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Newly Qualified General Nurses' Experiences and the Perceived Value of their Internship Period: A Republic of Ireland Cross-Sectional Study.

**A thesis presented to Trinity College Dublin, the University of Dublin for the
degree of Doctor of Philosophy**

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By

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Declaration

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Summary

Background: A 36-week nursing internship was introduced as part of the undergraduate nursing degree programme in Ireland in 2002. This development was intended to provide final year nursing students with extended clinical experience, where they would work more independently and transition more seamlessly into the role of registered nurse.

Aim: The aim of this thesis was to examine newly qualified general nurses' experiences of their internship period and its value to their transition to the role of registered nurse.

Methodology and Methods: A literature review was undertaken to ascertain background knowledge on the experiences of internship, and the transition to the role of registered nurse. Subsequently, a sequential explanatory mixed methods study, underpinned by a pragmatic philosophy, was selected as the most suitable research design to fulfil the study aims and objectives. Ethical approval was granted by the University and relevant Hospital Research Ethics Committees. Phase one data were collected using the Experience of Internship Questionnaire between November 2018 and December 2020. Data were analysed using the Statistical Package for the Social Sciences and an interview schedule was developed based on the phase one results. Phase two data were collected between 2021 and 2022 using online semi-structured interviews. The data were analysed using Braun and Clarke's Thematic Analysis procedures. Data from both phases were integrated using the Pillar Integration Process Model.

Findings: Pre-internship preparation experiences differed across hospitals. Some hospitals delivered a structured orientation programme while others provided information in an unstructured format as part of their fourth-year induction. A minority reported receiving no preparation. Internship helped to build confidence in communicating with staff nurses and families. The increased responsibility for patient care provided feelings of validation when the interns' contributions were appreciated and acknowledged. Covid presented unique experiences that required the then interns to be adaptable and flexible to deal with the changing clinical setting. Reflection was viewed as highly beneficial for learning and provided reassurance that they were progressing as interns, and that many other interns were experiencing similar situations. Independent practice gave insight into the requirement to develop non-technical skills which are needed to provide timely patient care. While independent practice provided vital experience for the registered nurse role, balancing learning with competing patient priorities was often to the detriment of the interns' own learning in practice. One such example related to medication rounds. Doctors' ward rounds were viewed as essential learning opportunities, but again time limitations regularly deterred participation in the ward rounds. Because handover was not always practiced during supernumerary placements, interns were tasked with learning this skill, as opposed to perfecting it during their internship. Professional socialisation in the clinical areas was a challenge for some, as they formed their identity. Interns recognised that self-motivation and demonstration of enthusiasm and interest reaped dividends and resulted in greater support from preceptors and other staff. This support was essential for learning. Ward managers were generally admired for their expertise, approachability, and leadership. Professional socialisation experiences were sometimes negative, depending on the ward ethos and culture. Negative experiences impacted the interns' development and their professional identities.

Feedback was neither consistent nor consistently useful. Nevertheless, the acquisition of clinical skills was progressive, and by the end of the 36 weeks most could identify the value of internship in preparing them for transition to the role of registered nurse.

Conclusion: The internship period as part of the undergraduate degree in general nursing programme provided opportunities to gain insight into the full extent of the role of the registered nurse. Skills not emphasised or realised during supernumerary placements were identified as essential to successfully managing internship, and the associated patient caseload. While there are many positive aspects to internship, there are areas that require further consideration. Internship was portrayed as survival of the fittest and a stressful time for many students. They had no choice but to learn on the job and sink or swim. However, it was recognised as valuable in preparing them for transition to the role of registered nurse.

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Chapter 1 Introduction and Background

“Nursing is a progressive art such that to stand still
is to go backwards”
(Florence Nightingale)

1.1 Introduction

This dissertation describes a sequential explanatory mixed methods study that was undertaken to examine newly qualified general nurses' (NQGNs') experiences of their internship period, which is the last 36-weeks of the four-year nursing degree programme. This study also explored the value of the internship period in preparing them for the role of registered nurse. This chapter presents the background to the study and starts with a discussion on the origin and evolution of undergraduate nurse education in Ireland and internationally. The thesis begins with setting out the history of nurse education in Ireland, from its establishment in 1880 to the present day, and includes the origin of nursing internship in Ireland. The legislation that underpins nurse education in Ireland and Europe is also discussed in this chapter. Nursing within and beyond Ireland broadly conforms to the European Union (EU) regulations and comparisons are drawn throughout the discussion on the European section of this thesis. The concluding section to the chapter provides a background to the current study and an overview of the content, structure, and organisation of this dissertation.

1.2 The Origin and Evolution of Undergraduate Nurse Education Internationally

Nursing originated in religious and military sectors. The religious sector developed nursing from its role in encouraging nuns to care for the sick. The caring role was mostly in response to injury during war and sickness due to epidemic outbreaks. In the 1800s Lilian Wald instigated the notion of community or home nursing when she taught a home nursing class (Buhler-Wilkerson, 1993). In response to the requirements for experts in the field, the nursing role was formally developed. Nursing education was formalised by Florence Nightingale, who established the first nursing school at St Thomas's Hospital London in 1860 (Dyson and McAllister, 2020). Nursing became distinct and recognised internationally through the curriculum of nursing practice devised by Florence Nightingale. The first nursing institutes were established in 1885 and 1886 in Japan and the United States respectively.

Nursing was first regulated on a national basis by the American Nurses Association (Greenlaw, 1985; Flook, 2003), and the New Zealand initiative and before long other countries established a similar regulation process (Bullough, 1984). In 1923, Yale University in the United States, became the first to establish a nurse education programme based on education requirements as opposed to service needs. This was a pivotal stage for nurse education as other universities developed nurse education programmes across America during the 1950s (Ervin, 2021). Today nursing is recognised as a distinct profession with areas of specialisation and advanced practice.

1.3 Undergraduate Nurse Education in Non-European Countries

The quantity of professionally prepared, baccalaureate nurses in countries is noticeably related to better health outcomes (Blegen et al., 2013; Aiken et al., 2017). Internationally, 91% of countries report that curricula for nurse education exist, and 89% of countries indicate that accreditation for education institutions exist (World Health Organization, 2020). Considerable variation exists in the level and quality of education for registered nurses within the six World Health Organisation's regions of Africa, America, Southeast Asia, Europe, Eastern Mediterranean, and Western Pacific.

The complexity of current health care requirements has meant that nurses must be well educated to respond to higher levels of decision-making, clinical judgement, and team leadership, to effectively manage care in complex settings (Baker et al., 2021). Nurses are a progressively mobile workforce, with one in eight not working in the country where they were educated (World Health Organization, 2020). Beyond Europe, in the other five World Health Organisation regions, undergraduate nurse education varies in duration and qualification. Appendix 1.1 outlines the average duration of education for undergraduate nursing students across the six World Health Organisation regions (World Health Organisation, 2020). These variations occur within and between regions and countries. The next section discusses nurse education across the World Health Organisation (WHO) regions.

1.3.1 The WHO Southeast Asian Region

The WHO South-East Asian Region has 11 countries - Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste (WHO, 2022). Nurse education across this region is becoming standardised with more countries introducing bachelor level nurse education at undergraduate level (Kunaviktikul et al., 2019). The Southeast and East Asian Nursing Education and Research Network (SEANERN) was established in 2015 as a collaborative approach to restructuring and standardising nurse education. The SEANERN agreed that undergraduate nurse education should be at Bachelor of Nursing Science level. All countries have adopted the qualifications framework for higher education to aid in the harmonisation of nursing programmes (Kunaviktikul et al., 2019). Presently, Thailand and the Philippines have bachelor's degree as their undergraduate nurse education programmes (Efendi et al., 2018). The other countries in the region offer a mix of bachelor's degrees and bridging programmes from diploma to bachelor level, while several continue to offer diploma programmes in nursing (Kunaviktikul et al., 2019). The duration of nursing degrees varies across the Southeast Asian Region, ranging from 3 to 4 years in Singapore to 5 years in Indonesia. The experience of SEANERN members indicates that the information and curricula shared through SEANERN have fostered the capacity building of universities and the upgrading of education programs (Kunaviktikul et al., 2019).

1.3.2 The WHO Eastern Mediterranean Region

The WHO Eastern Mediterranean region includes 21 countries – Afghanistan, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates and Yemen (WHO, 2022). In these countries, nursing programmes were originally adopted from the American programmes and modified based on socio-political influences as well as population needs. One such example is, in Saudi Arabia where undergraduate nurse education is structured as a four-year degree

programme. The first year is spent in university, with theoretical instruction and simulation sessions in the laboratory, to prepare the nursing students for clinical placements. These placements commence in the second year of the programme. Once the graduates have completed their education, they undertake a one-year internship (Almutairi et al., 2015).

1.3.3 The WHO American Region

The WHO American Region includes North and South America. North American countries such as Canada offer two programs: a two-year diploma programme, and a four-year degree programme, both of which enable the students to register as nurses (College of Nursing British Columbia, 2016). In addition, Canada offers a ten-week summer internship course to selected 4th year students who exhibited strong academic and clinical performance. These students are part of the workforce and expected to manage patient care under the direct supervision of a registered nurse. Faculty members also supervise the students (Paul et al., 2011).

Also in North America, the United States offers two levels of nurse training programmes; registered nurses, and licensed practical nurses, with three pathways (associate degree, diploma, and degree programme) to registration provided by different educational settings. The four-year Bachelor of General Nursing programme is delivered by the university. According to Rich and Nugent (2010), of the new graduate nurses in 2007, an estimated 42% undertook the four-year degree programme, 54% undertook the two-year associate degree programme while only 4% undertook the three-year Diploma programme. In the United States, internship is optional after the completion of the four-year programme and residency programmes are also available. Licenced practice nurses undertake a twelve-month licenced practical nurse training program in a community college or technical school (American Nurse Association, 2023).

Similar to the United States, in South America, there are two levels of nurse training programmes: registered nurses, and licensed practical nurses. The four-year Bachelor of General Nursing programme is delivered by the university. Theoretical aspects such as natural sciences, humanities and social sciences are the focus for the first two years, and the final two years concentrate on nursing studies and practice placements (American College of Nursing, 2008). To become a licenced practice nurse, they must undertake the licenced practical nurse training programme.

1.3.4 The WHO African Region

In the WHO African Region two programmes of education are available. The successful completion of either of these will allow nurses to register with the South African Nursing Council. The programmes include a three-year diploma programme and a four-year degree in nursing. The programmes have both theoretical and clinical practicum components. The degree qualification enables the nurses to work in general, community, psychiatric and midwifery settings (Awases et al., 2013).

1.3.5 The WHO Western Pacific Region

The WHO Western Pacific Region includes 28 countries; Australia, Brunei, Cambodia, China, Cook Islands, Fiji, Japan, Kiribati, Laos, Malaysia, Marshall Islands, Micronesia, Mongolia, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, South Korea, Taiwan, Tonga, Tuvalu, Vanuatu, and Vietnam (WHO, 2022). In Australia, nursing students undertake a three-year degree programme, with a minimum of 800 hours allocated to clinical practice placements that must include exposure to a variety of healthcare settings (Australian Nursing and Midwifery Accreditation Council, 2012).

1.4 Undergraduate Nursing Education in Europe

General nursing education is delivered at various levels within countries in the European Union (EU). In 2001, the World Health Organisation published the 'European Strategy for Nursing and Midwifery Education', and this recommended

moving from apprenticeship style training to degree education (WHO, 2001). The education changes were aligned to changes in healthcare and preparing nurses to deal with the increased complex care needs of patients. Furthermore, the WHO (2009) and the International Council of Nurses (2010) re-emphasised the importance of nursing degree education to ensure the delivery of quality patient care and to optimise patient safety.

However, the transition from the apprenticeship nurse education programme to undergraduate degree programmes has varied by country (Davies, 2008). A Report by the WHO (2009) identified that nurse education was delivered at degree level in 22 out of 37 monitored EU countries; Belarus, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Greece, Iceland, Ireland, Italy, Lithuania, Norway, Portugal, Romania, Slovenia, Sweden, Switzerland, Ukraine and the United Kingdom.

Nursing education has also been enhanced by the Bologna Process. The Bologna Process was implemented by the European Union in 1999 with the goal of “ensuring comparable, compatible and coherent systems of higher education in its 47 member countries” (European Higher Education Area, 2010 cited in Lahtinen et al., 2014, p.1040). This process aimed to align and standardise nurse education to degree level across Europe. As a result, nurse education is now offered in 45 of the 47 member countries (Lahtinen et al., 2014, p.1040; European Higher Education Area, 2023). A significant part of the Bologna declaration was the establishment of the European Credit Transfer and Accumulation System. The European Credit Transfer and Accumulation System enabled the recognition of qualifications achieved in other countries (European Higher Education Area, 2023). The introduction of the Bologna process, along with the European Credit Transfer and Accumulation System has played a crucial role in standardising nurse education, enabling nurses to practice internationally with their nursing qualification.

European nurse education ranges from three to four-year education programmes, leading to diploma or degree level education qualifications. The European Union Directives 2005/36/EC stipulated that nurse training at higher education level must be of at least three-year duration and include 4,600 hours of theoretical and clinical training (European Union, 2005). Nurse education reform has occurred throughout Europe to enable the integration of nurse education into universities as well as standardising nurse qualifications to enable nurses to work in any European country with their credentials (Robinson and Griffiths, 2007; WHO, 2009; Salminen et al., 2010). As part of the Tuning Project (2011) nursing programs were reviewed for compliance with EU Legislation. This legislation mandates that nursing curricula provide specific competencies and a minimum of 2,300 hours each of theory and clinical placement prior to initial nurse registration. However, despite this EU legislation variations in the nursing education structure still exist throughout Europe (Dobrowolska et al., 2015).

The Future of Nursing Report (2011) recommended that by 2020 eighty percent of nurses would be educated to degree standard (Institute of Medicine, 2011). The rationale for this recommendation illuminated the benefits of baccalaureate nurse education, including the attainment of competency in health policy, leadership, research, and collaboration. These skills were recognised as important for managing the changing complexity of patient care (Institute of Medicine, 2011). A multinational project led to the development of an international pillars framework for professional nursing education led by the Global Alliance for Nursing Education and Sciences (WHO, 2020; Baker et al., 2021). This framework emphasised baccalaureate nurse training with international expectations in relation to the standards of nurse education and Higher Education Institutes delivering the programmes. Higher level education includes universities, institutes of technology and higher vocational schools. Appendix 1.2 outlines the level of nursing education in each of the EU countries (i.e., universities, higher educational institutions) (European Commission. Directorate General for Internal Market, Industry, Entrepreneurship and SMEs. and Spark Legal Network, 2020). However, some countries still provide vocational education for preservice nurses. The WHO suggests modernising nurse education and regulation to degree standard and

harmonising education requirements to standardise nursing credentials internationally (WHO, 2020).

Many countries offer nursing registration in various disciplines. For example, Ireland offers registration in General, Intellectual Disability, Mental Health, and the Combined General and Children's nursing programmes. Likewise, Austria, Germany, Malta, and the United Kingdom offer comparable specialisations in nursing at undergraduate level (Lahtinen et al., 2014). In Ireland, the Nursing and Midwifery Board (NMBI) is responsible for overseeing the registration of nurses (NMBI, 2023).

Ireland is the only European country that has an internship period as part of the undergraduate degree in nursing programme, which further adds to the variance in nurse education across Europe. The next section discusses the history of nurse education in Ireland.

1.5 History of Undergraduate Nurse Education

1.5.1 Undergraduate Nurse Training in Ireland from 1880-1919

Prior to the 1880s, nurses were recognised for hard work and efficiency. The focus on appropriate and adequate nurse education was minimal and consisted entirely of preparation with the knowledge and skills necessary to care for patients safely. Hospitals and schools of nursing focused on working skills and customs with little emphasis on developing nurses' knowledge (Fealy, 2006). The Dublin Hospital Sunday Fund (1879) and the Dublin Hospital Commission (O'Snodaigh, 1887) report identified a deficiency in nurse education and the absence of educated nurses. This led to the establishment of a formal nurse education programme that included a probationary training period through experiential learning with theoretical instruction during off-duty time. By the late 19th century nurse education had reformed with the development of in-house training structures and the recruitment of young women for training (Robins, 2000; Fealy, 2006).

1.5.2 Undergraduate Nurse Training in Ireland from 1919-1960

The Nurses Registration Act (1919) established the national nurse register (Fealy, 2006). Over the years, amendments to the Nurses Act retained the nurses' register in Ireland and formalised the practice authority of nurses (National Council for the Professional Development of Nursing and Midwifery, 2003). With the Nurses Act of 1950, An Bord Altranais (The Nursing Board) was established to take over from the General Nursing Council of 1919. After 1950 the Nursing Board issued regulations for nurse education and training. The criteria for training hospitals were based on the availability of clinical experiences, education facilities, nursing practice standards and the availability of accommodation for nursing students. Training hospitals were required to meet the aforementioned criteria before approval was granted by An Bord Altranais.

At that time, nursing did not have its own body of knowledge and only twelve hours of the syllabus was assigned to the theory and practice of nursing, as the focus was on experiential learning in practice. Training comprised of medical lectures delivered by consultants, which were seen to enable nurses to recognise the signs and symptoms of patient deterioration (Fealy, 2006). The nursing course featured two formal exams, where students had to demonstrate a record of the nursing tasks they had completed. The students were known as trainees, and they learnt from the trainees who were six months ahead of them in the programme. The ward sister was responsible for completing the trainees' progress report. In the 1960s, theory and practice were separated into specific blocks of weeks, which allowed students protected time to attend lectures.

1.5.3 Undergraduate Irish Nurse Training from 1970s-1990s

After Ireland joined the European Union in 1973, it was obliged to conform to European Union directives. By 1979, nurse education in Ireland had changed to a three-year theoretical and technical education programme, which included clinical

placements in accordance with the criteria set out by the European Union directives (Fealy, 2006). Registered nurses were given greater responsibility for nurse education as students attended practice placements in the clinical settings as part of the integrated curriculum. Another European Union Directive in 1989 specified changes to the theoretical instruction. In line with this, Ireland increased dedicated study (block) time to 40 weeks as part of the three-year Certificate in Nursing Programme (Fealy, 2006).

The apprenticeship model was a theoretical and practical method for training nurses (Glen, 1999). This model relied on staff nurses to teach and assess the nurses in training. The appropriateness of the model was reviewed as the focus was more on performance as opposed to learning (Chapman, 1980; Greenwood, 1993). Additionally, there was a significant reliance on the health services with a supposition that staffing levels were sufficient for such a role (Glen, 1999). A primary criticism of the apprenticeship model was the reliance on clinical learning with no emphasis on independent learning or clinical reasoning (Studdy et al., 1994). It was recognised that more advanced methods of educating nurses were required (Glen, 1999).

In Ireland until 1994, the Nightingale apprenticeship model was the main training programme with attainment of a Certificate in Nursing qualification. Under this model, nurses provided a service to the hospitals as part of their training (Fealy, 2006; Watson and Kelly, 2013). Following a consultative review by An Bord Altranais between 1991 and 1994, it was recommended that nurse training be moved to university and students' status be changed to supernumerary status. Furthermore, each discipline of nursing had a specific programme and formal academic accreditation for all courses. Students' status changed to supernumerary, as the nursing students were no longer expected to provide a service to the hospital, and clinical practice placement was driven by educational needs, thereby enabling the student to achieve stated learning outcomes (An Bord Altranais, 2000). The student nurse, under the supervision of a registered nurse, participated in patient care. The students' supernumerary status meant that they were not part of the workforce but

were present to fulfil the learning requirements and achieve their learning outcomes and clinical competency assessments (An Bord Altranais, 2000).

1.5.4 Undergraduate Irish Nurse Training from 1994-2000

In April 1994, a three-year nursing Diploma programme commenced in Ireland. This was set up initially as a pilot project. As part of the curriculum, students were taught biological and social sciences by nurse educators in accordance with a defined curriculum (Robins, 2000). As part of the final fourteen weeks of the Diploma programme the students undertook a rostered placement (Robins, 2000). The rostered placement meant that students were part of the workforce and were supervised to deliver care and have their competency assessed by registered nurses.

By 1997, the Diploma in Nursing had been implemented nationally following a period of successful piloting in the National University of Ireland, Galway (Simons et al., 1998; McCarty and Higgins, 2003). The Diploma in Nursing course was evaluated by Simons et al., (1998) who identified the need to prepare clinical staff for the mentoring role for teaching and assessing students in clinical practice. In Ireland, during clinical placement undergraduate students were supported by registered nurses, also known as preceptors (Robins, 2000). In 1998, the Commission on Nursing was established by the Irish government. The aim of the Commission was to review nurses' employment conditions, career development options and educational opportunities. The Commission on Nursing recommended the establishment of new bodies with a responsibility for the development of the nursing profession such as a nursing policy division in the Department of Health, Nursing and Midwifery Planning and Development Units and the National Nurses Council. The commission also recommended that a pre-registration degree programme replace the existing diploma nurse education programme as well as, the development of clinical career pathways (Department of Health, 1998). Nursing in Ireland is indirectly managed by the Department of Health through the Nursing and Midwifery Board of Ireland, formerly An Bord Altranais.

1.5.5 Undergraduate Irish Nurse Training from 2000–2020/2024

Catherine McAuley was one of the most influential nurse theorists in Irish history. McAuley developed a model for contemporary nursing practice in the early years of the 19th century known as Careful Nursing (Meehan, 2003). The Careful Nursing Model was developed in response to the growing healthcare needs of the era. At that time, recurring famine, chronic illness, and epidemics of infectious diseases were prevalent in Ireland. McAuley re-established the nursing service that had become non-existent and focused on the poor and sick in the community (Meehan, 2003, 2012).

In 2000, in accordance with EU curriculum development, An Bord Altranais introduced the five domains of competence for the nursing degree programme. During clinical placements students were encouraged to gain skills in critical analysis, problem solving, decision-making, reflective practice as well as skills and abilities essential to the art and science of nursing (An Bord Altranais, 2000). An Bord Altranais also developed the requirements and standards for nurse education and training in this year (An Bord Altranais, 2000). In 2002 the four-year Degree programme was introduced. Since then, the annual number of nurse training places have been determined by the Department of Health, in consultation with the Higher Education Institutes in Ireland, based on the nursing workforce requirements. Applications are made through the Central Applications Office, where processing of student applications for all college courses takes place.

In Ireland, nursing students attend a Higher Education Institute where the four-year undergraduate program is delivered. Each nursing discipline is a separate programme (general nursing, children and general nursing integrated, intellectual disability nursing, children's nursing, and mental health nursing) leading to exit qualification and entitlement to register in the relevant division with the Nursing and Midwifery Board of Ireland.

In 2009, the World Health Organisation published the globalisation standards for the initial nurse education in light of the increased globalisation of the profession. The global standards for initial nursing education outlined the essential components of education. Implementation of the standards facilitated progress towards the highest level of education attainable in a country or region, assured equitable and appropriate placement of nurses and enabled cross country recruitment to fulfil workforce needs (WHO, 2009). In 2011, the nursing board title changed from An Bord Altranais to the Nursing and Midwifery Board of Ireland. Today, nursing students across Ireland have the option to take part in the Erasmus programme that allows students to exchange international practice placements with nursing students in other European countries (Jansen, 2021).

As part of the fourth year of the programme, students complete a 36-week rostered placement called internship. Intern nursing students are remunerated at 80% of a first-year registered nurses pay scale. The decision to include the internship period as part of the four-year degree programme was a recommendation from the Commission of Nursing (1998), following a review of nurse education internationally. The aim of the internship period is to enable students to work independently under the distant supervision of a registered nurse, to link theory to practice and to experience the different shift patterns, including the 24-hour cycle to prepare them for transition to the role of registered nurse (An Bord Altranais, 2005; NMBI, 2016, 2023). One advantage offered by the internship is the ease of transition from nursing student to newly qualified nurse (Steen et al., 2011).

1.6 Internship in Healthcare

Internship in healthcare originated in medical training (Kuwabara et al., 2015). It was used in many disciplines including pharmacy, management, research, and business fields, as internship was a popular way of recruiting and transitioning employees. Medical interns complete their internship in the first year after completing their

medical education programme. This year provides them with experiential learning opportunities across a range of clinical settings. Like nursing, medical interns are allocated clinical responsibility to enable them to develop their professional and personal competencies. The medical interns are registered with the Medical Council and on successful completion of the internship year can progress their career in a chosen medical division. An evaluation of satisfaction with medical internship by D'abate et al., (2009) identified a positive clinical learning environment with adequate learning opportunities, supervision, and feedback as the most important aspects for satisfaction. Similar factors have been identified in nursing (Levett-Jones and Lathlean, 2008).

In Ireland, the nursing internship period is the final 36 weeks of the four-year undergraduate degree in nursing programme (NMBI, 2023). The aim of the internship period is to enable the nursing interns to link theory to practice and consolidate the theoretical knowledge and experiential learning from previous supernumerary clinical placements (Department of Health, 1998). As such, it allows the interns to work and gain experiential learning at an independent level while still under the supervision of a registered nurse (NMBI, 2016; 2023). During internship, the interns are remunerated, as they are considered part of the workforce.

While learning outcomes are provided for supernumerary placements, the learning outcomes during internship vary. In some sites they are pre-determined, while in others, nursing interns identify their learning outcomes based on their experience and the competencies they have yet to achieve. In line with the requirements and standards for undergraduate nurse education as set out by the Nursing and Midwifery Board of Ireland, the 36-week period allows nursing interns to achieve competence in delivering complex care needs and caring for high acuity patients independently to prepare them for transition to the role of registered nurse (NMBI, 2023). In the literature, O' Dwyer (2007), and Kumaran and Carney (2014) have highlighted reservations about how prepared general nursing graduates are at the end of the 36-week period. These reservations may have given rise to a suggestion that the internship period be increased from 36 weeks to 52 weeks (Department of

Health, 2012). However, this has not happened and internship has remained at 36 weeks. In general, the internship period has been described as a pathway to clinical competence, as it affords the nursing interns independence at delivering nursing care while still under supervision (Blanzola et al., 2004; Deasy et al., 2011).

While the medical and pharmacy internship has been evaluated by D'abate et al., (2009), Gouda et al., (2013) and Strawbridge et al., (2019), nursing internship has never been evaluated. Therefore, this study aims to examine newly qualified general nurses' experiences and the perceived value of their internship period.

1.7 The Researcher's Motivation for undertaking this Research

My professional experiences motivated my interest in the experiences of the internship period and its value to their transition to the role of registered nurse. A preliminary literature review yielded little research on nursing internship in the Irish healthcare setting. The review identified that the newly qualified nurses felt ill-prepared for transition to the role of registered nurse.

While undertaking this PhD programme, I worked as an Assistant Director of Nursing in Nurse Practice Development in a large teaching hospital in Ireland. Prior to that I worked as a Clinical Placement Coordinator and my nursing career involved teaching students at undergraduate and post graduate level. Many aspects of my career inspired the research study described in this thesis.

In my role as Assistant Director of Nursing in Nurse Practice Development I was responsible for the undergraduate programme at the clinical site ensuring students were provided with a quality clinical learning environment to assist them in gaining clinical skills necessary to achieve their competencies and meet the standards and requirements as set by the Nursing and Midwifery Board of Ireland. This involved

strong engagement with the academic partner regarding student placements and their evaluation.

The role also involved supporting new graduates in their transition to the role of registered nurse and ensuring appropriate supports were in place to aid their transition. The theory and skills acquired during the four-year programme are consolidated during internship but, it is not until the new graduate nurse is registered that they realise the full responsibility and accountability of the role. Such realisations often prompted new graduate nurses to leave nursing as they were unable to manage the role, while others immigrated to other countries in search of an alternative experience and this in turn contributed to the recruitment and retention challenges of newly qualified nurses in Ireland.

Another inspiration for this study was the ongoing challenges of recruitment and retention of nurses in Ireland. The shortage of nurses impacts on patients, but also on preceptorship and the ability of acute hospital settings to provide quality clinical learning environments and support for new graduates.

Nursing is continuously advancing to ensure the delivery of high-quality patient care. However, with the changing level of acuity and complexity of patient care, as well as a growing population through migration, the nursing workforce is compelled to meet the demands of such complexities. The global shortage of nurses and recruitment embargos affects the availability of staff to supervise students in complex healthcare settings (Morrell and Ridgway, 2014; Tamata and Mohammadnezhad, 2023). The retention of nurse graduates is a national and international issue. In 2020, the international nursing workforce was 27.9 million, with approximately 5.9 million vacancies (World Health Organization, 2020). The estimated global shortage of nurses by the year 2030 is 4.5 million (World Health Organisation, 2024). Nurses represent approximately 50% of the international healthcare workforce and nursing vacancies are a major challenge for many healthcare organisations (Pressley and Garside, 2023). Nursing workforce

shortages impact staff to patient ratios, staff satisfaction, occupational stress, and staff retention, to the detriment of patient safety and the quality of care (Aiken and Fagin, 2018). Minor attention is assigned to the safeguarding and retention of the current nursing workforce within healthcare systems (Kelly et al., 2022; Shembavnekar et al., 2022). With such complexities and staff shortages within the health services nurses' health and wellbeing along with recruitment and retention are considered key priorities to maintain and sustain the nursing workforce.

1.8 Dissertation Overview

This dissertation is divided into nine chapters including this chapter. The content of each chapter is briefly outlined below.

Chapter 2, which is the literature review, is divided into three sections. The first of these presents literature on readiness for the role of registered nurse. The second section presents expectations placed on newly qualified nurses during transition. The third and final section of the literature review examines professional socialisation in the context of newly qualified nurses transitioning to practice. The concluding section explores and examines the theoretical frameworks employed in the literature reviewed to identify the most appropriate theoretical framework for this study.

In chapter 3 the study methodology is presented. The rationale for the choice of study design is discussed, together with, the process of conducting the sequential explanatory mixed methods study. The theoretical underpinnings are also discussed in detail in this section.

Chapter 4 is titled the methods chapter. The process of conducting the study is discussed in this chapter. This includes sampling for both phases of the study, and how the study was undertaken from a quantitative and qualitative perspective. The research instrument and its development for phase one and the development of the

interview schedule for phase two are also discussed in this chapter. The end of this chapter discusses the ethical considerations for both phases of this study.

Chapter 5 presents the results for the first phase of the study, the quantitative phase. This includes the number of respondents, the number of questionnaires included in the data analysis along with the results of the analyses that were undertaken.

Chapter 6 presents the findings from the second phase of the study, the qualitative phase. This includes the number of informants who participated in the online semi-structured interviews and the findings that emerged from thematic analysis.

Chapter 7 describes the data integration process that was undertaken using the Pillar Integration Process model. The fully integrated findings are also presented in this section. The results from the first phase and findings from the second phase were integrated to display a comprehensive answer to the research question.

Chapter 8 provides an overall discussion on the outcomes of the study. The findings from this study are discussed in the context of the broader literature to align and synthesise the overall findings.

Chapter 9 concludes the thesis and provides insights into the implications of this study and makes recommendations for further research.

1.9 Conclusion

In conclusion, the origin and evolution of nurse education internationally was discussed. From the early nineteenth century to the present day, nursing as a profession has evolved with the establishment of regulatory bodies and advancements in nursing education. Undergraduate nurse education has developed

from being barely recognised, and wholly unacknowledged, to becoming a respected and recognised degree programme delivered at university level. The embedding of nurse education in Higher Education Institutes progressed the development of nursing knowledge and opened the airways to nurses to travel within the EU and globally with a worldwide recognised degree qualification. Undergraduate nurse education in non-EU countries was presented based on the six World Health Organisation regions. While most have a degree programme, they also offer varying levels of nursing qualifications. Undergraduate nurse education in Europe has evolved based on a unified approach which was enhanced by the Bologna process. The implementation of European Credit Transfer and Accumulation System established the recognition of qualifications across Europe and the opportunity to travel for undergraduate study and post registration employment. Undergraduate nurse education in Ireland has progressed to a four-year degree programme delivered by the Higher Education Institutes. The inclusion of the internship period is unique and enables intern nursing students to form part of the nursing workforce and deliver care independently under the distant supervision of a registered nurse.

The next chapter synthesises and critiques the available literature on internship and transition to practice.

Chapter 2 Review of the Literature

“At the heart of good clinical judgment and clinical
wisdom lies experiential learning”
(Benner, 2004; p.189)

2.1 Introduction

This chapter presents a review of the research literature related to the subject of this study. Undergraduate nursing education programmes equip nurses with the knowledge and skills necessary to deliver nursing care to the highest standard. However, the transition to practice is a daunting time for newly qualified nurses. Although the newly qualified nurses have undertaken years of education, of varying duration depending on their location, readiness for practice for the role of registered nurse is often taken for granted.

Chapter one provided an overview of undergraduate nurse training in Ireland and globally, highlighting similarities and differences in nurse education and identifying countries that include an internship period as part of the degree programme. This chapter presents the background literature with the aim of exploring internship experiences from the newly qualified general nurses' perspective, together with their experiences of readiness for practice and the transition to practice.

2.2 Sourcing the Literature

This section presents a review of the literature concerning the main constructs that informed the development of this study's aims and objectives, and includes relevant literature published up to 2024. To provide a background on the concepts associated with undergraduate nurse education, remunerated practice placements, internship, and readiness for transition to practice, a comprehensive examination of the literature was completed. Published research in all languages from 1960-2024 was reviewed. Literature was sourced using a variety of strategies including searches of grey literature and extensive searches of the electronic databases, EBSCO, Cumulative Index of Nursing and Allied Health Literature Ultimate (CINAHL), MEDLINE, PsycINFO, Web of Science (WOS), EMBASE and the Cochrane library. The search strategy is detailed in Appendix 2.1. Reference lists of viewed literature were manually searched. No year limit was applied to the start date of the search as nursing degree were introduced at different times across countries globally and the researcher aimed to ensure that no vital studies were overlooked.

The assistance of the subject librarian at the School of Nursing library at Trinity College Dublin was enlisted to assist with the scoping of the literature and to identify applicable search terms and key words. This combination of search terms yielded 5085 articles. Following deduplication and screening to determine the relevant literature that met the inclusion criteria, 257 articles were identified as relevant. These articles were sourced and read fully. Any articles pertaining to newly qualified nurses' experience of transition in the presence or absence of an internship or residency programme were also sourced, as well as the newly qualified nurses' experience of transition to newly registered nurse and their perceptions of practice readiness. Secondary references were then identified from these articles and journals during the literature search. Given the nature of clinical and academic interest in this topic, most articles were published in nurse education journals. Textbooks and papers, which included systematic reviews, editorials, and commentaries, are referenced throughout this thesis. However, 57 research-based articles published in peer reviewed journals were selected as relevant to this research study. The Prisma Chart is available in Appendix 2.2.

The findings from the qualitative studies (n= 37), quantitative studies (n=12) and mixed methods studies (n=8) were analysed using content analysis to identify patterns and themes across the studies. Appendix 2.3 summaries the country of origin of each study included. A summary of the studies is available in Appendix 2.4.

The findings from the 57 primary research studies were organised into three key themes: 1) Readiness for the role, 2) Expectations placed on the newly qualified nurses during transition and 3) Professional socialisation. The findings related to each theme are presented below.

2.3 Readiness for the Role

Readiness for the role is an important consideration and one that has been researched frequently over the years. Readiness for the role denotes the ability of

graduate nurses to acclimate to the work setting (Caballero and Walker, 2010). Clinical competencies, for instance knowledge, clinical skills, non-technical skills such as prioritisation and critical thinking, are necessary for graduates to be practice-ready and successfully adapt to the work environment (Walker et al., 2013). Additionally, the ability to develop interpersonal relationships and possess self-confidence are essential attributes (Walker et al., 2013; Baumann et al., 2019). The literature provided a mix of outcomes, some reflecting that nurses were ready for their role on registration, but the predominant finding reported was that most felt unprepared for this undertaking.

The literature indicates that the reality of the nurse's role was only realised on registration. Even though the newly qualified nurses had completed practice placements, the full extent of the role was not apparent until they became registered nurses. Seminal research by Kramer (1974) first identified 'reality shock' as newly qualified nurses' reaction to transition, where newly qualified nurses found themselves in a work situation that they had spent years preparing for and yet they were not prepared. Ten years later, Benner (1984) identified the novice to expert framework in response to the requirement to support newly qualified nurses during transition and explained the stages of progression from novice to expert. Thirty-four years after Kramer's seminal research, Duchscher (2008) identified the stages of newly qualified nurses' role transition. This theory identified the stages that newly qualified nurses progress through during the transition phase. Transition experience in the acute care setting is highly dynamic and intense, where clinical environments had increasing levels of patient acuity and nursing workloads.

Although the newly qualified nurses in these studies had all completed a nursing education programme which included clinical practice placements, upon qualification their level of skill and ability varied (Delaney 2003; Zheng et al., 2023). Studies, using mixed methods (n=2), quantitative (n=4) and qualitative (n=4) methodologies examined practice readiness including factors that impacted the newly qualified nurses' perceptions of competency levels (Ellerton and Gregor, 2003; Etheridge, 2007; Wangensteen et al., 2008; Deasy et al., 2011; Wangensteen

et al., 2012; Johanson, 2013; Numminen et al., 2016; Aboshaiqah and Qasim, 2018; Sterner et al., 2023; Zheng et al., 2023).

Emotions Experienced during Transition

Several studies using qualitative (n=7) and quantitative (n=1) methodologies reported reality shock and varying emotions that were experienced during the transition phase (Delaney, 2003; Etheridge, 2007; Zinsmeister and Schafer, 2009; Martin and Wilson, 2011; Kumaran and Carney, 2014; Hung et al., 2017; Cai, 2021; Ahmad et al., 2022). Initially, a sense of achievement was felt when the newly qualified nurses had completed the nurse education programme and gained registration with the nursing regulatory board (Delaney, 2003; Zinsmeister and Schafer, 2009; Hung et al., 2017; Cai, 2021; Ahmad et al., 2022). These feelings were quickly overshadowed by a sense of nervousness and apprehension regarding their level of knowledge and ability to address every situation (Delaney, 2003; Zheng et al., 2023). The level of responsibility of a registered nurse was only realised after they were qualified. This resulted in fear about caseload management, time management and the fact that patients relied on them for care. Many newly qualified nurses did not feel ready for the role of registered nurse, with studies reporting that they were anxious and insecure about the level of responsibility, particularly if they had to perform new tasks. Some of the main stressors were intravenous medications and collaborating with the doctors (Delaney, 2003). In Hong Kong, an exploratory qualitative study explored the challenges experienced by newly qualified nurses (n=14) in their first year of practice (Hung et al., 2017). The newly qualified nurses' experienced reality shock in their first few months which caused them to experience tremendous stress. On the other hand, some participants felt that they had attained a sense of achievement and satisfaction describing their first year as 'fruitful and unforgettable' as they worked in a role that they were not fully prepared for and did not realise the full extent of the role until they were qualified (Hung et al., 2017). Furthermore, a qualitative phenomenological descriptive study explored the internship experiences of newly qualified nurses (n=11) from three hospitals in Kuwait (Ahmad et al., 2022). This study revealed that the newly qualified nurses' experienced reality shock, as they were challenged mentally and physically in their new role. Similar findings from a study in China revealed that newly qualified nurses'

experienced transition shock in relation to the nursing role and to a lesser degree in the sociocultural context (Cai, 2021).

To continue with the theme of readiness for the role, Kumaran and Carney (2014) conducted a qualitative descriptive study in Ireland to identify and understand newly qualified nurses' (n=10) experiences of their transition from student to staff nurse. Positive emotions were reported on graduating, but these feelings reverted to anxiety and nervousness with the realisation of the level of responsibility and accountability of the registered nurse role (Kumaran and Carney, 2014). According to Ethridge (2007), newly qualified nurses expected patient care and decision-making to be the doctors' responsibility, so these newly qualified nurses were surprised at the level of responsibility expected of them, in comparison to that of a nursing student. The reality of the role, fast pace, lack of confidence, lack of ward familiarity and insufficient time to spend with patients, increased their anxiety (Kumaran and Carney, 2014).

Lack of readiness for the role was recognised when the workload was found to be challenging (Parker et al., 2014). This was a source of anxiety for the nurse graduates in many studies. Parker et al., (2014) described the work as emotionally and physically challenging due to the heavy workload that it entailed. Support mechanisms such as preceptors and clinical placement coordinators were no longer available, and this further increased their anxiety and stress (Kumaran and Carney, 2014). Similar findings were noted in a descriptive phenomenological study by Zheng et al., (2023) who used semi-structured interviews to explore the experiences of newly qualified nurses (n=14) during the two-year transition period in two teaching hospitals in China. During the transition period stress and anxiety were experienced due to the perceived change in mentality from student to registered nurse.

Lack of readiness for the role was further identified in three American studies that explored newly qualified nurses' experiences of transition (Ethridge, 2007; Martin and Wilson, 2011; Urban and Barnes, 2020). A qualitative interpretative

phenomenological study examined the lived experiences of newly qualified nurses (Martin and Wilson, 2011). These nurse graduates (n=7) identified that the reality of the nurse's role and responsibilities only emerged once they were qualified (Martin and Wilson, 2011). Likewise, Ethridge (2007; p.25) reported that newly qualified nurses lacked awareness of the reality of nursing, with one respondent stating, 'I did not think it was constant running and thinking'. Several years later, Urban and Barnes (2020) interviewed newly qualified nurses (n=15) to explore their experiences of transition to independent practice. Participants reported feeling overwhelmed navigating work-based relationships and their way in independent practice.

Fear also played a role in the emotions experienced by newly qualified nurses in many studies. Researchers Ethridge (2007), Clark and Springer (2012) and Sterner et al., (2023) reported that these fears were related to actual and potential clinical issues. These included fear of missing indications of deterioration, changes in patients' status, the inability to recognise the meaning of assessment data, fear of not knowing what was happening to a patient, fear of being unable to obtain and interpret relevant information and uncertainty about when to call the doctor. In a longitudinal, mixed methods United Kingdom study, stressors during the first 12 months as a registered nurse were investigated (Halpin et al., 2017). An explanatory sequential mixed methods design was used with a sample of newly qualified nurses (n=14) who had 12 months post registration experience. Phase one used the Nurse Stress Scale, and the subsequent phase used four semi-structured interviews. The findings revealed that due to staff shortages newly qualified nurses were stressed trying to manage their workload, thus they were fearful due to increased responsibility. Negative attitudes of co-workers were also stressful (Halpin et al., 2017). These results reflect those reported by Clark and Springer (2012) where unsupportive preceptors were a source of stress. Other sources of stress included an inability to access policies, updated documentation and staff shortages (Halpin et al., 2017).

Role insight impacted on the perception of practice readiness. In Ireland, a quantitative study explored role transition experience before (n=98) and six months after registration (n=21) (Deasy et al., 2011). The sample included 4th year general, mental health, and intellectual disability nursing students. Role preparation and expectations were high on the list of factors related to readiness for practice. Over half of the respondents reported: feeling adequately prepared for the role of registered nurse; that the course content was relevant, and that adequate opportunities were available for them to develop clinical skills (Deasy et al., 2011). Respondents also reported average confidence levels and average stress levels (Deasy et al., 2011). Although this study looked at pre and post registration experiences, it is important to examine how internship prepares nursing students for role transition, and its value in shaping newly qualified general nurses to independently deliver patient care.

Perceptions of Competence

Other factors that impacted the transition experience and the realisation of lack of readiness for the role included unfamiliarity with the ward, difficulty accessing policies, and time pressures. A qualitative descriptive study explored the adequacy of preparation of newly qualified nurses on qualifying with a degree in nursing (Ellerton and Gregor, 2003). This study comprised a convenience sample of newly qualified nurses (n=11) who graduated in 2001 from three Canadian sites. Each participant was interviewed at three months, six months, and twelve months during their first year of practice. The findings reported in this study were from the data collected at three months. The findings revealed that newly qualified nurses were challenged in organising patient care and spent considerable time searching for information about procedures or charts, something that experienced nurses could perform much more efficiently. Time spent locating equipment or seeking help left them rushing to complete patient care before the end of their shifts. Patients were described according to their nursing care requirements and tasks as opposed to their characteristics. The newly qualified nurses highlighted their achievements in mastering certain skills since graduating and noted deficits in skills required of a registered nurse. They felt challenged in interpreting the significance of observations and reported a lack of communication skills when dealing with patients and families,

particularly in relation to their health status, plan of care and providing reassurance to patients (Ellerton and Gregor, 2003; Clark and Springer, 2012). Nurse graduates felt overwhelmed when faced with complex care situations and frustrated with the lack of knowledge and skills to manage some clinical situations. Similar accounts were expressed by Hussein et al., (2017). Although the newly qualified nurses in these studies did not feel ready for practice, they did not rate themselves as incompetent. Nurse graduates maintained confidence in preceptors and were cognisant that skills and competence would develop further with experience (Ellerton and Gregor, 2003).

A quantitative cross-sectional study described newly qualified nurses' (n=620) self-perceptions of competence from universities in Norway (Wangensteen et al., 2012). Three instruments were used to collect the data. These were, the Nurse Competence Scale, the California Critical thinking Disposition Inventory and the Research Utilization Questionnaire. The newly qualified nurses reported their overall competence in managing deteriorating patients as good. The "helping role" was scored the highest and more frequently competent but noted that the frequency of performing tasks and managing elements of care, led to a higher perception of the level of competence (Wangensteen et al., 2012).

The changes in newly qualified nurses' perceptions of the demands-abilities and supply-needs misfits and how these impact on turnover intention were explored in a longitudinal quantitative study, in Japan (Takase et al., 2014). This study included five hospitals where newly qualified nurses (n=176) completed the Nursing Competence Scale, the Work Environment Scale and the Modified Withdrawal Cognition Scale at the 3rd, 6th, 9th, and 12th month post registration. The results indicated that time and experience impacted the perception of competence as newly qualified nurses rated themselves reasonably or almost fully competent by the end of the first year. This concurs with the reported findings by other researchers in this field of research (Wangensteen et al., 2012; Hung et al., 2017). Competence increased rapidly in the first half of the year and gradually in the second half of the year. These findings reflect Benner's (1984) novice to expert theory, and

Duchscher's (2008) stages of newly qualified nurses role transition, where skills develop over time, as the newly qualified nurse progress from novice to expert through gaining more experience in clinical practice.

When students complete the four-year degree in nursing programme in Saudi Arabia they are considered new graduates. After completing the degree, the graduates are required to complete a one-year internship programme by registering on the National Internship Programme. During the internship year the graduates are considered as preceptees and are supervised by preceptors (Aboshaiqah and Qasim, 2018). A mixed methods study undertaken in Saudi Arabia determined if the preceptorship program provided nursing interns with the appropriate education to enhance clinical competence (Aboshaiqah and Qasim, 2018). One territory hospital participated, and data were collected concurrently from interns (n=92) using a demographics questionnaire, clinical competence questionnaire with two open ended questions about factors that impacted clinical competence, and improvements required in the internship programme. The results demonstrated that the internship programme assisted the interns in achieving a constructive experience by increasing their competence in prioritising and recognising deteriorating patients, multitasking, and demonstrating complex nursing skills.

The practice environment and work-related factors can impact on the perception of readiness for the role. A quantitative cross-section correlational study conducted in Helsinki explored newly qualified nurses' perceptions of their practice environment and its association with their self-assessed competence, turnover intention, and job satisfaction as work related factors (Numminen et al., 2016). The Practice Environment Scale of the Nursing Work Index, which measures nurses' perceptions of their work environment, was used with the Nurse Competence Scale, which measures nurses' self-assessed competence using a visual analogue scale. Nurse graduates (n=318) who had an average of eight months experience working as a registered nurse participated. Overall, the perception of the work-related environment was positive; there were strong links between the practice setting and work-related factors. Positive manager attributes included being approachable,

visible, goal focused, available for consulting, encouraging, valuing staff, providing praise and recognition, promoting accountability, and creating opportunities for professional development. Perceptions of adequate staffing levels and resources for time to get work done were considered important. Negative perceptions were evident in relation to communication with positional hierarchy. Nurses who stated that they had insufficient support perceived their skills as inadequate and the quality of care as poor. A positive perception of the practice environment was associated with higher competence ($p < .0001$) (Numminen et al., 2016). The newly qualified nurses referred to resources such as medication and procedure manuals and valued the preceptors as professional role models. Some commented that the academic component did not prepare them for clinical practice, while others regretted not paying more attention while in college (Numminen et al., 2016). Negative ward environments showed higher intention to leave the profession. A positive practice environment was important for supporting newly qualified nurses and helping them develop competence to flourish, in-turn augmenting retention and job satisfaction (Numminen et al., 2016).

Development of Confidence

Confidence impacts perceptions of readiness for the role. Professional confidence supports newly qualified nurses to conduct their duties competently in the clinical area. Confidence in nursing is a belief in one's ability to collaborate effectively with the multidisciplinary team, patients and families, management, practice clinical skills, and utilise critical thinking skills, as well as prioritisation of patient care (NMBI, 2016). Confidence takes time to develop, especially when learning to deal with different situations (Etheridge, 2007). Self-belief, value, and a sense of belongingness are key attributes to the development of confidence, along with the attainment of knowledge, clinical and interpersonal communication skills. Developing confidence was an important factor in transition. Studies reported that confidence was lacking when analysing situations and making decisions (Etheridge, 2007). Most newly qualified nurses had gained a significant amount of confidence by the 6-month mark. At nine months, the graduates were able to make complex decisions and act on them independently (Etheridge, 2007). However, the newly qualified nurses reported that their idea of critical thinking was inferior to reality, as

they soon realised what works for one patient may not work for another. As a result, they learnt to gather and analyse data before consulting with the multidisciplinary team. In that moment came the realisation of the importance of evaluating doctors' recommendations through on-going analysis, and considering implications of the recommended treatment (Etheridge, 2007). The newly qualified nurses learnt to think through clinical experience with patients and discussions with colleagues. This developed understanding and the ability to think on their feet (Etheridge, 2007).

In Denmark, an ethnographic study used observation and semi-structured interviews with newly qualified nurses (n=9) to explore the knowledge that newly qualified nurses used in clinical decision making (Voldbjerg et al., 2017). The findings revealed that newly qualified nurses used three sources of knowledge for clinical decision making: others, self, and gut feeling. When uncertain, the newly qualified nurses discussed situations with the experienced nurse and doctor, as these were viewed as knowledgeable, trustworthy, and legitimate sources. However, they were cautious not to become dependent on such knowledge sources, and there were times when the newly qualified nurses questioned the advice of whether it was morally sound or if it went against their beliefs (Voldbjerg et al., 2017). The finding concurs with a finding from an earlier study by Ellerton and Gregor (2003) and Etheridge (2007) where newly qualified nurses collaborated with the multidisciplinary team as part of their decision-making process. Confidence takes time to develop, and it is apparent from these studies that newly qualified nurses sought advice and guidance from colleagues as they developed confidence in their practice. The latter discussion highlights how the newly qualified nurses developed skills in evaluating that advice and guidance as they became more experienced in their clinical practice.

On the other hand, other factors that had increased newly qualified nurses' level of confidence was increased knowledge levels, experience, and development of their interpersonal skills. The development of confidence resulted in assertiveness, increased self-esteem, and an ability to take on responsibility (Kumaran and Carney, 2014). Lack of confidence was mainly influenced by a lack of knowledge and

criticism of newly qualified nurses' level of knowledge, resulting in a negative impact on their confidence. Nurse graduates recalled feeling ignored as students and such treatment meant they missed information and updates pertaining to their patients; this led to lack of confidence upon qualification (Kumaran and Carney, 2014). These findings concur with Urban and Brandenburg's (2022) study that described how student experiences impacted post-qualification levels of confidence.

To continue with the theme of readiness for the role, the review turns now towards the perception of clinical and educational preparedness. A Swedish mixed methods cross-sectional study with 248 participants from six hospitals (Sternér et al., 2023) and a case study from the United States (Hickey 2010) investigated newly qualified nurses' perceptions of preparedness for practice, based on university education. The results from the Swedish study revealed that theoretical preparation was rated highly, while the practical preparation was rated lower. This contrasts with findings by Numminen et al., (2016) where graduates valued the wisdom of the clinical setting. Most of the participants (71.8%) identified workload as a challenge, 56% experienced fear of making mistakes or harming patients (Sternér et al., 2023). Lack of confidence was reported by 54.8%, while 45.6% were challenged by role expectations, and 16.9% reported difficulty with social interactions. Fear of making mistakes, confidence levels, expectations and socialisation impacted on perceptions of readiness for the role. Hickey (2010) used qualitative and quantitative methods, within the Clinical Instructional Experience Questionnaire to collect their data. A purposive sample of newly qualified nurses (n=108) six months to one year after graduation identified that prioritisation and organisational skills were important for the transition from university to practice. Fifty percent of respondents in this study (Hickey, 2010) reported learning advanced technical skills while on placement and 91% identified these skills as important for practice.

Respondents identified clinical experience as lacking and was focused more on healthcare assistant tasks such as taking vital signs and hygiene needs. Thus, the newly qualified nurses felt there was little emphasis placed on 'real' nursing experiences, such as prioritising care for multiple patients and collaborating with the

multidisciplinary team (Hickey, 2010). Similar results were echoed in a quantitative non-experimental descriptive study that determined the perceived adequacy of the nursing degree education in preparing nurses for practice (Johanson, 2013). The survey, which was designed by the researcher, was completed by newly qualified nurses (n=58) who had up to two years' experience. The results indicated that the newly qualified nurses felt prepared for the transition to practice but felt more clinical time was required to practice essential clinical skills. These results correlate with findings by Ellerton and Gregor (2003) where nurse graduates described the challenges with familiarity in practice and the requirement for more time in the clinical setting to enhance their readiness for the role. Another study also found that while organizational skills were lacking, such skills were developed during the transition phase (Hung et al., 2017). As well as competence in clinical skills, confidence in one's practice was also important.

A Canadian explanatory sequential mixed methods study explored newly qualified nurses' confidence in inter-professional collaboration (Pfaff et al., 2014). A convenience sample of newly qualified nurses who had qualified between 2009 and 2011 from one college participated. The first phase of data collection involved a postal survey (n=514) and phase two involved interviews with newly qualified nurses (n=16). Higher levels of confidence in inter-professional collaboration were reported in the acute setting, compared to the community and long-term care settings in this study. No differences in confidence were identified based on gender, prior experience in the health sector, mentorship, or formal orientation. However, supportive relationships within the team and with managers facilitated confidence to engage in inter-professional collaboration, with participation in formal and informal opportunities increasing confidence through exposure to different disciplines. As such, team satisfaction was categorised with respectful interactions with other healthcare professionals. It was highlighted that factors that inhibited inter-professional collaboration included lack of experience, lack of knowledge, communication challenges, balancing practice expectations as well as issues with professional socialisation, such as belongingness, which entails being welcomed and valued as a team member (Pfaff et al., 2014). The findings concurred with findings from Steen et al., (2011), Kumaran and Carney (2014) and Ortiz (2016).

In conclusion, this theme focused on readiness for the role of registered nurse from the perspective of newly qualified nurses. However, much of the supporting literature suggested that there was a general perception of a lack of readiness in many cases. Although newly qualified nurses were deemed competent in theory, support was still required during the transition phase. Transition is an emotional time for graduates. The literature indicates that newly qualified nurses are emotionally and physically challenged as they adjust to their new role. Heavy workload and issues with support contributed to the physical challenges. Feelings of stress, anxiety, and overwhelmed were experienced with the realisation of the full extent of the role. Lack of readiness was also identified in relation to the ability to develop work-based relationships in the adjustment to independent practice. Lack of familiarity with wards impacted on their readiness for the role. Difficulties in accessing policies and documentation were recounted, such challenges were not considered a problem for their senior counterparts. Fear of making mistakes were also reported in the literature. Further preparation was required in relation to communicating with doctors, which for some was viewed as a difficult task. Supportive managers assisted with skills and confidence development. With experience, the newly qualified nurses learnt to collate important information before consulting the team and to evaluate advice and guidance. The supernumerary status in the undergraduate years, and the perceived level of knowledge by both the graduates and their colleagues were some of the factors that impacted the development of confidence. Confidence development was negatively impacted by criticism, while support and encouragement led to the development of confidence in practice and inter-professional collaboration.

The next section discusses expectations placed on newly qualified nurses by individuals and the organisation during transition.

2.4 Expectations Placed on the Newly Qualified Nurses during Transition

This theme is focused on the expectations of newly qualified nurses by individuals and organisations. It comprises the literature associated with expectations as well as experiences by newly qualified nurses. Experience supports the development of expertise, and such experience is required to consolidate learning and the ability to understand the application of theory within the clinical setting (Benner, 1984). The level of expectation of newly qualified nurses during transition was identified in a number of studies (Della Ratta, 2016; Halpin et al., 2017; Hsiao et al., 2021; Hung et al., 2017; Hussein et al., 2017; Ten Hoeve et al., 2018; Woo and Newman, 2019; Baker, 2020; Kim and Shin, 2020; Willman et al., 2021; Ahmad et al., 2022; Toothaker et al., 2022; Alsalamah and Fawaz, 2023; Gautam et al., 2023; Zheng et al., 2023).

Eight researchers used interviews to explore expectations during transition (Clark and Springer, 2012; Della Ratta, 2016; Ten Hoeve et al., 2018; Murray et al., 2019; Willman et al., 2021; Toothaker et al., 2022; Gautam et al., 2023; Prosen and Lichen 2023). In Nepal, Gautam et al., (2023) explored newly qualified nurses' perceptions of transition to the role of registered nurse. The newly qualified nurses (n=10) from two private hospitals, reported that high expectations made them feel inadequate in their roles. They were expected to perform at the same level as senior nurses (Gautam et al., 2023). Likewise, Toothaker et al., (2022) study supports this finding, when newly qualified nurses (n=11) reported that increased expectations put pressure on them to work at a more experienced practice level to meet the service demands and expectations of their colleagues. Similar sentiments were echoed by Ten Hoeve et al., (2018) whose qualitative longitudinal study investigated the experiences of newly qualified nurses during their first two years of employment. Nurse graduates (n=19) in this study had one year's experience and were located across multiple wards in one hospital in the Netherlands. They used written diaries to record their experiences and in these they documented being tasked with unrealistic workloads that were unmanageable with a complexity of care beyond their comprehension (Ten Hoeve et al., 2018). Multiple studies have reported that

newly qualified nurses were allocated workloads beyond their experience and were expected to perform at that same pace and level as experienced colleagues (Lea and Cruickshank, 2015; Hussein et al., 2017; Hsiao et al., 2021; Alsalamah and Fawaz, 2023; Sterner et al., 2023; Zheng et al., 2023). This contradicts guidance from Benner (1984) who recognises newly qualified nurses at advanced beginner level and should not be expected to function at an experienced level.

Continuing the discussion on unrealistic expectations and their impact on the newly qualified nurses, excessive workload was a key issue for many during the transition period, with many not recognising the significant increase in workload compared to their previous experience (Lea and Cruickshank, 2007; Lea and Cruickshank, 2015). Excessive workloads beyond skill and experience impacts patient safety and may lead to adverse consequences for patients. An Australian study (Murray et al., 2019) explored the transition experiences of eleven newly qualified nurses with a focus on patient safety. The findings revealed that newly qualified nurses focus more on completing tasks in a timely manner than attending to patient safety. Medication management was a significant stressor that added to time management issues (Murray et al., 2019). Similarly, Willman et al., (2021) explored newly qualified nurses' (n=16) experience and ability to manage complex patient situations six months post registration. The findings revealed that the newly qualified nurses were not sufficiently prepared and did not feel supported to meet responsibilities and demands. Nurse graduates were expected to be able to manage any situation presented to them. Their competence was not taken into consideration when being allocated responsibilities, yet lack of experience could negatively impact patient safety (Willman et al., 2021).

Challenges Encountered due to High Expectations

Four focus group interviews conducted in Slovenia explored newly qualified nurses' (n=18) perceptions of their new role and competency level (Prosen and Licen, 2023). The study revealed the importance of support during transition and the challenges related to the scope of nursing practice (Prosen and Licen, 2023). Leadership, documentation, communication, technology, and inter-professional

skills were recognised as important, but perceived as the most challenging by newly qualified nurses (Prosen and Lichen, 2023). Such challenges and high expectations impacted the newly qualified nurses' job satisfaction. In the United States Clark and Springer (2012) examined the lived experience of nurse residents (n=37) and their level of job satisfaction in their first year of practice. Focus groups revealed that they felt overwhelmed with the workload and struggled to get to know the routine as every day varied. In order to cope with the fast pace of the wards, they arrived earlier to work to prepare themselves for the day but found that they were constantly running and thinking throughout the day (Clark and Springer, 2012).

According to Della Ratta (2016) high expectations and extreme workload pressures led to newly qualified nurses questioning their capability as a nurse during transition. This qualitative study aimed to comprehend newly qualified nurses' experiences of caring for deteriorating patients during the first year of practice. Nurse graduates (n=8) identified that experience and the learnt ability to prioritise patient care led to more realistic expectations of their abilities. Additionally, they were more cognisant of when to request assistance.

Five studies used mixed methods approaches to investigate the influence of organisational factors and clinical supervision on the transition experience of newly qualified nurses (Parker et al., 2014; Pfaff et al., 2014; Hussein et al., 2017; Woo and Newman, 2019; Kim and Shin, 2020). Influential factors and changes in newly qualified nurses' perspectives over twelve months during a transitional support program were explored by Hussein et al., (2017). The Manchester Clinical Supervision Scale and the Practice Environment Scale were utilised to collect the data at 8-10 weeks (n=114) and again at 10-12 months post registration (n=87). Two thirds of the participants worked in non-critical care areas and one third worked in critical care areas. Similar to findings from studies by Toothaker et al., (2022) and Gautman et al., (2023), some newly qualified nurses reported facing unrealistic workload expectations from other nurses and felt challenged by increased patient acuity and staff shortages. Nurse graduates reported working outside their scope of practice when tasked, for example, with using unfamiliar equipment. Nurse

graduates' skill levels were not always considered, and they were often allocated caseloads beyond their skills and expertise. This resulted in the newly qualified nurses feeling challenged and lacking in confidence. Inadequate skill mix coupled with high patient acuity and rapid patient turnover, meant that newly qualified nurses often worked beyond their capabilities (Hussein et al., 2017). Graduates also felt that senior nurses allocated the heavier workloads to them (Hussein et al., 2017).

In their mixed methods study, Kim and Shin, (2020) explored the barriers to, and facilitators of newly qualified nurses' successful transition to the role of registered nurse. The quantitative phase surveyed newly qualified nurses (n=212) using the Casey-Fink Graduate Nurse Experience Survey, while the qualitative phase used focus group interviews (n=22) before the data were converged. The graduates experienced various expectations by staff. Some staff recognised their level of experience, while some of the more senior nurses expected them to perform at the same level of competence as them. Such high expectations led to stress and fear in relation to the level of knowledge and skills, a finding consistent with others (Lea and Cruickshank, 2015; Ten Hoeve et al., 2018). On the other hand, realistic workload allocations led to feelings of satisfaction and fulfilment, as they were able to cope with the patients' needs (Kim and Shin, 2020). The mismatch between high expectations and the ability to perform left newly qualified nurses feeling anxious and overwhelmed with a sense of dread attending work (Ten Hoeve et al., 2018). Such experiences may have implications for staff retention.

Challenges and Impact of Unrealistic Expectations

Unrealistic expectations were reported in a study that investigated the experience of newly qualified nurses following their initial six to twelve months transition to registered nurse (Woo and Newman, 2019). The quantitative phase of this study surveyed newly qualified nurses (n=30) using a survey designed for the study, while the qualitative phase used focus group interviews with newly qualified nurses (n=5). It was reported that in some healthcare settings the newly qualified nurses were expected to become proficient during transition. Unrealistic expectations led to the allocation of higher levels of responsibility that were perceived beyond the newly

qualified nurses' ability, and scope of practice, consequently they felt unprepared to perform specialised skills required for the role (Woo and Newman, 2019). The finding of unrealistic expectations of newly qualified nurses concurs with those of other researchers (Hussein et al., 2017; Ten Hoeve et al., 2018; Toothaker et al., 2022; Gautam et al., 2023).

While high levels of expectation were placed on them by healthcare settings, newly qualified nurses also put additional pressure on themselves to perform. A cross-sectional Australian study explored newly qualified nurses' experiences of entering the workforce and factors that affected transition, satisfaction, and retention (Parker et al., 2014). Firstly, an online survey was completed by newly qualified nurses (n=282), followed by seven focus groups with newly qualified nurses (n=55). In terms of expectations, newly qualified nurses were clear on their roles and responsibilities, but 26% identified that they did not have or were unsure if they had enough information to carry out the role; 22% felt unable to meet their own expectations, while 45% experienced increased stress levels with role expectations (Parker et al., 2014). On the other hand, 85% were confident in meeting others' expectations and 85% felt they had the ability to perform competently. This contrasts with findings from earlier studies, where new graduates were overwhelmed with the workload and the lack of support (Hussein et al., 2017; Ten Hoeve et al., 2018; Toothaker et al., 2022; Gautam et al., 2023). Expectations in relation to supervising junior staff in medical and surgical areas, along with associated workload, were seen as unreasonable. As a result, morale was low, and stress was high (Parker et al., 2014).

An explanatory sequential mixed methods study explored newly qualified nurses' confidence in inter-professional collaboration (Pfaff et al., 2014). In phase one, newly qualified nurses (n=514) completed an online survey, and in phase two newly qualified nurses (n=16) participated in interviews. The findings indicated that most of the newly qualified nurses interviewed struggled to balance the demands of collaborative practice. This involved managing self-inflicted expectations of practice, as well as the expectations of other healthcare professionals. This discord

negatively affected their confidence, particularly in inter-professional collaboration. New graduates reiterated that the knowledge expectation by patients, staff, and the multidisciplinary team was unrealistic and a source of stress for them in their new role. As discussed earlier, these experiences led to self-questioning about their ability to perform (Pfaff et al., 2014; Della Ratta, 2016).

In conclusion, the literature reviewed identified that high expectations put pressure and stress on the newly qualified nurses. The high levels of expectations came from staff, patients and the newly qualified nurses themselves. In particular, studies reported that the newly qualified nurses were often expected to perform at the same level as senior nurses. To compound this, graduates were reported to put pressure on themselves to perform at more experienced levels, without considering their stage of experience or level of proficiency. The allocation of unrealistic workloads without due consideration for their skills and level of experience resulted in feelings of stress and pressure to work outside their scope of practice. Inadequate consideration of nursing skill and experience when allocating caseloads can have adverse consequences for patients in terms of patient safety concerns. The additional pressure of unrealistic workloads in the early stages of transition impacted satisfaction with their role, self-confidence, and ability to perform. It was evident from the mixed method studies that while the first phases of quantitative data yielded important results, the qualitative findings elaborated further, providing rich data and context with respect to the struggles encountered by newly qualified nurses. The next section presents the findings from the literature in relation to professional socialisation during transition.

2.5 Professional Socialisation

Professional socialisation begins when students commence their nursing programme (Zarshenas et al., 2014). The process of professional socialisation involves internalising and developing a professional identity as students learn the professional attitudes and behaviours, clinical skills and values of the profession (Mooney, 2007a; Young et al., 2008; Price, 2009; Zarshenas et al., 2014). This

theme is titled professional socialisation and comprises literature associated with socialisation experiences of newly qualified nurses. Professional socialisation is not straightforward and takes time to develop through constant exposure to an explicit culture within a professional municipal (Sadeghi et al., 2019). The process is personal and transformative and the integration into such a culture can be impacted by personal, association and relational factors (Sadeghi et al., 2019). Support is an essential part of professional socialisation in nursing. The benefits of positive professional socialisation of newly qualified nurses are evident in the literature with reports of high levels of role satisfaction and dedication to the profession which directly impacts on recruitment and retention (Woo and Newman, 2019). Conversely, challenges in social acceptance have a significant impact on the transition experience. Adapting to the role of registered nurse takes time and during this period the newly qualified nurses progress through various stages of proficiency while adjusting to their new role (Benner, 1984; Duchscher, 2008; 2009; Murray et al., 2019). It is recognised that support forms an important part of socialisation during the transition phase of the newly qualified nurse and this was discussed in several studies (Walker, 1998; Delaney, 2003; Zinsmeister and Schafer, 2009; McKenna and Newton, 2008; Lee et al., 2013; McCalla-Graham and De Gagne, 2015; Hussein et al., 2017; Alghamdi and Baker, 2020; Toothaker et al., 2022).

Importance of Orientating Newly Qualified Nurses to Clinical Sites

Orientation programmes are designed to prepare newly qualified nurses for practice and provide time for the new graduates to become familiar with the clinical setting. Such supportive programmes enable the socialisation of newly qualified nurses into new clinical areas. On the other hand, lack of social support results in dissatisfaction (Strauss et al., 2016). A descriptive correlational study assessed the impact of orientation programmes on newly qualified nurses (n=95) within six to 24 months of registration (Alghamdi and Baker, 2020). Half of the newly qualified nurses identified the need for additional support from preceptors during their orientation period. A significant relationship was identified between support with communication, leadership, professional satisfaction and job satisfaction (Alghamdi and Baker, 2020). This concurs with findings by Toothaker et al., (2022) where most participants identified that a lack of leadership and lack of support led to patient safety concerns.

A small number of newly qualified nurses identified the positive impact of supportive mentors in their transition experience and commitment to the role (Toothaker et al., 2022). Although nursing shortages were acknowledged, the newly qualified nurses were overall dissatisfied with their orientation programme as it did not meet their expectations or align with programme objectives identified at the outset (Toothaker et al., 2022). A phenomenological study conducted in the United States explored newly qualified nurses' transition experience during orientation (Delaney, 2003). The newly qualified nurses (n=10) were undertaking a 12-week orientation programme to assist them in their transition. The findings revealed that newly qualified nurses valued the knowledge and experience of the more experienced preceptors, while they had negative perceptions of those who were less experienced. The socialisation process within the unit in this study provided a challenge, where participants did not always feel welcome, and at times felt rejected. Similar experiences were reported elsewhere by Walker (1998) and Lee et al., (2013). Being accepted results in a more positive experience and positive feelings about transition (Delaney, 2003).

The importance of organising the orientation aspect of the transition period was highlighted in the literature. When it was well organised, assimilation into the new environment was more effective (Zinsmeister and Schafer, 2009; Hussein et al., 2017). An Australian mixed methods study identified that orientation was the foundation of success (Hussein et al., 2017). In this study, the newly qualified nurses responded positively to the welcome they received with formal introduction to the team during the orientation days. Sufficient time to become familiar with the ward, the layout, equipment, and policies was essential for supportive environments, where newly qualified nurses felt welcomed and part of the team (Hussein et al., 2017). A Saudi Arabian quantitative cross-sectional study explored the challenges and associated factors that limit knowledge acquisition of newly qualified nurses (n=95) (Baker, 2020). High levels of satisfaction were reported when efforts were made to socialise and orientate newly qualified nurses to the clinical areas (Baker, 2020). However, an Irish study reported that only some newly qualified nurses (67%, N=14/21) were orientated to their new role; and 43% (n=9/21) were orientated to the ward (Deasy et al., 2011).

It has been suggested that orientation for newly qualified nurses is too short (Prosen and Lichen, 2023). The implications of limited time to familiarise newly qualified nurses with the workplace results in them feeling challenged in understanding and applying policies and procedures in the workplace (Alharbi et al., 2023). This was also reported in an Australian study, where a mixed-methods cross-sectional design identified factors that affected transition and workforce satisfaction and the likelihood of retention (Parker et al., 2014). In this study, the majority of newly qualified nurses (n=60%) felt supported by nurses, while 32% were dissatisfied with the support and orientation available. Nurse graduates prefer to choose their work area and desire to be welcomed and better supported (Parker et al., 2014). Nurse graduates required structured support, encouragement, and constructive feedback on performance during the graduate year. Knowing how others perceived their performance would have alleviated stress and potentially impacted positively on their confidence (Parker et al., 2014). Some senior colleagues demonstrated a lack of interest in supporting newly qualified nurses, but this did not deter them from seeking assistance from them, where needed. Graduates rely on senior nurses with a high level of expertise, and these are role models for these new nurses. Displays of disinterest in supporting newly qualified nurses may impact patients.

Acceptance and Support during Transition

The acceptance of newly qualified nurses in the team is another factor in professional socialisation. The literature reviewed identified that becoming a member of the team is an important part of role transition. However, newly qualified nurses have had varying experiences of acceptance by the team (Andersson and Edberg, 2010; Hussein et al., 2017). In Sweden, a qualitative study described the experiences of newly qualified nurses (n=8) during their first year of practice (Andersson and Edberg, 2010). The findings revealed that becoming a nurse included being able to shoulder responsibility, prioritise tasks, and convey confidence. As newly qualified nurses, they had to strive for acceptance and respect (Andersson and Edberg, 2010). This is similar to findings by Hussein et al., (2017),

where it was identified that the newly qualified nurses were not always formally introduced to the ward staff.

Support is an important element of professional socialisation. Preceptorship during the transition phase can positively or negatively influence experiences of professional socialisation. An American study used a descriptive retrospective design to evaluate the impact of preceptor continuity in the Nurse Internship Program (Smith and Chalker, 2005). The Nurse Internship Program was a four-month program where newly qualified nurses were placed in two to four medical and surgical settings. The newly qualified nurses were assigned a preceptor on the same roster so that they worked together. The 'Preceptor Continuity in the Nurse Internship Program' internal postal survey was used to collect the data. Nurse graduates (n=216) completed the survey. The results identified that a single preceptor was beneficial to interns as it helped them take responsibility for four to six patients and increased their confidence in skill development and clinical decision making. On the other hand, having multiple preceptors assisted in improving their clinical skills and knowledge and were a resource for problem solving (Smith and Chalker, 2005). The single site study in a military hospital provided very context specific findings as the intern program was developed and implemented by this hospital. Nonetheless valuable data were presented. In this study the interns were not counted in the staffing numbers, and this facilitated learning. Similarly, some newly qualified nurses liked having many preceptors, as it allowed them to observe different practice styles. Feedback provided reassurance in relation to safe practice, instances of the non-provision of feedback resulted in stress and avoidance of preceptors' questions. This communication gap embedded self-doubt in relation to their ability to provide quality patient care. This concurs with findings from Parker et al., (2014) where lack of support and feedback were experienced by newly qualified nurses.

Supportive preceptors were considered inspiring and motivating (Alsalamah and Fawaz, 2023). Satisfaction was experienced in working with supportive preceptors and contributed to feeling valued and being part of the team (Clark and Springer,

2012). A qualitative study explored the transition experiences of nurses in the first year of their role as registered nurse (Yildiz and Ergun, 2020). Nurse graduates (n=30) from eight hospitals in Turkey participated in the interviews. Similar to the findings reported by Parker et al., (2014), newly qualified nurses expected feedback and support from colleagues and managers. While stress was experienced during transition to the role, feeling part of the team were the main socio-cultural and developmental concerns of the newly qualified nurses (Yildiz and Ergun, 2020). A supportive environment is important for newly qualified nurses where they feel valued and part of the team as they settle into their new role.

Unsupportive environments can lead to high turnover of staff and impact newly qualified nurses' intention to remain in nursing. Therefore, the relationship between the newly qualified nurses and the preceptor should not be underestimated. Some studies reported challenging, unsupportive relationships with senior nurses or mentors (Lea and Cruickshank, 2007; Kelly and Ahern, 2009; Lee et al., 2013; Alsalamah and Fawaz, 2023; Gautam et al., 2023). One such study identified the power exerted by senior nurses based on the presence of a hierarchical culture. Nurse graduates reported feeling controlled, overburdened, and undermined by senior staff (Gautam et al., 2023). Similarly, in another study newly qualified nurses reported the lack of readiness to deal with power relationships (Kelly and Ahern, 2009). Hung et al., (2017) reported most participants (n=14) experienced negative attitudes from senior colleagues; isolation and bullying led to frustration and feelings of helplessness, with some senior nurses being hostile and unhelpful (Lea and Cruickshank, 2007). Nurse graduates who reported feeling bullied and unsupported by colleagues resisted asking for assistance or advice (Alsalamah and Fawaz, 2023). This has implications for newly qualified nurses' self-confidence and patient safety. Behaviour such as this has the potential to lead to stress related absences and lack of commitment to the ward (Ho et al., 2021). Conversely, senior nurses were valued for their expertise, and the ability of newly qualified nurses to validate their decisions was one safety mechanism to avoid error and patient harm. However, this level of expertise was not always available (Toothaker et al., 2022). Furthermore, it was identified that the availability and quality of support impacted on their transition experience, self-confidence, and level of job satisfaction. On the

other hand, newly qualified nurses expressed feelings of satisfaction, as they were recognised and acknowledged by patients, relatives, and were 'visible' to the multidisciplinary team (Kumaran and Carney, 2014). Similarly, Hussein et al., (2017) identified the significance of support during transition, with managers and nurses being identified as crucial for acceptance and learning.

Friendliness and approachability were identified as essential for successful preceptorship relationships. The absence of supportive clinical environments results in dissatisfaction of newly qualified nurses and challenges with socialising (Mooney, 2007a). Supportive preceptors assisted newly qualified nurses in coping in their new role, leading to friendships. Establishing a social bond in the ward was an important part of transition so that newly qualified nurses felt comfortable asking for support. Clinical instruction was essential for learning and preparing for the real world of nursing (Hickey, 2010). Facilitated instruction, learning opportunities, clear communication of expectations, approachable mentors, promoting independence to assist with developing clinical judgement skills were factors that were considered important for a positive learning experience (Hickey, 2010).

Challenges and Opportunities to Build Relationships during Transition

Moreover, developing trusted relationships with preceptors, mentors and colleagues resulted in an encouraging and supportive learning environment. This was identified in a phenomenological study that described the lived experiences of newly qualified nurses (n=16) with eight to ten months experience as registered nurses (Urban and Brandenburg, 2022). A supportive environment for newly qualified nurses affords the opportunity for communication of feelings, learning needs and questions to aid comprehension of service delivery. A sense of teamwork and camaraderie enhances the supportive environment. The achievement of 8-10 months experience resulted in feelings of excitement about the role and feeling part of the nursing family (Urban and Brandenburg, 2022).

Likewise, a qualitative study aimed to understand the transition experience of newly qualified nurses (n=50) as they transitioned into clinical practice during their first

three months as registered nurses (Ho et al., 2010). The findings revealed that newly qualified nurses' knowledge and skill levels were insufficient to manage routine work with fear of incompetence and communication challenges during handover (Ho et al., 2010). Support was required from managers, colleagues, and preceptors as they adjusted to working different shift patterns, especially night duty. Furthermore, it was found that preceptorship of newly qualified nurses varied, with only one nurse out of the 50 assigned a preceptor post registration (Ho et al., 2010). While 65% expected to receive ongoing support when registered, just 29% received ongoing support after registration. Coupled with this was the development of professional responsibility, where nurses identified the importance of support from nurse managers and colleagues to be able to deal with deteriorating patients and stressful situations (Martin and Wilson, 2011).

Continuing the discussion on professional socialisation, a qualitative descriptive study from Saudi Arabia explored the experiences of newly qualified nurses during their first year of practice (Alharbi et al., 2023). A purposive sample of newly qualified nurses (n=15) participated in the semi-structured interviews. The findings highlighted fear of dealing with new or deteriorating patients and that staff support assisted with overcoming this fear and confidence building (Alharbi et al., 2023).

A study in the United States utilised a qualitative approach to understand the lived experiences of newly qualified nurses 8–10 months post registration. Semi-structured interviews were undertaken with newly qualified nurses (n=16). The findings revealed that realistic dynamics were present in the clinical setting when some staff did not conform to the supportive nature resulting in some uncivilised events. Uncivilised staff who detested questions were often the most experienced members of the nursing team, newly qualified nurses coped by avoiding them (Urban and Brandenburg, 2022). The newly qualified nurses relied instead on other graduate's support and even former nursing classmates as a supportive network (Urban and Brandenburg, 2022). Similar findings were reported in relation to support in a qualitative study by Laschinger et al., (2016). Additionally, a qualitative study using Husserl's phenomenological approach explored the expectations of final year

nursing students and their experiences as newly qualified nurses (n=13) during their first six months of employment (Ahmad et al., 2022). The findings revealed that newly qualified nurses frequently encountered horizontal violence and identified that the presence of male nurses averted such instances (Ahmad et al., 2022). In general, where managers were negative and unsupportive towards newly qualified nurses, this was reflected in the team (Kelly and Ahern, 2009; Ahmad et al., 2022). Self-adaption and positive attitudes helped with transition (Hung et al., 2017). In China, a quantitative cross-sectional study assessed the work adaptability disorders among newly qualified nurses (Cai, 2021). Several surveys were employed including the Work Adaptability Disorder Scale, Transition Shock of Newly Graduated Nurses Scale, and Organizational Socialisation Questionnaire to collect the data from newly qualified nurses (n=206) in four tertiary hospitals. The findings revealed that newly qualified nurses had to quickly adapt to the work environment. Meanwhile, more support and encouragement from nurse managers would enhance the adaptation to the new role (Cai, 2021). A qualitative study explored the role transition of newly qualified nurses (n=10) in rural practice in New South Wales (Lea and Cruickshank, 2007). The findings were reflective of the aforementioned studies in that they highlighted that negative ward dynamics affected nurse transition and the level of support shown towards newly qualified nurses varied greatly. Although managers in this study were informed of the issue, it remained unresolved (Lea and Cruickshank, 2007). Unresolved issues allow such behaviours to become the norm and can lead to toxic and unpleasant work environments and ultimately impact staff retention.

In the United Kingdom, a qualitative descriptive study explored the experiences of support by newly qualified nurses (n=6) to generate retrospective accounts of how final placements prepared newly qualified nurses for the role of registered nurse (Hart, 2019). The findings indicated that support at all levels impacted the experience from the clinical learning environment, clinical education team, managers, and university links. Supportive mentors were important for learning and building confidence and they particularly liked the double mentor model. However, personality clashes, multiple mentors and poor communication between mentors led to dissatisfaction for final year students (Hart, 2019). Similar findings were reported

by Aboshaiqah and Qasim (2018) study where interns identified factors such as availability, approachability and trustworthiness of preceptors as influential factors. The three sources of informal support post registration were registered nurses, Nurse Managers, and the multidisciplinary team; 38% received feedback from managers and registered nurses less than anticipated (Deasy et al., 2011). Similar findings in relation to the importance of a supportive environment were reported by (Hussein et al., 2017; Hsiao et al., 2021; Alsalamah and Fawaz, 2023; Zheng et al., 2023).

In summary, professional socialisation plays a role in the transition experience. Orientation programmes were helpful but sometimes too short to provide the real benefit of familiarising newly qualified nurses with an area and allowing them time to settle into the clinical setting. Although the participants in these studies had completed practice placements it became clear that with professional socialisation there is a limit and beyond it, there are issues with cliques and culture that can be hard to break through and overcome, making acceptance a problem for some. The implications of lack of attention to professional socialisation impacts greatly on the transition experience for newly qualified nurses. It was noted that an unsupportive environment has the potential to negatively impact patient care, particularly if senior staff are unhelpful or perceived as unapproachable. The literature demonstrated that newly qualified nurses received mixed reactions from staff, particularly managers and senior nurses who rank hierarchical positions and exert power in relationships with newly qualified nurses. Helpful staff and preceptors eased the transition and were viewed as inspirational by the newly qualified nurses.

The next section summaries the overall critique of the studies included in the literature review.

2. 6 Overall Critique of the Studies Included in the Literature Review

Overall, fifty-seven studies were included in this literature review. These studies employed various methodologies; quantitative, qualitative and mixed methods. The larger sample sizes in the quantitative studies provided important data however, the low response rates and inclusion of single sites limited the generalisability of the results. Conversely, studies that involved several sites tended to have smaller sample sizes. The qualitative studies provided rich data, had small sample sizes and single site involvement. The mixed method studies provide greater insights with data collection at two points and the integration approach resulted in a greater understanding of the phenomenon. In these studies, the generalisability of the results was limited as often single sites were utilised with small sample sizes or low response rates.

The next section details the theoretical frameworks employed by the studies included in this literature review.

2.7 Theoretical Frameworks Employed by the Studies in the Literature Review

Theoretical frameworks are an important aspect of any research study (Grant and Osanloo, 2014). They assist in describing and understanding the phenomenon of interest (Lo-Bindo-Wood and Haber, 2014; Heale and Noble, 2019). This provides a foundation for the review of literature and chosen methodology (Heale and Noble, 2019).

In this literature review, the three most prominent theoretical frameworks employed in the studies included were Benner's novice to expert, Kramer's transition shock theory and Duchscher's stages of transition theory. As mentioned earlier, NQNs transition and socialisation experiences are widely discussed in the literature and this recognition commenced in the reality shock theory (Kramer 1974). In 1984, Benner developed the novice to expert theory based on the Dreyfus and Dreyfus

model to explain the progressive stages that students and newly qualified nurses progress through on their quest to competency and beyond. In the last 15 years Duchscher (2008; 2009) developed a framework or theory to explain the stages of transition; the Stages of Transition Theory and Transition Shock Model (Duchscher, 2012). This theory further illuminated the ongoing reality shock experienced by NQNs and led to the development of additional supports for NQNs in the clinical setting to support them during their transition (Murray et al., 2019). The Transition Shock Theory identified the broad range of factors that influence the transition experience (Duchscher, 2008). Within the literature, studies that focused on transition experience employed Duchscher Transition Theory and Kramer's transition shock theory. While studies that focused on development of skills and the progression of competency referred to Benner's novice to expert framework. Findings from this literature review enabled the identification of a research gap which this current study aims to fill. The theoretical framework that guided this study will be discussed in detail in the next chapter.

2.8 Chapter Summary

In conclusion, fifty-seven studies were included in this review. These studies employed various methodologies; quantitative (n=12), qualitative (n=37) and mixed methods (n=8). The studies identified that while newly qualified nurses recognised their achievement in completing the degree to become a registered nurse, they only realised the extent of the accountability and responsibility after they were registered. Once they started working as a newly qualified nurse they recognised the enormity of the role and the learning and experience that they had yet to achieve. Hindrances in learning during the undergraduate programme were recognised as they were accountable and responsible for making patient care decisions and managing caseloads. The newly qualified nurses only became aware of their lack of knowledge and skills once they had to manage their own caseloads and think for themselves, resulting in many of them feeling unprepared for the reality of practice as a registered nurse. The newly qualified nurses felt under pressure to know everything and missed the supports that had been in place during the undergraduate degree programme. New graduates required support from all members of the

multidisciplinary team to enable them to build confidence and competence in managing patient care and inter-professional collaboration. Welcoming and belongingness together with support from managers and staff were key to newly registered nurses' development and transition. Senior nurses were often less supportive than new graduate colleagues and managers. Nurse graduates did not appreciate the responsibility of the role, or the workload and variety of skills required. New graduates required time to develop their critical thinking skills and sought assistance from trusted colleagues. They also knew the importance of the need to question advice, something that may not have been previously observed in practice.

The quantitative studies with the larger sample sizes provided important data that provided insight into the phenomenon. The qualitative studies, although with much smaller sample sizes, provided deep insights into the transition experience of newly qualified nurses. However, it was observed that the use of the mixed method approach generated a greater understanding of the phenomenon and the experiences that were uncovered in the quantitative phase as they provided further explanations for the preceding findings in the second phase. The integrated data presented an overall comprehensive perspective on the transition experience. While the studies in this literature review looked at transition to practice and practice readiness, no study, to date, has looked at internship and its impact on newly qualified nurses' experiences.

The aim of this mixed methods research study was to examine newly qualified general nurses' experience of the 36-week internship period and its value to their transition to the role of registered nurse.

The objectives for this study are;

1. To examine newly qualified general nurses' preparation for internship prior to its undertaking.

To examine the adequacy of the pre-internship preparation for the 36-week internship period.

2. To examine experiences during the internship and their contribution with respect to;
 - a. Experience of clinical skills acquisition during the internship.
 - b. Feedback on progress during the internship.
 - c. Protected time for competency assessment during the internship.
 - d. Reflective practice during the internship.
3. To identify the level of satisfaction with support during the internship.
4. To elicit newly qualified general nurses' opinions about the 36-week internship period with respect to its value and contribution to the preparation for transition to the role of registered nurse.

The next chapter discusses, with rationale, the research methodology for this study.

Chapter 3 Methodology

“When the study phenomenon of interest is multifaceted and includes dimensions that are both qualitative and quantitative in nature, a mixed methods approach is appropriate”
(Curry and Nunez-Smith, 2015; p. 5)

3.1 Introduction

The previous chapter provided evidence that there is a lack of information available to describe the internship experience and its contribution to preparing newly qualified general nurses for transition to the role of registered nurse. As a follow on, this chapter will outline the theoretical framework and research design that were chosen to answer the research question. The associated philosophical underpinnings are presented and the rationale for choosing a sequential explanatory mixed methods design are outlined.

3.2 Overview of Theoretical Framework

A theoretical framework refers to the link between the study and the recognised theories and models, forming the basis of evidence-based practice (Jirojwong et al., 2014). The central focus of this study was the 36-week internship period and the acquisition of clinical skills to prepare newly qualified general nurses for the transition to the role of registered nurse. While researching an appropriate theoretical framework for this study, several frameworks were reviewed and considered for their suitability. The theoretical frameworks considered were Benner's Novice to Expert Framework (Benner, 1984), Duchscher's Stages of Transition Theory and Transition Shock Model (Duchscher, 2008; 2009), Kramer's Reality Shock Theory (Kramer, 1974) and Bridges Transition Theory (Bridges, 1991). These frameworks were considered due to their focus on the transition to the role of registered nurse. However, upon further research and inspection, these frameworks (except for Benner's) were not deemed suitable as they focused on the transition journey and experiences during the first year as a newly qualified nurse. This study, however, examines experiences of internship to identify how it prepared interns for their transition to the role of registered nurse. Although Benner's model is the most suitable framework for this study, Duchscher's framework will be referred to again in the discussion chapter as it is relevant to the discussion about transition. Benner's model focused on skill acquisition and the gradual progression of the nursing student from novice at the start of the programme to competent level during internship. Therefore, Benner's Novice to Expert Framework, recognised by Landers et al., (2020) and the NMBI (2023) (Appendix 3.1 and 3.2) was deemed

most appropriate as the model that underpins clinical skill acquisition during the undergraduate degree in general nursing education.

Some of the criticisms of Benner's framework include the linear progression of the continuum and lack of measurement as the transition from one stage to the next is not clearly defined (English, 1993). The comparative guide is considered helpful (Brykczynski 2002). While the model is considered easy to understand, complexity encroaches when trying to determine progression (Altmann, 2007). Although progression is linear, regression can be included if unfamiliar situations are encountered (Altmann, 2007). There is a lack of guidance on achieving the expert stage, although Benner acknowledges that not all nurses will become experts, no explanation was provided (Altmann, 2007). Although the concepts in Benner's model have been consistently referred to no operational definitions for the concepts exist (Altmann, 2007). Nevertheless, Benner's model has been widely employed by educators and hospitals to develop nursing education programmes and career progression pathways (Altmann, 2007). As identified in the literature review, Benner's framework was one of the most prominent theories employed when researching retrospective undergraduate experiences.

3.2.1 Theoretical Framework - Benner's Novice to Expert

Benner's model originated from the Dreyfus model of skill acquisition (Dreyfus and Dreyfus, 1980) which was used to examine 'a pilot's performance in emergency situations' (Benner, 2001). The Dreyfus model recognises experiential learning and is based on the premise that different types of experiences build on the ability to perform (Dreyfus and Dreyfus, 1980; Benner, 1984). Airlines and healthcare organisations share a safety vision to prepare staff to deal with emergency situations to optimise positive outcomes (Benner, 2001). Benner embraced the Dreyfus concept and developed the five-stage progression model from novice to expert (Figure 3.1).

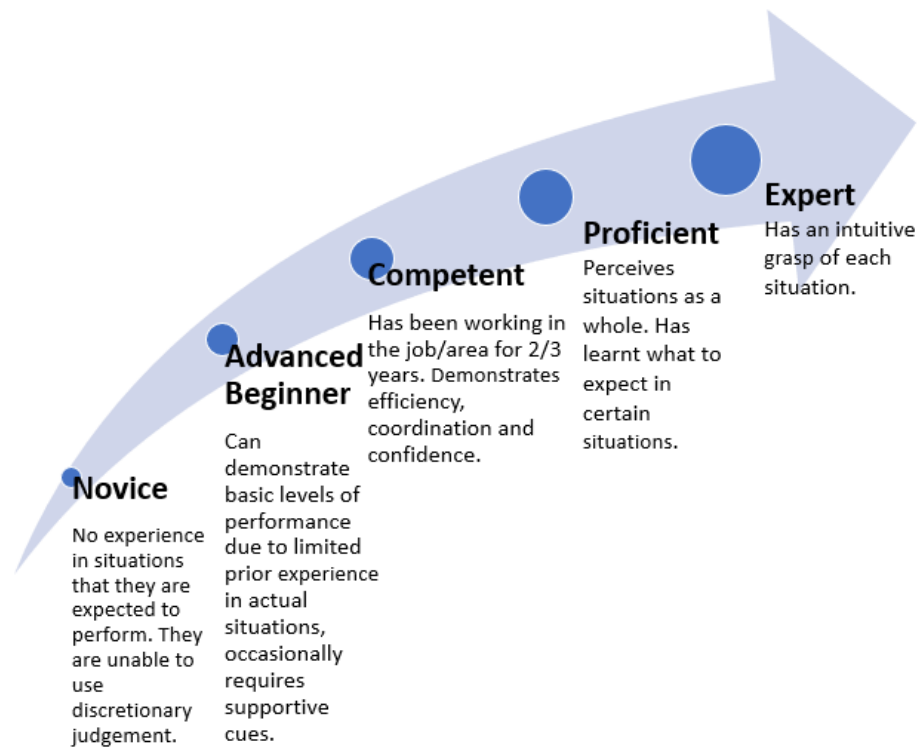


Figure 3. 1: Benner's Framework (Murray et al., 2019, p. 201).

The five stages of Benner's (1984) model are as follows; novice, advanced beginner, competent, proficient, and expert. Benner (1984) identified that newly qualified nurses were at the advanced beginner stage because they are only able to demonstrate basic nursing skills due to limited prior exposure, as well as requiring supportive guidance from guidelines and mentors. At the advanced beginner stage, Benner maintained that new nurses have no 'aspect recognition' due to limited experience. For example, newly qualified nurses would struggle with interpreting patients' vital signs and taking appropriate action (Benner, 2001). As part of practice placements, nursing students gain experience in recognising cues for patient deterioration; such cues vary from patient to patient, and it is the experiential learning that informs students' knowledge and attainment of such skills (Benner, 1984). This is in keeping with findings from an Irish study prior to the establishment of the degree and internship where it was reported that newly qualified nurses struggled to manage patient care due to a lack of clinical experience (Mooney, 2007b). While Benner's model acknowledges that advanced beginners require the support of registered nurses to ensure that all patients' needs are met, at the

competent stage the student can critically analyse and determine the care requirements using a systematic process. As aforementioned, according to Benner's model, newly qualified nurses are at the advanced beginner stage (Benner, 1984; Murray et al., 2019). Although Benner's model was developed in 1984, it is still applicable to nursing today. Benner's model is endorsed by the Nursing and Midwifery Board of Ireland (2019; 2023) and is incorporated into the national competency assessment guideline that sets out the performance criteria and stages of assessment of nursing students at each year of training (Appendix 3.3). In Ireland, the advanced beginner stage is achieved in the 4th year supernumerary placement prior to the commencement of internship.

Internship is a period of employment for nursing students for the final 36 weeks of their 4-year degree programme. This period allows the interns to link theory to practice and consolidate their learning. The Nursing and Midwifery Board of Ireland adapted Benner's Framework and incorporated it into the national Competency Assessment Document and the associated Competency Assessment Document guideline. In line with the Competency Assessment Document guideline and Benner's framework, interns must reach the competent stage in all the performance criteria in line with the Nursing and Midwifery Board of Ireland Requirements and Standards for Nurse Registration (NMBI, 2023). Benner's model fits with NMBI's scope of practice that allows nurses and students to practice safely and effectively in line with their stage of training, level of experience and level of competency.

Knowledge development in nursing consists of practical knowledge or understanding that is acquired through clinical experience (Benner, 1984; Benner et al., 2009). Nursing students foster clinical skills and knowledge of person-centred care through evidence-based theoretical curricula (Landers et al., 2020). Clinical skills and knowledge develop gradually, and with experience from one clinical placement to the next (Benner, 1984; Benner et al., 2009). Benner's framework is considered a situational based model where students progress through the various stages during their training. In line with Benner (1984), Benner et al., (2009), students at novice or advanced beginner stage lack discretionary judgment as they

may not know the most important skill to perform in certain clinical situations. The principles of the Code of Professional Conduct (NMBI, 2021) inform the domains of competence, and this is benchmarked against other countries globally, as well as the European Federation of Nurses' Associations Competency Framework (2015) and the EU Council Directive 2013/55/EU to ensure they complied with the statutory requirements of the EU (NMBI, 2023). During the benchmarking process, no specific competency framework was in use, but the Nursing and Midwifery Board of Ireland sought to use one. The selected framework was that of Benner (1984) where the focus on competence and the gradual and incremental acquisition of clinical skills, knowledge, and professional attributes was evidenced. The competency framework aims to ensure that newly qualified nurses are equipped to deliver safe, effective, evidence-based, and compassionate care throughout the life continuum (NMBI, 2023).

The 36-week internship period has provided additional exposure to the nursing workforce and increased opportunities to achieve competence and consolidate learning. It is recognised that newly qualified nurses are not going to reach the expert stage during transition, as this takes time to develop (Murray et al., 2019). In Benner's theoretical framework, newly qualified nurses are at the advanced beginner level and they reach the competent level two to three years post registration (Benner, 1984).

Having given due consideration to the potential frameworks that could be used in this study, it was decided that Benner's model was the best fit. The model fits with the current practice that recognises the gradual progression of nursing students as they become competent nurses. The Nursing and Midwifery Board of Ireland have already endorsed Benner's framework (NMBI, 2023), further validating it as a suitable fit for this research. The Benner Framework is intrinsic to the research undertaken and is aligned to the professional and philosophical stance that acknowledges the value of experiential learning in clinical practice and the gradual progression of nursing students in the development of clinical skills that prepare them for the role of registered nurse. The research undertaken aims to analyse the

experience of internship and its value in preparing newly qualified general nurses for transition to the role of registered nurse. The skills and experiences acquired and developed through the 4-year education programme are fundamental to the registered nurse role and are practiced at independent level during internship where the nursing interns are part of the nursing workforce and manage a caseload of patients independently with a preceptor available as a distant supervisor.

3.3 Philosophical Underpinning of the Study

Research is based on philosophical beliefs in accordance with research paradigms (Guba and Lincoln, 1994; Parahoo, 2014). A paradigm denotes the world view, philosophical belief, or way of viewing the nature of reality (Guba, 1990; Bryman, 2009; Parahoo, 2014). Paradigms are classified by distinct components known as epistemology, ontology, axiology, and methodology (Teddlie and Tashakkori, 2009).

Epistemology relates to seeking the truth in an objective manner and constructing data using systematic techniques in a rigorous and controlled manner (Crotty, 1998; Teddlie and Tashakkori, 2009; Houghton et al., 2012; Parahoo, 2014). It is grounded in the assumption that truth is complex and is affected by the continuous experiences from cultural, social, environmental, and political influences (Burke et al., 2004; Scotland, 2012).

Ontology refers to what is “real” and the physical, structured world around us. Axiology concerns itself with one’s values and the rationale for such values. Methodology is the study of procedures and techniques used in research. The epistemological and ontological positions are considered when choosing a research approach (Crotty, 1998; Bazeley, 2018; Creswell and Plano Clark, 2018).

Constructivism originated in ontology with the perspective that reality is complex (Denzin and Lincoln, 2011; Scotland, 2012; Parahoo, 2014). Constructivists believe

that humans socially construct the world, and that human beings are continuously making sense of and interpreting the world (Milburn et al., 1995; Denzin and Lincoln, 2011). Constructivists also recognise the preconceptions of the researcher and depending on the philosophical stance and methodology the requirement to bracket these preconceptions to prevent such notions from influencing the research or data (Parahoo, 2014). Constructivists maintain that knowledge is constructed based on interactions with other individuals as well as, the environment (Parahoo, 2014). Constructivism in research is a flexible approach that uses inductive methods to answer the research question (Morgan, 2014a). This flexible approach is relevant in the study of human behaviour, as the process and outcome cannot be predicted (Parahoo, 2014).

Critical realism focuses on the difference between the real and observable world. Critical realists view the 'real' as unobservable and maintain that the world can only be comprehended if the structures that create situations are understood by the population (Bryman, 2009). Constructivists believe that critical realism may be achieved with post positivism, where findings are considered as achieving a realistic view.

The post positivist paradigm uses quantitative methodologies such as questionnaires to collect data from a wider population, thus helping to make results generalisable (Morgan, 2014a), while the statistical analysis of these objective methods enables the measurement of relationships between variables (Morgan, 2014a; Parahoo, 2014). The strengths of the post positivist paradigm include efficiency in collecting data using questionnaires and surveys, its ability to reach a larger population across a large geographical spread and efficiency in conducting analysis through statistical software (Burke et al., 2004; Parahoo, 2014). However, the post positivist paradigm has been criticised for dehumanising people through the application of scores and percentages (Weaver and Olson, 2006; Parahoo, 2014). Morgan (2014a) maintains that the application of numerical observations eliminates the ability to portray a meaningful understanding of the phenomenon. This suggests that while the post positivist approach may answer the research

question, an in-depth understanding would remain absent. The world view of an investigator is inspired by either the post positivist paradigm or the constructivist paradigm. Mixed methods research uses a combination of these approaches and is underpinned by pragmatism.

3.4 Pragmatism – Philosophical Underpinning for Mixed Methods Research

In this research study, pragmatism was chosen as the underpinning philosophy in line with mixed methods recommendations (Teddle and Tashakkori, 2009; Morgan, 2014a; Burke et al., 2017; Schoonenboom and Burke, 2017 and Creswell and Plano Clark, 2018). Pragmatism was established as a philosophy in the 19th century during the American Civil War. The philosophical association of pragmatism began with consensus among scholars over the decline of customary assumptions about the nature of reality and knowledge. The pragmatist scholars completely vetoed the view that social science inquiry could identify reality based on a scientific method (Maxcy, 2003). The philosophical underpinning for the mixed methods paradigm, pragmatism, emerged in the 1990s (Teddle and Tashakkori, 2009). Consequently, mixed methods are recognised as an alternative paradigm to the post positivist and constructivist paradigms. Pragmatism is considered a firm philosophical partner to mixed methods research (Teddle and Tashakkori, 2009; Morgan, 2014a; Burke et al., 2017; Bazeley, 2018; Creswell and Plano Clark, 2018). Pragmatism focuses on the consequences, is pluralistic, and is orientated towards what is practical and the reality of the situation (Williams, 2016, Creswell and Plano Clark, 2018).

Pragmatism has enabled a resolution to the mixed methods debate for mixed methodologists and other researchers (Teddle and Tashakkori, 2009; Creswell and Plano Clark, 2018). Accordingly, suitable mixed methods data collection and analysis methods can be combined, and reasonably justified in their ability to address the research question (Johnson and Onwuegbuzie, 2004; Morgan, 2014a). The primary concern in justifying the choice of mixed methods is the amalgamation of different and opposing ontologies and epistemologies of quantitative and qualitative inquiry (Creswell and Tashakkori, 2007; Johnson et al., 2007; Bazeley,

2016), but pragmatism counters the incompatibility at a philosophical level by establishing compatibility between quantitative and qualitative approaches (Howe, 1998; Tashakkori and Teddlie, 1998; Morgan, 2007). Social science researchers believe that pragmatism provides a solution to most philosophical and scientific dilemmas (Burke et al., 2017), however, it is not considered perfect.

The emergence of pragmatism as a philosophical underpinning for the third research method – mixed methods, has generated some discussion and criticism of this paradigm. Although mixed methods research illuminates the practical aspects of this research method, little emphasis has been applied to the philosophical underpinnings of pragmatism (Morgan, 2014b). Greene and Hall (2010; p.16) highlighted that pragmatism had ‘no set methodological requirements for social inquiry’, therefore the practical aspect is prioritised over critical analysis. Furthermore, Hampson and Mc Kinley (2023) argued that the flexible and practical approach of pragmatism afforded little attention to the principles and in so doing lacks guidance for researchers. With pragmatism the quality of the research tends to be determined based on the results, this poses a risk that findings may be disregarded if they do not reflect the anticipated consequences of the study, thereby impacting methodological rigor (Hampson and Mc Kinley, 2023). If an anticipated relationship is not identified this may be considered a failure of the methodology as opposed to the fact that no relationship existed (Hampson and McKinley, 2023). Another limitation of mixed methods research is the challenge in integrating the data and the method chosen can impact on the ability to achieve the essence of mixed methods research (Johnson et al., 2019).

A pragmatic position proposes epistemological rationalisation and reasoning for blending several data sources with the aim of ascertaining a complete comprehension of the population and the world as it is lived in (Onwuegbuzie et al., 2009). Pragmatism provides realistic, effectual, and satisfactory solutions to advocates of the paradigm campaign (Burke et al., 2017; Schoonenboom and Burke, 2017). Undoubtedly, pragmatism is not dedicated to a single philosophy and reality, ontology, or epistemology, as it does not seek solutions about the rules of nature and reality or the philosophy of knowledge (Teddlie and Tashakkori, 2009; Morgan, 2014a; Creswell and Plano Clark, 2018). This is in line with mixed methods

research and the use of quantitative and qualitative paradigms in a single research study (Teddlie and Tashakkori, 2009; Morgan, 2014a; Creswell and Plano Clark, 2018).

The aim of this mixed methods research study was to examine newly qualified general nurses' experience of the 36-week internship period and its value to their transition to the role of registered nurse. The pragmatic approach enabled the combining of quantitative and qualitative methods in the current study and the elimination of abstract considerations. Qualitative research enables the use of narrative descriptions from the experience to understand the perspective of the informant (Weaver and Olson, 2006). Rigorous forms of data analysis are undertaken to identify themes, and the findings are presented using words and description to describe the phenomenon and answer the research question (Parahoo, 2014). Accordingly, qualitative research generates data to provide a deeper understanding of the phenomenon which aims to analyse newly qualified general nurses' experiences and their views on the value of internship. The findings are not generalisable as constructivists believe they are context-related and may not be significant outside of the current research setting (Parahoo, 2014). With rigorous methods and a demonstration of trustworthiness, many of the limitations can be overcome. The main reproach with qualitative research includes the risk of bias due to researcher preconceptions, subjectivity, and lack of generalisability due to small sample size (Larkin et al., 2014; Parahoo, 2014). Qualitative research is often considered to have less influence and sovereignty in comparison to a quantitative approach but can contribute to the measurement of impact and outcomes when used in mixed methods research (Larkin et al., 2014; Parahoo, 2014).

Quantitative research is underpinned by a post positivist philosophy, believing in the existence of objective reality where events can be linked to an associated cause (Cohen, 2006; Morgan, 2014a; Parahoo, 2014; Polit and Beck, 2017; Bazeley, 2018). Alternatively, qualitative research is influenced by constructivist philosophy, where multiple realities are constructed by the human experiences that are

influenced by environmental and cultural factors (Cohen, 2006; Mason, 2006; Morgan, 2014a; Bazeley, 2018). The quantitative data enables the researcher to identify and measure relationships, while the qualitative data delivers a deeper understanding of the human experience (Mason, 2006; Creswell and Plano Clark, 2018).

In mixed methods research, pragmatists concentrate on abduction, which was applied to this study to address the weakness with inductive and deductive approaches. Abductive reasoning abides by a pragmatic perspective, where undeveloped observations or perceptions are interpreted to present the best prediction of the truth and may lead to the development of a new theory. Simultaneously, it must be illuminated that abductive reasoning is akin to deductive and inductive approaches as it can be used to create logical inferences and construct theories (Mitchell, 2018). Therefore, pragmatism allows the use of multiple methods, worldviews, and assumptions as well as, a variety of data collection and analysis options (Teddlie and Tashakkori, 2009; Morgan, 2014a; Burke et al., 2017; Schoonenboom and Burke, 2017; Creswell and Plano Clark, 2018). The mixing of methods is now considered the third paradigm (Greene et al., 1989; Creswell and Plano Clark, 2018).

3.5 Mixed Methods Designs

Mixed methods inquiry requires a combination of research methodology using meticulous concurrent or sequential data collection, analysis, and the integration of findings to provide a comprehensive answer to the research question (Johnson et al., 2007; Leech and Onwuegbuzie, 2009; Bazeley, 2018; Creswell and Plano Clark, 2018; Houser, 2018). Creswell and Plano Clark (2018) promote mixed methods research characteristics to illuminate the distinction of this method of inquiry. Mixed methods research is dependent on the integration of quantitative and qualitative research methods at one or more points in a single study (Creswell and Plano Clark, 2018). Thus, mixed methods research designs are suitable for evaluation of research (Greene et al., 1989; Bazeley, 2018; Creswell and Plano Clark, 2018) and

offer pragmatic advantages when examining unique or complex nursing problems (McCusker and Gunaydin, 2015).

Researchers believe that the adoption of one research method provides an insufficient comprehension of the phenomenon, and that combining methods enables a deeper understanding of the complexities and multifaceted nature of reality (Morgan, 2007; Fielding, 2009; Ostlund et al., 2011; Halcomb and Hickman, 2015). In nursing research, the combining of quantitative and qualitative paradigms enables the strengthening of the reality and richness of the findings to answer the research question (Larkin et al., 2014; Halcomb and Hickman, 2015; Creswell and Plano Clark, 2018).

One of the main ways that quantitative and qualitative inquiry may be distinguished is by the induction and deduction process (Morgan, 2007). The basic view of quantitative inquiry is that it is an objective method of deduction, while the qualitative method is subjective and uses an inductive process that can be considered in context (Morgan 2007). Methodological traditionalists maintain that investigators cannot be inductive and deductive concurrently, nonetheless in reality human reasoning is complicated and flexible (Patton, 1990; Parahoo, 2014). Therefore, mixed methods are considered a more appropriate method as it enables 'multiple ways of seeing and hearing' (Greene, 2007, p 20).

Furthermore, the repeated movement between methods is strongly associated with an abductive logic, where ideas based on previous knowledge are challenged resulting in further exploration (Morgan, 2007). Therefore, the results of integration are the meta-inferences from the amalgamation of quantitative and qualitative data and further explorations as new ideas emerge, offering a more comprehensive understanding of a research problem than quantitative or qualitative approaches alone (Bryman, 2006; Ivankova et al., 2006; Johnson et al., 2007; Fielding, 2012; Feters et al., 2013; Creswell and Plano Clark, 2018; Bazeley, 2018).

Healthcare matters are best researched using a variety of knowledge sources (Wisdom et al., 2012). Mixed methods research is popular in healthcare and more mixed methods research has been undertaken by health and medical researchers than in any other field (Ivankova and Kawamura, 2010). However, for mixed methods research to be considered suitable, the research question must lend itself to mixed methods research (Sandelowski, 2014; Doyle et al., 2016). In this research study, the researcher decided that a mixed methods research approach would facilitate a comprehensive examination of the internship experience and its value to transition to the role of registered nurse.

The importance of justifying the adoption of a mixed methods style for undertaking research was emphasised by Creswell and Plano Clark (2018). Several motives exist for employing a mixed methods approach to address the research question in this study. Primarily, a mixed methods approach is best suited to answering several research questions or several aspects of a specific problem. Further reasons for utilising a mixed methods approach include gaining comprehensiveness, breadth, explanation, and confidence in the study. Bryman (2009), Bazeley (2018) and Creswell and Plano Clark (2018) highlight the importance of investigators explicitly identifying the rationale for choosing mixed methods designs.

A mixed methods approach allows the findings from both phases to converge, providing a richer understanding of the research question (Bryman, 2006; Fielding, 2012; Fetters et al., 2013; Creswell and Plano Clark, 2018). Evidence from the literature demonstrates the challenges faced by newly qualified general nurses during transition and the variation in readiness for practice. Phase one of this study utilised a questionnaire and mainly focuses on preparation for internship, internship experience and its value to the transition to the role of registered nurse, while phase two utilised individual interviews and focuses on similar aspects to provide further insight and explanation to phase one findings. This would not have been possible using a single method.

Researchers maintain that mixing methods enables a deeper understanding of the complexities and multifaceted nature of reality (Morgan, 2007; Fielding, 2009; Ostlund et al., 2011; Halcomb and Hickman, 2015; Parahoo, 2014). In this study, the method was chosen based on its ability to answer the research question, aims and objectives of the study. The mixed methods approach, and analysis portrayed a dimensional image of the internship period from the newly qualified general nurses' perspective and provided comprehensive insights into the value of internship in preparing newly qualified general nurses for transition to the role of registered nurse. Once the qualitative data were analysed the data for both phases were integrated. The employment of this mixed methods design enabled the qualitative findings to enhance and build upon the quantitative findings that were already collected (Maxwell, 2004; 2012). Multiple sources were utilised to generate comprehensive results for the study; thus, the mixed methods research was conducted to allow for this array of sources.

There are several designs associated with mixed methods research. This study used a sequential explanatory design.

3.6 Sequential Explanatory Mixed Methods Design

Research designs are the procedures that describe the methods of data collection, time, place and sources of data, methods of data analysis and validity of findings, as well as the logic of enquiry (Parahoo, 2014; Houser, 2018). Research designs guide decisions about methods and create the structure for the study. They are chosen based on the researcher's beliefs, resources and what they can provide for the aims and objectives of the study to fit the research question (Parahoo, 2014; Creswell and Plano Clark, 2018). Over time the number of types of mixed methods research designs has reduced to three core designs: convergent/parallel, where quantitative and qualitative data are collected at the same time, explanatory sequential, where quantitative data are collected and analysed before the qualitative data are collected, and exploratory sequential, which involves the collection and

analyses of qualitative data followed by quantitative data (Creswell and Creswell, 2018; Creswell and Plano Clark, 2018).

The designs have been refashioned and renamed removing the focus on timing. The renewed focus is on the intent of design and the researcher's aim (Creswell and Plano Clark, 2018). Therefore, explain, explore, or converge is the first word in the renamed designs (Bazeley, 2018; Creswell and Plano Clark, 2018). There are significant decisions to be considered when selecting a mixed methods design such as: the intent of the design, the identification of requirement for follow up or further explanation of findings, identification of a sample who can best provide the explanation, and the procedures for integrating the findings (Creswell and Plano Clark, 2018). Sequential has been added to remove the focus of triangulation and concentrate on what is done with the data, based on the intent of the study (Bazeley, 2018; Creswell and Plano Clark, 2018). The primary intent of the sequential explanatory design is to use the qualitative phase to explain the findings from the quantitative phase. This design is well suited to explaining significant or non-significant findings, outlier results or surprising findings (Morgan, 2014a; Creswell and Plano Clark, 2018).

The sequential explanatory design is recognised as one of the more straightforward mixed methods designs. It is undertaken in two phases – quantitative first and then qualitative (Creswell and Plano Clark, 2018). The Creswell and Plano Clark (2018) sequential explanatory design was considered the most appropriate structure to attain the objectives of this research study (Figure 3.2 and 3.3).

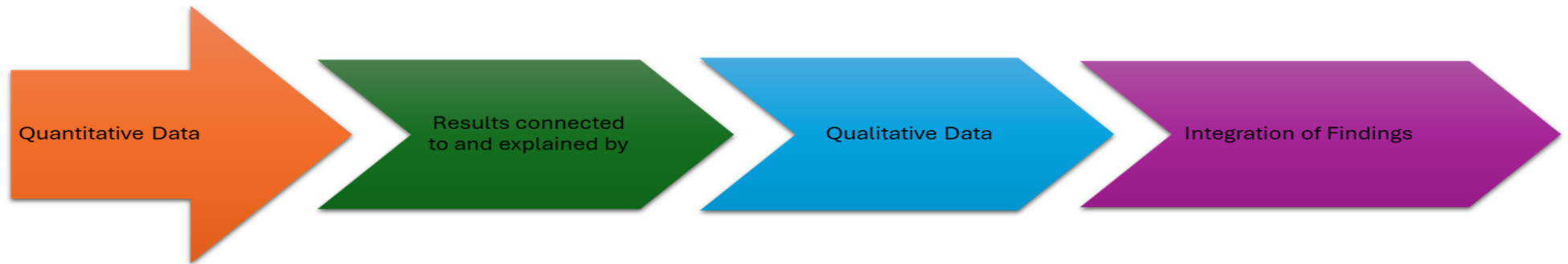


Figure 3. 2: Sequential Explanatory Design.

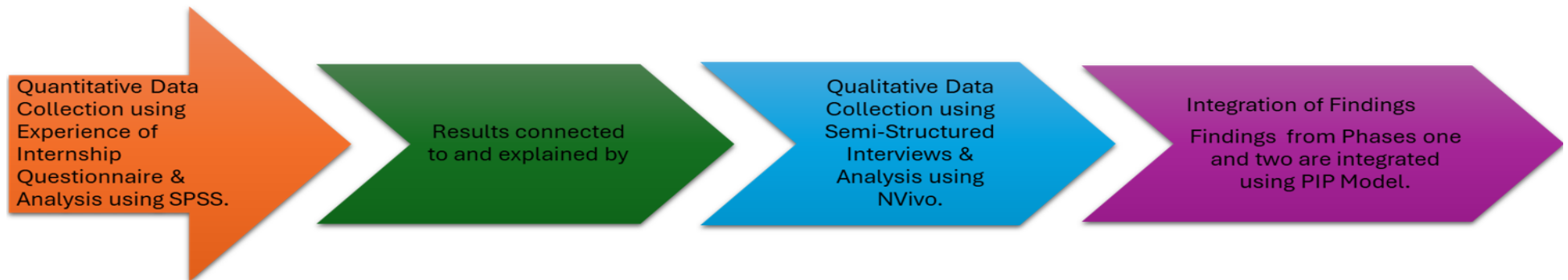


Figure 3. 3: Sequential Explanatory Design explained for this study.

Sequential explanatory is best used when the problem is quantitatively oriented, when the important variables are known, when quantitative instruments are available to measure the primary constructs, and when there will be an opportunity to return to participants for the qualitative phase (Creswell and Plano Clark, 2018). This design was deemed appropriate for this study as the primary variables were known and an instrument was available that identified the primary constructs.

The sequential explanatory design was chosen also due to the inadequate understanding of the value of the internship period in preparing newly qualified general nurses for transition to practice, therefore implying that the qualitative investigation should be dependent on and guided by the conclusions from the quantitative phase. An experience of internship questionnaire was available and deemed suitable to adopt with permission from the creator (Drennan et al., 2010). Further development of the questionnaire was required to meet the aims and objectives of the current study. The primary focus of quantitative inquiry was to establish newly qualified general nurses' preparation for internship, experience during internship, its value in preparing them for transition to the role of registered nurse, and the associations between these variables. The subsequent qualitative phase further examined the quantitative findings to facilitate interpretation of the quantitative results, enabling the refinement, explanation and enhanced understanding about the internship experience and the value of it in preparing newly qualified general nurses for transition to the role of registered nurse (Creswell and Plano Clark, 2018). Once the quantitative results were analysed, decisions were made relating to the qualitative phase, to consider the research question. The flexibility of the mixed methods approach enabled the qualitative phase of the sequential design to further explore the results from the quantitative phase leading to a comprehensive address of the research question.

The sequential explanatory design was chosen for this study as this is an evolving design based on the findings from the quantitative phase (Doyle et al., 2016; Creswell and Plano Clark, 2018). This research design is symbolised as

QUAN+qual research. This is a mainly quantitative dominant research design and depends on the addition of qualitative data and approaches to elaborate on quantitative results that require further exploration or explanation (Morgan, 2014a; Bazeley, 2018; Creswell and Plano Clarke, 2018). In accordance with the sequential explanatory mixed methods design, data analysis is conducted separately as the results from phase one informed the development of the data collection interview schedule for phase two (Curry and Nunez-Smith, 2015).

Data integration or convergence of outcomes involves a complete understanding of the research phenomena (Bazeley, 2016; Creswell and Plano Clark, 2018; Bazeley, 2018). This integration is described in the methods chapter and the outcomes are presented in chapter seven. This sequential explanatory design enables the quantitative results to be followed up with qualitative research methods or use of the quantitative results to inform purposeful sampling for the qualitative phase (Teddle and Tashakkori, 2009; Morgan, 2014a; Curry and Nunez-Smith, 2015).

3.7 Sampling, Data Collection and Analysis in Mixed Methods Research

Although a comprehensive discussion of sampling procedures, data collection and data analysis for phase one and phase two of this study is provided in Chapter 4, it is essential to discuss here the issues concerning the techniques that are specific to a mixed methods study. The primary consideration when considering the sample is whether the quantitative phase can increase generalisability and whether the qualitative phase can increase credibility (Curry and Nunez-Smith, 2015). Due to the nature of the sequential explanatory mixed methods design, an interdependent, mixed methods sampling frame was employed through the joint use of non-probabilistic and purposeful sampling methods to sufficiently examine newly qualified general nurses' experience and the value of internship. Creswell and Plano Clark (2018) suggest that in an explanatory mixed methods design, the same participants should be included in both phases of data collection as the intent of this design is to use qualitative data to provide more detail about the quantitative results.

Sequential explanatory data collection involves the distribution of the quantitative questionnaire followed by qualitative semi-structured interviews. With this data collection method, quantitative and qualitative data collection correlate with each other and neither stands alone (Creswell and Plano Clark, 2018).

Integration of data from the quantitative and qualitative phases is a key element of mixed methods research (Creswell and Plano Clark, 2018). The data sets are combined for data integration. Data integration can enrich the findings from the initial phases and yield a comprehensive insight into the phenomenon (O’Cathain et al., 2010). Failure to integrate data effectively will produce two independent studies as opposed to a unified mixed methods study (Curry and Nunez-Smith, 2015). To combine the quantitative and qualitative phases, each data set should be analysed using established methods in line with that approach. Quantitative data analysis uses statistical methods with numerical data to create measures of statistical significance and associations between variables (Pallant, 2020), while qualitative data analysis uses an iterative process of analysing textual data inductively generating categories of themes to answer the research question to describe and explain the phenomenon (Silverman, 2014; Braun and Clarke, 2022). This method of data analysis in a sequential explanatory design is widely supported (Curry and Nunez-Smith, 2015; Bazeley, 2018; Creswell and Plano Clark, 2018). It is considered an emergent design. The findings are integrated and interpreted, and conclusions are drawn. Methods of quantitative data analysis include the Statistical Package for the Social Sciences (SPSS) (IBM Corporation, 2020), while qualitative data analysis can include manual analysis or the use of qualitative data analysis software, such as NVivo.

Qualitative data analysis software such as NVivo (Lumivero, 2022) or MAXQDA (Verbi Software, 2021) are recommended as they support mixed methods design given the volume and diverse forms of data for analysis and integration (Curry and Nunez-Smith, 2015; Bazeley, 2018). Qualitative data analysis software assists in coding, code development and pattern development (Braun and Clarke, 2022).

However, MacMillan and Koenig (2004) warn that this software does not perform analysis or guarantee high quality results. Software packages can aid comparative analyses within and between data sets allowing focused analysis on sections of data and creating combined displays of data (Curry and Nunez-Smith, 2015). Some authors caution against qualitative data analysis software, with claims that it could impact the researcher's ability to deeply engage with and question the data, as well as enabling ample time for reflection and insight development (Braun and Clarke, 2022). Jackson et al., (2018) highlights that software is a tool, and the analysis is completed through mindful engagement with the data along with the process of questioning the data. Braun and Clarke (2022) recommend using a blended approach of software and manual for ample engagement. Data integration approaches include narrative, joint displays, and data transformation (Fetters et al., 2013). Data analysis procedures as undertaken will be presented in the next chapters.

3.8 Data Integration

Data integration involves combining the data sets either concurrently or sequentially depending on the chosen design (Creswell and Plano Clark, 2018). Mixed methods interpretation involves reviewing the quantitative results and the qualitative findings and assessing how the data addresses the mixed methods research questions (Creswell and Plano Clark, 2018). Data integration enables the creation of insights, for example: subgroup characteristics, alignment of behavioural characteristics, scaled ratings, patterns of relationships, and deviations in data sets (Bazeley, 2018). Several researchers who developed critical appraisal frameworks to assess the quality of mixed methods research (Onwuegbazie and Johnson, 2006; Dellinger and Leech, 2007; Heyvaert et al., 2013) concluded that integration approaches are essential for methodological rigor. Creswell and Plano Clark (2018) prefer systematic integration approaches such as merging, converting, and embedding. However, Fetters and Freshwater (2015) propose that despite the increase in popularity of mixed methods research, integration remains a challenge. Creswell and Plano Clark (2018) identified four methods of data integration. Joint display integration techniques are used to blend, weave, combine and merge two or more

types of data. The four types include data transformation, visual presentation using a matrix and joint multistage technique known as threading, triangulation, and comparison of data sets (Creswell and Plano Clark, 2018).

The joint displays utilised for quantitative and qualitative data are available for the same phenomenon and can be studied together (O'Cathain et al., 2010). Transparency in data integration is lacking (O'Cathain et al., 2010; Fetters and Freshwater, 2015). While joint displays are popular for merging data, researchers have found a deficit in the explanation of the technique and recommend a more in-depth explanation on how the technique was used to integrate the data (O'Cathain et al., 2010; Fetters and Freshwater, 2015; Guetterman et al., 2015; Bazeley, 2016). In response to the aforementioned critical appraisal of existing techniques, Johnson et al., (2019) created a four-stage analytical technique for systematically integrating qualitative and quantitative findings using a joint display format 'Pillar Integration Process'. The Pillar Integration Process is a joint display technique that explicitly demonstrates the integration of findings. A joint display is the presentation of two datasets side by side in a table format (Creswell and Creswell, 2022). Insights that emerge from combining the data are meta inferences.

The creation of Pillar Integration Process was underpinned by the creation of realist epistemological view. The realist epistemological view echoes the belief that one can only know reality from their perspective of it and it is affiliated with the pragmatic technique in mixed methods research (Johnson and Onwuegbazie, 2004; Johnson et al., 2007; Johnson et al., 2019). The main advantages of utilising the Pillar Integration Process included the reduction in observer bias and increased opportunities for synthesis, both visually and methodologically (Johnson et al., 2019).

The preliminary mixed methods research studies concentrated on collecting and reporting the quantitative and qualitative data without explanation about data

integration (Johnson et al., 2019). As mixed methods research advanced, it was identified that the essence of mixed methods research is the integration of the two data sets. This combination of results provides a more comprehensive understanding of the phenomenon under investigation (Creswell and Creswell, 2022; Hirose and Creswell, 2023). Therefore, the Pillar Integration Process model was chosen to fully integrate the data from both phases and provide a visual and transparent display of the data integration for this study.

3.9 Summary

This chapter discussed the theoretical underpinnings of this research study. Firstly, the choice of theoretical framework was discussed as well as other models that were considered and reasons for discarding them. Quantitative, qualitative, and mixed methods paradigms were discussed in detail together with the advantages and disadvantages of each and the rationale for utilising mixed methods for this study. Mixed methods research is amenable, and although counter arguments exist in the literature that the world view of the customary research approaches cannot be mixed, there is evidence in the literature that mixed methods is an accepted third research approach with the philosophical underpinnings of pragmatism. Several mixed methods research designs were outlined. The chosen design, a sequential explanatory design, was discussed in detail, along with the researcher's rationale for choosing it. The sequential explanatory design is a robust, structured approach to examine the research aims and objectives for this study. The internship experience, readiness for practice, and transition to the role of registered nurse are multidimensional, making it necessary to employ a mixed methods approach that can accomplish the essential in-depth level of inquiry to address the research question. Finally, data integration techniques were discussed. The Pillar Integration Process model was chosen as it was developed to address deficits in pre-existing data integration methods, namely by reducing the risk of observer bias and enabling visual and methodological synthesis of data.

The next chapter discusses the application of these research methods in this study to analyse newly qualified general nurses' experiences of internship and its value to their transition to the role of registered nurse.

Chapter 4 Research Methods

“Success in your mixed methods project demands
your identification of both qualitative and
quantitative procedures”...
(Fetters, 2020; p. 56)

4.1 Introduction

The previous chapter outlined and justified the methodological and philosophical assumptions for the design and conduct of this study. The application of a sequential explanatory mixed methods design in the current study was discussed. This study examined newly qualified general nurses' experience of the 36-week internship period and its value to their transition to the role of registered nurse. A sequential explanatory mixed methods research design was employed, involving the collection and analyses of quantitative and qualitative data. The quantitative phase examined various aspects of the internship period, including the preparation for internship, experiences during internship such as acquisition of clinical skills, feedback, time for competency assessment, reflective practice sessions, and the overall value of the internship period. The qualitative phase further explored the acquisition of clinical skills and the value of the internship to their transition to the role of registered nurse.

This chapter examines the research methods employed in this study to address the aims and objectives. Additionally, this section discusses the population, sampling approach, access, recruitment process, data collection instruments, data analysis approaches, methods to strengthen rigor and ethical considerations.

4.2 Study Aim

The aim of this mixed methods research study was to examine newly qualified general nurses' experience of their 36-week internship period and its value to their transition to the role of registered nurse.

4.2.1 Study Objectives

The study was undertaken to meet the following objectives;

1. To examine newly qualified general nurses' preparation for internship prior to its undertaking.

To examine the adequacy of the pre-internship preparation for the 36-week internship period.

2. To examine experiences during internship and the contribution with respect to;
 - a. Experience of clinical skills acquisition during internship.
 - b. Feedback on progress during internship
 - c. Protected time for competency assessment during internship.
 - d. Reflective practice during internship.
3. To identify the level of satisfaction with support during internship.
4. To elicit newly qualified general nurses' opinions about the 36-week internship period with respect to its value and contribution to the preparation for transition to the role of registered nurses.

Objectives one to four were the focus of the first phase of the study and were measured using quantitative methods. Objectives two to four were addressed in the second phase, which employed qualitative methods.

4.3 Phase One: Quantitative Phase

4.3.1 Population and Sample

The four-year Bachelor of Science in General Nursing programme is delivered in the Higher Education Institutes across nine counties in Ireland (Appendix 4.1). To maximise the chances of obtaining a cross-national sample, all Higher Education Institutes were invited to participate. There were thirteen Higher Education Institutes in total, and from these, the population from which the sample would be drawn was calculated. The sample consisted of newly qualified general nurses who had completed their undergraduate general nursing degree in Ireland between 2018 and 2020. Access to graduates was requested from the Heads of the Schools of Nursing and Midwifery at each Higher Education Institute. Two Higher Education Institute's refused due to ongoing research commitments and to protect students from research fatigue, while two others did not reply to the email. Some Higher Education

Institutes could not participate due to General Data Protection Regulations restrictions, which prevented them from sending research packs to graduates. As a result, four Higher Education Institutes agreed to participate in the study.

4.3.1.1 Sample

As not all Higher Education Institutes provided access to participants, snowball sampling was utilised, allowing fellow graduates to inform their colleagues and peers about this study. In the first phase of this study, all newly qualified general nurses who graduated in Ireland from 2018 to 2020 were eligible for inclusion.

4.3.1.2 Sample Size

At the time of calculating the sample size, the annual national average number of general nurse training places was 925 (Appendix 4.2). Hence, the target population was 2775. As nursing in Ireland is mostly a female profession (NMBI, 2022) gender breakdown was not requested for the sampling frame. The sample size was calculated using the G Power calculator version 3.1.9.7 to ensure adequate representation of the population (Faul et al., 2007). Type I error (alpha) measures the probability of falsely rejecting the null hypothesis (H_0) and identifying a false-positive effect (Noordzij et al., 2010; LoBiondo-Wood and Haber, 2014; Serdar et al., 2021). The alpha is usually fixed at 0.05, resulting in a less than 5% chance of obtaining a false-positive conclusion (Noordzij et al., 2010; Serdar et al., 2021).

The power was set at 0.80. The effect size is considered low if the value of r is around 0.1, medium if r varies around 0.3, and large if r varies more than 0.5 (Cohen, 1992). In consultation with a statistician, an effect size of 0.3 was selected. The following information was inputted: effect size 0.3, alpha 0.05 and confidence interval 95%. This calculation determined a sample size of 147. An Image of this calculation is presented in Figure 4.1

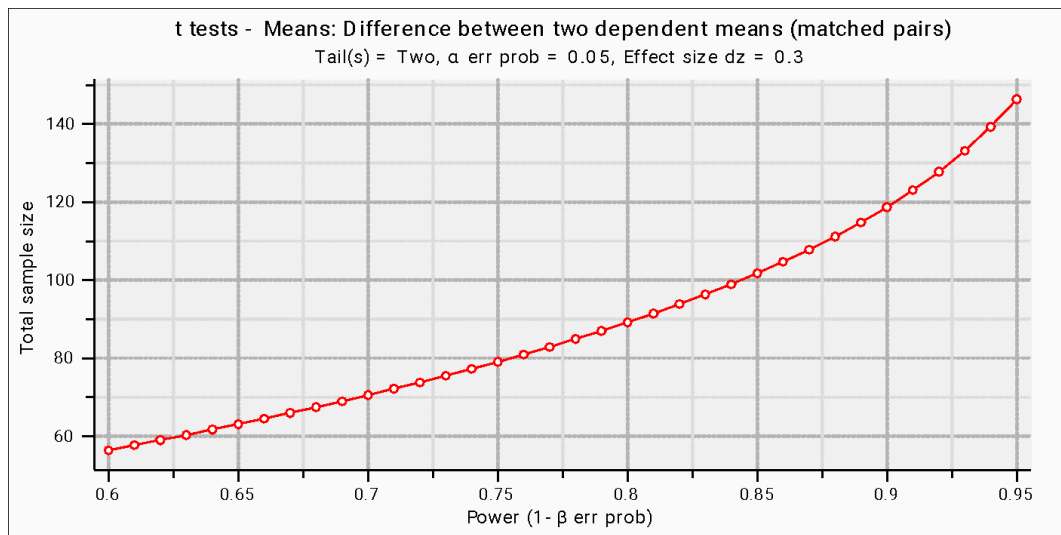


Figure 4. 1: Image of sample size calculation from G Power Calculator version 3.1.9.7

4.3.1.3 Eligibility Criteria

The eligibility criteria were developed to maximise responses from newly qualified general nurses who completed the 36-week internship period as part of the undergraduate degree in general nursing in Ireland. Ireland is the only country in the European Union that includes an internship period as part of the undergraduate degree in general nursing programme. Newly qualified general nurses who graduated in Ireland from 2018 to 2020 were eligible to partake. Newly qualified general nurses who trained outside Ireland were not eligible to participate in the study as they had not experienced the same form of internship. Additionally, those who were interns in 2022-2023, at the time of authoring this thesis, were not eligible as they had not yet transitioned to the role of registered nurse.

4.3.2 Recruitment of Participants

A request was submitted to the Nursing and Midwifery Board of Ireland regarding posting or emailing the research information packs to the newly registered eligible graduates who had completed their education in Ireland. However, the Nursing and Midwifery Board of Ireland were unable to facilitate this due to general data protection rules (Government of Ireland, 2018). Instead, the Nursing and Midwifery

Board of Ireland offered alternative methods of dissemination, such as advertising the research in their monthly newsletter, the Nursing and Midwifery Board of Ireland E-zine, and this offer was accepted. A similar request was submitted to the nursing union, Irish Nurses and Midwives Organisation (INMO) regarding emailing the research packs to their members who were graduate general nurses who trained in Ireland, but again, due to the general data protection rules, they were unable to fulfil the request. They offered to publish the advertising flyer in their monthly magazine and this offer was accepted (Appendix 4.3).

Consequently, alternative methods of dissemination were sought, and a decision was made to disseminate through participating Higher Education Institutes, social media and by snowball sampling. Additional methods employed to maximise recruitment potential included placing advertisements in the World of Irish Nursing magazine, on the Nurses' Facebook page and Twitter (now known as X). A study specific website <http://www.nursing-internship-study.com/> (Appendix 4.4) was created where all the research information (Invitation to partake, Participant Information Leaflet, Questionnaire, and researcher's contact details) was uploaded. The link to this website was added to the advertisement flyers thus enabling accessibility to the information packs and the questionnaire directly from the advertisements for potentially interested participants.

4.3.3 Access to NQGNs via the Higher Education Institutes

Heads of Schools of Nursing were emailed information about the study, along with a request to access the newly qualified general nurses who had recently graduated from their Higher Education Institutes. In instances where no response was received, a follow-up phone call and email were sent. For those interested in participating in the research, an information pack was sent which included the questionnaire (Appendix 4.5), participant information leaflet (Appendix 4.6) and cover letter/ email (Appendix 4.7). Once they agreed to participate, the contact details of a nominated gatekeeper were requested. After this information was received, phase one of data collection commenced.

4.3.4 Data Collection

4.3.4.1 Research Instrument

The questionnaire used in this study was titled the 'Experience of Internship Questionnaire', hereafter referred to as the 'questionnaire'. This 75-item questionnaire was designed specifically for this study following a review of the literature, a focus group interview and the incorporation of content from a previously developed questionnaire called the "Intern Year Evaluation Questionnaire" (Drennan et al., 2010). The Intern Year Evaluation Questionnaire was used in an unpublished Irish study to identify general, intellectual disability and mental health students' satisfaction with their internship year. It consisted of 29 questions measuring students' level of satisfaction with various aspects of their internship placement (Appendix 4.8). Permission was obtained from its creator, Professor Drennan to incorporate elements from their questionnaire into the electronic questionnaire used for the current study (Appendix 4.9).

When designing a questionnaire there are multiple factors to contemplate, such as using unambiguous, non-leading language and ensuring each question addresses only one feature (Houser, 2018). The electronic questionnaire for this study was developed in SurveyMonkey (SurveyMonkey Inc., 2018). The questionnaire was divided into three main sections; 1. Pre-Internship Preparation, 2. Experiences during Internship and 3. Value of Internship (Table 4.1). A demographic section was also included to capture sample characteristics and descriptive variables to provide a composite image of the study participants. The eight demographic questions at the start of the questionnaire (Appendix 4.5) were developed in line with the research question and findings from the literature review.

Table 4. 1: Different sections of the questionnaire that measure the internship experience

Sections
Demographic Profile
1. Pre-internship Preparation
2. Experiences during internship
a) Experience of acquisition of clinical skills during internship
b) Feedback
c) Protected Time for Competency Assessment
d) Reflective Practice
e) Support during Internship
3. Value of Internship

The literature review demonstrated that age, previous life skills, and part-time work outside of placements may influence experiences, and the ability to perform during placements. Thus, it was deemed necessary to explore these in the current study (Questions 3 to 8). Statistics from the Nursing and Midwifery Board of Ireland identify that 90% of newly qualified general nurses annually are female, with 9.3% representing the male population (NMBI, 2022). Therefore, it was not considered important to include questions regarding gender in the questionnaire. The questions pertinent to demographics were pre-populated with options on the questionnaire. Participants were asked to tick the appropriate boxes or add other information if applicable.

A four-point Likert scale was used for closed-ended questions in the questionnaire, and the options ranged from 'strongly agree' to 'strongly disagree' and 'very satisfied' to 'very dissatisfied'. The Likert scale is considered an objective measure that captures opinions or attitudes (Hartley, 2014). The 'neither agree nor disagree' option was excluded from the questionnaire, as it was not considered useful in terms of identifying the newly qualified general nurses' experiences. Hernández et al., (2004) and Kulas and Stachowski (2013) caution against using the 'middle category' on a Likert scale and noted its use was more attributed to the item listed as opposed to the respondents' personality. The 'middle category' is most often used when

respondents consider the response to the question as an 'it depends on the situation' type response (Kulas and Stachowski, 2013).

4.3.5 Validity and Reliability

To establish the reliability and validity of the specifically designed questionnaire, several tests were conducted on the instrument. These are presented below.

4.3.5.1 Validity of the Research Instrument

The validity of a questionnaire determines that the instrument measures what it is intended to measure, in addition to the accuracy of it (Gerrish and Lathlean, 2015). Several steps were taken to assess the validity of the questionnaire in this study, including the search for an already available and tested instrument and the incorporation of this into the study. Validity was assessed using face validity, content validity, construct validity and criterion-related validity.

Face Validity

Face validity refers to the presentation of the questionnaire and the extent to which it appears to measure the concept that it was designed to measure (Grove et al., 2015). The questionnaire was designed based on an existing questionnaire and through a focus group, therefore the content was considered relevant. Furthermore, the pilot test and test blueprint further assisted in determining the validity of the questionnaire to ensure that the content was relevant.

Content Validity

Content validity considers the extent to which the instrument includes items that are relevant to the concept being measured (Grove et al., 2015). A test blueprint was used to test for content validity. This helped determine that the questions in the questionnaire represented the basic concept under investigation (Houser, 2018). The test blueprint of the Questionnaire was sent electronically to a panel of experts.

The panel of experts consisted of two assistant professors in general nursing who were also structured reflection facilitators, an Assistant Director of Nursing in a Nurse Practice Development Department in an acute clinical setting, two Clinical Placement Coordinators, and a Manager in a Centre for Nurse Education. The experts were asked to evaluate the relevance and clarity of each statement. Minor amendments that were made to the questionnaire following the test blueprint are highlighted in red in Appendix 4.10. The consensus of judgment from the reviewers indicated that the questions were clear, unambiguous, easy to complete, relevant and captured the essence of the phenomenon under examination.

The validity of the questionnaire was further determined during the pilot study, to ensure that the questionnaire was clear, understandable, and relevant to the phenomenon under examination, as discussed in section 4.4.

Construct Validity

Construct validity determines if the instrument measures the theoretical concept that it aims to measure (Gerrish and Lathlean, 2015). This was determined using the statistical technique principal component analysis on the data using the Statistical Package for the Social Sciences version 27 (IBM Corporation, 2020). Before undertaking principal component analysis, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix identified coefficients of 0.3 and above. The Kaiser-Meyer-Olkin value was 0.86, which is greater than the recommended value of 0.6 (Kaiser, 1970; 1974 cited in Pallant, 2020). The Bartlett's (1954) Test of Sphericity reached statistical significance.

Principal component analysis identified eleven components with eigenvalues greater than 1, explaining 30.7%, 7.8%, 4.5%, 4.1%, 3.7%, 3.5%, 3%, 2.8%, 2.7%, 2.6% and 2.3% of the variance respectively. The scree plot shows a break after the second component. In line with Catell's (1966) scree test, a decision was made to further investigate two components. The two-component solution explained a total

of 38.5% of the variance, with component one contributing 30.7% and component two contributing 7.8% of the variance. There was a positive correlation between the two factors ($r=.43$). The overall findings demonstrate that the instrument was valid and effectively measure the main outcomes. The principal component analysis results are available in Appendix 4.11.

Criterion-Related Validity

Criterion-related validity is measured by testing the new instrument against an already established or 'gold standard' instrument. One of the challenges of criterion-related validation is finding a validated instrument to measure against (Polit and Beck, 2020). In this instance a published validated tool was not available for comparison. However, the researcher identified a previously developed instrument that was used in an unpublished research project and with the creator's permission it was adapted for this study. This assisted with the identification of key variables to include in the instrument.

4.3.5.2 Internal Validity

Internal Validity refers to the degree to which a study can conclude that the independent variable in fact had a casual effect on the outcome as opposed to any other influencing factors (Polit and Beck, 2020). Therefore, it is important to eliminate potential causes that can interfere with the results of the study.

Selection bias is a concern to internal validity (Polit and Beck, 2020). In this study participants self-selected to participate in the quantitative phase of the research. The demographic section of the questionnaire collected vital data to confirm the eligibility of participants. The risk with self-selection results in either highly satisfied or unsatisfied participants responding and this is difficult to manage and determine.

History and external events are other factors that can pose threats to internal validity. In this instance a global pandemic had occurred and would have impacted some newly qualified general nurses' experiences of internship at that time.

Maturation or the passage of time possess a risk to internal validity (Polit and Beck, 2020). In this study it was acknowledged that recall bias may be present as the newly qualified general nurses have completed internship and they had to recall their internship experience. Depending on when they participated in the study several weeks or months may have passed since they completed their internship.

4.3.5.3 External Validity

External validity is the degree to which the results from a research study are generalisable beyond the current study (Taylor, 2013). The cross-sectional nature of the study consisted of a specific population of newly qualified general nurses who had completed their nurse education in Ireland between 2018 and 2020. Snowball sampling was utilised together with national advertising to alert all potential participants to the study. In order to ensure efficient access for participants, a dedicated webpage link containing the invitation to partake, the participant information leaflet and the link to the survey was available and was included in the advertisements. The representative sample from the population of interest will enable future researchers to replicate the study.

4.3.5.4 Reliability

Reliability is the level of ability of an instrument to generate the same results on repeated measures (LoBiondo-Wood and Haber, 2014). The measure of reliability used in this study was internal consistency, assessed using Cronbach's alpha.

4.3.5.4.1 Internal Consistency

Internal consistency determines the level of ability of items within a scale to complement each other (LoBiondo-Wood and Haber, 2014). Cronbach's Alpha is the most common way to measure internal consistency, particularly when the instrument includes Likert scales (Field, 2013; LoBiondo-Wood and Haber, 2014; Singh and Thirsk, 2022). Cronbach's alpha was calculated using the data, the results of which are displayed in table 4.2. The Cronbach's alpha for the overall questionnaire was 0.92, indicating moderately high internal consistency, given that 0.70 or higher is considered an acceptable level of reliability (Field, 2013; Parahoo, 2014).

Table 4. 2: Cronbach's Alpha for the Experience of Internship Questionnaire

Section	Cronbach's Alpha	No. of items
Full Questionnaire	0.92	43
Pre-internship Preparation	0.79	3
Experiences during Internship	0.91	37
Value of Internship	0.73	3

4.4 Pilot Study

A pilot study was conducted in April 2018 to test the questionnaire and determine the amount of time that it would take to complete. The pilot study was conducted over two weeks with fifteen registered nurses who had experienced internship as part of the undergraduate degrees and had qualified in the previous years. The pilot participants worked in the acute hospital setting. No remuneration or incentive was provided.

All participants involved in the pilot study were given the same information. This included the cover letter, participant information leaflet and questionnaire. Although the official study questionnaire was electronic, a paper-based format was used in the pilot study, for ease of distribution and feedback. Minor changes were made to the questionnaire after the pilot study (Appendix 4.12) to improve its clarity. Data from the pilot study were not included in the final analysis.

It took between 20 and 30 minutes to complete the questionnaire. While considered lengthy, it was decided to retain all questions to comprehensively analyse the internship period using all relevant variables. The pilot participants liked the four stage Likert scale as it required a decisive approach and removed the middle of the road stance as the 'neither agree nor disagree option' was not available. The pilot participants welcomed the fact that the ultimate questionnaire would be delivered to the relevant population electronically as it would provide ease of access and enable participants to complete it anytime anywhere, as they found the paper based lengthy.

Overall, the pilot phase confirmed the content validity of the questionnaire. The Likert scales were deemed an efficient way of completing the questionnaire by participants involved in the pilot study.

4.5 Administration of the Questionnaire

The researcher contacted the Head of School in each of the four participating Higher Education Institutes to inform them that ethical approval had been received and to seek a nominated gatekeeper. The gatekeepers varied from site to site and included Heads of Nursing, Heads of Undergraduate Nursing Programmes and Student Allocation Officers. Each appointed gatekeeper was emailed with information about the study and a research pack for electronic distribution. The research pack contained a cover letter with a link to the questionnaire (Appendix 4.5), and a participant information leaflet (Appendix 4.6). A reminder email was sent to the gatekeepers two weeks later. This process was followed in 2018, 2019 and 2020.

The gatekeepers at each site were provided with a cover email for the potential participants, which included an invitation to participate in the study, the participant

information leaflet and a link to the electronic questionnaire. The cover email, participant information leaflet and advertisements each contained a link to the electronic questionnaire. Once accessed any entries made were saved anonymously directly to the SurveyMonkey database. Once the data collection stage was completed, the data were exported directly from SurveyMonkey onto an automatically generated Excel spreadsheet for data preparation and cleaning prior to analysis.

4.6 Data Analysis

In mixed methods studies, quantitative data are analysed using established quantitative methods of analysis (Tashakkori and Teddlie, 2010; Curry and Nunez-Smith, 2015; Creswell and Plano Clarke, 2018). The analysis involved several stages; data preparation, statistical analysis planning and assessment of data distribution, these procedures are discussed in the following sections.

4.6.1 Data Preparation

Data preparation and cleaning are fundamental to the quality assurance process in research and assists in identifying data errors (Pallant, 2020). At the outset, data were exported directly from SurveyMonkey to an Excel database, which removed the risk of transcription error. The data were then cleaned by checking for data entry errors and ensuring that each participant met the inclusion criteria.

A codebook was prepared in Excel (Appendix 4.13) to define and label the variables and assign a number to each possible response (Pallant, 2020). All variables and responses were coded in the Excel spreadsheet in line with the code book; strongly agree was coded as number one, agree as number two, disagree as number three and strongly disagree as number four. The data in the Excel spreadsheet were then copied and pasted directly into the database in the Statistical Package for the Social Sciences (SPSS) version 27 (IBM Corporation, 2020). Before the analysis was

undertaken, basic frequencies were run to screen for missing data and outliers. In quantitative research, missing data can be challenging, therefore it is necessary to minimise this if possible (Pallant, 2020). Absent responses were managed by assigning a missing data value 999.

4.6.2 Statistical Analysis Plan

An outline of the statistical analysis plan used to answer the research question is included in the next section. The statistical analysis aims to examine the relationship between experiences of internship, the level of satisfaction with internship, and the value of internship in preparing the newly qualified general nurses for transition to the role of registered nurse. Consequently, various statistical methodologies were used for data analysis. Descriptive analysis was used to describe and summarise the data. The frequency for each response is discussed in text format, and outlined in tables, bar charts and pie charts. The data were grouped in tabular format based on the Likert scale used. Inferential analysis was undertaken using Non-Parametric Tests; Mann-Whitney U Tests, Kruskal-Wallis, Bonferroni Post-Hoc Tests, and Spearman Correlations to generalise the results based on the data. Firstly, the distribution of data was assessed.

4.6.3 Distribution of Data

The assessment of data distribution involved the use of the Likert scale questions from the Experience of Internship Questionnaire. The overall totals for pre-internship preparation, internship experience and value of internship sections were generated in SPSS using the compute variable function. The normality assumption was assessed using Q-Q plots, and by calculating skewness, and kurtosis values for each section. Skewness calculates the symmetry of the data distribution, while kurtosis calculates the 'peakiness' of the data distribution (Frey, 2018; Pallant, 2020). A positive value for kurtosis denotes a distribution more peaked than normal. On the contrary, a negative kurtosis shows a shape flatter than normal. If the kurtosis is greater than +2, the distribution is considered too peaked whereas, if kurtosis is

less than -2 the distribution is considered too flat. When both skewness and kurtosis are at or close to zero, it is deemed a normal distribution (Hair et al., 2022).

For this questionnaire, the kurtosis value was 1.106. If the distribution of responses veers toward the right or left tail of the distribution, then it is considered skewed. A negative skewness signals a higher number of larger values, on the other hand a positive skewness signifies a larger number of smaller values. A skewness value between -1 and $+1$ is deemed excellent, whereas a value between -2 and $+2$ is deemed acceptable. Values greater than -2 and $+2$ indicate substantial non-normality (Hair et al., 2022). In this questionnaire the skewness value is .303 meaning that it is not symmetrical.

Next, the exploration stage of the data was undertaken, which involved a visual inspection to determine if the data were normally distributed (Appendix 4.14). This process assisted in deciding whether to use parametric or non-parametric tests. As the data were not normally distributed, non-parametric tests were carried out after attempts to transform the data were unsuccessful.

Descriptive statistics were used to assess the distribution of the dataset. The skewness value of 0.303 indicates a slight positive skew, while the kurtosis value of 1.106 suggests that the dataset's tails are slightly heavier than those of a normal distribution. For a normal distribution, both values are expected to be as close as possible to 0. Generally, based on the skewness and kurtosis values, the distribution of the dataset is relatively close to normal. The slightly positive skewness indicates a minor asymmetry towards higher values, while the kurtosis indicates slightly heavier tails. However, these deviations were not pronounced, and the dataset's distribution can still be considered approximately normal.

Normality tests were carried out using the Shapiro-Wilk Test and the Kolmogorov-Smirnov Test. The Kolmogorov-Smirnov Test yielded a p -value of 0.2, which is greater than the significance level of 0.05. As a result, the data were not considered significantly different from a normal distribution. However, the Shapiro-Wilk demonstrated a p -value of .039, which is less than .05. Therefore, the data were considered significantly different from a normal distribution. The results of the normality tests on the questionnaire are displayed in Tables 4.3 and 4.4. Non-parametric analysis was chosen as outlined in Appendix 4.15.

Table 4. 3: Results of normality tests for the overall questionnaire

Questionnaire	Mean	Median	Std. Deviation	Skewness	Kurtosis
	87.14	88.0	15.24	.303	1.106

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	P value	Statistic	df	P value
Total Internship	.055	112	.200 [*]	.976	112	.039

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 4. 4: Shapiro-Wilk test for normality

Questionnaire Sections	Skewness	Kurtosis	df	p
Pre-Internship Preparation	.253	.125	176	<.001
Experiences during Internship	.246	1.132	120	.024
Value of Internship	.427	-.501	112	<.001
Full Questionnaire	.303	1.106	112	.039

4.6.4 Descriptive Analysis

Frequency distribution is used to describe the data by counting the occurrence of each category (LoBiondo-Wood and Haber, 2014). The data are categorised, and the frequency of each category is reported. Graphs and tables are used to illustrate the frequency and distribution of data.

The pattern of responses is described using measures of central tendency, for example the mean. The mean for each section (Pre-Internship Preparation, Experiences during Internship, Value of Internship and the Overall Internship Experience) and total mean of the questionnaire were calculated in SPSS. The mean value is a benchmark for statistical significance and, in this case, the level of internship satisfaction. Scores below the mean indicate higher levels of internship satisfaction, scores above the mean indicate lower levels of internship satisfaction. Standard deviation (SD) is used to measure variability. Standard deviation is reported alongside the mean for all the sub sections of the questionnaire.

For summarising response patterns, especially in terms of the overall internship satisfaction, the overall mean were calculated for the various sections of the questionnaire, encompassing Pre-Internship Preparation, Experiences during Internship, Value of Internship, and the mean total for the questionnaire reflecting the overall internship experience. Where data are not normally distributed the median and interquartile range are reported. The study results are presented in Chapter 5.

4.6.5 Inferential Statistics

Inferential statistics are used to estimate the probability that statistics in the sample accurately reflect the population parameter. They provide evidence that allow statements or conclusions to be made about the larger population. Spearman's test was used to measure the strength of association between variables. Mann-Whitney U Tests were used to test for differences between two independent groups. Kruskal-Wallis tests were used to test for differences between three or more groups. When Kruskal-Wallis tests revealed statistically significant results Bonferroni Post-Hoc tests were conducted to identify exactly which group was statistically significant. These comparisons were made based on previous findings in the literature in relation to newly qualified nurses' experiences of transition in the presence or absence of an internship or transition programme. Appendix 4.16 outlines the map of the literature with comparisons made in this study. The results of the inferential analysis are presented in chapter 5 section 5.8-5.9.

4.7 Phase Two: Qualitative Phase

Phase two of this research study was the qualitative phase and was undertaken to examine in greater depth the newly qualified general nurses' experiences of internship and its value to their transition to the role of registered nurse. The inclusion/exclusion criteria for phase two differed slightly from phase one. Newly qualified general nurses from 2021 were included and those who qualified in 2018

were excluded, as the latter were no longer newly qualified general nurses as defined by this study.

Qualitative research is a way of exploring how people make sense of their experiences and is an appropriate method to gain a deeper exploration of a topic (Savin-Baden and Major, 2013). Furthermore, qualitative research enables a comprehensive description of a person's world (Houser, 2018). In phase one, the questionnaire identified participants' experience of pre-internship preparation, their level of satisfaction with the acquisition of clinical skills during internship and the value of the internship. The results from phase one endow important data about newly qualified general nurses' experiences of preparation for internship and clinical skills acquisition during internship. However, the questionnaire did not allow for extensive description about the value of internship to the transition to the role of registered nurse, as such experiences are not quantifiable.

4.7.1 Access to the Sample

Access to participants for phase two of the study was twofold. Firstly, participants from phase one of the study had the option to express an interest in participating in phase two, which involved qualitative interviews. Secondly, to ensure representation from all areas of the country and achieve a varied and inclusive set of results, one hospital was randomly selected from each of the six hospital groups across each province in Ireland. A map of hospital groups is included in Appendix 4.17.

The Directors of Nursing in each randomly selected hospital were contacted by email and provided with information about the study. Permission and access to the newly qualified general nurses at their hospital was requested. Follow up emails and phone calls with secretaries were undertaken as required. In two cases, the initially selected hospital, refused access to newly qualified general nurses due to the ongoing pandemic and escalation situation in the hospitals. Therefore, the next hospital in the randomised sequence was contacted and provided access. In one

group, the research ethics committee covered two hospitals and as the ethical approval allowed access to the two sites, both were included. Newly qualified general nurses from six hospitals were invited to participate in the study.

4.7.2 Recruitment of Participants

A gatekeeper for each site was nominated by the relevant Director of Nursing. The gatekeeper's role was to manage the advertisement and recruitment of participants. The researcher contacted the gatekeepers via email, with information about the expectation of their role (Appendix 4.18), a cover letter for distribution to participants along with a Participant Information Leaflet (Appendix 4.19), Consent Form (Appendix 4.20) and an electronic version of the Flyer (Appendix 4.21). In addition, hard copies of the flyers were sent to the gatekeepers for advertising the study. The participant information leaflet outlined the process for participating in the study. Interested newly qualified general nurses were advised to contact the researcher directly for more information and to arrange an interview.

Although a phone number was provided on the flyer, all participants made contact by email. Once participants contacted the researcher, expressed interest, were adequately informed about the study and wished to participate, a day and time for the interview was agreed. Interviews were held on-line, so participants were asked to sign and return the consent form by email, before their interview.

4.7.3 Data Collection

4.7.3.1 Development of the Interview Schedule

The interview schedule (Appendix 4.22) was developed to align with the objectives of the study and to address areas that emerged as requiring further explanation from the first phase of the study.

The purpose of the interview schedule was to keep the discussion focused and to prevent superficial or uncontrolled conversation (Kvale and Brinkmann, 2015). The interview schedule was short, in line with Morgan's (1997) recommendation to keep questioning to a minimum, allowing the informant to speak freely as real feelings are uncovered as they interact.

The interview schedule was developed following the systematic approach by Kallio et al., (2016) and in line with Holloway and Galvin (2017) recommendations. The objectiveness and trustworthiness of a study is enhanced when the interview schedule is developed using a rigorous approach (Kallio et al., 2016). The development of the interview schedule commenced after the first phase data were analysed and areas that required further exploration identified. Questions were formulated, and accompanying prompts were included to support the original question. The order of the questions was carefully considered and applied in a sequenced format. The schedule began with general warm-up questions and then progressed to key open-ended questions, for example the informants were asked to share their experiences of internship and how it prepared them for transition to the role of registered nurse. The interview concluded with a summary and confirmation from participants that the key elements they wished to discuss had been adequately covered.

4.7.3.2 Online Semi-Structured Interviews

Online semi-structured interviews were used to collect the data for this phase. A semi-structured interview is a discussion between two individuals where the interviewer asks open ended questions and the participant responds accordingly (Savin-Baden and Major, 2013; LoBiondo-Wood and Haber, 2014; Singh and Thirsk, 2022). This approach is an integral part of qualitative research as meaningful perspectives are obtained from participants (Savin-Baden and Major, 2013).

There are pros and cons associated with online interviews. Online interviews are economical, as participants can join from any geographical area without the expense of travelling (LoBiondo-Wood and Haber, 2014). As there was a global pandemic with travel restrictions at the time of data collection, the online platform was a suitable alternative to the face-to-face method.

One of the main concerns with online interviews is ensuring informed consent (LoBiondo-Wood and Haber, 2014). Participants were asked to email the researcher the signed consent form once they agreed to participate and prior to the interview taking place. Another concern is the protection of anonymity on internet platforms (LoBiondo-Wood and Haber, 2014). Online interviews were conducted using a secure zoom account that was password protected (Zoom Video Communications Incorporated, 2016). Only the participant and the researcher had access to the secure zoom link that was sent by email. The secure account was used to protect participants' identities.

Broadband connectivity is another challenge for participants and for researchers. During one interview, internet connection issues were encountered, but the interview resumed as soon as the internet reconnected. During another interview, a participant's internet signal was low and so they turned off their camera to increase the band width and the interview continued.

Audio recording forms part of interview techniques and allows for critical appraisal of the interview (Doody and Noonan, 2013). The use of audio devices to record interviews reduces unconscious bias in data selection as a complete record of the interview is available and can be studied thoroughly in the analysis phase (Aksu, 2009). The researcher was cognisant that participants may feel uncomfortable being recorded and that this may distort the interview or lead to participants providing less authentic responses and being more attentive to word choice (Kuckartz and Radiker, 2023). However, the researcher decided that recording the interview was

conducive to obtaining more accurate data as the interview could be replayed to ensure full accuracy. Consent to record was obtained and participants were informed when the recording started and finished. An electronic dictaphone, which was not visible on the screen, was used for recording the interview. The participants were reassured that the recording would not be available to anyone other than the researcher and the supervisory team.

4.7.3.3 Conducting the Online Semi-Structured Interviews

Participants were welcomed and thanked for attending and participating in the study. An overview of the topic was provided with a rationale for the research and its current stage – phase two. Participants were not asked if they had completed the questionnaire. A sound check was performed, consent was verified, participants' questions were answered, and they were reminded that they could withdraw from the interview at any time up to the point of data analysis.

The interview was conducted in line with the interview schedule with appropriate probe questions used to explore responses in greater depth. The interviewer started by asking the participant to share their views and experiences on how the internship prepared them for the transition to the role of registered nurse. Participants were asked to provide examples to further contextualise their responses; this is reported in chapter six. Recapping was used to ensure a thorough understanding of participants' experiences, and they were provided with an opportunity to add any final opinions, revisit any experiences, or add any further detail before the interview concluded.

At the end of the interview the participants were thanked for their time and the recorder was turned off. The participants were given time for a closing discussion during which they were asked if they were affected by recalling their experiences and whether they would like information on the Employee Assistance Programme to be sent to them. The participants expressed their satisfaction to have the

opportunity to participate and some reiterated points that they felt strongly about during the interview.

4.7.4 Data Analysis

In mixed methods research qualitative data are analysed using established qualitative data analysis methods (Teddlie and Tashakkori, 2009; Creswell and Plano Clark, 2018). The aim of qualitative data analysis is to allow interpretation of raw data from the transcripts of recorded interviews to find commonalities and differences, which are then grouped into more abstract themes (LoBiondo-Wood and Haber, 2014; Creswell and Plano Clark, 2018). There are many methods of qualitative data analysis, but the choice of method is based on the qualitative design of the study (LoBiondo-Wood and Haber, 2014; Singh and Thirsk, 2022). The qualitative phase of this mixed methods design used a descriptive design to ascertain newly qualified general nurses' experiences. This approach focuses on the accurate description of participants' experiences during analysis and interpretation of the raw data (Sandelowski, 2010). The inclusion of verbatim descriptions from the transcripts in the reporting of the qualitative phase of the study was a significant element to understanding the newly qualified general nurses' experiences of internship and its value to their transition to the role of registered nurse. Each interview was transcribed by the researcher and the transcription were then uploaded to NVivo 12 software for analysis.

In this study, the qualitative data were analysed using Braun and Clarke's (2022) Reflexive Thematic Analysis Framework. There are six phases in this framework: familiarisation with the dataset, coding, generating initial themes, developing and reviewing themes, refining, defining and naming themes and writing up. The six phases were applied systematically in this study and are discussed in detail in the next section.

4.7.4.1 Familiarisation with the Data Set

Familiarisation with collected data is imperative during research to allow full understanding and more accurate data analysis. To achieve this, the researcher listened fully to the recorded interviews and then transcribed the data from the electronic recordings. The researcher then re-listened to the recordings and reread all the transcripts to further familiarise themselves with the data set. The transcripts were imported into NVivo 12, to commence the coding process.

4.7.4.2 Coding

In NVivo, a code folder was set up and the researcher worked systematically through the data and applied code labels to each segment of data. The code labels were created by using indicators of the specific meaning of the data. This process was followed for each transcript. A codebook was generated in NVivo.

4.7.4.3 Generating Initial Themes

To generate initial themes, codes were categorised into groups and analysed separately. Candidate themes were generated by identifying patterns across the data set to produce a meaningful answer to the research question. Memos were kept within NVivo as well as, a reflective journal to record accurate reflections of the data collection and analysis process.

4.7.4.4 Developing and Reviewing Themes

Continuing with Braun and Clarke's thematic analysis framework (2022; p.35), the researcher posed two questions to check that the themes made sense in relation to the coded extracts and the dataset "one, does each theme tell a convincing and compelling story about an important pattern of shared meaning related to the data set?" and "Two, collectively, do the themes highlight the most important patterns of shared meaning related to the dataset?" This process helped to ensure that the themes accurately represented the data.

4.7.4.5 Refining, Defining and Naming Themes

The themes were checked against the coded extracts and amalgamated, resulting in a reduction from nine to three themes. The themes were then inspected to identify the story that each theme expressed and were named accordingly.

4.7.4.6 Writing Up

Finally, the phase two data chapter was written to comprehensively reflect the data analysis process and included extracts to tell the story and answer the research question. The findings are presented in Chapter Six.

4.8 Rigor

There is ongoing discourse on the best strategies to demonstrate rigor in qualitative research with mixed reaction to the idea of universal criteria corroborating the quality of qualitative research (Johnson et al., 2020). In recent times, checklists have been recommended for examining universal quality criteria (Kuper et al., 2008; Anderson, 2010; Morse, 2015; Santiago-Delefosse et al., 2016). However, some researchers disagree with their use, purporting that such checklists lack flexibility for diverse approaches and the various interpretive processes that are employed in qualitative research (Dixon-Woods et al., 2004; Sale, 2008; Stige et al., 2009; Wasserman et al., 2009). They maintain that universal quality criteria restrains the diversity and array of practices that are significant in ensuring quality and rigor in qualitative research. This debate is beyond the remit of this chapter. In the absence of consensus on how to best demonstrate rigor in qualitative research, the highly acknowledged criteria presented by Lincoln and Guba (1985) - credibility, transferability, dependability, and confirmability - were used to conduct phase two of this research.

4.8.1 Credibility

Credibility refers to the genuineness of the data, the interpretation of the data and is akin to internal validity in quantitative research (Houser, 2018). Credibility can be achieved by returning to the participants to share interpretation findings and verify them from the perspective of the person living the experience (Lincoln and Guba, 1985; LoBiondo-Wood and Haber, 2014). Participant verification can be achieved in two forms: during the interview or following data collection. In this research, participant verification happened during the interview. Any matters that arose during the interview were clarified at that time. This enabled accurate interpretation of the participants' experiences. Additionally, transparency is demonstrated through the inclusion of participants' verbatim quotes to enhance credibility (LoBiondo-Wood and Haber, 2014; Houser, 2018; Singh and Thirsk, 2022). Triangulation of perspectives in mixed methods approaches through the corroboration of the findings enhances credibility. Similar to mixed methods approaches, triangulation aims to provide a deeper understanding of the phenomena (Flick, 2017).

4.8.2 Transferability

Transferability refers to the degree to which results can be transferred to other locations or populations and is akin to generalisability in quantitative research (LoBiondo-Wood and Haber, 2014; Singh and Thirsk, 2022). Qualitative research, due to its characteristics, subjectivity, and smaller sample sizes, is not envisioned as generalisable to the wider population. Nevertheless, transferability can be achieved when results fit into circumstances outside of the study (Sandelowski, 1986). It can be attained through careful consideration of the sample choice and the research location (Lincoln and Guba, 1985). In this study, one hospital was recruited from each of the six healthcare groups in Ireland. These six hospitals represented hospitals on a national scale. Additionally, the approaches used for conducting the online semi-structured interviews were fully portrayed, thus enabling the prospective transferability as appropriate.

4.8.3 Dependability and Confirmability

Dependability refers to the stability of qualitative information over time under the same conditions (Polit and Beck, 2017). On the other hand, confirmability refers to the objectivity of the research procedure, ensuring interpretations are entrenched in the data to allow affirmations to be tracked to the original source (Lincoln and Guba, 1985). Both dependability and confirmability can be demonstrated using an audit map (Sandelowski, 1986). The aim of the audit map is to enable an impartial appraisal of the research procedure to establish if the results are logical and based on the data. In this study, a systematic process was employed for collecting, managing, and analysing the qualitative data. NVivo was used for qualitative data analysis and to manage the mapping process for each generated theme. This translucent process affirms assurance that the findings are a precise reflection of what was said by the interview participants. Several coding processes completed during phase two data analysis enabled concordance and audit mapping using NVivo.

4.9 Data Integration Process

Explanatory sequential mixed methods design is employed when the intention is to use the qualitative findings to explain the initial quantitative results by connecting the two data sets (Creswell and Creswell, 2022). The integration of qualitative and quantitative data is a principal component of mixed methods research (O'Cathain et al., 2010; Creswell and Plano Clark, 2018). Integration is an intended procedure where quantitative and qualitative methods are brought together in a single study (Creswell and Plano Clark, 2018). The integrative analysis commences separately of both the quantitative and qualitative data. The point of integration occurs when both data sets are arranged side by side in table or graph format known as a joint display (Creswell and Creswell, 2022). Integration in mixed methods research generates a comprehensive answer to the research question, as opposed to answers using individual research methods (Fetters and Freshwater, 2015).

Meta-inference is an extremely valuable outcome in mixed methods research (Uprichard and Dawney, 2019); it is the trademark or core element of mixed methods research (Moseholm and Feters, 2017; Bazeley, 2018), and “the actual dialectic mixing of consequence lies in the construction or composition of inferences, drawn from purposeful conversations of different threads of data patterns” (Greene and Hall, 2010, p.125). The meta-inference is a sign of the quality of a mixed methods study (O’Cathain et al., 2010). Some mixed methods intellectuals claim that the level of data integration impacts the quality of the research (Teddlie and Tashakkori, 2009). Hence, it is not the mixing of methods but the integration of inferences that is significant. However, this is not accentuated in the literature, where the emphasis is on the integration of methods as opposed to the integration of findings (Hitchcock and Onwuegbuzie, 2022).

Integration occurs at several stages throughout a study, from the initial design to the methods, interpretation, and finally reporting (Feters et al., 2013). Integration during the design and methods stages of this study have been outlined in Chapter 3. The integration and reporting of the quantitative and qualitative data is illustrated in chapter seven where data from phases one and two were integrated using a joint display and narrative weaving approach. A joint display of mixed methods findings is a visual representation using a variety of structures for juxtaposing presentation of the quantitative and qualitative findings (Feters and Freshwater, 2015; Feters and Tajima, 2022). A joint display framework to integrate and represent mixed methods integrated analysis can consist of tables, matrices, and figures (Guetterman et al., 2015, 2021; Johnson et al., 2019). The juxtaposing of quantitative results and qualitative findings side-by-side facilitates researchers drawing meta-inferences to gain new insights about the phenomenon (Guetterman et al., 2015, 2021).

In this study, the Pillar Integration Process, a four-stage analytical technique was utilised to systematically integrate the quantitative results and the qualitative findings. The Pillar Integration Process was chosen due to its many advantages; it decreases observer bias and increases opportunities for synthesis, both visually and methodologically (Johnson et al., 2019). The four stages of building the model were

adhered to as outlined by Johnson et al., (2019). They include listing, matching, checking and pillar building.

Stage 1: Listing

The raw data from the quantitative and qualitative phases are listed in the joint display qualitative and quantitative category columns.

Stage 2: Matching

Once the data have been listed in the quantitative and qualitative columns, the matching process commenced on the other side of the joint display. The quantitative data were matched to the qualitative data, aligning and refining the data in both category columns. The list was compared across the rows in the joint display so that the quantitative data reflected patterns, parallels, and similarities with the qualitative data. At the end of Stage 2, the QUANT DATA, QUANT CATEGORIES, QUAL DATA, and QUAL CATEGORIES columns were complete.

Stage 3: Checking

Once the data were matched and verified for match accuracy, the quality of the data were checked. All the data in the completed outside columns were cross-checked for completeness to verify that the rows were appropriately matched. The checking stage allowed for stepping back and reflecting on emerging patterns or lack thereof and consequently refining and modifying the nature of the lists and how they matched across the four columns. At the end of the checking stage all relevant data and categories were checked to ensure the appropriateness of the matches.

Stage 4: Pillar Building

In this stage the pillar was built in the centre column. The findings were compared from the first three stages to conceptualise the insights from the data in the outer columns. Inferences were developed based on the patterns, insights and themes that emerged with possible explanations. The themes were listed in the pillar column. The pillar depicted the integrated themes from all the rows and from this a meaningful narrative was weaved from the integration of the quantitative and qualitative data. Figure 4.2 displays a generic image of the Pillar Integration Process Model that demonstrates columns, headings and the direction of integration from Johnson et al., (2019; p.305).

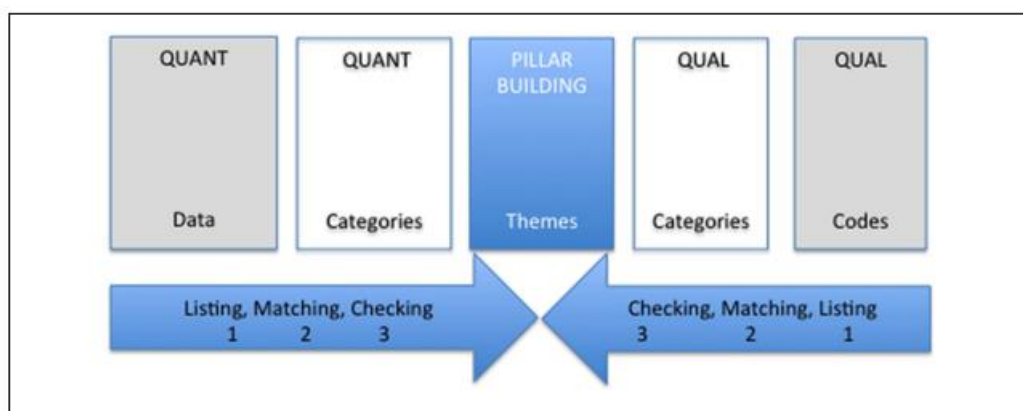


Figure 4. 2: Generic image of the PIP Model that demonstrates columns, headings and the direction integration (Johnson et al., 2019; p. 305).

4.10 Ethical Considerations

Ethical codes and regulations protect the rights of research participants and when upheld lead to ethically sound research (Polit and Beck, 2017). These include the Declaration of Helsinki (World Medical Association, 2004), the Belmont Report (Office for Human Research Protections, 1979), and the Nuremberg Code (Global Health Network, 1996). The Declaration of Helsinki affirms that research involving human participants must not take precedence over the rights and interests of individuals (World Medical Association, 2004). It is the researcher's responsibility to protect human individuals' rights during the research (LoBiondo-Wood and Haber, 2014; Singh and Thirsk, 2022). These regulations protect research participants by

advising researchers to consider the benefit-risk ratio of a study, provide full disclosure to ensure informed consent from participants, adhere to research ethics policies by obtaining approval from institutional research ethics committees, and protect participants' rights through anonymity and confidentiality (Parahoo, 2014; NMBI, 2015; Holloway and Galvin, 2017).

In this mixed methods research study, all participants were provided with clear and unambiguous verbal and written information about the study. The electronic Participant Information Leaflet outlined the nature of the study, the research methods, benefits, risks, confidentiality, and the right to withdraw from the study at any time.

Ethical approval for phase one of this study was granted by the Research Ethics Committee at the School of Nursing and Midwifery, Trinity College Dublin (Appendix 4.23) and site-specific ethics committees from Higher Education Institutes that required it. Ethical approval for phase two of the study was granted by the hospitals where the research was undertaken along with the Research Ethics Committee at Trinity College Dublin (Appendix 4.24). In phase two, as part of the Ethics Application process, a Data Protection Impact Assessment was completed and approved by the Data Protection Officer / Deputy Data Protection Officer at Trinity College Dublin and the Data Protection Officer in each of the Healthcare Groups (Appendix 4.25).

During the study, the researcher was guided by the Professional Guidance on Ethical Conduct in Research (NMBI, 2015) and the Code of Professional Conduct for registered nurses (NMBI, 2021). Respect for the person, beneficence and justice are the main ethical principles that are important for this study, the application of which are discussed in the next section.

4.10.1 Respect for Participants

As aforementioned, respect towards participants was one of three main ethical principles applied to the study. The principle of respect for the person as outlined in the Belmont Report, includes the right of self-determination, autonomy, privacy, consent, and confidentiality (Office for Human Research Protections, 1979; NMBI, 2015; Houser, 2018). The right of self-determination and autonomy allows participants the freedom to decide if they wish to participate in the study and the right to refuse to partake in the study (Bell, 2005; NMBI, 2015). Consent is not only a mandatory component of research but a vital consideration to protect the fundamental rights and freedom of participants (Office for Human Research Protections, 1979; LoBiondo-Wood and Haber, 2014; Parahoo, 2014; Polit and Beck, 2017; Data Protection Act, 2018; Singh and Thirsk, 2022). Consent must be explicit so that participants are fully informed about the research to make an informed decision (NMBI, 2015; Houser, 2018). General Data Protection Rules emphasise the requirement for explicit consent so that there is no chance of misinterpretation (Government of Ireland, 2018). Article 29 of the Working party guidance on consent illuminates that explicit consent means participants provide an 'express statement of consent' (EU Data Protection Working Party, 2018). The consent form included information on data processing, possible risks or implications that might arise during the study as well as, information that may affect a participant's decision to give consent to partake in the study. This ensured the power of free choice, enabling them to voluntarily consent to participate in the research or refuse participation, as well as the freedom to withdraw from the study at any time.

In phase one of the study, the Participant Information Leaflet contained explicit information pertinent to the study. Participants confirmed their participation by ticking the box before they started to complete the anonymous electronic Experience of Internship Questionnaire, thereby indicating consent to participate.

In phase two of the study, before the online semi-structured interview commenced, the researcher provided verbal information similar to that detailed in the electronic

participant information leaflet. Participants were then requested to voluntarily sign the consent form (Appendix 4.18). Sufficient time was given between the advertisement of the study and the decision required to participate in the research. The autonomy of participants was respected, as they were advised that they could withdraw from the study at any time up to the analysis stage.

4.10.2 Beneficence and Non-Maleficence

The principles of beneficence and non-maleficence refer to balancing the advantages and the risks of the research to ensure that participants are not harmed and that the research will benefit the participating population or society as a whole (NMBI, 2015). The Belmont Report classifies the two obligations associated with beneficence, minimising risk and maximising the benefits to the participants or related population (Office for Human Research Protections, 1979). While there were no direct benefits, the participants provided insights into the experiences and the value of the internship period as part of the undergraduate degree in general nursing programme. The anticipated benefits of the research were that insights from the research would provide a greater understanding of the role of the internship period in preparing newly qualified general nurses for the transition to practice.

There were no anticipated risks, but relaying experiences of internship had the potential to generate feelings of upset or distress. To alleviate upset or distress, the online semi-structured interviews were conducted via Zoom and the participants were asked to choose a confidential, warm, and relaxed room with refreshments.

Additionally, a plan to deal with the potential of participants becoming upset during the interview was devised. This included stopping the interview and allowing the participant time to relax before continuing, and, if a participant displayed distress, the relaying of details of the Health Service Executive Employee Assistance Programme. The Health Service Executive Employee Assistance Programme is an

anonymous work-based counselling service that offers six free counselling sessions and is available 24 hours a day seven days a week.

As per the participant information leaflet and the ethics application, participants were informed that any issues of malpractice would have to be reported to the Director of Nursing at the applicable site and to the Trinity College Dublin Research Ethics Committee. No such incidents were divulged.

4.10.3 Justice

The principle of justice concerns the fair treatment of all participants before and during the research (NMBI, 2015; Polit and Beck, 2017). Justice was enforced in this study by ensuring the protection of anonymity, confidentiality, and privacy. In phase one of the study, all participants were guaranteed anonymity as no participant details were collected and the Internet Protocol address on SurveyMonkey was turned off.

In accordance with the principle of justice, every effort was made to ensure that newly qualified general nurses' were aware of the study and had the opportunity to participate in phase one of the research. This was achieved through national electronic advertising and the assistance of gatekeepers at participating sites. For phase two, the sites were randomly selected and the participants volunteered to participate. Gatekeepers at each site managed the recruitment process by sending email invitations and placing flyers in clinical areas to ensure that all eligible participants were aware of the study.

4.11 Summary

This chapter discussed the chosen methods for this study and provided rationale for decisions at each stage of the process. The aims and objectives were outlined, as well as the phase of the study that would address them. The population and sample

were discussed, providing rationale for decisions in both stages. The sample size calculation was explained and the eligibility criteria defined – newly qualified general nurses who had completed their degree in general nursing between 2018 and 2021. Accessing participants through the four participating Higher Education Institutes was outlined along with the use of national advertisements and the development of a webpage to make the study available to all potential participants. The process of developing the Experience of Internship Questionnaire was outlined, as well as methods of establishing the validity and reliability of the instrument. This questionnaire was used in phase one to examine the experience of internship, in particular the preparation for internship, acquisition of clinical skills and the value of the internship period. The data collection process was discussed as well as, the data analysis plan for phase one data.

Following the analysis of phase one data, the interview schedule for phase two was developed. Representation from all hospital groups was required for this cross-sectional study and ethical approval was obtained from each site. Directors of Nursing at each site provided gatekeepers who managed the advertising and recruitment of participants at each site. Online semi-structured interviews were used in phase two to further examine internship and its value to transition to the role of registered nurse. The data were transcribed and analysed using NVivo 12.

The employment of a sequential explanatory mixed methods design maximises the opportunity for the subject to be extensively researched, providing a comprehensive understanding of the internship experience from the newly qualified general nurses' perspectives. The integration of findings is a significant element of mixed methods research and if not performed correctly can jeopardise the process. After evaluating methods of integrating the findings, the Pillar Integration Process was utilised due to its known advantages over previous visual display models. The Pillar Integration Process provided a clear and transparent model by following a four-step process to ensure accuracy of integration. Lastly, the ethical considerations relevant to this

study were illuminated, demonstrating compliance with ethical regulations and the protection of participants' rights.

The next three chapters present the analysis of findings from the quantitative and qualitative phases as well as, the integration of the data from both phases.

Chapter 5 Quantitative Results

“Experiential learning does not occur without active participation nor is it guaranteed by the mere passage of time”
(Benner et al., 2010; p. 11)

5.1 Introduction

The aim of this mixed methods study was to examine newly qualified general nurses' experiences of internship and its value to their transition to the role of registered nurse. This chapter presents the results from the first phase of the study regarding newly qualified general nurses' experiences of internship based on the responses elicited from the 'Experience of Internship Questionnaire'. The first section presents the demographic profile of the respondents; including their age, the year they started and finished their nursing degree, the number of weeks it took to complete their internship, whether they undertook part-time employment during internship, the higher educational institute where the nursing degree was completed, and the type of placements completed during internship.

The second section presents a description of their experiences of the internship period under three main sections: pre-internship preparation, experiences during internship and the value of internship. The final section presents the results of the inferential analysis that were undertaken to reveal associations and differences between variables using Spearman's Correlation, Mann-Whitney U tests, Kruskal-Wallis and Bonferroni Post-Hoc Tests.

5.2. Demographic Profile of the Respondents

Data were collected from November 2018 to 1st December 2020, with representation from all thirteen Higher Education Institutes that delivered the BSc (Hons) in General Nursing programme in Ireland during this period. In total, 193 newly qualified general nurses participated in this study with 112 completing the questionnaire in full. All available data were included in the analysis.

The average age of the respondents was 26.43 years (Standard Deviation (SD) = 7.23). The respondents' ages ranged from 23 years to 58 years, with the majority falling within the 20–25-year category (68.9%, n=133). Most of the respondents started their BSc in General Nursing in 2014 (44%, n=85) and 2015 (38.9%, n=75)

and completed their BSc in General Nursing in 2018 (43.5%, n=84) and 2019 (40.4%, n=78). The majority (94.8%, n=183/193) completed their internship in the standard 36 weeks, while 2.1% (n=4) took 38 weeks and 3% (n=6) took 39-44 weeks. About one third (35.8%, n=69) of the respondents held part-time jobs during the internship period. There was representation from all thirteen higher education institutes. Table 5.1 provides an outline of the demographic profile and placement characteristics of the respondents.

Table 5. 1: Demographic and placement characteristics of study respondents (N=193)

Respondents Characteristics		Category	n	%
Age		20-25	133	68.9
		26-30	22	11.4
		31-35	14	7.3
		36-40	10	5.2
		41->50	14	7.2
Year Started Degree		2012/13	14	7.3
		2014	85	44.0
		2015	75	38.9
		2016	19	9.8
Year Completed Degree		2016/17	10	5.2
		2018	84	43.5
		2019	78	40.4
		2020	21	10.9
Higher Education Institute		HEI 1	48	24.9
		HEI 2	49	25.4
		HEI 3	19	9.8
		HEI 4	17	8.8
		HEI 5	11	5.7
		HEI 6	11	5.7
		HEI 7	10	5.2
		HEI 8	7	3.6
		HEI 9	6	3.1
		HEI 10	6	3.1
		HEI 11	4	2.1
		HEI 12	3	1.6
		HEI 13	2	1.0
No. weeks to complete internship		36 weeks	183	94.8
		38 weeks	4	2.1
		39-44 weeks	6	3.0
Part-time Job		Yes	69	35.8
		No	124	64.2

Nearly all respondents (97.4%, n=187) completed their internship placements in an acute hospital setting, while a smaller number (2.6%, n=5) completed their first

placements in a day hospital or community setting. Subsequent internship placements followed a similar trend (Table 5.2).

Table 5. 2: Distribution of internship placements among NQGNs by setting (N=193)

Placement	1	2	3	4
	n (%)	n (%)	n (%)	n (%)
Acute Hospital	187 (97.4)	184 (95.3)	180 (95.2)	179 (96.8)
Day Hospital	2 (1.0)	7 (3.6)	3 (1.6)	2 (1.1)
Community Setting	3 (1.6)	2 (1.0)	6 (3.2)	4 (2.2)

5.3 Pre-Internship Preparation and Adequacy of Preparation

The first section of the questionnaire examined the type and adequacy of preparation for internship. It also explored the respondents' understanding of the intern role, the availability of guidelines and the expectations associated with the internship experience. This aligns with the study objective one.

Preparation for Internship

Of the 176 respondents who identified the information structures that were available to prepare them for their internship, 58%, (n=102) received this information as part of their 4th year induction, while 33% (n=58) received a bespoke internship orientation programme, delivered by their hospital. However, 9.1% of respondents (n=16) reported that they received no preparation (Figure 5.1).

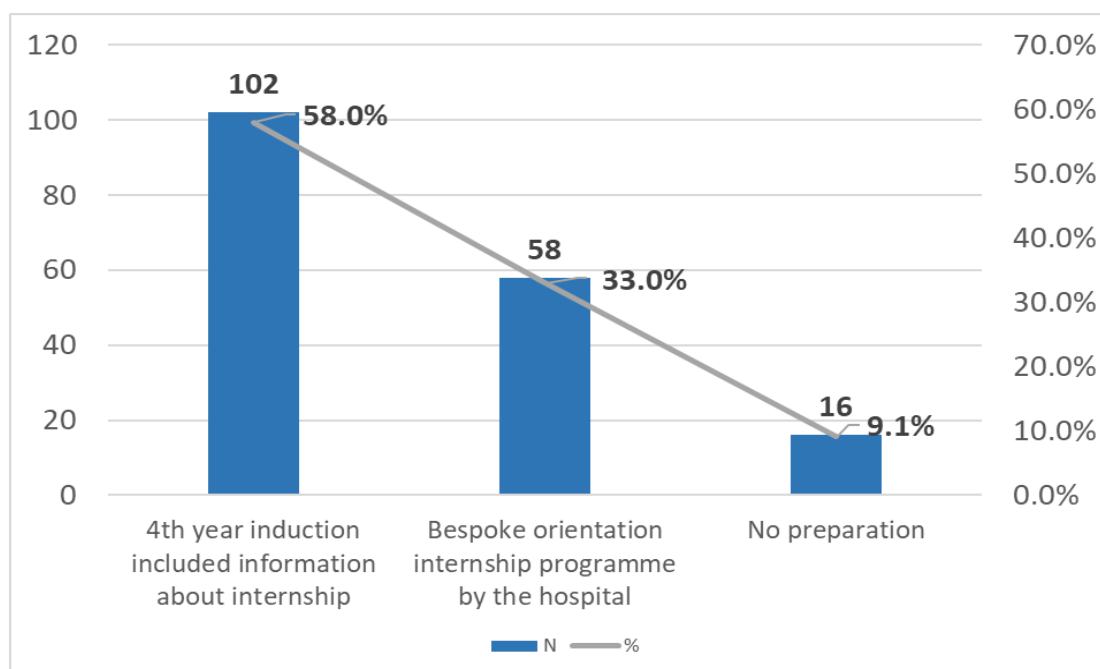


Figure 5. 1: Structures used to prepare supernumerary nursing students for transition to intern (n=176).

Guidelines, Expectations and Preparedness for Internship

Most respondents (77.9%, n=137/176) agreed or strongly agreed that they had a clear understanding of what was expected of them during the internship period. However, 22.2% (n=39) disagreed or strongly disagreed with this statement. Similarly, most respondents (71.6%, n=126/176) agreed or strongly agreed that there were clear guidelines available for their learning. Conversely, 28.4% (n=50) felt that the guidelines were not clear. Just over half of the respondents (54%, n=95) felt prepared for internship while 46% (n=81) did not feel prepared for internship (Table 5.3)

Table 5. 3: Preparedness and clarity of guidelines for internship (N=176)

Preparation for Internship	Strongly Agree n (%)	Agree n (%)	Disagree n (%)	Strongly Disagree n (%)
Clear guidelines for learning during internship	31 (17.6)	95 (54)	45 (25.6)	5 (2.8)
Clear about what was expected from interns	39 (22.2)	98 (55.7)	33 (18.8)	6 (3.4)
Felt prepared for internship	13 (7.4)	82 (46.6)	62 (35.2)	19 (10.8)

As shown in Figure 5.2, over half of the respondents (56.8%, n= 100/176) felt they could have been better prepared for their internship, while the remainder (43.2%, n=76) indicated that they were adequately prepared. Internship mostly met respondents' expectations (70.5%, n=124) but for 29.5% (n=52) it did not. This demonstrates a divided experience in terms of internship preparation and the extent to which internship met their expectations.

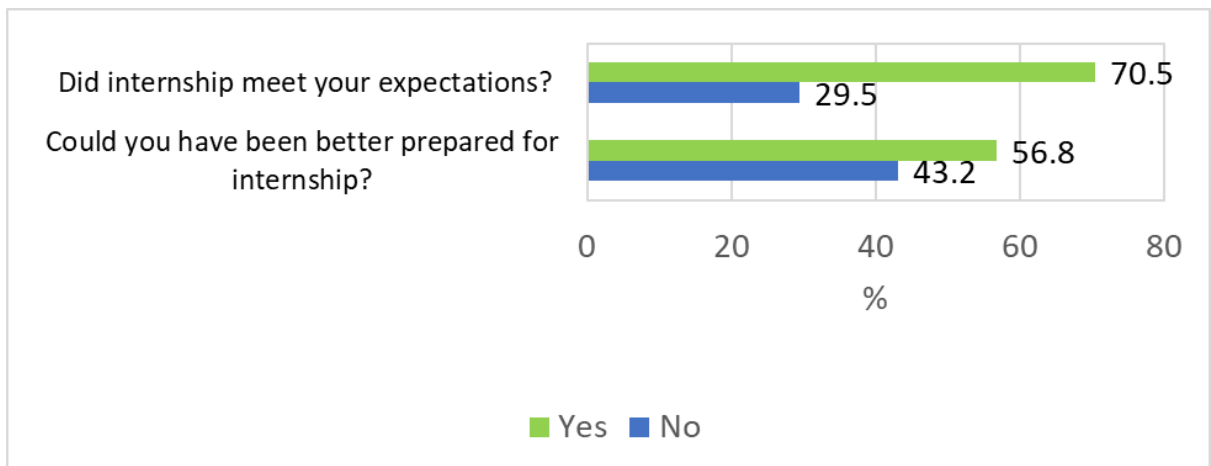


Figure 5. 2: Perceptions of internship meeting expectations and preparedness for internship.

Summary of Pre-Internship Preparation and Adequacy of Preparation

This section of the questionnaire examined quantitative results pertaining to the type and adequacy of preparation for internship. The results indicate that some, but not all respondents were clear on their role as interns. Where guidelines were available, they were not always understood. However, the expectations of internship were fulfilled for most respondents.

5.4 Experiences during Internship

In line with the second, third and fourth study objectives, this section reports on respondents' internship experiences with respect to; learning and clinical skills acquisition, receiving feedback on progress, protected time for competency

assessment, reflective practice, and level of satisfaction with support during internship.

5.4.1 Experience of Learning and Clinical Skills Acquisition

This subsection of the questionnaire examined respondents' experiences of consolidation of learning, opportunities to advance knowledge and skills, and the acquisition of clinical skills during their internship.

Consolidation of Learning

With respect to the consolidation of learning during internship, almost all respondents (92.8% n=138) were satisfied or very satisfied that the internship period consolidated their learning and helped them to link theory to practice more than any of their supernumerary placements (Table 5.4). A minority of respondents (7.2% n=10/138) were dissatisfied with the opportunity to consolidate learning during internship.

Table 5. 4: Satisfaction with consolidating learning during internship

Level of satisfaction with consolidating learning during internship	Very Satisfied n (%)	Satisfied n (%)	Dissatisfied n (%)	Very Dissatisfied n (%)
The internship period consolidated learning and helped link theory to practice more than any of the supernumerary placements	61 (44.2)	67 (48.6)	10 (7.2)	0 (0)

Opportunities to Advance Knowledge and Skills

Just over two thirds of respondents (68.8%, n=95/138) were satisfied with the opportunities made available to them to advance their knowledge and skills required for registering as a nurse. The remaining 31.2% (n=43) indicated that they were not satisfied with these opportunities (Figure 5.3).

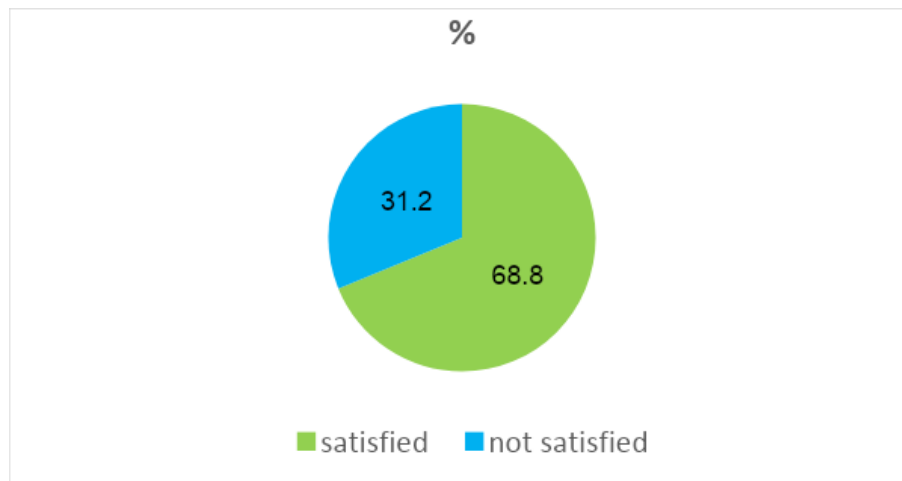


Figure 5. 3: Satisfaction with opportunities to advance knowledge and skills.

Setting and Achieving Goals

Many respondents (71%, n=98/138) agreed or strongly agreed that there was a greater emphasis on setting and achieving goals during internship compared to when they were on supernumerary placements. In contrast, 29% (n=40) disagreed or strongly disagreed with this statement (Table 5.5).

Table 5. 5: Emphasis on setting and achieving goals during internship (N=138)

Emphasis on setting and achieving goals during internship	Strongly Agree n (%)	Agree n (%)	Disagree n (%)	Strongly Disagree n (%)
During internship, there was greater emphasis on setting and achieving goals during clinical placement than when supernumerary.	34 (24.6)	64 (46.4)	33 (23.9)	7 (5.1)

Acquisition of Clinical Skills

The level of satisfaction with gaining experience in essential clinical, skills such as giving shift handovers, undertaking medication rounds under supervision, participating in doctors' ward rounds, recognising and managing acutely ill patients, caseload management, and recording clinical practice, was ascertained through ten questions.

Shift Handover

Most newly qualified general nurses who responded (81.9%, n=113/138) were satisfied or very satisfied with the opportunities of giving shift handover to the nursing team. However, 18.1% (n=25) were dissatisfied or very dissatisfied with this aspect of their internship (Table 5.6).

Most respondents who were dissatisfied or very dissatisfied gave shift handovers once per week (12.4%, n=24/46) once per shift, (6.7%, n=13), or once per day (4.7%, n=9). Two respondents reported giving shift handovers once every couple of weeks and one respondent reported that the opportunity to give shift handover only arose twice in the 36 weeks.

Medication Management under Supervision

With respect to medication management, 52.1% (n=72/138) of respondents were satisfied or very satisfied with the opportunities to participate in medication management under supervision, while 47.9% (n=66) were dissatisfied or very dissatisfied with this aspect (Table 5.6). Those who were dissatisfied or very dissatisfied with participation in medication management under supervision on average participated in this activity; once per week (64%, n=48/75), once per shift (29.3%, n=22), while 6.7%, (n=5) completed all drug rounds in their section.

Doctors' Ward Rounds

Respondents were asked to rate their satisfaction with the opportunities to participate in the doctors' ward rounds. Just over half of those who responded (55.8% n=77/138) were satisfied or very satisfied with the opportunities to participate, while the remainder (44.2%, n=61) were dissatisfied or very dissatisfied (Table 5.6).

Respondents who were dissatisfied identified on average how often they participated in ward rounds. In total, 85 respondents answered this question. Of these, 22.4% (n=19) participated in ward rounds once per week, 20% (n=17) participated once per month, while 9.4% (n=8) participated in ward rounds on all shifts. The 'other' option was chosen by 48.2% (n=41) with some indicating that they rarely attended ward rounds (n=14), others attended twice during the entire internship (n=3), never participated in ward rounds (n=16), or reported that the ward manager conducted the ward rounds (n=5). Three respondents provided no description.

Table 5. 6: Level of satisfaction with opportunities for participating in shift handover, medication management and doctors ward rounds during internship (N=138)

	Very Satisfied n (%)	Satisfied n (%)	Dissatisfied n (%)	Very Dissatisfied n (%)
Satisfaction with the opportunities to give shift handover to the nursing team during internship.	49 (35.5)	64 (46.4)	23 (16.7)	2 (1.4)
Satisfaction with the opportunities to participate in medication management under supervision during internship.	18 (13)	54 (39.1)	51 (37)	15 (10.9)
Satisfaction with the opportunities to participate in the doctors' ward rounds.	13 (9.4)	64 (46.4)	47 (34.1)	14 (10.1)

Recognition and Management of the Acutely Ill Patient

The next part of the questionnaire examined experiences gained in recognising and managing acutely ill patients. The vast majority (94.2%, n=130/138) felt the internship provided opportunities to advance knowledge and skills in this area.

As interns, 85.5% (n=118/138) agreed or strongly agreed that they felt prepared for the recognition and management of acutely ill patients more than when they were supernumerary students. The remaining 14.4% (n=20) reporting a lack of preparedness in this regard.

Communicating with Family Members

Opportunities to develop experience in communicating with family members were explored. The respondents felt the internship prepared them for this aspect, with 89.1% (n=123/138) responded strongly agree or agree, while 10.8% (n=15) responded disagree or strongly disagree.

Linking with Specialist Nurses

Opportunities to link with specialist nurses while caring for patients were also explored. In total, 64.5% (n=89/138) reported that they had enough opportunities to link with specialist nurses during internship. On the other hand, 35.5% (n=49) reported that they did not have enough opportunity to link with specialist nurses.

Managing a Caseload

As interns, 73.2% (n=101/138) were satisfied or very satisfied that their patient allocation/caseload enabled them to advance their knowledge and skills in preparation for working as a registered nurse. Conversely, 26.8% (n=37) were dissatisfied or very dissatisfied with this aspect of their internship. The most frequently allocated number of patients to interns was six (Table 5.7).

Table 5. 7: Average number of patients allocated to interns per shift (N=138)

Number of patients	n	%
4 patients	24	17.4
5 patients	8	5.8
6 patients	59	42.8
7 patients	47	34.1

As illustrated in Figure 5.4, the preferred number of allocated patients per shift was, on average between five and seven.

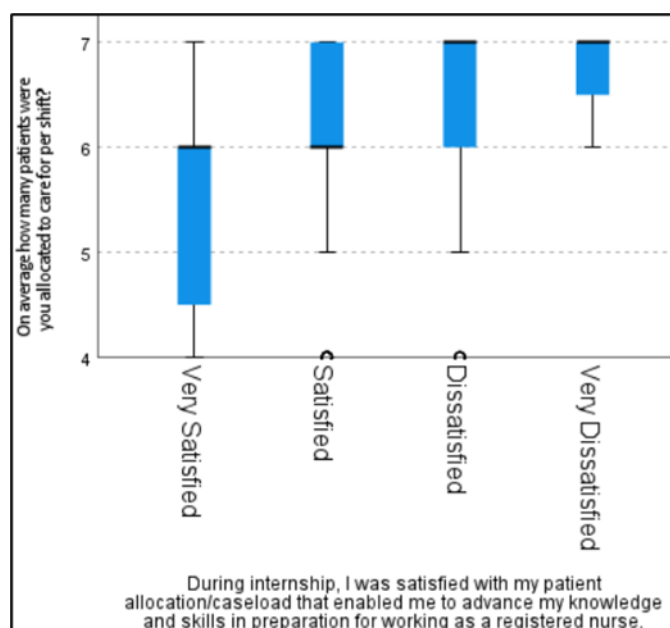


Figure 5. 4: Preferred number of allocated patients per shift and level of satisfaction with the caseload.

Recording Clinical Practice

Recording clinical practice, including admission, discharge and referral documentation, is a fundamental role of the nurse. Nearly all respondents (95.7%, n=132/138) were satisfied or very satisfied with the opportunities to advance their skills in recording clinical practice in patient healthcare records. In contrast, a minority (4.3%, n=6) were dissatisfied or very dissatisfied with this aspect. Similarly, 97.1% (n=134/138) and 89.8% (n= 124/138) of respondents were satisfied or very satisfied with opportunities to advance their skills in admitting and discharging patients, respectively, while the remaining respondents (2.9%, n=4) and (10.1%, n=14) were dissatisfied or very dissatisfied with these opportunities. Additionally, 78.3% (n=108/138) of respondents were satisfied and very satisfied with the opportunities to complete community referral documentation, such as public health nurse (PHN) referrals, whereas 21.8% (n=30) were dissatisfied or very dissatisfied with this aspect (Table 5.8).

Table 5. 8: Satisfaction with opportunities to practice clinical skills during internship (N=138)

Clinical skill	Very Satisfied n (%)	Satisfied n (%)	Dissatisfied n (%)	Very Dissatisfied n (%)
Satisfaction with the opportunities to advance skills in recording clinical practice for the caseload in the patient healthcare record.	39 (28.3)	93 (67.4)	5 (3.6)	1 (.7)
Satisfaction with the opportunities to advance skills in admitting patients.	58 (42.0)	76 (55.1)	3 (2.2)	1 (.7)
Satisfaction with the opportunities to advance skills in discharging patients, within the caseload.	49 (35.5)	75 (54.3)	13 (9.4)	1 (.7)
Satisfaction with the opportunities to complete community referral documentation (e.g., PHN).	35 (25.4)	73 (52.9)	27 (19.6)	3 (2.2)

Acquiring Non-Technical Skills

In healthcare, non-technical skills are essential for ensuring high quality care for patients. Most respondents (93.5%, n=129/138) were satisfied or very satisfied with the opportunities to gain competence in planning and organising patient care, while 6.5% (n=9) were dissatisfied or very dissatisfied with this aspect. Similarly, most respondents (92.7% n=128/138) were satisfied or very satisfied with opportunities to gain competence in prioritising patient care, whereas 7.2% (n=10) were dissatisfied or very dissatisfied. Just over 87.7%, (n=121/138) were satisfied or very satisfied with the opportunities to gain competence in time management, while 12.3% (n=17) were dissatisfied or very dissatisfied (Table 5.9).

Table 5. 9: Satisfaction with opportunities to acquire non-technical skills during internship (N=138)

Non-technical skills	Very Satisfied n (%)	Satisfied n (%)	Dissatisfied n (%)	Very Dissatisfied n (%)
Satisfaction with the opportunities to gain competence in planning and organising patient care within the caseload.	28 (20.3)	101 (73.2)	8 (5.8)	1 (.7)
Satisfaction with the opportunities to gain competence in prioritizing patient care.	45 (32.6)	83 (60.1)	9 (6.5)	1 (.7)
Satisfaction with the opportunities to gain competence in time management of patient care within the caseload.	37 (26.8)	84 (60.9)	15 (10.9)	2 (1.4)

Shadowing the Ward Manager

Some respondents (34.1%, n=47) were afforded the opportunity to work alongside the Clinical Nurse Manager (CNM), while over two thirds, (65.9%, n=91/138) reported not having this opportunity.

Other Clinical Skills

Over half of the respondents (63%, n=87/138) felt there were other key clinical skills that they would like to have gained experience in during internship to better prepare for the role of registered nurse, while 37% (n=51) felt the skills gained were sufficient.

5.4.2 Experience of Receiving Feedback

This section of the questionnaire examined the level of satisfaction with receiving feedback during internship. Feedback provides interns with essential information about their progress. Feedback during internship was explored.

Frequency and Quality of Feedback

The frequency of feedback varied among respondents, with two thirds (65.3%, n=79/121) identifying that they only received feedback on their progress during

clinical competency assessment meetings. Less than a quarter (19.8%, n=24) reported receiving feedback every week while just 14.9% (n=18) received feedback on every shift. The perceived quality of the feedback was also explored; 72.7% (n=88/121) reported receiving helpful feedback during internship, whereas 27.3%, (n=33) were dissatisfied or very dissatisfied with the level of helpful feedback on their progress (Table 5.10).

Table 5. 10: Satisfaction with feedback on progress during internship (N=121)

Feedback during Internship	Very Satisfied n (%)	Satisfied n (%)	Dissatisfied n (%)	Very Dissatisfied n (%)
During internship, I was provided with helpful feedback on my progress.	13 (10.7)	75 (62.0)	25 (20.7)	8 (6.6)

Opportunities to Discuss Progress

With respect to the level of satisfaction with opportunities to discuss areas for improvement with their preceptors, most respondents (69.4%, n=84/121) were satisfied or very satisfied with this, while 30.6% (n=37) were dissatisfied or very dissatisfied. Additionally, many respondents (78.5%, n=95/121) agreed that improvements are needed in relation to the provision of feedback during internship, whereas 21.5% (n=26) disagreed (Table 5.11 and Figure 5.5).

Table 5. 11: Opportunities to discuss improvement in progress during internship (N=121)

	Very Satisfied n (%)	Satisfied n (%)	Dissatisfied n (%)	Very Dissatisfied n (%)
Satisfaction with the opportunities to discuss areas for improvement with the preceptors.	15(12.4)	69(57.0)	31(25.6)	6 (5.0)

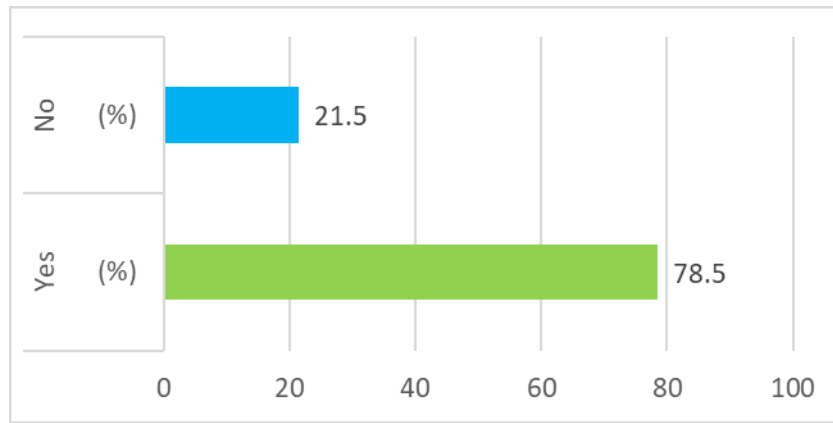


Figure 5. 5: Improvement needed in the provision of feedback during internship (N=121)

5.4.3 Protected Time for Competency Assessment

Protected time for competency assessment during internship was explored throughout the internship, interns' competency levels are assessed in line with the NMBI Requirements and Standards (NMBI, 2016; 2023). Most respondents (74.4%, n=90/121) felt that there was insufficient protected time for their competency assessment meetings with their preceptor, while 25.6 % (n=31) reported that there was adequate protected time for these meetings (Table 5.12).

Table 5. 12: Level of satisfaction with protected time for competency assessment meetings (N=121)

Protected time for assessment during Internship	Strongly Agree n (%)	Agree n (%)	Disagree n (%)	Strongly Disagree n (%)
During internship, there was enough protected time for each of my competency assessment meetings with my preceptor?	3 (2.5)	28 (23.1)	53 (43.8)	37 (30.6)

5.4.4 Reflective Practice during Internship

Two questions examined the advantages of reflective practice during internship. Two thirds of respondents (69.1%, n=83/120) strongly agreed or agreed that reflection was a beneficial component of internship, while 30.9% (n=37) disagreed or strongly disagreed. The respondents outlined how structured reflection was

beneficial during internship based on the suggested responses, with the option to select more than one benefit (Figure 5.6).



Figure 5. 6: Benefits of structured reflection during internship.

5.4.5 Support during Internship

This subsection of the questionnaire examined satisfaction with the level of support available during internship.

Support with Managing a Caseload and Feeling Part of the Team

When the level of support in managing a caseload and feeling part of the team was explored, most respondents, (71.7%, n=99/133) agreed or strongly agreed that they felt supported in caring for their caseload, while 28.2% (n=39) disagreed or strongly disagreed with this statement. Additionally, 86.9% (n=120) felt part of the nursing team, whereas 13 % (n=18) did not. As interns, 69.5% (n=96) felt they were part of the multidisciplinary team, while 30.4% (n=42) did not feel part of the multidisciplinary team (Table 5.13). Although respondents were not asked to provide

explanations, some inferences can be drawn regarding their involvement or lack of involvement in ward rounds.

Table 5. 13: Experiences of support with caseload and team integration during internship (N=138)

Support during Internship	Strongly Agree n (%)	Agree n (%)	Disagree n (%)	Strongly Disagree n (%)
I felt supported in caring for this caseload.	12 (8.7)	87 (63.0)	34 (24.6)	5 (3.6)
During internship, I felt part of the nursing team.	37 (26.8)	83 (60.1)	16 (11.6)	2 (1.4)
During internship, I felt part of the multidisciplinary team.	17 (12.3)	79 (57.2)	37 (26.8)	5 (3.6)

Support in the Clinical Setting

Over three quarters of the respondents (75.6%, n=93/123), felt that, in general, they were well supported during internship, while 24.4% (n=30) did not feel supported. Almost two thirds (65.1%, n=80/123) felt that clinical and patient commitments prevented clinical staff from supporting them during their internship, whereas one third (34.9%, n=43) disagreed or strongly disagreed that this was a factor. Time as a factor in supporting interns during internship was explored in one question: 53.7% (n=66/123) strongly agreed or agreed that clinical staff had time to support them in the clinical area, while 46.4 % (n=57) disagreed. Support with learning during internship was explored in one question: many respondents (90.3 %, n=111/123) strongly agreed or agreed that clinical staff were helpful in assisting them to learn during internship, while just 9.7% (n=12) disagreed and strongly disagreed. In an equivalent way, 69.1% (n=85/123) were very satisfied or satisfied with the level of support from the Clinical Placement Coordinators during internship, but 30.9% (n=38) were dissatisfied. The results are displayed in Table 5.14.

Table 5. 14: Satisfaction with support from clinical staff during internship

Support from clinical staff during Internship	Strongly Agree n (%)	Agree n (%)	Disagree n (%)	Strongly Disagree n (%)
Clinical staff were helpful in assisting me to learn during internship.	28 (22.8)	83 (67.5)	11 (8.9)	1 (.8)
In general, I was well supported on internship.	21 (17.1)	72 (58.5)	28 (22.8)	2 (1.6)
Clinical and patient commitments prevented clinical staff from supporting me on internship.	27 (22.0)	53 (43.1)	41 (33.3)	2 (1.6)
In general, there were too many students on placement for clinical staff to provide support.	8 (6.5)	18 (14.6)	80 (65.0)	17 (13.8)
Clinical staff had time to support me in the clinical area.	8 (6.5)	58 (47.2)	45 (36.6)	12 (9.8)

Support from the Higher Education Institute

Before commencing their internship, students have completed the entire theoretical component of the programme. Once they begin internship, they are employed by the health service and become part of the nursing workforce. Consequently, the requirement for support from the higher education institute is minimal. Almost half of respondents (47.2% $n=58$) felt well supported by the higher education institute during internship, while 52.9% ($n=65$) were dissatisfied with the level of support provided from the higher education institute. The perceptions or expectations of newly qualified general nurses regarding the type of support needed by interns was not explored in the questionnaire.

Preceptorship

All interns are allocated a preceptor and an associate preceptor to support their learning at an independent level and to assess their level of clinical competency. However, consistency in preceptorship can be difficult due to varying shift patterns which means interns may not always work with their allocated preceptor. Access to supervisory support from preceptors was explored. Over half of the respondents (57.7%, $n=71/123$) felt that they had good access to supervisory support from their preceptors during their internship, while 42.3% ($n=52$) felt dissatisfied. Additionally, most respondents (65.1%, $n=80/123$) were satisfied or very satisfied with the support received from their preceptors, while 34.9%, ($n=43$) were dissatisfied with this.

Support from Clinical Nurse Managers.

Clinical Nurse Managers (CNMs) were also identified as a central support for interns, with high levels of satisfaction reported by 75.6% (n=93/123). In contrast, a smaller number of respondents (24.4%, n=30) were dissatisfied or very dissatisfied with the level of support provided by CNMs. Additionally, the value of support from intern nursing colleagues was highly valued, with 98.4% (n=121/123) of respondents being satisfied and very satisfied with this aspect of their experience (Table 5.15).

Table 5. 15: Experiences of support from CNMs and nursing colleagues during internship (N=123)

Satisfaction with support from CNMs and nursing colleagues during Internship	Very Satisfied n (%)	Satisfied n (%)	Dissatisfied n (%)	Very Dissatisfied n (%)
During internship, I was satisfied with the support from my Clinical Nurse Manager.	26 (21.1)	67 (54.5)	20 (16.3)	10 (8.1)
During internship, I was satisfied with the support from my intern nursing colleagues.	81 (65.9)	40 (32.5)	2 (1.6)	0 (0)

Just over half of the respondents (53.7%, n=66/123) felt there were other ways they could have been further supported during internship, while 46.3% (n=57) felt there were not.

Support through Debriefing

The availability of debriefing sessions was explored. Nearly half of the respondents (45.7%, n=63/138) agreed or strongly agreed that when stressful events occurred during internship, sufficient debriefing opportunities were available to support them following the event. Conversely, 54.4% (n=75) disagreed or strongly disagreed that there was sufficient debriefing.

Level of Stress

The level of stress experienced during internship compared to supernumerary placements was also explored. Nearly all respondents, (91.1% n=112/123) felt that internship was more stressful than supernumerary placements. However, 61.8%, (n=76/123) indicated that they experienced less stress as they progressed through internship, while 38.2% (n=47) disagreed or strongly disagreed with this statement.

Summary of Experiences during Internship

This section examined various aspects of internship experiences, including learning opportunities, feedback, support, and the time available for competency assessment. Overall, as interns' their experiences of consolidating learning and acquiring technical and non-technical skills were varied. Feedback was mostly given during competency assessment meetings as opposed to during each shift. Despite the availability of multiple sources of support available for interns in clinical practice, the findings demonstrate significant variation in the perceived level of support experienced by interns.

5.5 Value of Internship

The final section of the questionnaire examined the value of the internship period. This section included the overall contribution of the internship to nurse education and its effectiveness in preparing intern nursing students for their transition to the role of registered nurse. These questions align with the fourth objective of the study.

Value of Internship for Nurse Education

The value of internship for nurse education and training was positively evaluated by 98.3% of respondents (n=110/112). Most respondents (95.6%, n=107/112) strongly agreed or agreed that internship was extremely valuable in preparing them for working as newly qualified general nurses (Table 5.16).

Table 5. 16: Value of Internship in preparing for newly qualified registered nurse role (N=112)

Value of internship in preparing for newly qualified registered nurse role.	Strongly Agree n (%)	Agree n (%)	Disagree n (%)
Internship is a valuable placement for nurse education and training.	76 (67.9)	34 (30.4)	2 (1.8)
The internship period was extremely valuable in preparing me for working as a newly qualified nurse.	47 (42.0)	60 (53.6)	5 (4.5)

Valuable Internship Experiences

Respondents identified ways in which internship was a valuable experience by choosing from multiple suggested responses. Gaining clinical experience at an independent level with the support of a preceptor was identified as the most valuable experience during internship (50%, n=96) (Table 5.17).

Table 5. 17: Ways that internship was a valuable experience

Ways that internship was a valuable experience	n	%
Enabled me to gain clinical experience at independent level with support of preceptor.	96	50
Enabled me to deliver patient care independently.	92	48
Enabled me to link theory to practice.	69	36
Internship is valuable for gaining confidence and gaining experience on different wards.	3	1.5

Most respondents (96.4%, n=108/112) strongly agreed or agreed with the statement that “Internship helped prepare them for transitioning to registered nurse, more than supernumerary placements.”

Respondents identified specific areas of internship that were most beneficial in preparing them for transition to the role of registered nurse. A total of 111 respondents provided answers, with some providing multiple examples of the benefits of internship. These included: responsibility for caseloads, delivering patient care independently with support (50.4%, n=56/111), managing patient care and caseloads (19.8%, n=22), gaining medication management experience (12.6%,

n=14), managing time and prioritisation of care (7.2%, n=8) hand over practices (7.2%, n=8) and time management – planning, organising, prioritising (7.2%, n=8). Just over half of the respondents (55.4%, n=62/112) felt that there were other ways that internship could be improved to better prepare nurses for transition to the role of registered nurse, while 44.6%, (n=50) felt no improvements were required.

Summary of Value of Internship

Overall, the level of satisfaction with the value of internship in preparing the newly qualified general nurses for transitioning to the role of registered nurse was extremely high. The opportunity to practice at an independent level while still receiving support from registered nurses was deemed one of the most beneficial aspects of the internship period.

5.6 Inferential Analysis

This section presents the inferential analysis that were undertaken using Mann-Whitney U tests and Spearman's Correlation, Kruskal-Wallis and Bonferroni Post Hoc Tests. Firstly, the overall mean, median and interquartile range were calculated for the various sections of the questionnaire, encompassing pre-internship preparation, experiences during internship, value of internship, and the overall questionnaire reflecting the overall internship experience (Table 5.18).

Table 5. 18: Mean, standard deviation, median and IQR per section of the questionnaire

Total per Section	n	Mean	Std. Deviation	Median	Interquartile Range (IQR)
Overall Experience of Pre-internship Preparation	176	6.66	1.896	6.50	2
Overall Experiences during Internship	120	76.5	13.171	77.00	19
Overall Value of Internship	112	4.50	1.336	4.00	3
Overall Experience of Internship (Total Questionnaire)	112	87.14	15.242	88.00	20.75

5.6.1 Factors Associated with the Overall Experience of Pre-Internship Preparation

A Mann-Whitney U Test was conducted to examine the relationship between respondents' perceptions of internship meeting their expectations and their overall experience of pre-internship preparation. Results revealed a significant difference between the overall pre-internship preparation experience and respondents' expectations of their internship, ($U = 5090.50$, $z = 6.152$, $p = <.001$). Those who were more satisfied with their overall pre-internship preparation were more likely to be satisfied or very satisfied with how internship met their expectations. Similarly, a significant difference was found between the overall pre-internship preparation experience and respondents' feeling that they could have been better prepared for internship ($U = 2182.50$, $z = -4.910$, $p = <.001$) (Table 5.19). Those who felt that they could have been better prepared for internship reported less satisfaction with their overall experience of pre-internship preparation.

Table 5. 19: Results of Mann-Whitney U Tests of the difference between the overall experience of pre-internship preparation and internship meeting expectations, and preparedness for internship (N=176)

Variable	Group	Median	(IQR)	U	Z	P
Overall pre-internship preparation experience and internship meeting expectations.	Yes	6.00	(2)	5090.5	6.152	<.001
	No	8.00	(2)			
Overall pre-internship preparation experience and could they have been better prepared for internship.	Yes	7.00	(3)	2182.5	-4.910	<.001
	No	6.00	(2)			

Mann Whitney U Test: Significance levels: $p < .001$

Direction of variables: positive (lower values) to negative (higher values)

A Kruskal-Wallis test identified a statistically significant difference in the overall experience of pre-internship preparation, based on the year the degree was started, ($p = .018$) (Table 5.20). Start years 2015 and 2016 recorded a lower median score ($MD = 6$) than the other start years (2012/13 and 2014) which recorded median values of 7.5 and 7 respectively. The Bonferroni Post-Hoc tests revealed no

statistical significance with respect to the comparisons between the year they started the programme and their overall experience of pre-internship preparation. However, the unadjusted significance identified a statistical significance between the start years of 2014 and 2016 and the overall experience of pre-internship preparation, ($p=.038$). Similarly, the unadjusted significance revealed a statistical significance between the start years of 2014 and 2015 and their overall experience of pre-internship preparation, ($p=.011$) (Table 5.21)

A Kruskal-Wallis test identified a statistically significant difference in the overall experience of pre-internship preparation, based on the year the degree was finished, ($p=.018$) (Table 5.20). Those who completed their internship in 2019 and 2020 reported greater satisfaction with their overall experience of pre-internship preparation. Finish years 2019 and 2020 recorded a lower median score ($Md=6$) than the other finish years 2018 which recorded a median value of 7 (Table 5.20). The Bonferroni Post-Hoc tests revealed no statistical significance in comparisons between the year they finished the programme and their overall experience of pre-internship preparation. However, the unadjusted significance revealed a statistical significance between the finish years 2018 and 2019 and the overall experience of pre-internship preparation ($p=.024$). Similarly, the unadjusted significance revealed a statistical significance between the finish years 2018 and 2020 and the overall experience of pre-internship preparation ($p=.020$). The results are displayed in Table 5.22.

Respondents who completed a bespoke orientation internship programme provided by the hospital, and those whose fourth-year induction included information about internship reported higher levels of satisfaction with their experience of their overall pre-internship preparation. The bespoke orientation internship programme by the hospital and the 4th year induction that included internship information recorded a lower median score ($Md=6$) than no preparation which recorded a median value of 8 (Table 5.20). The Bonferroni Post-Hoc tests revealed a statistically significant difference between the structures that were put in place for pre-internship

preparation i.e. a bespoke orientation internship programme by the hospital, and no preparation ($p=.005$). Secondly, the Bonferroni Post-Hoc tests revealed a statistically significant difference between the structures that were put in place for pre-internship preparation i.e. 4th year induction that included internship information, and no preparation, ($p=.014$). The results are displayed in Table 5.23.

Table 5. 20: Results of Kruskal-Wallis Test of differences between satisfaction with the overall pre-internship preparation experience and 1) the years the degree was started and finished and 2) preparation structures (N=176)

Satisfaction with pre-internship preparation	Year	Median	(IQR)	Kruskal-Wallis	df	P
Overall pre-internship preparation experience and the year they started the degree.	2012/13	7.50	(3)	10.039 ^a	3	.018**
	2014	7.00	(2)			
	2015	6.00	(2)			
	2016	6.00	(2)			
Overall pre-internship preparation experience and the year they finished the degree.	2018	7.00	(2)	8.034 ^a	2	.018**
	2019	6.00	(3)			
	2020	6.00	(3)			
Overall pre-internship preparation experience and structures in place to prepare them for transition from supernumerary to intern.	A	6.00	(3)	9.944 ^a	2	.007
	B	6.00	(2)			
	C	8.00	(2)			

{A=Bespoke orientation internship programme by the hospital, B=4th year induction included information about internship, C=No preparation}

Kruskal -Wallis Test Significance levels: * $p<.05$; ** $p<.01$

Direction of variables: positive (lower values) to negative (higher values)

Table 5. 21: Results of Bonferroni Post-Hoc test that compared the start year and their overall pre-internship experience

Pairwise comparison of the start year and overall pre-internship preparation experience	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
2012/13 compared to 2014	7.617	15.585	.489	.625	1.000
2012/13 compared to 2015	28.810	15.662	1.839	.066	.395
2012/13 compared to 2016	34.390	18.484	1.861	.063	.377
2014 compared to 2015	21.193	8.331	2.544	.011*	.066
2014 compared to 2016	26.774	12.875	2.080	.038*	.225
2015 compared to 2016	5.581	12.967	.430	.667	1.000

Each row tests the null hypothesis that the Sample 1 and sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed.

Test Significance levels: * $p<.05$; ** $p<.01$:

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Table 5. 22: Results of Bonferroni Post-Hoc test that compared the finish year and their overall pre-internship experience

Pairwise comparison of the finish year and overall pre-internship preparation experience	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
2018 compared to 2019	18.224	8.066	2.259	.024*	.072
2018 compared to 2020	28.535	12.260	2.328	.020*	.060
2019 compared to 2020	10.311	12.413	.831	.406	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed.

Test Significance levels: * $p < .05$; ** $p < .01$.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Table 5. 23: Results of Bonferroni Post-Hoc test that compared structures that were put in place to prepare supernumerary nursing students for transition to intern

Pairwise comparison of the structures that were put in place to prepare supernumerary nursing student for transition to intern	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
Bespoke orientation internship programme by the hospital compared to 4th year induction included information about internship.	6.015	8.244	.730	.466	1.000
Bespoke orientation internship programme by the hospital compared to No preparation.	44.156	14.155	3.119	.002*	.005*
4th year induction included information about internship compared to No preparation.	-38.142	13.479	-2.830	.005*	.014*

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed.

Test Significance levels: * $p < .05$; ** $p < .01$.

b. Significance values have been adjusted by the Bonferroni correction for multiple tests.

5.6.2 Factors Associated with the Overall Experience during Internship

Kruskal-Wallis Tests revealed a statistically significant difference between respondents feeling supported in caring for a caseload and their sense of feeling part of the nursing team, ($p < .001$). Those who felt supported in caring for their caseload reported a higher level of satisfaction with feeling part of the nursing team. Similarly, there was a significant difference between respondents feeling supported in caring for a caseload and their sense of feeling part of the multidisciplinary team, ($p = .008$). Those who felt supported in caring for the caseload reported higher levels of satisfaction with feeling part of the multidisciplinary (Table 5.24).

Table 5. 24: Results of Kruskal-Wallis Tests of differences between feeling supported with the caseload and integration into the nursing and multidisciplinary team (N=138)

Feeling supported in caring for the caseload		Median	(IQR)	Kruskal-Wallis	df	P
Feeling part of the nursing team.	Strongly Agree	2	(0)	18.145 ^a	3	<.001*
	Agree	2	(1)			
	Disagree	3	(1)			
	Strongly Disagree	3	(0)			
Feeling part of the multidisciplinary team.	Strongly Agree	2	(1)	11.936 ^a	3	.008*
	Agree	2	(0)			
	Disagree	2	(1)			
	Strongly Disagree	3	(2)			

Kruskal-Wallis Test Significance levels: * p<.05;** p<.01:*** p<.001: ns= not significant

Direction of variables: positive (lower values) to negative (higher values)

Additionally, Kruskal-Wallis Tests revealed a statistically significant difference between the level of satisfaction with the caseload allocation and the number of patients allocated per shift (p=.003) (Table 5.25).

Table 5. 25: Results of Kruskal-Wallis Tests of differences between satisfaction with the allocated caseload and average number of patients (N=138)

Variable		Median	(IQR)	Kruskal-Wallis	df	P
Satisfaction with patient allocation/caseload	4 Patients	2	(0)	13.761 ^a	3	.003*
	5 Patients	2	(1)			
	6 Patients	2	(0)			
	7 Patients	2	(1)			

Kruskal-Wallis Test Significance levels: * p<.05;** p<.01:*** p<.001: ns= not significant

Direction of variables: positive (lower values) to negative (higher values)

Bonferroni Post-Hoc test revealed a statistically significant difference between the level of satisfaction with the patient allocation/caseload and the number of patients allocated; 4 to 7 patients (p=.013); 6 to 7 patients, (p=.001) (Table 5.26). The higher the number of patients allocated resulted in lower levels of satisfaction with the caseload.

Table 5. 26: Results of Bonferroni Post-Hoc test that compared satisfaction with the patient allocation/caseload and the number of patients allocated.

Pairwise comparison of satisfaction with patient allocation and the average number of patients allocated to care for per shift.	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
4 patients compared to 5 patients	-8.792	14.464	-.608	.543	1.000
4 patients compared to 6 patients	-.176	8.578	-.021	.984	1.000
4 patients compared to 7 patients	-27.216	8.889	-3.062	.002	.013*
5 patients compared to 6 patients	8.615	13.349	.645	.519	1.000
5 patients compared to 7 patients	-18.424	13.551	-1.360	.174	1.000
6 patients compared to 7 patients	-27.040	6.927	-3.903	.000	.001*

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed.

Test Significance levels: * p<.05:** p<.01.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Using Spearman Correlation, a significant association was identified between satisfaction with caseload allocation and overall internship experience. Similarly, a significant association was found between satisfaction with the caseload allocation and feeling supported in caring for the caseload (Table 5.27).

Table 5. 27: Results of Spearman Correlation of association between caseload allocation, overall internship experience and support

Relationship	Spearman's Correlations	P value
Satisfaction with the patient allocation/caseload that enabled interns to advance knowledge and skills in preparation for working as a registered nurse compared to the Overall Internship experience.	.516 ^{**}	0.001
Satisfaction with the patient allocation/caseload that enabled interns to advance knowledge and skills in preparation for working as a registered nurse compared to satisfaction with support in caring for the caseload.	.457 ^{**}	0.001

****.** Correlation is significant at the 0.01 level (P value).

Kruskal-Wallis Test revealed a statistically significant difference between feeling supported in managing a caseload and linking theory to practice, (p=.002). Respondents who felt supported in caring for their caseload reported higher levels of satisfaction in consolidating their learning and linking theory to practice during their internship more than when they were on supernumerary placements (Table 5.28).

Table 5. 28: Results of Kruskal-Wallis Tests of differences between satisfaction with support in caseload management and consolidation of learning (N=138)

Satisfaction with support in caring for the caseload		Median	(IQR)	Kruskal-Wallis	df	P
Internship helped to consolidate learning and link theory to practice more than supernumerary placements.	Strongly Agree Agree Disagree	2.00 2.00 3.00	(0) (1) (1)	12.196 ^a	2	.002**

Kruskal-Wallis Test: Significance levels: * $p < .05$; ** $p < .01$.

Direction of variables: positive (lower values) to negative (higher values)

The Kruskal-Wallis test found a statistically significant difference between the level of support during internship and clinical staff having time to support interns in the clinical area, ($p < .001$) (Table 5.29). In general, those who felt well supported during internship felt that clinical staff had time to support them in the clinical area.

Table 5. 29: Results of Kruskal-Wallis Tests of differences between support during internship and clinical staff availability (N=123)

In general, I was well supported on internship		Median	(IQR)	Kruskal-Wallis	df	P
Clinical staff had time to support interns in the clinical area.	Strongly Agree Agree Disagree Strongly Disagree	1.00 2.00 2.00 3.00	(0) (0) (1) (1)	38.421 ^a	3	<.001

Kruskal-Wallis Test: Significance levels: * $p < .05$; ** $p < .01$; *** $p < .001$; ns= not significant

Direction of variables: positive (lower values) to negative (higher values)

A Kruskal-Wallis test revealed a statistically significant difference between feeling part of the nursing team and access to supervisory support ($p < .001$). Those who felt part of the nursing team felt that they had good access to supervisory support during their internship (Table 5.30).

Table 5. 30: Results of Kruskal-Wallis Tests of difference between feeling part of the nursing team and good access to supervisory support (N=123)

Feeling part of the nursing team		Median	(IQR)	Kruskal-Wallis	df	P
Had good access to supervisory support from the preceptor/ co preceptor during internship.	Strongly Agree	1.00	(1)	31.043 ^a	3	<.001
	Agree	2.00	(1)			
	Disagree	2.00	(0)			
	Strongly Disagree	2.50	(1)			

Kruskal-Wallis Test: Significance levels: * $p < .05$; ** $p < .01$; * $p < .001$; ns= not significant**

Direction of variables: positive (lower values) to negative (higher values)

A Kruskal-Wallis test revealed no statistical significance between feeling less stressed as the internship progressed and satisfaction with opportunities to practice medication management under supervision, ($p=.200$). However, statistically significant differences were identified between feeling less stressed as the internship progressed and satisfaction with the following aspects: support from clinical nurse managers, recognising and managing acutely ill patients, support with managing a caseload and feedback (Table 5.31).

Table 5. 31: Results of Kruskal-Wallis Tests of differences between level of stress during internship and multiple variables (support factors)

Experienced less stress as progressed through internship		N	Median	(IQR)	Kruskal-Wallis	df	P
Satisfaction with opportunities to practice medication management under supervision.	Very Satisfied Satisfied Dissatisfied Very Dissatisfied	18 54 51 15	2.00 2.00 2.00 2.50	(0) (1) (1) (1)	4.639 ^{a,b}	3	.200
Satisfaction with support from Clinical Nurse Managers.	Very Satisfied Satisfied Dissatisfied Very Dissatisfied	26 67 20 10	2.00 2.00 2.50 2.50	(1) (1) (1) (1)	12.216 ^a	3	.007*
Internship prepared them for transitioning to the role of registered nurse more than supernumerary placements.	Strongly Agree Agree Disagree	56 52 4	2.00 2.00 3.00	(2) (1) (1)	5.886 ^{a,b}	2	.053
Advanced my knowledge and skills in the recognition and management of the acutely ill patient during internship.	Strongly Agree Agree Disagree Strongly Disagree	52 78 6 2	2.00 2.00 3.00 3.00	(1) (1) (1) (0)	23.265 ^a	3	<.001***
Felt prepared for the recognition and management of the acutely ill patient during internship.	Strongly Agree Agree Disagree Strongly Disagree	34 84 14 6	2.00 2.00 3.00 3.00	(1) (1) (1) (1)	11.306 ^a	3	.010*
Felt supported in caring for the caseload.	Strongly Agree Agree Disagree Strongly Disagree	12 87 34 5	2.00 2.00 2.50 3.00	(1) (1) (1) (1)	12.086 ^a	3	.007*

Kruskal-Wallis Test: Significance levels: * p<.05;** p<.01:*** p<.001: ns= not significant
Direction of variables: positive (lower values) to negative (higher values)

5.6.3 Factors Associated with the Overall Experience of Internship

Mann-Whitney U Tests were used to compare the outcomes between two independent groups. The overall internship experience is represented by the cumulative mean total of all responses to the questions.

No significant difference was detected between the overall experience of internship and whether participants had a part-time job during their internship (U = 1415.5,

$z = -.328, p = .743$). Respondents with part-time jobs did not report lower levels of satisfaction with their overall experience of internship. Consequently, having a part-time job outside of internship did not influence the overall internship experience.

There was a significant difference between the overall experience of internship and participants' expectations of internship, ($U = 2091.0, z = -5.028, p = <.001$). Those who felt that internship met their expectations reported higher overall levels of satisfaction.

A significant difference was also identified between the overall experience during internship and participants feeling that they could or could not be better prepared for internship, ($U = 853.0, z = -3.934, p = <.001$). Those who felt they could have been better prepared for internship reported lower levels of internship satisfaction overall.

The overall internship experience was evaluated with the experience of opportunities to advance knowledge and skills for registration. The results indicated that there was a significant difference between the overall internship experience and participants level of satisfaction with opportunities to advance knowledge and skills for registration, ($U = 2232.5, z = -5.229, p = <.001$). Those who were satisfied with the opportunities to advance knowledge and skills required for registration reported higher levels of satisfaction with the overall internship experience. The results are displayed in Table 5.32.

Table 5. 32: Results of Mann-Whitney U Tests of differences between factors associated with the overall internship experience

Overall internship experience		N	Median (IQR)	U	z	p
Had a part-time job during internship.	Yes	69	90.00 (19)	1415.5	.328	.743ns
	No	124	87.00 (21)			
Internship meeting expectations.	Yes	124	84.00 (22)	2091.0	5.028	<.001***
	No	52	98.00 (19)			
Better preparation for internship.	Yes	100	91.50 (17)	853.0	-3.934	<.001***
	No	76	82.00 (22)			
Opportunities to advance knowledge and skills for registration .	Yes	95	83.00 (21)	2232.5	5.229	<.001***
	No	43	97.00 (16)			

Mann-Whitney U Tests: Significance levels: * p<.05: p<.01:*** p<.001: ns= not significant
Direction of variables: positive (lower values) to negative (higher values)**

A Kruskal-Wallis test identified a statistically significant difference in the overall internship experience, based on the year the degree was started, ($p=.017$) (Table 5.33). The Bonferroni Post-Hoc tests revealed no statistical significance between the start year and the overall internship experience. However, the unadjusted significance identified a statistical significance between start years 2014 and 2015 and the overall internship experience, ($p=.012$). Similarly, the unadjusted significance identified a statistical significance between start years 2014 and 2016 and their overall internship experience, ($p=.010$) (Table 5.34).

A Kruskal-Wallis test identified a statistically significant difference in the overall internship experience, based on the year the degree was finished, ($p=.034$) (Table 5.33). Bonferroni Post-Hoc tests revealed no statistically significant difference between the year that they finished the programme and their overall internship experience. However, the unadjusted significance identified a statistical significance between finish years 2018 and 2019 and their overall internship experience, ($p=.049$). Similarly, the unadjusted significance identified a statistical significance between finish years 2018 and 2020 and their overall internship experience, ($p=.026$) (Table 5.35).

Respondents who had completed a bespoke orientation internship programme organised by the hospital, or whose fourth-year induction included information about internship, reported greater satisfaction overall. Bonferroni Post-Hoc tests revealed a statistically significant difference between the overall internship experience and those that had a bespoke orientation internship programme by the hospital and those that had no preparation ($p=.003$); those who had a bespoke orientation internship programme had a more positive experience of internship. Bonferroni post-hoc tests revealed a statistically significant difference between the overall internship experience and those that had a 4th year induction that included information about internship and those that had no preparation ($p=.021$); those who had a 4th year induction that included information about internship had a more positive experience of internship (Table 5.36).

Table 5. 33: Results of Kruskal-Wallis tests of differences between factors associated with internship and the overall internship experience (N=176)

Overall internship experience		Median	(IQR)	Kruskal-Wallis	df	p
Year started internship.	2012/13	85.0	(36)	10.197 ^a	3	.017**
	2014	93.0	(20)			
	2015	86.0	(17)			
	2016	84.0	(27)			
Year finished internship.	2018	91.5	(23)	6.748 ^a	2	.034**
	2019	87.0	(19)			
	2020	86.0	(29)			
Structures in place to prepare for transition from supernumerary nursing student to intern.	A	82.0	(25)	10.820 ^a	2	.004
	B	88.0	(16)			
	C	98.0	(19)			

{A=Bespoke orientation internship programme by the hospital, B=4th year induction included information about internship, C=No preparation} Significance levels: * $p<.05$:** $p<.01$:*** $p<.001$: ns= not significant

Direction of variables: positive (lower values) to negative (higher values)

Table 5. 34: Results of Bonferroni Post-Hoc test that compared the start year and their overall internship experience

Pairwise comparison of start year and overall internship experience	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.^a
2012/13 compared to 2014	-15.196	15.188	-1.001	.317	1.000
2012/13 compared to 2015	1.724	15.378	.112	.911	1.000
2012/13 compared to 2016	10.854	17.084	.635	.525	1.000
2014 compared to 2015	16.921	6.752	2.506	.012**	.073
2014 compared to 2016	26.050	10.048	2.593	.010**	.057
2015 compared to 2016	9.129	10.333	.884	.377	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed.

Test Significance levels: * p<.05;** p<.01.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Table 5. 35: Results of Bonferroni Post-Hoc test that compared the finish year and their overall internship experience

Pairwise comparison of finish year and overall internship experience	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.^a
2018 compared to 2019	12.941	6.571	1.969	.049**	.147
2018 compared to 2020	21.788	9.775	2.229	.026**	.077
2019 compared to 2020	8.848	9.909	.893	.372	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed.

Test Significance levels: * p<.05;** p<.01.

c. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Table 5. 36: Results of Bonferroni Post-Hoc test that compared the structures put in place to prepare supernumerary students for transition to intern and their overall internship experience.

Pairwise comparison of the structures put in place to prepare supernumerary students for transition to intern and their overall internship experience	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.^a
Bespoke orientation internship programme by the hospital compared to 4th year induction that included information about internship	8.419	6.788	1.240	.215	.645
Bespoke orientation internship programme by the hospital- compared to no preparation	36.904	11.222	3.289	.001	.003**
4th year induction included information about internship compared to No preparation	-28.485	10.573	-2.694	.007	.021*

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed.

Test Significance levels: * p<.05;** p<.01.

d. Significance values have been adjusted by the Bonferroni correction for multiple tests.

A Kruskal-Wallis test revealed those who felt part of the nursing team and the multidisciplinary team, along with those who felt supported in managing their caseload, also reported higher levels of satisfaction with their overall internship experience (Table 5.37).

Respondents who felt they had not received helpful feedback on their progress reported lower levels of satisfaction with their overall internship experience. Conversely, those who perceived the internship period as extremely valuable in preparing them for working as newly qualified general nurses reported higher levels of overall satisfaction. These results are presented in Table 5.37.

Table 5. 37 Results of Kruskal-Wallis tests of differences between factors associated with internship and the overall internship experience

Overall internship experience		N	Median	(IQR)	Kruskal-Wallis	df	p
Feeling part of the nursing team	S Agree	37	71.0	(17)	48.613 ^a	3	<.001**
	Agree	83	90.0	(15)			
	Disagree	16	104.0	(16)			
	S Disagree	2	124.0				
Feeling part of the multidisciplinary team	S Agree	17	69.5	(18)	34.648 ^a	3	<.001**
	Agree	79	87.0	(19)			
	Disagree	37	96.0	(18)			
	S Disagree	5	106.5	(42)			
Feeling supported in managing the caseload	S Agree	12	68.5	(14)	33.635 ^a	3	<.001**
	Agree	87	85.5	(19)			
	Disagree	34	94.0	(15)			
	S Disagree	5	111.5	(36)			
Provided with helpful feedback on my progress	S Agree	13	70.0	(13)	31.047 ^a	3	<.001**
	Agree	75	87.0	(18)			
	Disagree	25	96.0	(18)			
	S Disagree	8	110.0	(25)			
Internship period was extremely valuable in preparing interns for working as a newly qualified nurse.	S Agree	47	76.0	(19)	42.901 ^a	2	<.001**
	Agree	60	94.0	(15)			
	Disagree	5	104.0	(41)			

5.6.4 Comparison of Strength and Direction of the Internship Variables

Spearman's correlation measures the strength and direction of the association between two ranked variables. The overall experience of internship reflects the cumulative mean total across all questions. Similarly, the cumulative mean total for each section - pre-internship preparation, experiences during internship and the value of internship - reflects the overall experience within that section. This study found significant correlations between all internship variables, indicating that experiences across all stages of internship influence the level of satisfaction with the overall experience. The results are presented in Table 5.38.

Table 5. 38: Results of Spearman's Correlation between Internship Variables

Relationship	Spearman's Correlations	P value
Overall Pre-Internship Preparation - Overall Experiences during Internship	.619**	<.001
Overall Pre-Internship Preparation - Overall Value of Internship	.453**	<.001
Overall Pre-Internship Preparation - Overall Internship Experience	.691**	<.001
Overall Experiences during Internship - Overall Value of Internship	.599**	<.001
Overall Experiences during Internship - Overall Internship Experience	.990**	<.001
Overall Value of Internship - Overall Internship Experience	.665**	<.001

****.** Correlation is significant at the 0.01 level (P value).

5.7 Conclusion

Preparation for internship varied across Ireland, with some sites providing more preparation than others. Many newly qualified general nurses reported feeling uncertain about what was expected of them during internship and that guidelines were not always available. Overall, most participants felt that they could have been better prepared for internship.

Despite these challenges, the internship period was perceived as helping newly qualified general nurses to consolidate their learning and to link theory to practice. In comparison to supernumerary placements, most newly qualified general nurses felt that there was greater emphasis on setting and achieving learning goals during their internship. They had opportunities to participate in shift handovers, medication rounds under supervision and doctors ward rounds. However, the level of satisfaction regarding access to these learning opportunities varied, with no consensus among respondents on their availability.

The opportunities for recognising and managing deteriorating patients were positively evaluated however, the overall level of satisfaction varied. Most respondents reported having opportunities to develop skills in communicating with family members and linking with specialist nurses when caring for their patients. Overall, there was a high level of satisfaction with opportunities to manage a patient caseload, with interns usually allocated between four and seven patients per shift. Although interns managed their caseload independently, many did not always feel part of the nursing and multidisciplinary team, and the perception of support in managing a caseload varied significantly.

The documentation of care is an important element of nursing communication. During internship almost all respondents were satisfied with the opportunities to document clinical practices including admissions, discharges, and referral to community services.

Non-technical skills are essential for the efficient and effective management of patient care and these skills take time to develop. Respondents reported an extremely high level of satisfaction with the opportunities to gain experience in time management, organisation and prioritisation of patient care. Feedback aids learning and guides students in areas of strength and identifying areas that require improvement. The frequency of feedback during internship was

inconsistent and at times perceived as unhelpful. Feedback was most commonly provided during competency assessment meetings, and in any placement, there are only three meetings, one at the start to establish goals, one at the mid placement point and one at the end, where interns are signed off as competent or not competent in the domains of competency. Furthermore, the allocated time for competency assessment meetings was considered inadequate by many respondents.

Reflective practice was deemed a beneficial component of internship allowing students the opportunity to reflect on their experiences with peers and find comfort in the shared nature of their feelings throughout the internship journey.

Sources of support during internship are available in the clinical learning environment through preceptorship, where interns are assigned a registered nurse as a preceptor and another as an associate preceptor. Respondents generally felt they had good access to supervisory support and preceptorship, but not all agreed that it was adequately available. It is noteworthy that some respondents completed their internship during a global pandemic, which likely influenced staffing levels in clinical areas at that time. Support from the CNMs and fellow interns was highly rated. Clinical placement coordinators also provided support in the clinical areas, even though they were not directly located on any ward, they were readily available and contactable to interns.

Overall, the value of internship in preparing interns for the transition to the role of registered nurse was rated highly by almost all respondents. The most beneficial aspects included the opportunity to deliver care independently and the ability to link theory to practice.

The next chapter presents the findings from the second phase of the study; the qualitative findings from the semi-structured interviews.

Chapter 6 Qualitative Findings

...“knowledge development in an applied discipline consists of extending practical knowledge (know how) through theory-based scientific investigations and through the charting of the existent know how that develops through the practice of that discipline”

(Benner, 1984; p. 39)

6.1 Introduction

This chapter presents the qualitative findings from phase two of this sequential explanatory study. The aim of this mixed methods study was to examine newly qualified general nurses' experiences of the 36-week internship period and its value to their transition to the role of registered nurse. The core objective of the second phase of the study was to elicit newly qualified general nurses' opinions about the 36-week internship period with respect to its value and contribution to the preparation for transition to the role of registered nurses. Nine registered general nurses from across five hospitals in four regional healthcare groups in Ireland participated in the online semi-structured interviews. The qualitative data were collected between 2021 and 2022. Through analysis using Braun and Clarke's (2022) Reflexive Thematic Analysis Framework, three themes emerged. The first theme is titled "Changing Tides" and reflects the ups and downs of daily life in clinical practice. The second theme, "Entangled in Time", relates specifically to the several references by participants to time management and time limitations during their clinical internship placement. The third and final theme is titled 'Clinical Agility'. This theme represents the interns' clinical and cultural adaptations, and their adjustments to clinical areas.

Participants were articulate during the interviews and spoke readily and openly about their internship experiences. To provide context, the participants in this study experienced their internship during the height of the Covid pandemic. Consequently, their experiences may have differed from others who were interns in a different era. One example of the potential difference was the way in which participants spoke very positively about the beneficial effect of the 20 hours of facilitated reflection. These sessions may have been considered particularly valuable as they were scheduled during a time of great stress and uncertainty. Interpretations from the analysis are widely substantiated with verbatim quotations in this chapter.

Learning and experiences during internship were often haphazard and unstructured, with a large gap between the reality and the ideal. On the other hand, this time was

one of growth and development, where interns were forced to “sink or swim”, as one participant said. This led to consolidation of learning, and the undertaking of additional responsibilities. Participants expressed increased confidence, pride, improved self-esteem, and feelings of integration associated with the internship period. Each of the three themes in the next section has one or more sub-themes linked to it, and these are presented graphically in Figure 6.1 below. Appendix 6.1 displays an overview of the main themes and subthemes.

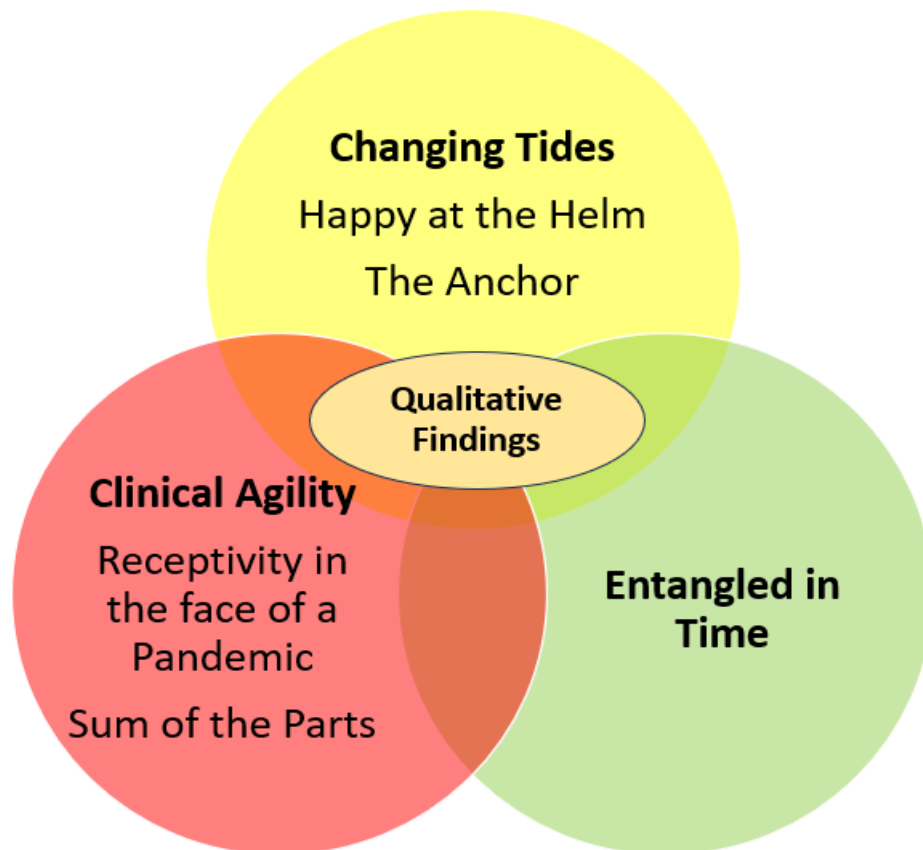


Figure 6. 1: Themes and subthemes.

6.2 Changing Tides

This theme title was selected to capture the descriptions of decline and regrowth experienced during internship. The theme contains two sub-themes, which represent the positive experiences of growth, development, and motivation, while the other exhibits the endurances associated with internship. These subthemes are

titled “Happy at the Helm” and “The Anchor” respectively. It became apparent from the outset that as an intern, determination and assiduity were essential for completing internship and to graduate as a registered nurse. Some progressed instinctively, while others cultivated through experience and deliberation.

6.2.1 Happy at the Helm

This sub-theme reflects the interns’ sense of satisfaction as they embraced their role and the associated learning. Independent practice empowered the then interns to take control and this enabled them to realise the level of responsibility of the nurse’s role. Positive feedback from staff helped to build their confidence and augmented the desire to progress their learning and achievements. Such positive encounters resulted in feelings of authentication, self-assurance and a drive to succeed.

P0011

..“it was the nurses that took the time out of their day to say come here come look at this and I remember a specialist consultant sat down with me for about twenty minutes one day just teaching me about things that were wrong with his patient it was incredible I remember I learnt so much, trying to write things down... I gained so much from it.”

Demonstrating interest and an eagerness to learn was essential for the intern and the nurse or preceptor that they were working with.

P0088

“If you were willing to learn, they were eager to show and teach you... if you weren’t really wanting to be there obviously, they weren’t going to be helping you either.”

P0088

“I found it was a ward that you either sink or swim, so I decided to swim; so, I pushed myself... the more you push yourself the better you get on.”

Internship enabled the building of confidence in communication skills with both staff, patients, and families.

P0033

“Even though you say I’m an intern, family members see you and see a nurse, they don’t see you as an intern for example so yes it did help build confidence in communicating with family members.”

P0044

“I was much more confident speaking to a group of nurses, that (internship) really sets you up.”

P0099

“It builds a lot of confidence, you know, practical skills that you could use to manage patients when you are a staff nurse.”

P0077

“I think it allowed me to see more of the role of the nurse, whereas in the other years I feel like I was just kind of in the background and doing healthcare assistant work. But in internship I was kind of pulled out of that and then I was doing more nurse work.”

The augmented level of responsibility for patient care resulted in feelings of self-assurance particularly when their efforts and performance were recognised.

P0022

“Definitely felt more recognised when I was an intern” ...

P0044

“They valued us; it was still short staffed (during Covid), but they really valued intern nurses as much as we value the nurses and the Clinical Nurse Managers as well.

These excerpts display the positive effect of eagerness, self-motivated learning, and the advantages of collaborative relationships with nurses/team members and families. “Happy at the Helm” synthesises this sub-theme. While interns possessed an augmented level of responsibility; they were satisfied with active participation and

learning to achieve their goals. As interns, they felt challenged, and this resulted in greater responsibility for one's learning. Self-motivation was key for success and demonstrating enthusiasm to learn motivated preceptors and other team members to support the development of skills, knowledge and understanding in order to consolidate their learning.

6.2.2 The Anchor

This second of the two sub-themes is called "The Anchor", which uses the analogy of a 'weight'. This weight restricted interns during their 36-weeks in clinical practice. Negative feelings such as stress, isolation, inadequacy, anxiety, and incompetence were described during the interviews. This sub-theme contrasts with the experiences presented above in "Happy at the Helm".

Participants expressed feeling anxious particularly when they encountered unfamiliar situations, and fear of the unknown served as a constant threat to satisfaction during internship. This was exacerbated by the ongoing fear of making a mistake.

P0011

"you have absolutely no idea what you are going to be faced with in a day..... and that always made me very nervous, because it's actually very easy for somebody to make a mistake.....I was terrified I was going to miss something."

P0055

"As I said it was my tenacity by sticking at it and going in there day after day into an environment that I was so anxious and nervous and pushing myself the whole time just to get it (internship) done."

P0088

"Initially I was always kind of a bit nervous talking to them, to the doctors. I always get nervous talking to the family too."

Stress was encountered more frequently on surgical than medical wards due to the faster pace and augmented workload, such as the need to have patients ready for theatre by a certain time. Nevertheless, the anchoring force was not restricted to certain placement areas. Fear, anxiety, and strain were experienced throughout internship.

P0011

...“it (medication rounds) always made me very nervous because it’s actually very easy for somebody to make a mistake. There is just no structure or instruction the whole way through (pre-internship); it is a very vulnerable position to be in and there is none of that constructive feedback to the individual.

P0066

... “you deal with the stress of having a caseload more as an intern.....when they were ready in theatre, they wanted them there instantly...it was pressure and stressful” ...

P0011

“One of the staff nurses on one ward... she sat me down when she caught me crying and I was mortified.”

P0077

...“If there was only three nurses on (night duty)... you were kind of thrown in at the deep end where you just had to get on with it and there was no one else to help you; there were no physios around no speech and language therapists you were in charge of all this and you needed to get everything done by half seven (am) like you were thrown in at the deep end.”

Some found internship extremely difficult which is exemplified in the quotation below.

P0055

“I felt that internship nearly destroyed me as a person.”

The theme “Changing Tides” demonstrated two facets of actuality during internship. The opportunity to work at independent level was empowering and enabled the

acquisition of clinical skills. Self-motivation and eagerness to learn were essential for growth and development during internship. Conversely, some found internship challenging and recounted the impact of stressful and overwhelming moments. Internship was an emotionally charged time for interns with a variation in emotions experienced at different stages.

6.3 Entangled in Time

This theme, as the name implies, describes a major issue that emerged from the interviews, and that was time.

Interns were challenged by time for delivering care and accomplishing their learning. Participants described the challenges of being pressed for time as they tried to manage patient care independently. During internship, the requirement for non-technical skills such as time management and prioritisation were realised. These skills were not highlighted or visible in the supernumerary years. On the other hand, learning time management skills assisted gaining time to consolidate learning. The excerpts from the interviews describe these contrasting experiences of time. In nursing it is essential to manage time effectively to ensure timely delivery of patient care. In this study, the participants described the challenges with time as they commenced internship and worked independently alongside other registered nurses whom they noted did not seem to have issues with time. The learning platform of internship exposed them to the reality of nursing and the requirement to gain essential skills for registration.

P0044

“I think the main thing with me was time management... throughout the day you know you are so busy, and you have your 6 patients there wasn't a lot of time... I would have liked to have participated in more medication rounds that was down again to time management and the nurse, I don't think they had the time.”

P0011

"So, I cried I think maybe every single day for the first six weeks. I was told that my time management wasn't good enough, that I needed to stop spending so much time chatting to my patients and do work instead."

P0099

"I don't want to say time management because I struggled with that at the start when I went to my new hospital.....every intern struggles with that."

P0022

"When I was doing my internship, I think covid showed up out of nowhere and it was really busy"...

On the other hand, the participants recalled how time pressures had helped them to learn how to manage time more effectively. It also made them realise the reality of nursing and the time pressures that can be encountered and how to deal with them. The progressive nature of internship meant that with experience over the 36 weeks they accomplished time management and prioritisation skills to a satisfactory level.

P0044

"I think it (internship) definitely made me manage my time better I think internship really gets you prepared for time management."

P0077

"I think it kind of showed me the reality of nursing, not that it should be the reality, but that there are days where your caseload is going to be big or difficult and you just have to prioritise and manage your time and just put all these things that you learnt into practice... So, it used to take me about 45 minutes to do an admission but probably get a good one done in 10-15 minutes now."

P0055

"I think time management became easier... just naturally became easier with time spent on the wards with experience...by the time I was finished internship I could admit and discharge people really quickly."

P0066

“Certainly, got a grip on it. You have elective surgeries, getting them organised and getting their admissions ready, that was good for time management.”

...“that was something that was pressure on time, when they had to be in theatre by a certain time.”

Within this theme ‘Entangled in Time’, the experience of supernumerary placements were alluded to. It was felt that a learning chasm existed, whereby essential skills were not realised or emphasised during these first three years. Interns reflected retrospectively on missed opportunities in the supernumerary years where they could have used time more productively to prepare for the intern role. The quotes included below exemplify this discussion.

P0011

“I think it is something that there is not enough conversation about with supernumerary students while they are there [in years one to three]. You are not really encouraged to take the lead when you are supernumerary and that should absolutely happen do you know... You have to ask permission to do everything the whole way through up until your internship. We talk about a staggered learning but that doesn’t happen. I struggled with so badly in the beginning, I was terrible at doing my notes”...

P0077

...“like the medications, things just started clicking. I think like with the blocks in year one to three you were just kind of counting down the weeks till you finished.”

P0088

“There is that jump from 3rd year to 4th year that you get more insight to the role of the registered nurse. We only did straight days from first year to third year so, 8am to 5pm. We didn’t do the full shift. So, that was a huge transition for us; evenings are very busy, and we didn’t get much of an opportunity to give handover until we got to fourth year so it was a bit of a jump, but you got on with it.”

The gradual progression was acknowledged as they identified that skills improved and broadened as time progressed.

P0088

....“as time goes on you build up more experience”...

The theme “Entangled in Time” portrayed aspects of time management and the impact of managing time during internship. During internship, interns handed over their patients at the end of shift, some had limited experience in practicing this skill, as they had little or no experience of this in the supernumerary years. The significance of non-technical skills such as planning and organising, time management, and prioritisation, were fully recognised in internship, and many felt overwhelmed with the workload. Internship enabled the recognition and value of these skills as essential for the registered nurse role.

6.4 Clinical Agility

The theme “Clinical Agility” represents the interns’ ability to adapt to the clinical setting. The requirement to adjust to varying clinical circumstances, social norms and expectations, which were often learned through exposure, was vital during internship. Clinical environments can be unpredictable, particularly during a pandemic when wards had to close or change patient cohorts to accommodate different situations. The coronavirus pandemic meant that circumstances in clinical areas changed quickly, and interns and staff had to adapt to manage the situations presented. This had advantages and disadvantages for the interns, enhancing and deflecting experiences during internship. Two sub-themes were identified in relation to the Clinical Agility theme - 1) Receptivity in the face of a Pandemic 2) Sum of the Parts.

6.4.1 Receptivity in the Face of a Pandemic

This first sub-theme, “Receptivity in the Face of a Pandemic”, summarises participants’ receptiveness to the surroundings and circumstances in which they found themselves during internship, and most specifically during the covid pandemic. Internship provided the opportunity to experience the different shift patterns that nurses are required to work, such as night duty and weekends. They also experienced different ways of working in the clinical areas where either primary nursing or team nursing was adopted.

The pandemic posed unique challenges during internship. It posed unexpected and unprecedented challenges to the health service and those working in it. There were numerous references to the impact of the Covid pandemic in the data. The presence of the pandemic meant that the interns had to be versatile and receptive to the changing nature of the clinical setting, particularly during covid surges. This was a unique time for the interns and these experiences provided lasting memories for them. The routine internship allocations were adjusted based on the clinical circumstances at that time. This meant that some remained on the same ward for the duration of their internship. Staff shortages resulted in redeployment of interns which was an unusual occurrence, given that they usually work with a preceptor. In these cases, some found themselves in a different and unfamiliar clinical area, often with limited support.

Throughout internship, it was mandatory for interns to participate in reflective practice that aimed to assist their comprehension of clinical experiences and consolidate their learning. This supported their coping and adaptation as they described reflecting on experiences through reflection as ‘hugely beneficial’. Structured reflection was particularly helpful as it was supported by clinical and academic facilitators. Presenting and discussing clinical scenarios with facilitators and peers helped them to understand situations and provided them with different ways to manage such situations in the future.

P0099

....“you could speak openly and freely with how you felt as part of reflection

and then give an outside perspective, and also you are with your peers, and it is so beneficial. We would have only been in then to hear about other people's experiences to talk about them so candidly what they would do differently with the Gibbs model, so I really enjoyed when we had reflection"....

Reflection helped the interns to make sense of their experiences and apply insights and better ways of managing situations in practice after reflecting on it.

P0044

...“usually most of the other nurses would have had similar experiences like you so I think really the reflection classes were really good. I found, and it was really nice to discuss things and then you learn from others in the group”...

P0066

....“if you were talking about something in particular the next time you approached something like that you wouldn't be approaching it with so much like confusion or frustration, because you would have already got your frustration out reflecting about it, so it was kind of easier to learn and go through how to adopt skills quicker”....

The concept and practice of reflection was only understood in internship, and while participants felt it should be something major, they soon realised that they could reflect on any encounter or situation. Reflection helped them to analyse the situation to gain a better understanding and apply the learning in practice when they encountered the situation again.

P0022

...“I thought it had to be something major that happened that you'd have to reflect on but no it was later on that I realised that it could be as simple as having a conversation with a patient”.....“I only understood that by reflecting upon it you are able to understand, know exactly what happened and why it happened and if you were feeling in some sort of a way why you were feeling in some sort of a way”...

Internship was impacted in many ways by the presence of the coronavirus at that time and presented unique opportunities and challenges. Challenges meant that the interns had to adapt to their environment on an ongoing basis, depending on the clinical situation posed by the pandemic. Staff shortages resulted in an inconsistency in preceptorship and challenges in accomplishing the completion of their competency documentation. However, they also gained lots of experience and because they were on some placements for prolonged periods, they gained confidence and became known to the wider multidisciplinary team.

P0077

"I was on internship when covid hit, so I think I got a kind of different experience than what other years would have had..."

P0011

"Because my internship was during covid, I think that had a knock-on effect, because you had basically no hands-on surgical skills whatsoever coming out of it. So, I felt really ill-prepared in the sense that if you don't encounter something while on your internship, you don't do those skills independently."

P0066

My internship was on a specialist surgical ward and it was meant to be split up into two placements, surgical for one and medical for the other, but because of covid they decided not to move us, so I was on the surgical placement for the duration of it... critically ill patients weren't on our ward that often, and if ever they were, they would go to the more experienced nurses."

P0099

"It (covid period) was a very anxious time for everybody and especially not being able to visit family members. People were quite anxious on the phone, and you know over the phone is a lot less personable less reassuring than seeing the face (of the relative) ..."

Nonetheless, the coronavirus also resulted in positive experiences. Some of the positives are captured in the below excerpts from the interviews.

P0022

"I don't know how we got redeployed to loads of other wards. I mean not that I saw anything different from covid. I think it was tough, but it helped add to

my experience.”

P0066

“You would be communicating with the family the whole time. It was like that during covid when the families couldn’t come in. That’s when I really got experience communicating with them. It was tough at the start, and I found I wasn’t confident telling them the information even though I knew it myself, but I did get better as I went along...”

P0077

“I mean the teams like the doctors and physios on the wards did get to know us, especially during the big block (extended clinical time in one placement) we had with covid.”

Other areas of receptiveness to change included the experience of night duty and the adaptation to the nursing ethos, whether that be primary nursing or team nursing. There were positive reports associated with these, but they still had their challenges, as there was less support available. Experiencing night duty was viewed as positive but it had its challenges too, as there was less support available.

P0077

...“first of all, what a night shift was like because I had never done night shifts and then dealing with acutely ill patients with even less staff and like less doctors around. It was good though but then the ones like during the day I got to see you know the CNMs; they came to help as well, and I got to see kind of the chain (sequencing of patient management processes) you know what you do. And the CNMs were like so calm..”

With team nursing the interns worked with other nurses in an area, whereas with primary nursing the interns were allocated their own caseload to manage under the distant supervision of a registered nurse. Team nursing was considered disempowering by the interns as they did not have to think for themselves or make independent decisions, as there was a shared decision-making process. In contrast, interns practicing primary nursing had to think and work independently.

P0022

“The first two wards I worked in, didn’t have team nursing. As it was primary nursing, you got your patients, and you took care of them, and all of the other staff nurses just got their own workload.”

P0077

“I had got so used to just having not only a preceptor but having another nurse on my team you know just to bounce things back off.”

In summary, internship was very much impacted by the covid pandemic for this cohort of participants. The interns were flexible and receptive to the clinical and healthcare climate at that time. They availed of what learning opportunities were made available to them and worked within the confines of the circumstances. There were losses and gains associated with this unique time, and their memories of internship will be forever lasting. The varied shift patterns were a new experience, as was the lack of available support at night in comparison to day shifts. The adoption of primary nursing empowered interns, while team nursing was prohibitive in some ways. Reflection was a form of support as it aided learning and analysis of situations to further enhance experiential learning and consolidate learning to link theory to practice. The pandemic resulted in unpredictable clinical settings, and this required adaptability and versatility in order to manage and progress through internship.

6.4.2 Sum of the Parts

Sum of the Parts is the second sub-theme under the theme Clinical Agility. Sum of the Parts refers to the synergy of togetherness, where more is achieved because of everyone's contribution. During internship, the interns learnt about the culture of the healthcare environment and became accustomed to the practices and values. The expectations in relation to the values promoted by an organisation are not always observable in reality. This mismatch can lead to positive and negative experiences in relation to culture. High levels of satisfaction and learning are evident in the

presence of a positive culture. In this study positive and negative experiences were encountered, the benefits of being accepted as a learner in the clinical setting, receiving advice and guidance assisted in preparing them for the nurse's role.

P0022

"Some wards are more welcoming and friendlier than others..... they were friendly, welcoming, they'd introduce themselves, learn your name" ...

P0033

..... "as long as you were looking after a patient you were part of a team looking after a patient"

P0077

.... "just knowing your name, I think, I feel, is a big part because you're called a student for so long"...

As interns, they were expected to perform with extremely high expectations experienced by some.

P0011

... "we felt like we were meant to know everything, but we were so far from that we didn't even know what we needed to know..... I had a full patient caseload all of a sudden out of nowhere. I had never had it before and was expected to do everything"...

P0022

... "there was more of an expectation to know more when you were an intern..... not that they wouldn't show you if you didn't know anything"...

P0055

... "just thrown in the deep end, you were just told to go and mind eight patients... maybe everybody else had a clue but I didn't, you are just thrown in the deep end, and you sink, or you swim"....

Familiarisation with practice is a component of the sum of the parts. One of the core

advantages of internship was that it allowed interns to become familiar with ward practices. The first internship placement fulfilled that role and subsequent internship placements allowed the gradual progression to enable them to manage their allocated patient caseload throughout their shift.

P0033

...“the first internship placement I got so much but it prepares, the first one is like an introductory one.....that subsequent internship placement did really show me how to manage my patients right from handover”...

The advantages of rotating to different clinical areas during internship were highlighted, in particular the acclimatisation to various ward practices in different specialties, thus broadening their clinical experiences.

P0077

...“having different areas that we could go to, rather than spending your whole internship in all surgical or all medical”...

Alternatively, one of the effects of remaining longer in the same clinical placement during Covid was that they became more recognised by the multidisciplinary team.

Ward practices vary depending on patient cohorts. Adapting to ward practices was an important part of internship. Interns were challenged when they were allocated shorter placements as there was less time to become familiar with ward practices and establish professional relationships with teams.

P0099

....“every hospital does it differently”....

P0011

...“every single ward has a different way that their day goes....they’ll write their notes differently, they do care plans differently, sometimes don’t do care plans at all, and if you are used of not doing care plans and putting everything

in the notes and if you go on to a different area and you forget to complete a care plan. I think it was the most difficult part of it all”....

The sum of the parts includes support. Support in the clinical setting was essential for learning, and the support offered to interns enhanced the feeling of togetherness that this theme, Sum of the Parts, is focused on. The reassurance that they had assistance and guidance available assisted them to learn during internship. The support included nurses/ preceptors, ward managers (Clinical Nurse Managers), Clinical Placement Coordinators, Clinical Facilitators and the multidisciplinary teams. Every so often, the relationship between the student and the preceptor was convoluted or challenging; this is something they both need to be aware of.

P0088

....“it takes two people to get along”...

Clinical Placement Coordinators were part of the student support network. Although their role is not ward-based they have responsibility for a number of clinical areas and are available to interns as required. The level of satisfaction with Clinical Placement Coordinators varied, with most relaying positive support by Clinical Placement Coordinators, such as troubleshooting to clarify instructions or helping them understand experiences. The Clinical Placement Coordinator role is multifaceted, including liaison with Clinical Nurse Managers, preceptors, students, and the higher education institutes.

P0055

....“they (CPCs) don’t work for the student, they work for the hospital, they work for the staff, they see the same staff day in and day out, they want to make the staffs’ life as easy as possible and they do not want any kind of negative feedback from the student; they don’t want to solve problems, they don’t want to educate”...

P0066

....“CPCs keep a check on you to make sure you are meeting all of the

goals”...

P0077

“CPCs, all of the ones that I had, they were great.... I felt hugely supported”...

P0088

...“if we were in doubt we did have the CPC to rely on and they were very supportive to me anyway they were very supportive.....the CPCs especially very good and supportive to us, like they came round to us every day, made sure that we were assigned somebody... you weren’t thrown out by yourself, not looked after....

P0099

...“ what we always did with the CPC... we always did case studies, and we went through them, and I found them much more valuable”...

Some participants identified a lack of support from senior staff members, especially in high-pressure situations.

P0055

“I felt a little bit pushed aside while more senior members of staff took over without necessarily explaining what was going on or why they were doing what they were doing it’s just like we are too busy this is an acutely ill person, and we are too busy you bugger off somewhere else.”

Others identified the college as a source of support.

P0088

...“we did have the link to our college and link lecturers to each hospital where we were based”....

The support network also included the multidisciplinary team and clinical nurse specialists in supporting interns in caring for their patients.

P0088

...“speech and language and the physio, they are all very supportive, we have to work and communicate like a team effort, there is no sole person involved in the team”.....“if a clinical nurse specialist had come up to review a patient obviously, I would say ‘how did you get on’ and then they would give you the full handover”...“they treat you like a regular”...

P0099

...“as the internship progressed the more, I felt part of the multidisciplinary team because you yourself are taking more responsibility and you are liaising and asking when they are on the ward ‘can you help me with this’.....and you get to know who is part of the team, easier to communicate because it is all about communication”.....

The ward managers were identified as a vital source of support in the clinical setting. Their approachability and level of expertise was admired by the interns and highlighted as a valuable attribute in the clinical setting.

P0099

....“the biggest impact of the managers had on my learning...you could approach them with a deteriorating patient”...

Support in the clinical areas is essential for learning. Within the clinical setting there were various forms of support for interns that assisted them to deliver quality care and in turn enhance their learning.

Preceptorship is another element of the sum of the parts and a key component of training to become a nurse, and in internship, students have the benefit of working at an independent level, with the support of a mentor (also known as a preceptor). While preceptorship is part of the nurses’ role and a fulfilment of a contract, interns’ experiences of working with preceptors varied. Preceptorship was impacted by the pandemic, although it was considered subjective and imperfect, even in the absence of the pandemic. Their experiences were subjective, with much variation and inconsistency reported. Participants recounted how it was difficult to get their

competency booklets completed, in such a changing environment and with such variation in preceptor quality.

P0077

“I actually think I got quite lucky with the wards that I was on; I only had one bad one (preceptor) and it wasn’t even that bad”.

P0011

...“but I mean it depended (competency documentation completion) on whether or not you had a proper preceptor. I know mine really varied. Covid definitely had an impact on this, but like I could have a different preceptor every day and I mightn’t even see my preceptor in a day like you are kind of left to your own devices”.

P0055

“Sometimes we would have to hound a nurse to give you some comments (in the competency documentation). You may not have worked with her at all, but it didn’t matter- you just needed pen on paper. It is all a fantasy it’s all a joke - just ticking boxes... nobody is monitoring your progress...”

P0022

“I would say where you are working and especially the staff that you are working with defines how your internship is going to be, whether it is good or bad. You know your preceptor has a big influence about how you feel about going to work how you feel about becoming a nurse”.

P0066

“I think there was one of my preceptors or my link nurse that I didn’t work with that much at all throughout my internship. I worked with my main preceptor a lot and she offered me really good support...”

Some preceptors were very willing to have interns, while others were not so keen, and practices varied as each had their own way of managing care albeit abiding by policies, procedures, and guidelines.

P0033

...“it depends on the preceptor you are assigned to; different nurses do things differently”...

“...they bring you along and sort of support not just the clinical but even the theory behind it, sort of give you a background to what is happening, that is what I think is helpful and I find helpful in a preceptor”....

P0077

....“if a nurse just didn’t really want a student with them”....

The willingness of the preceptor to find the time to instruct the intern had a positive impact on their experience and instilled lasting and transferable knowledge and understanding.

P0055

....“the most valuable experiences I would have had would have been one-on-one with dedicated nurses who opened themselves up to teaching.....one nurse sitting down with me and started writing out her sort of routine for the day -at what time she tends to have certain skills or certain jobs done by.... she was one out of how many nurses that I came across that spent that time with me doing that; before that it was off you go”...

P0022

...“some of my preceptors were really good and they were really helpful and that really stuck with me”...

The value of preceptorship was highlighted in overseeing the care delivered by the intern and the value of their conversation.

P0066

....“when you linked in with the registered staff nurse, that’s when you realised what needs to be done or what has to be done, they’d be checking up on you’ is this done is that done...present and constantly offering me to ask questions, like I could always ask her something and then she would also kind of quiz me a little bit at the end of the day; at the end of the week she’d be asking me questions, which was kind of intense, but it was good as well cause you need that for learning”...

Encouragement from the nurse or preceptor assisted the interns to progress their learning and to continuously avail of learning opportunities. For example, one nurse highlighted a particular skill opportunity that was available that they had mentioned previously.

P0077

...“she really pushed me even though I was like ‘no’ she kept saying ‘no you have to do it’ and she wouldn’t even say anything she would just sit in the corner and go ‘no you have to do it’ so that was a real help as well obviously”...

...“last week you said that you didn’t do an intramuscular injection, there is a patient having it now”....

Although the intern nursing students are part of the workforce, they are still students in training and require feedback on their performance as well as, competency assessment to meet the requirements and standards for registration. The role of the preceptor involves providing feedback and assessing performance.

The experience of receiving feedback on their performance varied, with some only receiving feedback during their competency assessment meetings.

P0088

....“we do interviews, am, like the beginning, intermediate and final.....it varied I suppose mainly you got the feedback during your interviews.....it varied mostly the interview would be done say every three weeks”.....

Others experienced regular feedback on their performance and progress although it was not delivered in a consistent manner.

P0088

....“the nurses were always very good to tell you how you were getting on”....

....“I found it can tell you where you are doing well and where you can improve, in a way not there always... was not consistent but there was always feedback”....

The challenge that preceptors or nurses must endure when faced with the prospect of having to deliver negative feedback, and in such instances anticipating the response, was acknowledged by one participant.

P0088

...“mainly positive feedback they would feed you more frequently rather than negative they probably would do because you don’t know how the other person is going to take it”....

Although feedback was not delivered regularly, the interns assured themselves by assuming that if there was a problem they would be informed.

P0088

....“I would pick it up as no news is good news”....

In summary, the Sum of the Parts is the contribution of all concerned who assisted in the successful completion of internship. Internship enabled familiarisation with ward practices and the realisation of the variances in the different clinical areas depending on the specialisation or patient cohort. The duration of the placement, particularly shorter placements, made familiarisation with practice difficult. The experience of welcomeness and feeling part of the team varied, it was identified that welcomeness of clinical areas influenced the cohesion of interns in the team. Preceptorship varied with both positive and negative experiences recounted. Positive experiences had lasting effects on the interns. Assessment of performance and feedback are a requirement for the internship period; however, the provision of feedback was inconsistent with interns assuming that their performance was acceptable in the absence of feedback. All of these essential parts contributed to the internship experience and the preparation for the nurse’s role.

6.5 Conclusion

Nine nurses participated in the qualitative interviews pertaining to the objective of eliciting newly qualified general nurses' opinions about the 36-week internship period with respect to its value and contribution to the preparation for transition to the role of registered nurse. It was evident from the data that internship can be an emotionally charged journey, with mixed emotions ranging from anxiety to a sense of satisfaction having conquered the role, and the recognition of the value of their contribution.

The theme "Changing Tides" depicts the reality of clinical practice and the unpredictable nature of what an intern or nurse may be confronted with on a daily basis. The progression during internship required motivation and determination to succeed. The two subthemes "Happy at the Helm" reflected the enjoyment, fulfilment and contentment experienced with taking responsibility, while "The Anchor" signified the stress, burden and challenges associated with internship.

The theme "Entangled in Time" portrayed the challenges experienced in relation to time which sometimes prevented them from partaking in doctors' ward rounds and experiencing medication rounds. The realisation of the requirement to manage time effectively was recognised in internship when they started to manage patient care independently. The vastness of nurses' knowledge and skill was only realised in internship when students managed their own caseload. The impact of not practicing certain skills for a while made them feel that they would benefit from refresher education.

The third and final theme "Clinical Agility" demonstrates the interns' skill in adapting to the changing clinical environment. Internship allowed interns to experience the reality of clinical practice as they adjusted to the social norms and expectations. The pandemic increased the complexity of the very unpredictable clinical setting, but this experience enhanced the knowledge and understanding of clinical situations. The

two subthemes “Receptivity in the face of a Pandemic” and “Sum of the Parts” further portrayed the advantages of familiarity with practice, the impact of the pandemic on the clinical learning environment and experiencing the culture within the healthcare system. During internship, as the interns gained experience and became familiar with the different ward practices, multiple sources of support were made available to them, and all of these contributed to the student’s learning. Preceptorship was identified as important for learning, as well as feedback on performance with some only receiving feedback during competency assessments. While internship provided an array of experiences and opportunities to learn and understand the role of the nurse, some did not feel completely ready for the role. The covid pandemic impacted experiences both positively and negatively. The interns had to step up, adjust to the changing environment and take more responsibility. Some were redeployed which is a reality in nursing and something that they will encounter as registered nurses.

The next chapter presents the integration of the findings from both phases.

Chapter 7 Integration of Findings

“One does not ask whether the mallet is better than the saw in absolute terms; instead, the focus is on what each instrument does and specifically, how these purposes can be combined synergistically”
(Gillespie et al., 2024, p. 117)

7.1 Introduction

After connecting the research at various stages in the study, the final step was the integration of the quantitative and qualitative findings. The integration of these addressed the question regarding newly qualified general nurses' experience of the 36-week internship period and its value to their transition to the role of registered nurse. In the first (quantitative) phase of the study, data were collected using a self-administered electronic questionnaire. Based on the results of the first phase, an interview schedule was developed and participants for the second phase (qualitative) were selected through volunteer sampling. Nine online semi-structured interviews were undertaken to further explore the results from the first phase. Three main themes were identified from the qualitative analysis. This chapter presents the integration of the quantitative results and qualitative findings. The data were fully integrated using a visual display model known as the Pillar Integration Process Model. The four-stage Pillar Integration Process involved listing, matching, checking and pillar building, from which the following three themes were identified;

1. No Frontier
2. The Chameleon
3. Professional Socialisation

These themes are presented diagrammatically in Figure 7.1

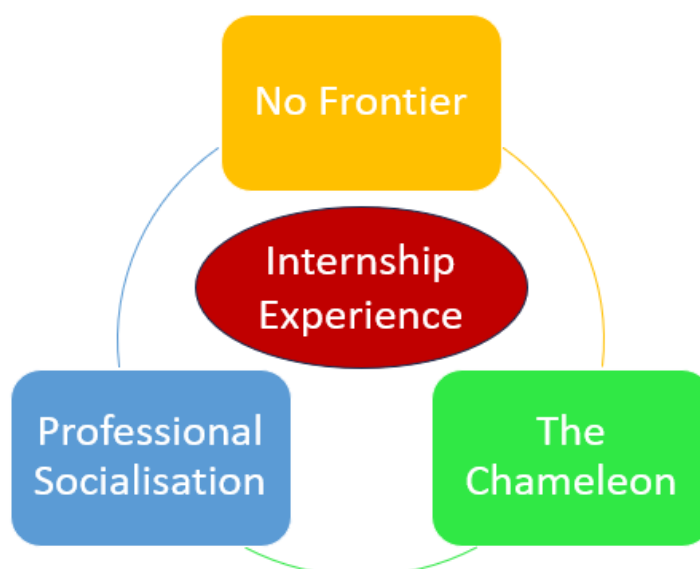


Figure 7. 1: Overall themes identified through the integration of findings using the Pillar Integration Process Model.

7.2 Integration of Quantitative and Qualitative Findings

The Pillar Integration Process model was developed by adhering to the four stages developed by Johnson et al., (2019). The Pillar Integration Process model's first stage involved creating a list of the quantitative results and qualitative findings. As the first phase of the study involved the collection of quantitative data, this list was organised with quantitative data on the left and qualitative data on the right. Next, in line with the matching stage, the quantitative results were matched to their qualitative counterparts. The third stage, the checking stage, involved reviewing the findings to ensure validity of the matches and appropriate alignment of the data from both phases. The checking stage aimed to confirm a high-quality standard of integration. The fourth and final stage, the pillar building part of the Pillar Integration Process model, then began. This involved the integration of both data sets into core findings in the central pillar. Synthesising the mix of methods utilised in this study (quantitative and qualitative) in this manner allowed comparing and contrasting of the data sets. This permitted the progression beyond the individual methodologies and the development of themes that embodied all the data in a complete narrative. Tables are used throughout this chapter to present the integration of the data sets, as well as the identification of convergence and expansion to produce each of the themes in the pillar column. Each pillar is also presented narratively.

7.3 No Frontier

A frontier represents a boundary or a limit of understanding or achievement in a particular area. In this context of this study, internship was bigger than the sum of its parts. While it was not without its difficulties, as demonstrated in the sub theme 'The Anchor', interns overcame the boundaries of internship and did not let these deter or prevent progression, hence the theme title 'No Frontier'.

No Frontier: Preparation and Communication

Regarding preparation for internship, deficiencies were identified from the data. For example, the level and adequacy of preparation for internship varied, and while most respondents received some preparation, this was inconsistent. Furthermore, there was a lack of certainty regarding what was expected of them during internship. A paucity of formal standardised guidelines, and no guidelines in some cases, added to this challenge.

Despite this, the interns overcame these boundaries through hard work and determination. They took ownership for their learning and demonstrated a motivation to succeed. This motivation was often driven by positive feedback from team members, which boosted their confidence and enthusiasm for learning. These positive encounters generated feelings of validation and positive self-regard as they passed through various levels of competency and gained new knowledge and skills.

During the early days of internship, interns felt inhibited with communication with families and members of the multidisciplinary team. In addition, giving shift handover to nursing colleagues also posed a problem for many. This was overcome through encouragement, guidance and support by preceptors. From their own perspective, rehearsal and reflection, together with experience gained over time, helped build confidence and break down the frontier. Table 7.1 displays the Pillar Integration Process model (PIP Model) for the integration of these findings.

Table 7. 1: PIP Model: No Frontier: Preparation and Communication

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents the understanding of their role and the level of preparation.	<u>Understanding</u> 77.9% (n=137/176) had a clear understanding of what was expected from interns during the internship period. 22.2% (n=39) did not understand what was expected from them during internship. <u>Guidelines</u> 71.6% (n=126/176) reported that there were clear guidelines for their learning. 28.4% (n=50) felt that the guidelines for their learning were not clear. <u>Preparedness</u> 54% (n=95) felt prepared for internship. 46% (n=81) did not feel prepared for internship. <u>Satisfaction with Preparation</u> 56.8% (n= 100/176) felt they could have been better prepared for internship. 43.2% (n=76) indicated that they had enough preparation for internship.	No Frontier Converged and Expanded	Theme 1: Changing Tides Subtheme: Happy at the Helm	P 0055 “I really prepared myself for being a staff nurse and it was through tenacity and, you know, that sort of drive to keep going...pushing myself the whole time just to get it done.”
				P0088 “I found it was a ward that you either sink or swim, so I decided to swim; so, I pushed myself...the more you push yourself the better you get on.” “If you were willing to learn, they were eager to show and teach you... if you weren't really wanting to be there obviously, they weren't going to be helping you either.”
This data presents the findings for communicating with family members.	<u>Communicating with Family Members</u> 89.1% (n=123/138) strongly agreed or agreed that internship prepared them for communicating with family members. 10.8% (n=15) disagreed or strongly disagreed.	No Frontier Converged and Expanded	Theme 1: Changing Tides Subtheme: Happy at the Helm	P0022 ...“I improved my communication skills so much better because you have to talk to so many broad ranges of people throughout the day family members”..... P0033“even though you say I’m an intern family members see you and see a nurse they don’t see you as an intern.....it did help build confidence in communicating with family members”... P0066 ...“it was really tough at the start I found it hard anyway I wasn’t confident telling them the information even though I knew it myself..... it was harder to explain it to someone else”...

No Frontier: Consolidating Learning, Setting and Achieving Goals

With respect to consolidating their learning during internship, again there were no frontiers with overall general satisfaction in this area. The findings converged and were expanded in the qualitative phase, revealing that internship enabled them to realise the full extent of the nurse's role. There were opportunities to set and achieve goals, develop knowledge and skills and enhance communication. All of this contributed to increased confidence in managing patient care.

Conversely, not all interns experienced opportunities to advance knowledge and skills, particularly if they were viewed as a junior multidisciplinary team member who might be lacking in ability or knowledge. However, this perception did not impede or thwart their confidence in themselves to process complex knowledge, again demonstrating that there were no frontiers with respect to their self-belief. Table 7.2 displays the Pillar Integration Process model for the integration of these findings.

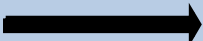
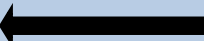
Table 7. 2: PIP Model: No Frontier: Consolidating Learning, Setting and Achieving Goals

Quantitative Results 		Pillar building with themes	Qualitative Findings 	
1	2		2	1
This data represents satisfaction with consolidating learning and opportunities to advance knowledge and skills during internship.	<u>Consolidation of Learning</u> 92.8% (n=128/138) were very satisfied or satisfied that the internship period consolidated their learning and helped them to link theory to practice more than any of their supernumerary placements. 7.2% (n=10) were dissatisfied	No Frontier Converged and Expanded	Theme 1: Changing Tides Subtheme: Happy at the Helm Clinical Agility: Subtheme: Sum of the Parts Changing Tides Subtheme: Happy at the Helm	P0099 "It builds a lot of confidence, you know, practical skills that you could use to manage patients when you are a staff nurse."
	<u>Opportunities to advance knowledge and skills</u> 68.8% (n=95/138) were satisfied with the opportunities made available to them to advance their knowledge and skills required for registering as a nurse. 31.2% (n=43) were not satisfied with the opportunities made available to advance the knowledge and skills required for registration.			P0077 "I think it allowed me to see more of the role of the nurse, whereas in the other years I feel like I was just kind of in the background and doing healthcare assistant work. But in internship I was kind of pulled out of that and then I was doing more nurse work." P0088 ... "speech and language and the physio, they are all very supportive, we have to work and communicate like a team effort, there is no sole person involved in the team" P0099 ... "as the internship progressed the more I felt part of the multidisciplinary team because you yourself are taking more responsibility and you are liaising and asking when they are on the ward 'can you help me with this' and you get to know who is part of the team easier to communicate because it is all about communication"...
	<u>Setting and achieving goals</u> 71% (n=98/138) agreed or strongly agreed that there was greater emphasis on setting and achieving goals during internship than when they were on supernumerary placements. 29% (n=40) disagreed or strongly disagreed with this.			P0011 ... "I felt supported by the doctors...it does happen, and people don't bother engaging in communication because the topic might be too complex for you to wrap your intern head around you know" ... P0022 "Definitely felt more recognised when I was an intern" ... P0044 "They valued us; it was still short staffed, but they really valued intern nurses as much as we value the nurses and the CNMs as well.

No Frontier – Support with Caseload and Feeling Part of the Team

While some respondents were dissatisfied with support in managing a caseload and being part of the team, the cumulative findings demonstrated general satisfaction in these areas. From the expanded qualitative data, there were descriptions of support from multidisciplinary team members and inclusion as part of that team. From the interns' perspective, there appeared to be no boundaries (frontiers) between them and those with whom they communicated with respect to patient caseloads. Internship afforded them responsibility in caseload management, thereby enhancing their relationships with the broader team including clinical nurse specialists. Table 7.3 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 3: PIP Model: No Frontier: Support with Caseload and Feeling Part of the Team

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents support with managing the caseload and feeling part of the team, enabled the building of confidence.	<u>Support with managing the caseload and feeling part of the team</u> 71.7% (n=99/133) felt supported in caring for their caseload 28.2% (n=39) did not feel supported. 86.9% (n=120) felt part of the nursing team. 13 % (n=18) reported that they did not feel part of the nursing team. 69.5% (n=96) felt they were part of the multidisciplinary team. 30.4% (n=42) did not feel part of the multidisciplinary team.	No Frontier Converged and Expanded	Theme: Clinical Agility Subtheme: Sum of the Parts	P0088 ... “speech and language and the physio, they are all very supportive, we have to work and communicate like a team effort, there is no sole person involved in the team” P0099 ...“as the internship progressed the more, I felt part of the multidisciplinary team because you yourself are taking more responsibility and you are liaising and asking when they are on the ward ‘can you help me with this’.....and you get to know who is part of the team easier to communicate because it is all about communication”... P0044 ... “definitely like your when it’s your own patient you’re the one that’s contacting multidisciplinary team members, so I never had a bad experience am like ringing or discussing care with any other multidisciplinary team” ...
This data presents the findings for linking with Clinical Nurse Specialists.	<u>Linking with Clinical Nurse Specialists.</u> 64.5% (n=89/138) were satisfied with opportunities to link with specialist nurses when caring for patients. 35.5% (n=49) reported that they did not have enough opportunity to link with specialist nurses.			P0088“if a Clinical Nurse Specialist had come up to review a patient obviously, I would say ‘how did you get on’ and then they would give you the full handover”...“they treat you like a regular”...

No Frontier: Anxiety and Stress during Internship

Interns experienced feelings of anxiety and stress when faced with unfamiliar situations. They also lived with the fear of making a mistake. These emotions impacted the internship experience. Experiences of stress were more prevalent on surgical than medical wards, likely due to the increased workload and pressure to have patients ready for theatre. Fear, pressure, and anxiety were experienced by all interns at some stage during their 36-weeks. Internship rendered some participants very vulnerable which negatively impacted their clinical experiences. Again, in keeping with the 'no frontier' theme, it is noteworthy that even these more vulnerable participants carried on to fulfil their internship requirements and achieved subsequent registration. Table 7.4 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 4: PIP Model: No Frontier: Anxiety and Stress during Internship

Quantitative Results		Pillar building themes	Qualitative Findings	
1	2		2	1
This data represents the experience of the level of stress during internship and if it subsided as they progressed through internship.	<u>Level of stress</u> 91.1% (n=112/123) felt internship was more stressful than supernumerary placements. 61.8%, (n=76/123) reporting that they experienced less stress as they progressed through internship. 38.2% (n=47) disagreed or strongly disagreed that stress reduced as they progressed through internship.	No Frontier Converged and Expanded	Theme: Changing Tides Subtheme: The Anchor	P0066 ... "you deal with the stress of having a caseload more as an intern.....when they were ready in theatre, they wanted them there instantly almost so even though it was pressure and stressful" P0077 ... "most of my placements were team nursing apart from the last one which was a shock to the system to say the least where I had got so used to having a preceptor and having another nurse on my team it was a bit of a shock but then I got to see as well if we were short staffed how much heavier the caseload would be"...

No Frontier: Conclusion

The theme titled 'No Frontier' represented the substantive expressed experiences from the merged data taken from the two study phases. While acknowledging internship was not without difficulties, the interns demonstrated boundary-breaking resilience, determination and motivation. They had an appetite for limitless growth and learning, and to achieve their goals, they pushed through the challenges that arose, and expanded their skills. The interns immersed themselves in the clinical area and made efforts to integrate with the team and give their patients the best care possible. Therefore, this theme captured the essence of overcoming obstacles and achieving internship and subsequent registration as a nurse.

7.4 The Chameleon

Chameleons are a species of lizard that changes its skin colour to blend with its habitat (National Geographic 2013). When used in the context of individuals, it refers to someone who adapts their behaviour or beliefs, often to please others and to ensure success. This theme, titled "The Chameleon", refers to the adaptability that was required, particularly during clinical internship, where interns reported adapting their behaviour depending on the situations. Clinical areas were unpredictable and produced variable experiences. The data from both phases converged with the findings from the qualitative phase providing explanations for the quantitative data. The respondents also recounted the time-pressures they experienced, while the acquisition of non-technical skills enhanced their efficiency in service delivery.

The Chameleon: Familiarisation with Ward Practices

Familiarisation with ward practices was an important element of internship. Shorter placement allocations during internship were challenging for interns and made learning more difficult, as interns could not familiarise themselves as easily with their placement areas. Practices differed between wards depending on the patient cohort. The first internship placement enabled interns to become familiar with ward

practices, while subsequent internship placements allowed the gradual progression to enable them to manage their allocated patient caseload throughout their shift. High levels of satisfaction were reported in the quantitative phase in relation to managing admissions, discharges and referrals within their caseload. In the qualitative phase the data converged and expanded to further explain such high levels of satisfaction. As interns, they were encouraged to gain experiences with admission, discharges and referrals, and reported ample opportunities to do so.

Participants identified the advantages of changing placements throughout internship as it enabled the familiarisation with different ward practices in different specialities to gain wider clinical experiences. On the other hand, one of the benefits of spending longer in the same clinical placement during Covid meant they were more recognised by the multidisciplinary team. Table 7.5 displays the Pillar Integration Process model for the integration of these findings.

The other aspect of the chameleon and clinical agility related to the adjustment to different work patterns, including night duty, and team nursing, as opposed to primary nursing. The latter meant that interns worked as part of a team together with the other nurses in that area. While this meant additional support was available, it also reduced opportunities for independent thinking and decision-making. When those exposed to team nursing were moved to areas that used primary nursing, they found it challenging in comparison to those who had experienced primary nursing from the outset. The then interns had to be receptive to the setting that they worked in as they adjusted to the role and the different shift patterns.

Table 7. 5: PIP Model: The Chameleon: Familiarisation with Ward Practices

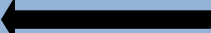
Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents familiarisation with ward practices such as recording clinical practice and managing admissions and discharges as well as associated referrals.	<u>Satisfaction with opportunities to advance skills in recording clinical practice for the caseload</u> 95.7% (n=132) were very satisfied or satisfied. 4.3% (n=6) were dissatisfied. <u>Satisfaction with opportunities to advance skills in admitting patients.</u> 97.1% (n=134) very satisfied or satisfied. 2.9% (n=4) were dissatisfied. <u>Satisfaction with the opportunities to advance skills in discharging patients.</u> 89.8% (n=124) were satisfied or very satisfied. 10.1% (n=14) were dissatisfied or very dissatisfied. <u>Satisfaction with opportunities to complete community referral documentation (e.g., Public Health Nurse).</u> 78.3% (n=108) were satisfied or very satisfied. 21.8% (n=30) were dissatisfied or very dissatisfied. <u>Satisfaction with opportunities to advance knowledge and skills necessary for registration.</u> 68.8% (n=95/138) were satisfied with the opportunities made available to them to advance their knowledge and skills required for registering as a nurse. 31.2% (n=43) indicated that they were not satisfied.	The Chameleon Converged and Expanded	Theme: Clinical Agility Subtheme: Receptivity in the face of a Pandemic and Sum of the Parts	P0033 ...“there were loads of opportunities to admit patients. Even when a patient is coming the nurse or preceptor would say ‘you do the admission,’ because the more you do, the better you become at how you ask questions and how you conduct your admission.” ...“discharge patients, in terms of transferring patients, communicating the transfer of care to another department for example, a public health nurse - you have to contact them to say this patient is going home. There were loads of opportunities in internship to do that and practice those.” P0066 ...“discharges not so much because the discharges were quite simple, and they were usually like well patients after elective surgery....on the medical side you’d see the more complicated discharges.” P0077 ...“first of all, what a night shift was like because I had never done night shifts and then dealing with acutely ill patients with even less staff and less doctors around. It was good though but then like during the day I got to see the Clinical Nurse Managers; they came to help as well, and I got to see kind of the chain (sequencing of patient management processes) you know what you do. And the Clinical Nurse Managers were so calm”... P0011...“every single ward has a different way that their day goes....they’ll write their notes differently, they do care plans differently, sometimes don’t do care plans at all, and if you are used of not doing care plans and putting everything in the notes and if you go on to a different area and you forget to complete a care plan. I think it was the most difficult part of it all”.... P0088“from first year to third year we didn’t do the full shift (only 8-5) so we were at a disadvantage from other colleagues that was a huge transition for us evenings are very busy and we didn’t get much of an opportunity to give handover until we got to fourth year so it was a bit of a jump, but you got on with it since doing long days we recognise that it is important to do the long shifts.”

The Chameleon: Recognising and managing the acutely ill patient

“The Chameleon” encapsulates participants’ responsiveness to the environment in which they worked during internship. While the research question for this study was not focused on covid-related clinical experiences during internship, there were several references to it in the data, which was understandable given the context at the time. Participants in this study demonstrated that they were adaptable and responsive to the ever changing and unpredictable clinical setting in which they found themselves. They were exposed to a unique set of circumstances, the experiences of which shaped their internship memories. The intended clinical placements did not always go to plan; some participants were left in one area for the duration of their internship, others redeployed as needed, and others were assigned only to specialist placements. Consequently, clinical learning experiences were different from expectations. However, they adapted and made the most of opportunistic learning. Exposure to clinical placement during covid was not seen as a totally negative experience, and positives were taken from it. During internship, interns gained experience in recognising and managing acutely ill patients, although there were some missed learning opportunities where more experienced staff undertook the care of these patients.

Recognising and managing acutely ill patients is an essential element of the nurse’s role. While the satisfaction level for opportunities in this area were relatively high, the qualitative findings converged and expanded to highlight that more experienced nurses would often take over the care of these patients. Some relayed the frightening experience when they first encountered such critical clinical situations, and others lacked such experience due to the ward type with interns having less opportunities on elective wards. Table 7.6 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 6: PIP Model: The Chameleon: Recognising and Managing the Acutely Ill Patient

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents the experiences and level of satisfaction with recognising and managing acutely ill patients.	<u>Recognition and Management of the Acutely Ill Patient</u> 85.5% (n=118/138) agreed that they felt internship provided opportunities to advance knowledge and skills in this area. 14.4% (n=20) reporting a lack of opportunities in this regard. 94.2% (n=130/138) reported that internship provided opportunities with this more so than supernumerary placements.	The Chameleon Converged and Expanded	Theme 3: Clinical Agility Subtheme: Receptivity in the face of a Pandemic	P0022 ...“it was mainly elective patients so critically ill patients weren’t there that often on our ward.” P0033 ...“if ever there, where they would go to the more experienced nurses.” P0055 “I also felt a little excluded from the acutely ill adult as an intern..... I suppose there were others and maybe they were managed better”..... P0066 “I actually didn’t get much experience of that on my internship..... it was mainly elective patients so critically ill patients weren’t there that often on our ward..... if ever there, where they would go to the more experienced nurses”..... P0077 “I had two or three in internship, and I was terrified all those three times I probably still not now, but I think I am more calm”.....

The Chameleon: Time Management

The Chameleon represents the manner in which participants adjusted their ways of working in the presence of time pressures. Time was a major issue that was identified in both datasets. The data converged and expanded in the qualitative phase to enhance the understanding of time as an inhibitor and enabler during internship. In the quantitative phase, high levels of satisfaction were reported with the acquisition of non-technical skills and the qualitative data further expanded to explain the rationale for this, but also highlighted the struggles encountered on their way to achieving this skill.

The value of time was realised in internship, as was identified in the theme 'Entangled in Time'. Balancing care delivery while still learning was a significant time challenge. The requirement of non-technical skills was quickly realised, and this was not appreciated in the supernumerary years. Time pressures were recognised as a reality of nursing and achieving non-technical skills assisted their progression in internship as they delivered care independently.

Time was a friend and a foe in equal measures during internship. There were descriptions of a constant race against time, balancing learning with the independent delivery of care meant that as interns they had to adopt skills like time management and prioritisation, skills not focused on in the supernumerary years. On the other hand, with the gift of time, things became easier in terms of adapting, gaining experience, growth, and development. Time management is important in all work, but for nursing, where the sequencing and management of care is time-dependent, it is critical. For the participants in this study, it felt like time was always in short supply, a contrast to the experience they had as supernumerary students. The delivery of care at an independent level inevitably took more time for interns than their registered counterparts. However, positive descriptions were noted about how, over time, their skills improved during internship because of the need to manage time demands. In this way, time was a friend, meaning that it allowed for

rehearsal and adjustment, thereby making processes and daily tasks easier. Furthermore, it was noted that a learning vacuum seemed to exist between years one and three, and this changed dramatically in year four. Table 7.7 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 7: PIP Model: The Chameleon: Time Management

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents the level of satisfaction with the acquisition of clinical skills.	<u>Acquiring non-technical skills</u> 93.5% (n=129/138) were satisfied or very satisfied with the opportunities to gain competence in planning and organising patient care 6.5% (n=9) were dissatisfied or very dissatisfied with this. 92.7% (n=128/138) were satisfied or very satisfied with the opportunities to gain competence in prioritising patient care. 7.2% (n=10) were dissatisfied or very dissatisfied with this. 87.7%, (n=121/138) were satisfied and very satisfied with the opportunities to gain competence in time management 12.3% (n=17) were dissatisfied or very dissatisfied.	The Chameleon Converged and Expanded	Theme: Entangled in Time	P0033 ...“on one of my internship placements... a patient was going for a surgical procedure and after handover I had gone off and done the routine, the bed baths, the routine, what I thought was the first thing on the list, and the porter came for the patient and my patient wasn’t ready because I hadn’t done my pre op checklist.” P0066 ...“you are not as capable at it, so you learn then how to prioritise what to prioritise.” P0077 ...“my prioritisation got really good.” “I think it kind of showed me the reality of nursing, not that it should be the reality, but that there are days where your caseload is going to be big or difficult and you just have to prioritise and manage your time and just put all these things that you learnt into practice... So, it used to take me about 45 minutes to do an admission but probably get a good one done in 10-15 minutes now.” P0044 ...“internship really gets you prepared for time management because you are taking on your own six patients where you never would before that.” P0066 ...“Certainly, got a grip on it you have elective surgeries, getting them organised and getting their admissions ready, that was good for time management.....that was something that was pressure on time, when they had to be in theatre by a certain time.”

The Chameleon: Reflective Practice

“The Chameleon” captures the importance of reflection and its role in enabling the interns to understand and develop better ways of managing situations when they are encountered again. During internship, interns were required to engage in twenty hours of structured and formal reflective practice. This offering is used to support interns in their adaptation to working at an independent level and to help them grow and develop during their 36-week internship. The process also supports their understanding of their clinical experiences and helps consolidate learning. The opportunity to present and discuss clinical scenarios with facilitators and peers assisted in making sense of certain situations and enabled understanding for managing these or other similar situations in the future. Reflection was a practice that was continued by many, as they recognised the benefits it offered. Reflection assisted in the realisation of the bigger picture and supported comprehending situations from other perspectives, thereby broadening their knowledge base for future encounters.

Reflection fostered learning from peers and assisted in the realisation that their experiences were similar, thereby averting the feeling of loneliness in learning. The understanding and value of reflection became clearer during internship. In the supernumerary years, reflection was viewed as another assignment that was often challenging to complete. However, in internship, the importance of reflection became apparent and the value in terms of learning from practice and experiences was evident. Table 7.8 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 8: PIP Model: The Chameleon: Reflective Practice

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents experience s of reflective practice during internship.	<u>Reflective Practice</u> 69.1 % (n=83/120) agreed or strongly agreed that reflection was a beneficial component of internship. 30.9% (n=37) disagreed or strongly disagreed with this. The respondents outlined how structured reflection was beneficial during internship based on suggested responses; they could select more than one. Enabled me to share experiences with colleagues in a safe environment (n=64). Realised colleagues had similar experiences to myself (n=55). Learnt from the scenarios presented (n=51). Enabled me to deal with situations presented as they arose in clinical practice (n=45). Gained solutions from the scenarios to similar situations that I encounter (n=36). Identified the importance of resilience and coping strategies (n=39). Identified the importance of self-awareness (n=46). Identified the importance of communication skills and applying particular methods to particular situations (n=43). Further consolidated my learning and linking theory to practice (n=37)	The Chameleon Converged and Expanded	Theme: Clinical Agility Subtheme: Receptivity in the face of a Pandemic	P0099 “you could speak open and freely with how you felt as part of reflection and then give an outside perspective, and also you are with your peers, and it is so beneficial. We would have only been in then to hear about other people’s experiences to talk about them so candidly what they would do differently with the Gibbs model, so I really enjoyed when we had reflection”.... P0044 ... “usually most of the other nurses would have had similar experiences like you know so I think really the reflection classes were really good I found, and it was really nice to discuss things and then you learn from others in the group” ... P0077 ... “it would be more beneficial I think if we were able to reflect with somebody else”. P0022 ... “I thought it had to be something major that happened that you’d have to reflect on but no it was later on that I realised that it could be as simple as having a conversation with a patient” “I only understood that by reflecting upon it you are able to understand, know exactly what happened and why it happened and if you were feeling in some sort of a way why you were feeling in some sort of a way” ...

The Chameleon: Conclusion

To summarise, as interns, the Newly Qualified General Nurses found that ward practices varied from placement to placement during internship, depending on the type of ward and patient. Every ward had a different routine, and this necessitated adjustment and flexibility so that they could make the most of the opportunities available to them. Reflection was a support and a practice that they enjoyed, and learning from each other was beneficial. This was a practice that some maintained as registered nurses as they realised the benefits of reflection during internship that might not have been fully appreciated prior to that. The presence of the coronavirus pandemic impacted internship experiences as clinical areas became unpredictable. However, the interns adjusted and adapted to manage the ongoing situation. Interns had higher caseloads and had to adapt quickly to the ever-changing environment.

7.5 Professional Socialisation

Professional socialisation is the third theme that emerged from the data integration and the final theme presented in this chapter. Professional socialisation refers to the culture, values, and attitudes in a healthcare organisation. The values of an organisation are not necessarily aligned with the ideals, which are often set out as a policy document. Where a positive culture is present, student learning and satisfaction levels are enhanced. Professional socialisation in nursing refers to understanding the culture on the ward and familiarisation with ward practices. Participants in this study described the advantages of being accepted as a learner into the clinical area, learning from mistakes, and receiving advice and guidance that helped prepare them for the nurse's role. There were positive and negative experiences, but adapting to the culture, fitting in, and playing by the rules helped with negotiating internship for many. The data converged and expanded as the qualitative data explained the quantitative findings.

Professional Socialisation: Support from Clinical Placement Coordinators and the Higher Education Institutes

Professional socialisation is enhanced by support. Support in the clinical setting was important for learning, and knowing that they had assistance and guidance available, helped them to learn during internship. The support included nurses/preceptors, ward managers (CNMs), Clinical Placement Coordinators and the multidisciplinary teams.

The Clinical Placement Coordinators are a support for students in clinical practice. In the quantitative phase, support from Clinical Placement Coordinators was mostly positive. The Clinical Placement Coordinator role is not ward-based and can be misunderstood in terms of expectations. In the qualitative phase, the data converged and expanded to demonstrate the benefits of the Clinical Placement Coordinator role in supporting students in clinical practice. The expectations placed on Clinical Placement Coordinators revealed some misunderstanding of the role. The Clinical Placement Coordinators are linked to the Higher Education Institutes and support from Higher Education Institutes was acknowledged in the form of the link lecturer role. Table 7.9 displays the Pillar Integration Process model for the integration of these findings.

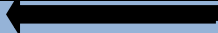
Table 7. 9: PIP Model: Professional Socialisation: Support from Clinical Placement Coordinators and Higher Education Institutes

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		1	2
This data represents the level of satisfaction with the Clinical Placement Coordinator.	<u>Support from Clinical Placement Coordinators.</u> 69.1% (n=85/123) were very satisfied or satisfied with the level of support from the Clinical Placement Coordinators during internship, but 30.9% (n=38) were dissatisfied.	Professional Socialisation Converged and Expanded	Theme: Clinical Agility Subtheme: Sum of the Parts	P0055“they don’t work for the student, they work for the hospital, they work for the staff, they see the same staff day in and day out, they want to make the staffs’ life as easy as possible and they do not want any kind of negative feedback from the student; they don’t want to solve problems, they don’t want to educate”... P0066“CPCs keep a check on you to make sure you are meeting all of the goals”... P0077 ...“CPCs, all of the ones that I had, they were great....I felt hugely supported”... P0088 ...“if we were in doubt we did have the CPC to rely on and they were very supportive to me anyway they were very supportive.....the CPCs especially very good and supportive to us, like they came round to us every day, made sure that we were assigned somebody... you weren’t thrown out by yourself, not looked after.....they would teach what you are missing and also ensure that you are fully aware of what is going on or if you are in doubt they would encourage you to do the right thing”... P0099 ...“ what we always did with the CPC... we always did case studies, and we went through them, and I found them much more valuable”...
This data presents the level of satisfaction with Higher Education Institute support during internship	<u>Support from the Higher Education Institutes</u> 47.2% (n=58) felt well supported. 52.9% (n=65) were dissatisfied.			P0088 ... “we did have the link to our college and link lecturers to each hospital where we were based”

Professional Socialisation: Support from Clinical Nurse Managers and Debriefing

Support from nurses was mostly positive but this was hampered by staff shortages posed by the Covid pandemic. Ward managers were idealised by most interns who admired the CNMs' level of skills and expertise. Approachability was vital, based on the level of satisfaction reported. Support through debriefing was often lacking, and although the interns are considered part of the nursing workforce, they were not always included in debriefing sessions after traumatic events. Table 7.10 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 10: PIP Model: Professional Socialisation: Support from Clinical Nurse Managers and Debriefing

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents support from Clinical Nurse Managers and through debriefing during internship.	<u>Support from CNMs</u> 75.6%, (n=93/123) satisfied or very satisfied with the level of support 24.4% (n=30) were dissatisfied or very dissatisfied with the level of support <u>Support through debriefing</u> 45.7% (n=63/138) agreed or strongly agreed that when stressful events occurred during internship, there were sufficient debriefing opportunities 54.4% (n=75) disagreed or strongly disagreed	Professional Socialisation Converged and Expanded	Theme: Clinical Agility Subtheme: Sum of the Parts	P0099 ...“the biggest impact of the managers had on my learning...you could approach them with a deteriorating patient”... P0055 ...“and there were some really supportive CNMs who on occasion could see that I was struggling and became very valuable to me and got me through”... P0011 “I felt really ill prepared in the sense that if you don’t encounter something while on your internship you don’t do those skills independently” ... “there’s no list of skills that you need to know that you can tick off or do you know when you are going out as a registered nurse it’s terrifying because the sky is the limit” ... P0011 ... “if something traumatic happens on a ward intern aren’t always involved in that debrief the same way staff would be” ...

Professional Socialisation: Preceptorship

Preceptorship was an essential part of internship. The interns became competent practitioners through experience gained working at independent level and consolidating their learning. Preceptorship is part of the nurses' role however, positive and negative experiences of working with preceptors were reported. The qualitative phase identified that the willingness of the preceptor to teach influenced the level of satisfaction. Sometimes, the relationship between the student and the preceptor was complicated or challenging and they both need to be cognisant of that. Positive experiences resulted in lasting and transferable knowledge and understanding. Furthermore, preceptorship was essential for overseeing the care delivered by the intern and valuable conversations enhanced understanding and learning. The provision of feedback is a core role of the preceptor. Interns require feedback and competency assessment to progress and attain registration. As interns, support with and from each other was highly satisfying. Table 7.11 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 11: PIP Model: Professional Socialisation: Preceptorship

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents the support from preceptors during internship.	<u>Preceptorship</u> 57.7% (n=71/123) felt that they had good access to supervisory support, 42.3% (n=52) felt dissatisfied. 65.1% (n=80/123) were satisfied or very satisfied with the support from their preceptors. 34.9%, (n=43) were dissatisfied.	Professional Socialisation Converged and Expanded	Theme: Clinical Agility Subtheme: Sum of the Parts	P0077 ... "If a nurse just didn't really want a student with them" P0055 ... "staff nurses perhaps they were so overwrought with their own work that you just they just weren't always available and they weren't always supportive"... P0055 ... "Am, the most valuable experiences I would have had would have been one-on-one with dedicated nurses who opened themselves up to teaching.....one nurse sitting down with me and started writing out her sort of routine for the day-at what time she tends to have certain skills or certain jobs done by.... she was one out of how many nurses that I came across that spent that time with me doing that, before that it was off you go" ... P0022 ... "some of my preceptors were really good and they were really helpful and that really stuck with me" ...
This data represents support from intern colleagues.	<u>Support from intern colleagues</u> 98.4% (n=121/123) were satisfied or very satisfied			P0066 ... "at the start I think I felt there was four of us students on the ward at the time at the start I think I feel like you're one of the students and we kind of stuck together"

Professional Socialisation: Feedback on Performance

Feedback is an important element of learning, indications of achieving the required level of performance and reinforcement of acceptable performance; all of these are important for progression. During internship, the prioritisation of feedback for interns was lacking. Feedback on performance was inconsistent, and time pressure, among other factors meant that feedback was not provided regularly. Negative feedback can be difficult to deliver, and the anticipation of the response can be a challenge for preceptors, as was acknowledged by one participant. In the absence of feedback, the interns assumed that their performance was acceptable. The progressive nature of internship meant that interns acknowledged and identified that their skills improved and broadened as time progressed. Table 7.12 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 12: PIP Model: Professional Socialisation: Feedback on Performance

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents the consistency of feedback and the level of satisfaction with it.	<u>Frequency and quality of feedback</u> 65.3% (n=79/121) identified that they only received feedback on their progress during their clinical competency assessment meetings. 19.8% (n=24) received feedback every week. 14.9% (n=18) received feedback on every shift. 72.7% (n=88/121) reported receiving helpful feedback during internship. 27.3% (n=33) disagreed or strongly disagreed feeling that the feedback was not helpful.	Professional Socialisation Converged and Expanded	Theme: Clinical Agility Subtheme: Sum of the Parts	P0011 ... "There wasn't a lot of opportunity for feedback..... I wouldn't have a problem with someone telling me I need to do something better, but I would expect that they would expand on it in some way shape or form I don't think there is any point in telling someone that they are not doing something well if they don't equip them with how to do it better..... it is an awful blow to your confidence I think if we could facilitate feedback more or possibly involve the CNMs more too" P0022 ... "comments given to you during the end of the week.... there was no time for it to be said to you..... every week we needed to get two comments... most of the time your preceptor would write you are communicating really well, or you are doing really well you will make a great nurse" P0088 ... "The nurses were always very good to tell you how you were getting on" I found it can tell you where you are doing well and where you can improve, in a way not there always... was not consistent but there was always feedback" mainly positive feedback they would feed you more frequently rather than negative they probably would do because you don't know how the other person is going to take it" "I would pick it up as no news is good news"

Professional Socialisation: Medication Management, Doctors' Ward Rounds and Shift Handover

The data from both phases converged with further expansion in the qualitative phase that explained the rationale for the moderate level of satisfaction with gaining experience in some essential skills such as medication management, doctors ward rounds and handover. The availability of time, or lack thereof, compounded the opportunities to participate or gain experience in doctors ward rounds and medication management, which are essential learning opportunities for preparing for the role of the nurse. Shorter shifts in supernumerary years meant that some rarely if ever got experience of handing over, and to do so for the first time during internship was a steep learning curve. Table 7.13 and 7.14 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 13: PIP Model: Professional Socialisation: Medication Management, Doctors' Ward Rounds

Quantitative Results		Pillar building themes	Qualitative Findings	
1	2		2	1
This data represents experience of medication management, doctors ward rounds during internship.	<u>Medication Management under Supervision</u> 52.1% (n=72/138) were satisfied or very satisfied. 47.9% (n=66) were dissatisfied or very dissatisfied with this. Those who were dissatisfied or very dissatisfied with participation in medication management under supervision on average participated in this activity; once per week (64%, n=48/75), once per shift (29.3%, n=22) and (6.7%, n=5) done all drug rounds in their section. <u>Doctors' Ward Rounds</u> 55.8% (n=77/138) were satisfied or very satisfied. 44.2% (n=61) were dissatisfied or very dissatisfied. Frequency of participation in the ward rounds. In total eighty-five responded, (22.4%, n=19) once per week, once per month (20%, n=17), attended ward rounds on all shifts (9.4%, n=8), 48.2% (n=41) chose the other option and identified that they rarely attended ward rounds (n=14), (n=3) attended twice in the entire internship (n=3), never done ward rounds (n=16), reported that the ward manager done the ward rounds (n=5).	Professional Socialisation Converged and Expanded	Theme 2: Entangled in Time	P0033 ... "it gave me the opportunity to actually do the medication rounds with supervision." P0044 "I would have liked to have participated in more medication rounds, that was down again to time management and the nurse...the morning medication round is quite important ...a lot of the time it would have been the evening medication round that we would do together which was better than nothing." P0055 ... "the opportunities that I did get ...I felt I learnt quite a lot quite quickly and medication never seemed to be an issue for me." P0077 "medications were something that I was really struggling with going into internship and I think it was like the last block I felt everything clicked together with the medication round." P0033 ... "the time to go with the doctor if they are in your bay, you can eavesdrop or go in but if they leave your area of work and go into another room, for example, I wouldn't say the luxury of time, you don't have that time." P0066 " I had a couple of experiences doing the doctors' rounds...it was kind of intimidating and daunting as an intern because you wouldn't know as much...when the doctors go and the patients are of course asking questions on what the doctors had said and stuff like that so it's definitely good experience going around with the doctors' rounds and I think I had a good bit of practice with that."

Table 7. 14: PIP Model: Professional Socialisation: Shift Handover

Quantitative Results		Pillar building themes	Qualitative Findings	
1	2		2	1
This data represents the experience of giving shift handover during internship.	Shift Handover 81.9% (n= 113/138) were satisfied with the opportunities of giving shift handover to the nursing team. 18.1% (n=25) were dissatisfied with this. 12.4% (n=24/46) dissatisfied respondents gave a shift handover once per week. 6.7% (n=13/46) once per shift 4.7% (n=9) once per day. Two reported giving shift handovers once every couple of weeks. One respondent reported that the opportunity to give shift handover arose twice in the 36 weeks.	Professional Socialisation Converged and Expanded	Theme 2: Entangled in Time	P0044 “giving handover at the end of your shift was another daunting experience but you know after you do it a few times it becomes normal I was always allowed to give handover..... the morning handover is much different to the evening shift handover, so I definitely think like doing the night shift and doing morning handover is really important.... like you are kind of waiting for the questions that are going to come at you”..... P0099 ...”when you are handing over to the night staff would ask was this done, and you were like oh right I didn’t realise that should have been done”... P0033 “The opportunity is there it takes a lot of practice.” ...“knowing how to give handover it’s a skill you don’t just get in the internship time it’s something that you build up on as you practice”... P0077 ...”in internship we always finished the full shift whereas when I started in the HEI (supernumerary) we had three short days and only one long day and I rarely got to give handover. I still remember giving my first handover in internship and I was sweating like I would rather do the whole day again than having to give the handover.. it was so bad, but one of the nurses said you just need to keep doing it and she really pushed me ...that was a real help”...

Professional Socialisation: The Value of Internship

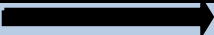
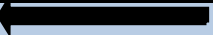
The value of internship included, in particular, the experience of delivering care at independent level, as well as the realisation and development of essential non-technical skills such as planning, organising, prioritisation, and managing patient care for when they became registered nurses.

In the quantitative phase, the level of satisfaction was high in relation to the value of internship. The qualitative data converged and expanded on this. Although it was generally considered a good nine months, one participant identified that they did not feel ready at the end of internship and identified how the role of nurse differs in reality. Others, however, felt the internship experience had prepared them for the role of registered nurse and that it would be difficult to transition without the internship opportunity.

The value of internship in preparing interns for the role of registered nurse was emphasised. The ability to refer to experiences from internship enabled them to deal with similar situations as a registered nurse. The experience of care delivery during internship generated confidence in their ability to manage as a registered nurse.

Overall, there were mixed impressions on readiness for practice, but most participants felt ready, recognising the value of internship in preparing them. Table 7.15 displays the Pillar Integration Process model for the integration of these findings.

Table 7. 15: PIP Model: Professional Socialisation – The Value of Internship

Quantitative Results 		Pillar building themes	 Qualitative Findings	
1	2		2	1
This data represents the value of the internship period.	<u>Value of Internship</u> 98.3% (n=110/112) agreed or strongly agreed that internship is a valuable placement for nurse education and training. 95.6% (n=107/112) agreed or strongly agreed that the internship period was extremely valuable in preparing me for working as a newly qualified nurse. 50% (n=96) Enabled me to gain clinical experience at independent level with support of preceptor 48% (n=92) Enabled me to deliver patient care independently 36% (n=69) Enabled me to link theory to practice 96.4% (n=108/112) strongly agreed and agreed that Internship helped prepare them for transitioning to registered nurse, more than supernumerary placements.	Professional Socialisation Converged and Expanded	Theme: Clinical Agility Subtheme: The Sum of the Parts	P0088 ...“I don’t think you would ever be ready. No, it was a good nine months like when you compare yourself to the first month the last month you are completely different”.....I found being stuck in the wards is how you learn it, well that is how I learn it, it is very different because everything is so rosy in the books...when you are out there it’s so different”... P0033 ... “I gained some skills from internship that prepared me for being a registered nurse” “internship gave me real life experience on the ward....it does prepare you”... P0066 ...“I did get better as I got along, and I think once I qualified then I was continuing to get better at it and like I was a hundred percent at it”... P0099 ...“yes, I do in the aspects I don’t think you would go into the role without it” ... P0033 “Internship gave me real life experience on the ward.....it does prepare you” ... P0044 ...“really get you involved as an intern with that so then when you are registered you are not saying this is something I can’t do now even though I’m registered” ... P0077 ... “I was nervous of course but I just kept thinking back to that last placement how ok I felt looking after my own group of patients doing all the meds you know without having to ask someone you know is this ok” ... P0099 “I was shocked when I first put on my staff nurse uniform and everyone kind of treats you a bit differently, everyone in the break room is asking you what you are doing for the weekend type of thing” ...

Professional Socialisation: Conclusion

The theme “Professional Socialisation” represents aspects of adjusting to the role of intern and how familiarisation with the nurse’s role assisted interns’ progression. Support and feedback were critical to this progression although not always available. Feedback on performance is not only an important part of assessment, but also a key element of support in the development of the intern. The interns felt their performance improved over time, as they gained more experience working independently. Welcoming and belongingness are attributes of professional socialisation. Welcoming interns and learning their names were simple examples of behaviour that helped them feel part of the team. Overall, the experience of preceptorship varied but was mainly positive. While independence was essential for experiencing the delivery of patient care, time pressure meant interns sometimes missed out on learning opportunities such as doctors’ rounds, medication rounds and learning to manage acutely ill patients. Furthermore, independent practice meant that interns handed over their patients at the end of shift, a skill that most had not practiced in supernumerary years and became a dreaded moment at the end of a long day or night during internship. Clinical decision-making skills were practiced in internship but, again, some interns missed opportunities in relation to managing deteriorating patients where nurses that are more senior relieved interns. The importance of planning and organising, time management, and prioritisation, were skills that were only realised in internship. In addition, internship enabled the development of essential clinical skills and timely intervention, particularly in relation to the deteriorating patient. During internship, interns realised the value of these skills.

7.6 Conclusion

This chapter presented the integration of findings from the quantitative and qualitative phases of the study. The data from both phases were integrated using the Pillar Integration Process Model. After integrating the data three themes were identified, which summarised newly qualified general nurses’ experience of their internship.

The theme “No Frontier” depicts the manner in which the then interns overcame the boundaries during internship to progress to the role of registered nurse. The findings from phase one underscored the critical role played by preparation for internship. Although most participants received some form of preparation, there was a degree of uncertainty in relation to the expectation of interns in internship. In some locations, guidelines were available, but they were often unclear. The level of satisfaction with the adequacy of internship preparation varied, with most participants reporting that they felt insufficiently prepared for their internship. The primary conclusion in relation to preparation for internship is that both the type and adequacy of preparation for internship matters to ensure that interns understand what is expected from them and that they are clear about their role and the objectives of internship. Therefore, preparation is the key to success in the internship experience.

In relation to the experience of clinical skills acquisition during internship, the findings indicate the importance of self-motivation to overcome the boundaries (frontier) and achieve successful learning. The study found that the internship period/ or experience assisted in the consolidation of learning and provided opportunities for advancing knowledge, developing skills and setting and achieving goals. However, this presented the participants with the challenge to either ‘sink’ or ‘swim’, and in that decisive moment to ‘swim’, the interns took charge of their own learning. Interns who demonstrated enthusiasm were encouraged by nurses and preceptors, and where interns did not show interest in learning, no additional effort was made by the staff nurse to encourage learning. These findings highlight the critical role of self-motivation in maximising the learning experience and opportunities provided during internship. Confidence in communicating with family members was achieved most during internship. Experience to link with specialist nurses regarding the plan of care was achieved by most during internship.

The theme “The Chameleon” portrays the requirement of interns to be adaptable in order to deal with situations encountered in the clinical setting. Balancing competing care needs of patients required a patient-first approach, often at the loss of other

learning opportunities. The opportunity to recognise and manage acutely ill patients was not always available due to the ward type. In wards where this was available, those patients were managed by more senior nurses. This valuable learning opportunity for interns needs to be acknowledged, and opportunities should be made available for interns to co-manage these patients with senior nurses. The acquisition of non-technical skills such as planning and organising, prioritisation, and time management received positive evaluation, and these skills were only recognised in internship when the interns had to manage their own caseload. Managing the caseload independently provided them with opportunities to experience the delivery of care and the challenges in clinical practice as well as, finding ways to deal with them effectively and efficiently. Interns reported very high levels of satisfaction with recording clinical practice, particularly admissions and discharges, as well as community referral, and these were more prominent on some wards than others due to the nature of the patient. Reflective practice was deemed a value component to internship by most, as reflection helped them to understand situations and how to deal with the situation if they encountered it again.

The theme “Professional Socialisation” refers to the development of the professional identity of nursing students created within the workplace based on the culture of the clinical setting. The culture of the clinical learning environment dictated the support the students received. During the Covid period, staff shortages led to lower levels of support for interns and the burden was often felt when their caseload increased. Some preceptors were more welcoming than others, and some experienced the lack of willingness by the preceptor to have students work with them. Clinical Placement Coordinator support was mainly positive but not in all cases. However, the beneficial support from Higher Education Institutes was widely acknowledged. Support from Clinical Nurse Managers was highly rated with an admiration for their skills and experience in dealing with situations when support was requested, and Clinical Nurse Managers were mostly approachable. Likewise, the findings indicated the valuable learning gained during internship from ward managers, particularly when they approached them with deteriorating patient scenarios. Interns were not always included in debriefing sessions after traumatic events. The interns felt the pressure

and increased levels of stress during internship with some experiencing less stress as internship progressed. The main stressors were caseload and managing time to ensure efficiency of service. Most felt that they were a part of the team, noting that some were labelled “student” as opposed to their own name, despite being part of the workforce. As internship progressed, they felt more part of the multidisciplinary team as they collaborated regarding their allocated patients’ care. In addition to the adaptation related to covid, participants also described their need to clinically adjust in other ways, including to the changes of preceptor and ensuring their competency documentation was completed, which was often challenging because of time and ward pressures.

Time was an intruding factor on interns’ ability to undertake medication rounds particularly in the morning and doctors’ ward rounds and learning essential skills to recognise and manage deteriorating patients. However, interns needed to decide between prioritises and routine to avail of the learning opportunities, in particular medication management and doctors’ ward rounds. During internship, giving shift handover was a challenge for some interns as it was sometimes their first time doing so. The very thought of presenting to nurses became a daunting experience but a skill that with practice, they improved on and, in many cases, continued to improve that skill as they progressed into their role as registered nurse. Performance related feedback was not always readily available with no structured processes in terms of timelines for delivering it. Students guessed that if there was no feedback they were performing adequately.

Internship was viewed as valuable for professional socialisation, gaining skills in the real world as opposed to classroom-based learning. This experience enabled the interns to experience and understand the role of the nurse and the vastness of what that role entailed. Internship experience provided interns with experiences that were not noticed during supernumerary placements and opened their eyes to the skill and ability required of the registered nurse.

Overall, this study has demonstrated the role of internship in preparing the interns for transition to practice as a registered nurse. The experience of managing a caseload independently all the while having support in the background was deemed very valuable for preparing them for transition to the role of registered nurse. Almost all participants reported that internship helped prepare them for transitioning to registered nurse, more than supernumerary placements did. They also claimed that experiences in core skills such as medication management, handover and the experience and realisation of the importance of non-technical skills were among the most valuable experiences gained.

This chapter presented the findings from integrating the data on internship's role in preparing newly qualified general nurses for practice. The next chapter discusses the findings under these themes in the context of previous literature.

Chapter 8 Discussion

... “the contemporary new graduate engaging in a professional practice role for the first time is confronted with a broad range and scope of physical, intellectual, emotional, developmental and sociocultural changes that are expressions of, and mitigating factors within the experience of transition”

(Duchscher, 2009; p. 1103)

8.1 Introduction

The findings from this mixed methods research study revealed that while internship is beneficial and useful for nursing students to support their preparation for registration, it is far from perfect. As it currently stands, it is unstandardised, inconsistent and largely dependent on the ethos of the clinical area and staff within it. Internship experiences are also dependent on the motivation of the student involved. Of particular note, internship was deemed particularly beneficial relative to the previous three supernumerary years during which time the students appear to be somewhat disengaged. Some skills not realised in supernumerary years were vital for internship and the role of registered nurse. This raises questions about the value of supernumerary clinical placements, which is something of an unknown. Internship offerings included feeling like a nurse, starting to think like a nurse, and assimilating into the culture and world of nursing. This section will discuss the main findings and present them in light of other published studies. The theoretical work of Benner and Duchscher are referred to throughout the chapter to contextualise the findings. This chapter is presented by the three themes that emerged from the integration of findings; No Frontier, The Chameleon and Professional Socialisation.

8.2 No Frontier

This study revealed that there were no limits (no frontier) to the intern's role, as they were employed as part of the nursing workforce to deliver care independently and consolidate their learning. The study identified that motivation and determination were required to succeed without limits, and if these were absent or lacking, there was a risk of 'sinking', as one participant worded it. The demonstration of enthusiasm for working prompted staff nurses and preceptors to assist interns with learning opportunities. Reciprocally, where enthusiasm was lacking, so too was encouragement. The social context influences an individual's values and their intrinsic motivation (Sansone and Harackiewicz, 2000). Moreover, interactions with work colleagues, or appreciating that one's work will affect others, can create more interest and enjoyment, consequently increasing intrinsic motivation to accomplish the goal (Sansone and Harackiewicz, 2000). However, other researchers maintained that motivational factors are not dependent on workplace engagement

alone (Newton et al., 2009). Motivation is influenced by workplace dynamics and the level of participation by students in workplace activities (Billett, 2006). Therefore, workplace dynamics can positively or negatively affect motivation (Newton et al., 2009). Some consider intrinsic motivation as a fixed trait (Tranquillo and Stecker, 2016). However, the self-determination theory claimed that there are ways to influence intrinsic motivation (Dweck, 2007).

Competence is attained as goals are achieved and the positive impact on the environment are observed (Tranquillo and Stecker, 2016), in this case, the opportunity afforded by internship to independently deliver quality care to patients and achieve learning outcomes. Positive relationships foster engagement, and intrinsic motivation also influences extrinsic rewards (Tranquillo and Stecker, 2016). Quality clinical learning environments that promote positive relationships increase interns' motivation to become successful in achieving registration as a nurse. Reminding students that a growth mind-set is important for the learning process and that challenges are a natural part of it (Dweck, 2007) can be helpful in supporting them to manage the challenges they face as they strive to succeed (McComb and Kirkpatrick, 2016). Immersion in the real world assists the learner to comprehend and manage their learning of new skills and practices (Benner, 2022). Final year nursing students and newly qualified nurses are considered the most motivated and capable learners that still require experience (Benner, 2022).

While there were no frontiers or boundaries perceived by respondents in this study, preparation was required to enable them to transition from supernumerary to intern status. This study identified that preparation was key to success, and it is known that successful placements are determined by preparation (Copley and Dancza, 2018). However, in this study, it was explicit that the level and adequacy of pre-internship preparation varied nationally, with no specific national standardised approach available to guide pre-internship preparation. Undergraduate nursing students hold a supernumerary status when they complete placements in years one to three. This experiential learning is also considered as a method of preparing them

for the final internship period. However, a study in Australia identified that often students on supernumerary placements do not realise the significance of their actions or in-actions (Davies et al., 2022). The knowledge and experience attained in the supernumerary role is not as effective as that gained through the allocation of responsibility to manage scenarios and maintain ownership for their decisions and the associated outcomes (Davies et al., 2022). This may have been a contributing factor as to why some interns did not feel prepared for internship. This leads to a recommendation regarding an evaluation of supernumerary placements and their value in preparing nursing students for internship.

The most prominent method used to prepare interns for internship was the provision of internship information as part of the year four induction. Other methods used to prepare interns included a bespoke orientation internship programme delivered by the clinical partner. However, some did not receive this preparation, and this may have resulted in some interns having a limited understanding of their role and expectations during internship. Pearce et al., (2022) acknowledged how the contribution of pre-registration education, with effective practice placements, leads to the development of students that are confident and competent, thus generating a workforce that is seamlessly integrated into healthcare teams. Furthermore, orientation programmes increase the interns' comprehension of professional nursing (Akeel and Kabeel, 2023) and the policies and procedures within the healthcare organisation (Althaqafi et al., 2019). In the United States, a new patient care internship programme enrolled interns/students on the health service new employee orientation programme, so that they could experience orientation in the professional context (Roush et al., 2021). This method was positively evaluated as it enhanced the interns' understanding of the healthcare organisation (Roush et al., 2021). This is in keeping with the findings from the current study where interns who had experienced an induction to the programme rated it positively. This has important implications for practice as well-informed interns and employees are more likely to adhere to policies, procedures, guidelines and the required standards of care if they have been well versed on them. This leads to a recommendation of

providing internship nursing students with an orientation as they become employees of the health service.

In this study it was found that most interns had clear guidelines for their learning, although this was not the experience of all. The absence of clear guidelines may have contributed to a perceived lack of understanding of what was expected from interns during the internship period. Studies in Saudi Arabia reiterated the importance of clear guidelines for learning with clear guidance for interns to ensure a successful internship that progressed the learner from a novice to advanced beginner to achieve proficiency in managing patient care (Althaqafi et al., 2019; Bahari et al., 2022). In Ireland, the internship period aims to progress the interns from advanced beginner to competent level (NMBI, 2019; 2023). Benner (1984; 2004) considered the newly qualified nurses, at advanced beginner level where they require mentorship and support as they learn to manage the caseload. These graduates are expected to progress to competent practitioner as a registered nurse which can be a stressful time for new graduates as they learn and develop (St-Martin et al., 2015). In Ireland, graduate nurses have already achieved a competent level during the 36-week internship programme. Nevertheless, they still require support as newly qualified general nurses, and most hospitals provide a local transition to practice programme to support them as they adjust to the role of registered nurse.

The current study also explored whether the interns' expectations for internship were met. While most reported that internship met their expectations, a minority (29.5%) felt that it did not. This finding contrasts with a previous study where half of the nurse interns expressed limited knowledge of role perception, and three quarters expressed a knowledge deficit of role transition (Elfatah et al., 2021). However, role transition perceptions are likely to vary between individuals and a one size fits all ideal would be unrealistic, with many variables to consider. One Swiss study revealed that a small number of the newly qualified nurses' expectations were met one year after registering (Koppitz et al., 2024). Internationally, studies identified that graduate nurses reported that they did not feel fully prepared for the role

(Gardiner and Sheen, 2016; Hickerson et al., 2016; Widarsson et al., 2020; Sterner et al., 2021). Acute care settings are considered most challenging or complicated by novice nurses (Duchscher, 2009; Hawkins et al., 2019). Acute care settings are characterised by unpredictable scenarios that require immediate action to ensure positive patient outcomes (Benner, 2001).

The current study identified that, for the most part, the internship period helped to consolidate interns' learning and enabled them to link theory to practice more than supernumerary placements. With that, there was an elevated level of satisfaction with the opportunities to advance the knowledge and skills required for registration. Furthermore, it revealed that there was greater emphasis on setting and achieving goals during the internship period. This concurs with findings by Cheraghi et al., (2007) and Althaqafi et al., (2019) that identified that internship programmes enabled nursing students to develop clinical skills and link theory to practice through supported independent practice with responsibility for three to eight patients per shift. In Ireland, the requirements and standards for undergraduate general nursing do not stipulate the number of patients that the interns must care for; rather, this is decided by the clinical setting as it is dependent on several factors (NMBI, 2023).

Studies from Ireland (Drennan et al., 2010) and Iran (Althaqafi et al., 2019) concur that nearly all final year nursing students were satisfied with their internship year. This level of satisfaction was attributed to the ability to develop knowledge and practical skills, thus enabling them to practice safely and effectively once registered (Drennan et al., 2010; Althaqafi et al., 2019). In the current study, the internship period enabled independent practice and opportunities to consolidate learning. This has implications for practice as newly registered nurses are required to be prepared to deliver patient care independently. Therefore, it is important that interns' avail of all learning opportunities associated with independent practice to enable them to be practice ready.

In this study almost all (89.1%) felt that internship prepared them for communicating with family members, and the qualitative findings expanded to reveal how it built their confidence. Confidence is a belief in one's ability to collaborate effectively with patients and families (NMBI, 2015). Conversely, previous studies highlighted that newly qualified nurses' lacked communication skills for dealing with patients and families particularly in relation to their health status, the plan of care and providing reassurance (Ellerton and Gregor 2003; Mooney 2007b). Other studies revealed that new graduates felt challenged in communicating with patients and families with challenging behaviour and were unprepared to deal with conflict in the workplace and negative social exchanges, as they had little prior experience of this (Walker et al., 2013; Hussein et al., 2017). However, it was identified that assertiveness grew with experience and by the end of the graduate year newly qualified nurses felt able to deal with interpersonal conflict (Walker et al., 2013). The impact of a condition or incapacitated state can result in the closure of a patient's 'lifeworld' (Benner, 2000). Effective therapeutic relationships that the nurse builds with the patient and family can assist in opening their 'lifeworld' and enable them to realise new perspectives and ways of dealing with changes in their lives caused by illness (Benner, 2000). When compared with findings from previous studies, this is a positive affirmation of internship where the interns gained this essential skill in communicating with family members. This is an important skill to attain prior to registration to ensure that newly qualified nurses are competent and confident in communicating with others. Covid offered new, and unprecedented challenges and opportunities particularly around communication, and this may have been a factor in this finding.

In summary, no frontier was recognised in internship, as the benefits of the period allowed interns to experience the nurse's role in its entirety. However, the inconsistency of approaches for preparing interns for internship across sites became apparent in this study and details provided by interns implied that this lack of preparation may have affected expectations, knowledge and understanding of the intern role. Contrary to other literature internship provided opportunities to develop communication skills for dealing with families. While the no frontier title may not have been used previously, other researchers reported similar study findings with respect to confidence building, motivation, preparation, satisfaction with internship

regarding the development of knowledge and practical skills. The value of supernumerary placements in preparing interns for internship warrants consideration. Interns require an orientation programme as they become employees of the health service.

8.3 The Chameleon

“The Chameleon” characterises the responsiveness and versatility shown by interns in response to the changing clinical situations. The complexity of patient care in nursing is constantly increasing, and the presence of a pandemic further impacted the challenges experienced within the clinical setting during internship. In keeping with the second objective, this section concentrates on the key findings in relation to experiences during the internship period, including the acquisition of clinical skills in the context of existing literature. Time was both an inhibitor and enabler in the learning process during internship. There were recollections of challenges and struggles to balance skill development with care delivery. The extent of non-technical skills required were not realised until internship began; these were not reiterated as part of the learning in supernumerary years. While the adoption of time management strategies was important to ensure the timely delivery of patient care, the challenge with time and competing tasks meant that essential learning opportunities were missed in the prioritisation of that care.

The non-technical skills referred to in the current study included time management, care prioritisation, planning and organisation. These skills had developed over time, which is consistent with other studies, where newly qualified nurses gradually adjusted to their new role (Murray et al., 2019). Similar attributes were portrayed by Benner (1984; 2009) with respect to nurses at advanced beginner level and Duchscher's Stages of Transition theory and Transition Shock Model (Murray et al., 2019). Benner (1984) maintained that nurses at the competent level may encounter time challenges, but they have managed to learn how to manage clinical situations. Nurses at the competent stage can achieve a level of efficiency through careful planning and organising (Benner, 1984). Nurse graduates consider elements of care

as tasks as opposed to viewing them in their entirety (Murray et al., 2019). Lack of experience by novice or advanced beginners can result in the consideration of elements of a scenario, as opposed to a comprehensive analysis of the situation (Dreyfus, 1992; Dreyfus and Taylor, 2015). Clinical reasoning skills develop with time and experience or through deeper understanding (Benner et al., 2010). This knowledge or skill is achieved through experiential learning (Benner, 1984; 2009; Mangiante et al., 2021) and often developed during transition (Hung et al., 2017).

In the United States, a study reported little emphasis on the 'real' nursing experiences such as prioritisation in providing care to more than one patient. Prioritisation, patient load, time management, and registered nurses' responsibilities were considered as the real elements of nursing in this study and others (Clarke and Holmes, 2007; Hickey, 2010). Some felt that clinical experience was lacking, with more focus on basic skills and healthcare assistant tasks (Clarke and Holmes, 2007; Hickey, 2010). It was identified that although advanced technical skills such as prioritisation and organisational skills are essential for nursing practice, they are not always promoted as part of student learning during clinical placements (Hickey, 2010). These findings highlight the need for non-technical skills development among supernumerary nursing students to help support their internship preparation.

With respect to competence and proficiency, Duchscher (2008) developed a substantive theory of role transition to professional nursing practice for newly qualified nurses and identified the stages of transition as doing, being, and knowing. The thrust of the 'The Chameleon' theme is encapsulated in this theory, where the requirement was to adapt to the clinical setting and develop their skills, competence and confidence. Philips et al., (2014) identified a decreased level of competence and proficiency among newly qualified nurses and referred to the importance of taking this into consideration when allocating patients to them. New graduates often lack confidence in key areas, such as time management, clinical skills, critical thinking and clinical judgement skills (Ethridge, 2007; Baumberger-Henry, 2012). However, Ethridge (2007) reported that as time evolves, graduates learn to think like a nurse and in due course, prefer working with experienced nurses instead of former classmates. These findings match those of Benner's (1984) novice to expert

theory, and Duchscher's (2008) stages of newly qualified nurses' role transition. Duchscher (2008) identified the process of becoming: The Stages of New Nursing Graduate Professional Role Transition. The acute care setting is considered highly dynamic and intense, with increasing levels of patient acuity and nursing workload and nurses need to be adaptable and flexible to adjust to the variety of clinical settings in which they are expected to work.

The stages of transition are reflected in the findings from a study by Deasy et al., (2011) where only 30% of the newly qualified nurses, pre and post registration, felt that they had adequate opportunities to develop their management skills. Similarly, Hartigan et al., (2010) identified a lack of readiness in relation to technical and clinical skills. Graduates found it difficult to manage pain relief, falls, calculate urinary output, and titrate insulin, and distinguish between nebulising equipment and humidifiers (Hartigan et al., 2010). They were over-reliant on monitors, often neglecting to observe the patient (Hartigan et al., 2010). The current study found that the internship period enabled the realisation of the requirement for technical skills and clinical skills and the opportunity to develop such skills before transitioning to the role of registered nurse.

In many instances it was reported that senior nurses looked after the acutely ill or deteriorating patients in this study; and on elective wards there were even less learning opportunities. A lack of experience in managing a deteriorating patient was reported in studies from Ireland, Norway, United States, Australia, and Saudi Arabia, where newly qualified nurses were challenged by deteriorating patients, as they had gained little prior experience of this before registration (Hartigan et al., 2010; Wangenstein et al. 2012; Johanson, 2013; Hussein et al., 2017; Aboshaiqah and Quasim, 2018). The lack of experience in dealing with these situations may be attributed to the way in which supernumerary student status was managed (Hartigan et al., 2010). However, the more likely explanation is the covid pandemic. During the pandemic experience in caring for these patients was lacking among all staff, not only among the interns in this study. It is plausible to therefore suggest that more

senior nurses cared for the sickest patients, as opposed to a nursing intern who had even less clinical experience.

By contrast, a study in Saudi Arabia identified that the internship programme increased interns' competence in recognising and prioritising deteriorating patients, multitasking, and practicing complex nursing skills (Aboshaiqah and Quasim, 2018). In some studies, the newly qualified nurses had developed competence, but they still found it emotionally challenging (Hussein et al., 2017). In Aboshaiqah and Quasim's (2018) study a positive correlation was reported between intern's self-efficacy, clinical competencies, professional behaviour, overall performance, and core nursing skills. Conversely, newly qualified nurses would have preferred more time to practice essential clinical skills (Johanson, 2013). Likewise, even though competence in managing deteriorating patients was attained, continuous practice augmented the competency level (Wangenstein et al., 2012). This is consistent with Benner's (1984; 2001) theory, in which it is stated that continuous experiential learning enables the development of skills and practice. These findings and international literature have implications for ward management and skill mix; newly qualified nurses who have missed learning opportunities require greater support mechanisms to manage such situations effectively, to ensure timely intervention and positive patient outcomes.

The experiences and contribution of reflective practice during internship were examined as part of the objectives. Reflective practice enables the recognition of strengths and weaknesses to develop clinical skills and manage clinical situations and is a valuable attribute to developing student learning in clinical practice (Karami et al., 2017). The current study identified that two-thirds considered reflection a beneficial component of internship. The benefits related most particularly to structured reflection where there was shared learning in a safe space, together with the realisation that colleagues had similar experiences. Reflection assisted interns in understanding complex situations and equipped them with the knowledge and assurance of methods of dealing with the situation if they encountered them again.

This is supported elsewhere (Moroney et al., 2022) including the Report of the Review of Undergraduate Nursing and Midwifery Curriculum that illuminated the benefits of reflection as part of clinical learning (Ryder et al., 2024). Moreover, reflective practice enabled newly qualified general nurses in this study to develop critical thinking skills as they reflected on episodes of care where they were involved in making clinical decisions. Reflection provides an opportunity for students to critically appraise areas of strengths and weaknesses in their practice thereby increasing their self-awareness and focusing their learning to achieve their goals (Ganzer and Zanderer, 2013; NMBI, 2015).

Levels of stress during internship were explored, the outcomes of which were reflected in the theme 'The Chameleon'. Over ninety percent felt internship was more stressful than supernumerary placements, but many reported that they experienced less stress as time progressed. The stress experienced was in relation to their caseload and managing to keep up with efficiencies in providing service. This is consistent with other studies where newly qualified nurses experienced stress in the initial phase of registration as they came to terms with responsibility, workload, and accountability challenges (Ellerton and Gregor, 2003; Clark and Holmes, 2007; Etheridge, 2007; Mooney, 2007b; O'Shea and Kelly, 2007; Deasy et al., 2011; Johanson, 2013; Hussein et al., 2017; Sterner et al., 2023). A study in China identified that higher levels of professional identity were related to lower levels of role stress (Sun et al., 2016). The main stressors experienced by newly qualified nurses include the burden of responsibility, fear of asking questions, and the perceived knowledge deficit that challenges clinical reasoning and critical thinking (Halpin et al., 2017). Duchscher's Stages of Transition and Transition Shock Model identified the phases of transitioning for graduate nurses. This model highlighted the impact of the reality shock, transition theory, and role adaptation on the professional development of newly qualified nurses (Duscher 2009). Duchscher (2008) identified that towards the end of the final transition stage of 'knowing', graduates' stress sources changed from their personal insecurities or inability to annoyance with the health system and their junior status within it.

To summarise, contrary to other studies, the internship period enabled the realisation of the role and the full extent of responsibility and accountability before registration. Similar to previous literature caring for patient caseloads, enabled the then interns to realise the importance of non-technical skills in order to manage their workload. Internship provided the interns with the real nursing experience and averted the post-registration reality shock that was reported extensively by other researchers where internship did not exist for this cohort. In this section, available published literature supported the findings of the current study and while some differed, they may have been context-related due to the pandemic influence. The presence of covid provided a context related finding that may not be reflected in other studies where experienced staff undertook care of sicker patients to the relief (on one hand) and sense of loss of missing out on the other hand by interns. The theme 'The Chameleon' depicted the adjustment that newly qualified nurses undergo in the early stages of role transition.

8.4 Professional Socialisation

The literature review identified the challenges faced by newly qualified nurses as they established their professional identity within the profession. This study highlighted the then interns' experiences of challenges to their professional socialisation within the workforce and the impact social experiences had on their internship experience. Professional Socialisation refers to the culture of the organisation and the ability of students to develop professional identity in the clinical setting (Zarshenas et al., 2014). As professional socialisation is extensively referred to in this study and thesis, it was considered important to acknowledge the theory underpinning it. Social identity theory was developed by Tajfel et al. (1971) in response to findings from a study that examined the impact of social categorisations in intergroup behaviour (Abrams and Hogg, 1990). The formalisation of the theory was established in 1978 when it was recognised as distinct in its ability to explain realistic social dynamics and intergroup conflict (Abrams and Hogg, 1990). Social identity theory provides a theoretical understanding for group dynamics and the role that self-perception plays in generating psychological effects on social behaviour

(Abrams and Hogg, 1990). While social identity theory is helpful in understanding the social contexts, it does not provide solutions to overcome negative social interactions. Indeed, social identity theory includes concepts such as self-perception and social dynamics which also influence intergroup behaviour. This is therefore a complex phenomenon.

This study revealed that professional socialisation was significant in the life of the internship student. It was important in terms of inclusion, support, and learning opportunities from other staff. As a component of this, the collaboration with the multidisciplinary team and specialist nurses was important. Liaising with specialist nurses had important implications for preparing interns to effectively collaborate with the multidisciplinary team to ensure quality patient care. A Canadian study demonstrated that knowledge of other disciplines' roles increased confidence in inter-professional collaboration (Pfaff et al., 2014). Additionally, team satisfaction was influenced by supportive relationships that developed confidence to engage in inter-professional collaboration (Manninen et al., 2013; Pfaff et al., 2014).

Professional socialisation is also important for progression (Graf et al., 2020). In the current study, it was identified that internship provided the opportunity to become part of the multidisciplinary team. These findings concur with Loftmark et al., (2006) and Nash et al., (2009) where collaboration and supervision were important in fostering that sense of belongingness, with good collaboration increasing confidence and providing an opportunity for students to ask questions. Feeling valued and part of the team increases learning and understanding of the boundaries of the role and relationships during internship (Bradshaw et al., 2018). Challenges with socialisation within units where students are not welcomed resulted in feelings of rejection and impacted perceptions of the experience (Delaney, 2003). Acceptance resulted in positive perceptions in relation to the placement experience and the experience of transition to registered nurse (Delaney, 2003) and the desire to remain in nursing (Borrott et al., 2016). Confidence developed by ensuring students were viewed as valued members of the team and ensuring that learning

support structures were in place to provide diverse experiences (Edwards et al., 2004). While status inequity and power imbalance may exist in the nurse-doctor relationship owing to the obscuring of margins between medicine and nursing; nurses develop negotiation skills through experience that enables the collaborative process (Benner et al., 2009). The implications of successful relationships with the multidisciplinary team ensures effective communication and plans of care for patients to ensure optimal outcomes. In comparison to previous studies (Mooney, 2007b), internship in this study enabled the integration of the then interns into the team, as they were part of the workforce and responsible for a caseload. However, for those whose experience was negative, integration and inclusion was absent. There were times when the opposite was expressed, which may have implications for recruitment and retention of some nurses.

Professional socialisation is important for including interns in learning experiences that are essential for the role of registered nurse, such as medication management. In relation to opportunities to experience medication management under supervision, the current study identified a limited time for availing of opportunities such as the morning medication round which is a busy time for nurses. Those who got experience of frequent medication rounds referred to the learning that was achieved from this. Studies in the United Kingdom, Ireland and China identified that medication management and fluid administration were a source of stress for newly qualified nurses (Clarke and Holmes, 2007; O Shea and Kelly, 2007; Hu et al., 2017). A New Zealand study highlighted that newly qualified nurses require ongoing support as they apply pharmacological knowledge in practice (Lim and Honey, 2017). Likewise, Irish researchers identified that due to the limited opportunities to practice medication management, interns entering their final internship felt inadequately prepared for their role in medication administration (Cleary-Holdforth and Leufer, 2020; Leufer and Holdforth, 2020). Studies from the United States claimed that final year nursing students are not competent in medication management on graduation (Berkow et al., 2008; Schneidereith, 2014; Jarvill, 2021). Like the current study, this was attributed to the limitations in opportunities to practice this skill consistently (Jarvill, 2021). Benner (1984) reiterated the

importance of recurrent experiences with a skill to apply the knowledge and gain competence in that skill. This has implications for nursing practice and patient care, as the missed internship opportunities may result in lower levels of competence as a registered nurse. Further supports are required in the transition phase to ensure that newly qualified nurses perfect this skill and ensure timely and safe administration of medication to avoid impacting patient care. Further emphasis needs to be attributed to developing medication management skills under supervision during internship.

The current study identified that the doctors' ward rounds were challenging for some interns who found them 'daunting' due to their perceived lack of knowledge but recognised them as valuable learning experiences. Time was again a negating factor in gaining opportunities to attend doctor's ward rounds. Studies from China correlate with these findings, reporting that the students felt inferior and unsupported by doctors, as well as experiencing lapses in communication from them (Wu et al., 2015; Hu et al., 2017). Similarly, an Irish study found that doctors did not recognise nursing students and only started communicating with them when they were in the staff nurse uniform (O Shea and Kelly, 2006; Mooney, 2007b). A Canadian study identified that some students felt intimidated by doctors while others embraced them for advice and instruction (Ellerton and Gregor, 2003). Although doctors' ward rounds were recognised as a valuable experience, individual factors such as a perceived lack of knowledge and time impacted their ability to participate in them. Such time pressures and inadequacies have implications for patient care as ward rounds are essential assessment, planning and collaboration opportunities.

Clinical handover is the transfer of pertinent information to ensure continuity of care between shifts from nurses and other healthcare professionals. It is considered one of the most important nursing practices (Johnson et al., 2012; Department of Health, 2015). The current study identified that, as interns, the majority of newly qualified general nurses were satisfied with the opportunities to deliver clinical handover even though there was a variance as to the frequency that those who were less satisfied

had given handover. Some newly qualified general nurses, however, mentioned that the perfection of this skill was an ongoing process. Gaining practice in shift handover provided many advantages for interns, like for example the realisation of missed episodes of care. Studies from the United States and Hong Kong acknowledged that clinical handover is a challenge for newly qualified nurses (Rose, 2013; Lim and Pajarillo, 2016; Chung et al., 2021). The under-performance in handover by newly qualified nurses may be attributed to the insufficient attention afforded to this skill in the nursing curriculum and the absence of its significance during clinical placements (Collins, 2014; Sabet Sarvestani et al., 2015). The implications of ineffective handover are numerous, including the omission of essential patient information, delayed and potential harm to patients (Saleem et al., 2015). In Ireland, shift handover is part of a national clinical guideline (Department of Health, 2015) and embedded in the undergraduate nursing curriculum. However, further emphasis should be placed on handover in the supernumerary years to prepare them for delivering effective handover during internship.

Support is essential for learning, and this was an important matter during the internship period. Although the interns were practicing at an independent level, preceptors were assigned to provide support as stipulated in the Nursing and Midwifery Board of Ireland requirements and standards (NMBI, 2023). In the current study, time was a residing factor when it came to support, and it was reported that almost half of the respondents felt that clinical staff did not have time to support them in the clinical setting. The Covid-19 pandemic meant that redeployment was regular on wards and this, as well as covid absences, led to staff shortages. In Ireland, the safe staffing and skill mix framework (Department of Health, 2018) was already implemented, and this had a positive impact on staffing, skill mix and patient ratio levels on the wards. However, consistent with other studies, the coronavirus pandemic led to staff shortages as staff who were close contacts or who had contracted the virus remained off work, thus impacted staffing levels (Xu et al., 2020). Studies in Belgium acknowledged that the coronavirus created an unprecedented level of stress in the clinical setting that impacted support that had the potential to jeopardise students' learning (Duprez et al., 2021; Ulenaers et al.,

2021). Healthcare organisations face challenges in ensuring that the workforce is sufficient to support new graduates and highlighted their own moral distress when staffing was short (Wolff et al., 2010).

Friendliness and approachability of preceptors were also identified as essential for successful professional socialisation. Supportive preceptors assisted newly qualified nurses in coping in their new role and developing friendships (Kelly and McAllister, 2013). The current study identified that clinical staff were helpful in assisting them to learn during internship however, there were some that demonstrated unwillingness to support interns. Willingness, or rather a lack thereof, of staff to support students in clinical practice was raised in several studies (Hartigan-Rogers et al., 2007; Kern et al., 2013; Manninen et al., 2013). Where staff were not willing to students they felt like a burden, and this had potential to affect their confidence and perception of nursing (Moroney et al., 2022). On the other hand, preceptors were often identified as providing students with opportunities of independence and responsibility while encouraging and assisting with demanding situations (Manninen et al., 2013). Supportive and unsupportive environments can have implications for recruitment and retention.

The support and approachability of Clinical Nurse Managers, as well as the support from intern nursing colleagues, was highly valued in this study and others. Kelly and McAllister (2013) reported that friendliness, approachability, and inclusive management styles strengthened social capital and enhanced commitment amongst newly qualified nurses and students, with students valuing friendliness as it helped them achieve their goals (Martin and Wilson, 2011). This has important implications for nursing, as ward managers hold significant leadership roles with responsibility for the operational aspects of the ward, quality and standards of patient care and the clinical learning environment. This study highlighted the value of ward managers' leadership skills in ensuring a supportive clinical learning environment, and the admiration for skilled and expert ward managers who supported them as interns.

Support from Clinical Placement Coordinators was valued by the majority. Some participants would have preferred assistance in education. However, in Ireland preceptors are considered the main educators in clinical practice. The Clinical Placement Coordinator role has evolved to a facilitator role. They are deemed a 'link' person as opposed to a clinical teacher (Drennan, 2002). The expert review acknowledged the requirement to develop clinical academic roles to further support research-led care and support clinical staff in the implementation of evidence-based practice (Department of Health, 2022). There were positive Clinical Placement Coordinators related experiences in this study with the Clinical Placement Coordinator assisting with goal setting and goal achievement and advice, and guidance in various situations. McLeland and Williams, (2002) indicated that clinical education and experience are important for building confidence to ensure that newly qualified nurses can perform effectively once qualified.

In this study and others feedback was a factor that facilitated or hindered learning during practice placements, and delayed feedback prior to assessments resulted in less time to increase performance (D'Souza et al., 2015; Jansson and Ene, 2016). The provision of feedback on performance results in a more positive learning experience (Watt and Pascoe, 2013) and stress and self-doubt can arise in its absence (Ethridge, 2007). In the current study some participants only received feedback on their progress during their clinical competency assessment meetings, while others received feedback every week and some received feedback on every shift. In the absence of feedback, interns assumed that there were no issues and thought that 'no news was good news'.

Studies in the United States and Sweden revealed that although the students yearned for feedback, they did not get it, nor did they ask for it (Ethridge, 2007; Manninen et al., 2013). In the current study it was highlighted that feedback was mostly positive and that a reluctance by staff to provide feedback or negative feedback might be set in the notion that "you don't know how the other person is

going to take it.” For the current study the inconsistency of feedback delivery and lengthy delays in providing timely feedback warrants consideration.

Through early professional socialisation as interns, it became clear that taking responsibility and managing caseloads during internship helped to clarify the role and the culture of the environment. This contrasts with previous studies where new graduates did not realise the role until they were registered and working as clinical staff nurses (Delaney, 2003; O Shea and Kelly, 2006; Ethridge, 2007; Clarke and Holmes, 2007; Kumaran and Carney, 2014). In this study some participants felt that there were areas of internship that could be improved, indicating that not all felt adequately prepared for the registered nurse role. Readiness for practice and competence of newly qualified nurses was discussed in several studies where the realisation of the enormity of the role was not realised prior to registration and factors impacted their competency level (Wangenstein et al., 2008; Wangenstein et al., 2012; Takase et al., 2014; Numminen et al., 2016; Theander et al., 2016; Aboshaiqah and Qasim, 2018). Benner et al., (1996) referred to the ‘lightness of being’ where the newly qualified nurse is present and unsure in the clinical setting but relies on colleagues for advice and support. Therefore, one of the affirmations of the internship period is that it enabled the interns to realise and begin to understand the registered nurse role and the associated level of responsibility and accountability when managing the caseload. Internship has gone some way towards addressing the transition shock that occurs at the beginning of internship. In Ireland, despite newly qualified nurses having completed internship, most hospitals offer graduate support programmes as part of the recruitment promotion for newly qualified nurses. This may be an enticement to work in these hospitals. However, this raises a question about the adequacy of internship, if additional support programmes are needed, or it may be that the graduate support programme is used to address professional socialisation for new nurses entering unfamiliar environments.

In summary, previous published literature had identified the influence of supportive relationships on building confidence to engage in inter-professional collaboration. The findings from the current study identified that internship enabled interns to become part of the multidisciplinary team, these findings concurred with previous literature that reported that collaboration fostered a sense of belonging and had a positive influence on learning. On the other hand, the current study and previous research revealed the challenges with socialisation when students felt rejected due to a lack of welcomeness. In the current study time impacted the then interns' ability to participate in medication rounds under supervision. These findings are supported by previous research that identified newly qualified nurses lacked sufficient skills in this area and required additional support to attain these skills during transition. Doctors ward rounds were an intimidating time for some interns and similar findings were reported in previous literature where the students felt inferior to the doctors due to their perceived lack of knowledge. Similar to previous research clinical handover was identified as a challenge and a skill that was not emphasised or not regularly practiced during the supernumerary years. The presence of the covid pandemic had impacted on the level of support during internship, a similar experience was reported in previous research. Feedback was lacking during internship with some reporting that the feedback received was unhelpful, this concurs with previous studies. Professional socialisation remains a prominent concern that warrants further attention to support the smooth transition from nursing student to the registered nurse role.

8.5 Summary

This discussion chapter presents the findings of this study in the broader context. The three themes that emerged from the integration of findings were addressed in this section. The findings from the first theme, "No Frontier", are consistent with those of previous studies where there were no boundaries for learning and consolidating new knowledge, even in imperfect circumstances. Preparation is the key to success and while most respondents received some preparation for internship, there was still a noticeable level of uncertainty regarding what was

expected. Where guidelines were available, it was reported that in some instances that they were not clear.

The second theme, “The Chameleon”, identified the adaptability required by interns to progress their learning. Opportunities were vast but time and competing priorities often impacted learning opportunities. The findings were consistent with previous studies where non-technical skills were viewed as important attributes of the nurses’ role for managing time and prioritising patient care. Consistent with Benner’s framework studies concurred that time in the clinical setting enabled progression and taught students to think like a nurse and develop essential skills for the role. However, some literature referred to the lack of readiness of graduates for the nurse’s role and the impact of this on their transition experiences.

The final theme, “Professional Socialisation”, remains something of a misnomer. Previous researchers highlighted the importance of developing professional identity in the clinical setting and the need to support staff in clinical areas. While support is essential for learning, it remains largely dependent on the ethos and culture of the ward, which may not always be positive or inclusive. A further factor of note is the willingness of preceptors to engage with students. Supportive preceptors are invaluable and positively impact students’ experiences. Ward managers are vital for leading supportive clinical environments.

The next chapter provides a conclusion, limitations, and recommendations for this study.

Chapter 9 Summary of the Thesis

“How leaders role model, improve practice environments, and foster lifelong learning greatly contributes to the formation and sustainability of the professional identity of nurses and the next generation of leaders”

(Joseph et al., 2021)

9.1 Introduction

Nursing is constantly evolving and the requirement to deliver high quality patient care remains a top priority. In Europe, the RN4cast highlighted the importance of nurses and their impact on the quality of care and revealed that often care was not delivered due to staff shortages and time pressures (Ausserhofer et al., 2014). In Ireland, the safe staffing and skill mix framework was implemented to augment staff to patient ratios and enhance the quality and safety of patient care (Department of Health, 2018). In 2024, the Irish healthcare system removed a recruitment embargo on new or promotional posts that had been implemented 9-months previously. Despite this embargo, new graduates were guaranteed permanent employment within the National Health Service (Irish Independent 2024), thereby, acknowledging and highlighting the importance of graduate nurse retention.

This chapter summarises the key findings that emerged as part of this study. The recommendations for practice, education, policy and research stemming from this study are presented. Additionally, the study strengths and limitations are discussed, together with the dissemination plan, and an overview of the researcher's doctoral journey.

9.2 Thesis Overview

The transition from student to staff nurse can be a daunting time due to a perceived lack of knowledge and limited experience. While graduates are generally pleased about their achievement following registration, this joy is often tainted by fear when they realise the level of responsibility and accountability associated with the role of a registered nurse. The true extent of the role is often not recognised during pre-registration practice placements. In 1974 the term 'reality shock' was used to describe the effect of the realisation of the registered nurse's role (Kramer 1974) and was since further endorsed by Duchscher (2008; 2009), and the term has remained in the nursing literature. Unlike the nurses referred to by Kramer (1974), the reality of the role was realised at the start of internship among the cohort in this study. In Ireland, interns work at the competent level. This, together with the role

and responsibility of an intern working at independent level, helps prepare them for transition. This contrasts with most prior research where newly qualified nurses were at the advanced beginner level of Benner's Novice to Expert Framework.

Chapter 1 in this thesis provided an overview of nurse education globally and the developments in nurse education over the last 140 years. Chapter 2 provided important evidence to support the need for this study, and the methods adopted to accomplish this. The major gap in evidence related to the non-evaluation of an initiative that was introduced over two decades ago in Ireland. Therefore, an evaluation of internship and its value in preparing interns for transition to the role of registered nurse was deemed an important study to undertake. The literature review supported the selection and refinement of the questionnaire that was used to collect data in phase one. Chapters 3 and 4 provided the rationale for the study design and the methods employed in the study. Chapters 5 and 6 presented the findings from phase one and phase two of the study. In keeping with mixed methods, Chapter 7 presented the integration of both datasets and the findings, using the Pillar Integration Process model. Chapter 8 discussed the findings in the context of current literature and in this section, the study strengths, limitations, recommendations, the dissemination plan and overview of my doctoral journey are presented.

9.3 Strengths of This Study

There are several strengths that must be acknowledged. This is the first study of its kind in Ireland. The assistance of the Trinity College Dublin subject librarian expert resulted in sourcing all relevant literature to support the study in terms of what was already known and not known. A validated and reliable instrument was used to collect the data. The employment of an anonymous questionnaire meant that responses could be honest and not linked to participants. In line with the sequential explanatory mixed methods design, data were collected at two time-points using different methods (phase one – questionnaire, phase two – online semi-structured interviews), thereby strengthening the quality of the data yielded. The researcher undertook training in mixed methods research, NVivo and sought statistical support,

which meant that the methods used were current, and reliable. A range of measures were taken to reach a wide target audience for recruitment to the study. This included the Irish Nursing and Midwifery Organisation World of Irish Nursing Magazine, Nursing and Midwifery Board of Ireland Newsletter, Twitter and the Nurses Facebook page to ensure that newly qualified general nurses were aware of the study.

9.4 Study Limitations

It is important to acknowledge the limitations in any piece of research and from these, insights can be gained and used to improve other similar studies in the future.

In this study a self-reported questionnaire was used in the first phase. The data for this study were collected over a two-year period. The time lapse between internship and participation in the study may have resulted in recall bias. The two-year data collection period and the retrospective nature of the study may have amplified recall bias, especially for participants whose internships occurred earlier in the study timeline. This may have affected the accuracy of the data, particularly for nuanced or less memorable experiences. In total, 193 newly qualified general nurses participated in this study, and 112 completed the questionnaires in full. Given the potential response rate nationally was 2775, this relatively low response rate of 7% was disappointing and a clear study limitation. Gender was deliberately excluded from the reports generated. This decision was made because the percentage of newly qualified male nurses annually is low and therefore there would be an increased risk of identifying individual participants. Nationality was not included in the demographics as it was not relevant to the study objectives. .

The self-reported nature of the quantitative data in the first phase may have introduced social desirability bias. The use of volunteer sampling for the qualitative phase likely resulted in the recruitment of participants with stronger opinions or more positive/negative experiences, leading to potential selection bias.

For the second phase, participants self-selected to volunteer for the online semi-structured interviews. This may have resulted in a selective sample, with potentially more interested or satisfied participants engaging with the study interviews. The coronavirus pandemic impacted how qualitative data were collected in this study. The researcher would have preferred to undertake face to face interviews at convenient locations for participants. However, health and travel restrictions mandated that the interviews be completed online. In keeping with the limitations imposed by the pandemic, the restructuring of services within hospitals to contain the virus meant that participants in this study had something of a different experience of internship relative to other students before and afterwards.

The findings are from Ireland, which limits their generalisability. However, the internship as it is currently offered is limited to the Irish context. Nevertheless, there are valuable lessons and noteworthy information to be gained from this study that can be applied internationally, which are included in the recommendations below.

9.5 Recommendations

9.5.1 Recommendations for Research

This study examined newly qualified general nurses' experiences of internship and its value to their transition to the role of registered nurse. The study findings indicate that the supernumerary years could play a greater role in preparing students for internship. Therefore, further research is required to examine the value of supernumerary student years, and the essential skills that supernumerary students need to develop before internship.

Other countries recommend the allocated number of patients for interns, in Ireland there is no recommendation in this regard. Research into a useful benchmark to be used in clinical areas would be helpful in determining the number of patients to be allocated to each practicing nurse. From this research, a recommendation could potentially be made regarding the appropriate number of patients to allocate to interns.

Preceptorship should be evaluated, including what time is afforded to assessments and what preparation is undertaken among those who undertake the preceptorship role, and whether this preparation is standardised.

9.5.2 Recommendations for Education and Clinical Practice

Based on the findings from this study there are several recommendations for education and clinical practice.

The literature and the findings from the current study identified the lack of acquisition of essential clinical skills during the supernumerary years that are essential for internship. Therefore, a recommendation is required in relation to the focus of learning during supernumerary placements. Emphasis on preparation for transition to internship should be a starting point, so that nursing students are ready for the role.

Providing support to interns and nursing students in clinical practice is essential for optimum learning. The findings revealed that some interns were not always welcomed to the ward by staff and often experienced instances of unwillingness to teach students. This demonstrates the requirement for managers to demonstrate positive leadership and a ward ethos of inclusion to optimise the culturalisation of nursing students in the clinical setting, thus supporting their professional identity. Leadership programmes for managers and staff should incorporate education on the importance of culturisation of nursing students.

In relation to creating a positive clinical learning environment, it is recommended that managers continue to demonstrate a clinical ethos of teaching and learning and that students feel they are in a safe space to grow, learn and develop. Preceptors

must demonstrate role model behaviour and support student learning in the clinical setting. Preceptorship educators need to raise awareness of the need for inclusion and promote the importance of creating a healthy clinical learning environment. Further emphasis needs to be attributed to inclusivity of nursing students during preceptorship education.

The need for exposure to critically ill and deteriorating patients is a recommendation coming from this study, but the exposure should take place in a supported learning environment with patient safety taking precedence. Preceptors and managers need to be cognisant of this important learning experience for nursing students and include them in this learning opportunity.

Feedback on progress is essential for progression, learning and overall satisfaction. In this study feedback in the clinical area was not consistent, and often unhelpful. The process of delivering feedback to nursing interns in the clinical setting needs to be reviewed to ensure that timely helpful feedback is provided. As part of this recommendation, interns should be encouraged to take ownership over their progress as opposed to adopting the “no news is good news” approach. They will need skills of assertiveness to support this requirement. It is recommended that Higher Education Institutes remind students of the importance of requesting feedback on their performance at every shift. It is also recommended that the Higher Education Institutes and clinical sites remind preceptors of the importance of feedback in reassuring and guiding interns in their skills, abilities and progression towards achieving their learning outcomes and successfully completing their competency assessments. Further emphasis on the importance of feedback provision needs to be incorporated into preceptorship education.

Medication management is a core element of the nurse’s role. This study and others identified that opportunities to practice this skill under supervision are often limited. Further emphasis needs to be afforded to enable interns to practice medication

management under the direct supervision of a registered nurse to further prepare them for transition to the role of registered nurse. The literature review also identified that newly qualified nurses required support with medication management. It is recommended that organisations continue to ensure that supports are available to new graduates in this regard.

Professional socialisation featured prominently in the literature review and in the findings from this study. While the social identity theory provides explanations for group dynamics, the complex nature of the phenomenon means that it lacks solutions. In nursing literature professional socialisation has been present for the past two decades yet the issue remains unresolved. Therefore, a recommendation from this study is the need to raise awareness of professional socialisation and the impact it has on student nurses and retention. Incorporating professional socialisation into the undergraduate curricula and leadership and management programmes to alert current and future nurse leaders of the issue and need for action to resolve such instances within the clinical learning environment.

9.5.3 Recommendation for Policy

Although the undergraduate nurse education is leading the field with internship as part of the four-year degree programme, some policy improvements to internship are required. As identified in the current study, pre-internship preparation varied across all sites with some interns not receiving any preparation for internship. Pre-internship preparation requires attention to improve interns' understanding of the role, and their overall objectives and expectations of internship. There is no national standard of preparation for internship, therefore the requirement and methods of preparation need to be incorporated into national policy. Additionally, the value of supernumerary placements in preparing students for internship needs to be explored with recommendations focusing attention on the acquisition of clinical skills during supernumerary placements. This should better prepare nursing students for the internship period. Organisations should take responsibility for preparing interns for internship. As they are considered part of the workforce, formal induction programmes should be delivered.

9.6 Dissemination Plan

The findings from this thesis will be widely disseminated. The Nursing and Midwifery Board of Ireland have expressed an interest in the findings and will be furnished with a copy of these on completion and ratification of the study. Additional papers will be prepared for publication, and conference abstracts submitted for oral presentations. It is anticipated that the findings will be of greatest interest to an audience of educators, nurse managers and clinicians. To date, one peer-reviewed paper has been submitted for publication, with two additional papers in progress; one on the qualitative findings and one on the use of the pillar integration process model in practice, as a case study. I have presented the work as a presentation at an international conference (Appendix 9.1) and plan to disseminate the findings in presentation format at other conferences, including the impending Trinity College Dublin conference in March 2025 (abstract submitted).

9.7 Overview of my Doctoral Journey

My PhD journey is finally complete. Throughout the journey, I learnt how to plan and manage a research project, to refine the objectives, develop and validate a survey, and conduct and analyse interview data. I negotiated and integrated data sets to provide a complete understanding to the research topic. I also prepared papers for publication, and managed revisions as requested. The steep learning curve enabled me to progress from a novice researcher to one that is competent in devising and conducting research and exploring ways to disseminate findings and make recommendations to enhance clinical education in the future. Portraying the students' voice to make a difference is an achievement from the study.

The timeliness of the study aligned with the requirements and standards review by the Nursing and Midwifery Board of Ireland, and a report from this study will be submitted to the board to help inform any future changes that are required. Time management throughout the PhD process was a challenge, as it often became difficult to balance it with full-time employment and personal commitments. I am proud of my achievements. I want to acknowledge the contribution of the Trinity

College Dublin Research and Education Seminar Days and training undertaken as part of the journey that complemented the knowledge and skills to enhance my understanding of mixed methods research that enabled me to complete this research project. I look forward to my next research project and future collaborations with researchers in this field. I want to acknowledge the tremendous support, advice and guidance from my supervisors Mary and Frances that enabled my learning and progression in achieving the completion of this thesis. Table 9.1 provides an overview of my continued professional development in research as part of the research journey.

Table 9. 1 Professional Development in Research

Modules	Workshops/ Study Days	Webinars
Planning and managing your research process (5 Credits)	Trinity College Dublin Research Support and Education Days	Mixed Methods Research International Association Webinar
Fundamentals of General Data Protection Rules on HSELAND	NVivo Scholarly Writing Institute	Mixed Methods Research International Association - Mixed Methods Datasets
Trinity College Dublin Online Data Protection programme	Two days NVivo Training	Introduction to Thematic Analysis with Professor Virginia Braun and Dr Victoria Clarke by NVivo.
	Survey Monkey Training Programme	Mixed Methods Research International Association Webinar: An Example of the Application of a Theoretical Framework in Mixed Methods : Facilitating the Integration
	General Data Protection Rules and Health Research regulations Tier 1 training workshop	Mixed Methods Research International Association Integrating, qualitative, quantitative and network data in a mixed methods study. Webinar
	Good Clinical Practice for Researchers and Ethics in research	Scholarly Writing Webinar Walden University MMIRA Webinar - The Fundamental Difference between Qualitative and Quantitative Data in Mixed Methods Research

Finally, I want to thank all who participated in this research study. Managers who provided access and gatekeepers who provided their time and assistance. Additional research that is required has been identified. The journey to enhancing the experiences of nursing students and the transition of newly qualified nurses continues to sustain the quality of internship experiences and transition to practice.

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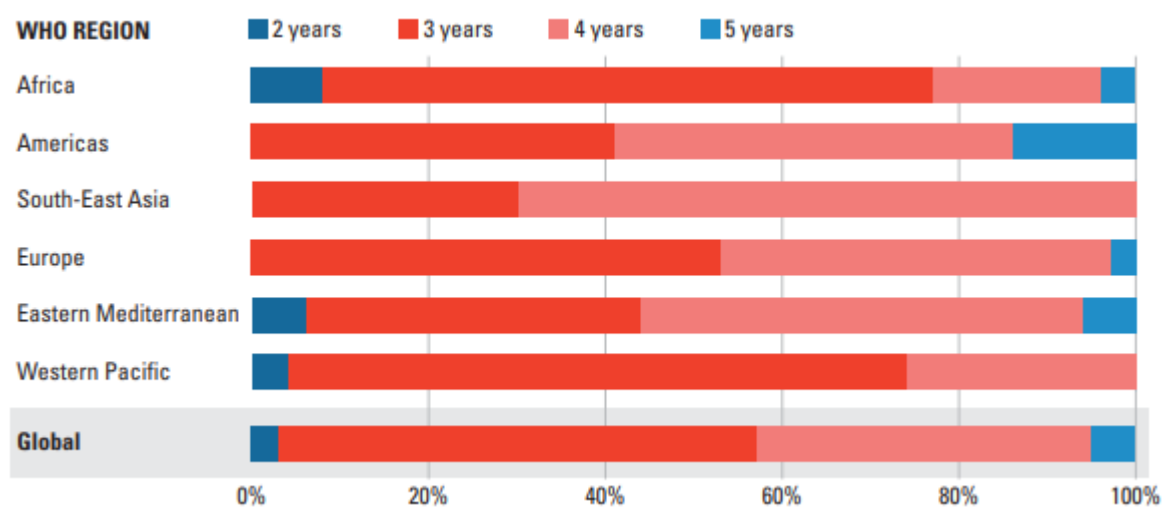
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Appendix 1.1 Average Duration of Nurse Education by WHO Region

(WHO, 2020; p. xvi)



Appendix 1.2 Level of Nurse Education in EU Countries

(European Commission. Directorate General for Internal Market, Industry, Entrepreneurship and SMEs. and Spark Legal Network., 2020; p. 55)

 Higher educational level
 Non-higher educational level

Countries	Level of nursing training		
	Higher educational level		Non-higher educational level
	Universities	Professional higher educational institutions	
Austria		X (Universities of applied sciences - <i>Fachhochschule-Bachelorstudiengang</i>)	x (Vocational schools – <i>Fachhochschule – Diplomstudiengang</i>)
Belgium	x	x	x
Bulgaria	x	x	
Croatia ⁸⁸	x	x	x
Cyprus	x		
Czech Republic	x	x (Higher professional nursing schools)	
Denmark		x (University college)	
Estonia		x (University college)	
Finland		x (University of applied sciences)	
France	x		
Germany ⁸⁹	x (Universities – <i>Universitäten</i>)	x (Universities of applied sciences - <i>Hochschulen für angewandte Wissenschaften</i>)	x Vocational schools – <i>Berufsfachschulen</i>)
Greece	x		
Hungary		x	x
Iceland	x		
Italy	x		
Ireland	x	x (Institutes of technology)	
Latvia	x (EQF 6)	x (College - EQF 5)	
Liechtenstein	Cooperation agreement with Switzerland		
Lithuania	x	x (Colleges)	
Luxembourg		x (Technical high school for the two last years)	x (Technical high school for the first two years)
Malta	x	x (Institutes of applied sciences)	
Netherlands		x (HBO – Higher education)	x (MBO – Vocational education)
Norway	x	x (College)	
Poland	x		
Portugal	x	x (Colleges, polytechnic institutes)	
Romania ⁹⁰	x		x (Nursing technical schools)
Slovakia	x	x (Higher vocational education at secondary health school)	
Slovenia	x	x (Colleges)	
Spain	x		
Sweden	x	x (University colleges)	
Switzerland ⁹¹		x (Universities of applied sciences)	X (Vocational schools)
United Kingdom	x		

Appendix 2.1 Inclusion and Exclusion Criteria for the Literature Review

Inclusion and exclusion criteria were created before undertaking systematic searches of the appropriate databases. Establishing specific inclusion and exclusion criteria ensures that the literature search remains focused on the studies relevant to the research question (Aveyard, 2019). The aim of the search strategy was to accomplish a comprehensive search of all the literature that have been conducted on the subject to date (Coughlan and Cronin, 2021). To preserve the integrity of the review and prevent bias it is important to consistently apply the inclusion and exclusion criteria to the literature identified from the searches. The subject librarian assisted with the development of the search strategy. The key words and search terms were carefully selected so relevant literature was obtained (Aveyard, 2019).

The Population, Exposure, Outcomes and Study type (PEOS) framework was used to guide the identification of inclusion and exclusion criteria (Table 1).

Table 1: Inclusion and Exclusion Criteria for the Literature Review

PEO Term	Inclusion Criteria	Exclusion Criteria
Population and Participants		
Newly Qualified Nurses	Newly qualified nurses who experienced internship as part of the undergraduate degree in general nursing programme	Intern nursing students who had not yet transitioned to the role of registered nurse.
Newly Qualified Nurses	Newly qualified nurses who experienced rostered placements as part of their general nursing training	Nursing students undertaking rostered placements as part of their general nurse training
Newly Qualified Nurses	Newly qualified nurses who experience residency or transition to practice programmes.	Nursing students undertaking residency or transition to practice programmes.
Exposure		
Internship/ Rostered Placement/ Transition Programme	All peer reviewed primary research studies relevant to newly qualified nurses' experiences of internship/rostered placement/transition programmes used to prepare them for transition to the role of registered nurse.	Articles that were not peer reviewed.
Outcomes		
Experience of Internship/ Rostered Placement/ Transition Programme and perception of how it prepared the population above for transition to the role of RN.	All peer reviewed studies that focused on the populations' experiences and perception of internship in preparing them for transition to the role of registered nurse.	Articles that did not focus on this populations' experiences or perceptions were excluded.
Study Type		
Studies published prior to this literature review	Peer-reviewed primary research studies. All languages	Non peer reviewed studies. Descriptive studies, systematic reviews, scoping and narrative reviews and theoretical analysis were excluded. Editorials and opinion papers were excluded.

Participants

The research question for this literature review included newly qualified general nurses who had experienced internship as part of their undergraduate degree in general nursing programme and transitioned to the role of registered nurse. Studies

involving this population were included in the review. In some countries rostered placements, transition programmes or residency programmes are used to prepare newly qualified nurses for transition to the role of registered nurse, so these studies were included. Studies involving nurse managers, preceptors, academics, or student nurses were excluded. Furthermore, studies involving interns who had completed internship were included if they had commenced transition to the role of registered nurse. Studies exploring newly qualified nurses' experience and perceptions of transitioning to the role of registered nurse were also included.

Exposure

In this literature review, exposure refers to newly qualified nurses' experiences of internship as part of the undergraduate nursing degree/rostered placement/transition programme and their perception of it in preparing them for transition to the role of registered nurse. Articles were included that were peer-reviewed and relevant to internship/rostered placement/ transition programme as they were relevant to newly qualified nurses.

Outcome

This literature review concentrates on newly qualified nurses' experiences of internship/ rostered placement/ residency/transition programme and transition to practice following the completion of internship/rostered placement/ transition programme to identify the value of it in preparing them for the role of registered nurse. All peer reviewed articles that focused on the population's experiences of internship/rostered placement/transition/residency programme and the perceptions of it in preparing them for the role of registered nurse were included.

Study Type

This literature review explored peer-reviewed studies that focused on the population's experiences of internship/rostered placement/transition programme and the perceptions of it in preparing them for the role of registered nurse were included up to February 2024. Only primary research studies were included. Descriptive studies, systematic reviews, scoping and narrative reviews, and

theoretical analysis were excluded. Editorials and opinion papers were also excluded. Google translate was used to translate non-English articles.

The search strategy is detailed below.

Search Strategy

Concept 1: Newly qualified nurses

*CINAHL: (MM "Baccalaureate Nurses") (MM "New Graduate Nurses") OR (MM "Novice Nurses") OR (MH "Students, Nursing, Graduate")

Embase: 'registered nurse'/exp OR 'nursing graduate'

*Medline: (MH "Education, Nursing, Graduate") OR (MH "Education, Nursing, Baccalaureate")

*PsycINFO: DE "Nurses"

Wos: title and topic only

Keywords:

EBSCO: (Nurs*) N2 ("newly qualif*" OR "newly graduat*" OR "newly register*" OR "newly licen*" OR pre-reg* OR "Pre reg*" OR postgrad* OR graduat* OR "Baccalaur*" OR post-graduate OR "post graduat*" OR intern* OR novice*)

EMBASE: (nurs*) NEAR/2 ('newly qualif*' OR 'newly graduat*' OR 'newly register*' OR 'newly licen*' OR 'pre reg*' OR postgrad* OR graduat* OR 'baccalaur*' OR 'post graduate*' OR 'post graduat*' OR intern* OR novice*)

Wos keywords: (Nurs*) NEAR/2 ("newly qualif*" OR "newly graduat*" OR "newly register*" OR "newly licen*" OR pre-reg* OR "Pre reg*" OR postgrad* OR graduat* OR "Baccalaur*" OR post-graduate OR "post graduat*" OR intern* OR novice*)

Concept 2: Internship

CINAHL: (MM "Internship and Residency") OR (MM "Interns and Residents") (MH "Transitional Programs") OR (MM "Theory-Practice Relationship") OR (MH "Practical Nursing")

Medline: (MH "Internship, Nonmedical") OR (MH "Nursing, Practical") OR (MH "Professional Competence") OR (MH "Internship and Residency") OR (MH "Preceptorship") OR (MH "Mentoring")

PsycINFO DE "Professional Competence" OR DE "Clinical Practice"

Embase: 'clinical learning'/exp OR 'clinical practice'/exp

EBSCO TI / AB Keywords: Internship* OR “readiness for practice” OR transition* OR “prepar* for practice” OR “acquisition of clinical skills*” OR “Rostered placement*”

EMBASE: Ti/ab KEYWORDS: ‘Internship* OR readiness for practice OR transition* OR prepar* for practice OR acquisition of clinical skills* OR Rostered placement*’

WOS Title and Topic: TS = ((“Internship*” OR “readiness for practice” OR “final placement*” OR “clinical learning experience*” OR “nursing practical*” OR transition* OR “prepar* for practice” OR “acquisition of clinical skills*” OR “Rostered placement*”))

Concept 3: experience

TI / AB Keywords: experienc* OR view* OR percept* OR perceive* OR attitud* OR belief* OR perspectiv* OR opinion* OR thought* OR aware* OR value*

Table 2 outlines the search results at the start of the PhD.

Table 2 Database Search Results – 2017

Databases	EBSCO – CINAHL and Medline (1966-2017)	Embase	Psych Info (1968-2017)	Web of Science	Total
Articles Retrieved	1319+1146	387	2206	27	5085
Imported to Rayyan and de-duplicated					
Articles removed after deduplication					1889
No. of full texts for screening					2276
Articled for full read					257
Articles included					35

The articles were exported from the databases to Zotero, and duplicates were removed. The remaining articles were screened, and 35 articles met the inclusion criteria.

The reference lists were reviewed to identify any further relevant literature. Search of grey literature were also conducted.

To identify an unbiased and objective final list of literature the inclusion and exclusion criteria was used to generate the final list of studies for inclusion in the literature review. Each study was critically reviewed, and data was extracted for inclusion in the literature review.

Updated Search performed in February 2024

Systematic searches were repeated in all five databases using the same search strategy. The results of additional literature from 2017 – 2024 are outlined in Table 3. All searches were exported to Zotero.

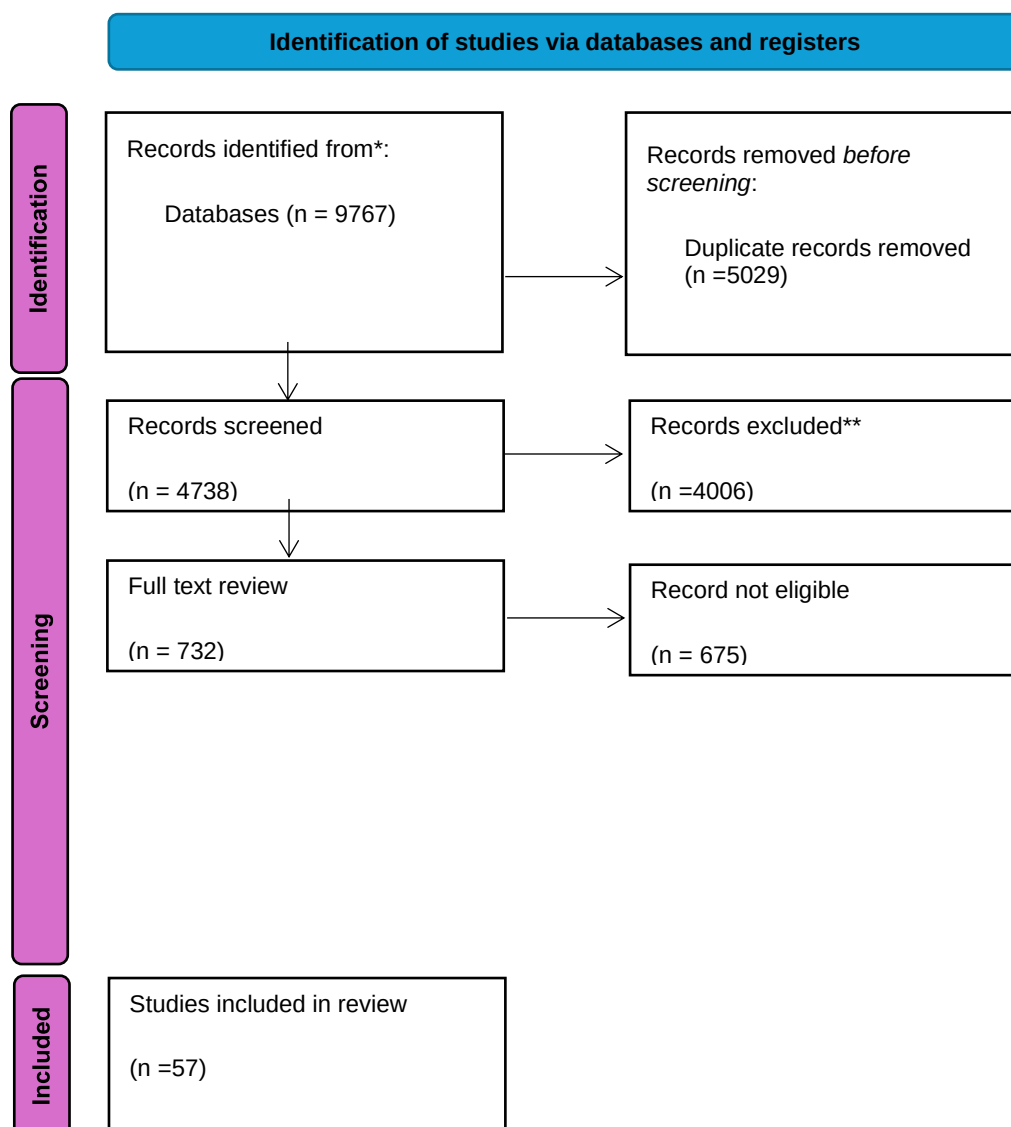
Table 3 outlines the search results for the updated search in February 2024.

Table 3: Results of Database Searches

Databases	EBSCO – CINAHL and Medline	Embase	Psych Info	Web of Science	Total
Articles Retrieved	3286	324	981	91	4682
Articles removed after deduplication	1771	317	972	80	3140
No. exported to Rayyan for screening					3140
Articles removed by reviewing titles and abstracts					2645
Remaining articles for full text review					475
Articles removed after full text review					447
Articles included in updated literature review					22

All articles imported to Zotero library.

Appendix 2.2 Prisma Diagram



Appendix 2.3 Research Methods and Countries of Origin of Studies in the Literature Review

Country	Quantitative Studies	Qualitative Studies	Mixed Methods Studies
Australia		6	2
Canada	1	1	1
China	1	2	
Denmark		1	
Finland	1		
Hong Kong		1	
Ireland	1	1	
Japan	1		
Korea			1
Kuwait		1	
Nepal		1	
Netherlands		1	
New Zealand		1	
Norway	1	1	
Saudi Arabia	2	2	
Singapore			1
Slovenia		1	1
Sweden		2	1
Taiwan		2	
Turkey		1	
UK		1	1
USA	4	11	
Total	12	37	8

Appendix 2.4 Summary of Studies Included in the Literature Review

Quantitative Studies (n=12)

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Alghamdi and Baker, (2020) Saudi Arabi https://doi.org/10.1111/jocn.15344	Identifying the experiences of new graduate nurses during the transition period to practise as a professional nurse	To assess the impact of orientation programmes on NQNs' transition periods.	Descriptive correlational design NQNs (n=95) 6 months to 2 years' experience. Casey-Fink Graduate Nurse Experience Survey	Some everyday tasks were challenging. NQNs (50.5%) identified that more support (50.5%) is required during orientation.	Small response rate, single site
Baker, (2020) Saudi Arabia http://dx.doi.org/10.4103/sjhs.sjhs.8820	New graduate nurses' transition: Role of lack of experience and knowledge as challenging factors	To identify the challenges and the associated factors which limit the knowledge acquisition of NQNs	Cross-sectional design Quantitative Casey-Fink Graduate Nurse Experience Survey (NLRN) (n=95) NQNs one region	Factors that increased satisfaction in the work environment were peer support (61.1%), patients and families (42.1%), ongoing learning (18.9%), professional nursing role (32.6%), and positive work environment (34.7%). Least satisfaction factors were nursing work environment (33.7%), system (58.7%), interpersonal relationship (31.5%), and orientation (12%). No significant association between support, patient safety, communication/leadership, professional satisfaction, and job satisfaction on number of preceptors.	Small sample size despite the involvement of several hospitals

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Cai, (2021) China https://doi-org.elib.tcd.ie/10.1016/j.nepr.2020.102951	Transition of newly graduated nurses in China: An evaluation study	To investigate the work adaptability disorder from the perspective of the organisational socialisation and explore the potential factors of work adaptability disorder of NQNs.	Convenience sample NQNs (n= 206) 4 tertiary hospitals. Work Adaptability Disorder Scale, the Transition Shock of Newly Graduated Nurses Scale, and the Organisational Socialisation Questionnaire	Low level of readiness for transition. Transition shock was high in physical ability and lower in social scale. Socialisation was challenging and they felt they needed more support from the nurse manager.	Convenience sample
Deasy et al., (2011) Ireland https://doi.org/10.1016/j.nepr.2010.11.006	An exploratory study of role transition from student to registered nurse (general, mental health and intellectual disability) in Ireland	To explore role transition from student to registered nurse in a cohort who had a substantial rostered internship in final year of their programme	Quantitative Postal Pre-registration survey Post registration survey developed from the literature. Convenience sampling NQNs Pre (n = 98) 84% response rate. Post (n=21) 22% response rate 4 th year general, mental health, and intellectual disability students	Over half of the respondents agreed that they were adequately prepared for the role of registered nurse, feeling the course content was relevant, and they felt they had adequate opportunities to develop their skills. However, only 30% of the students, pre and post registration, felt that they had adequate opportunities to develop their management skills.	Single site study Convenience sample Low response rate in phase two results not generalisable

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Hickey, (2010) USA https://doi.org/10.1016/j.profnurs.2009.03.001	Baccalaureate Nursing Graduates' Perceptions of their clinical instructional experiences and preparation for practice	To identify the perceptions of recent baccalaureate nursing graduates regarding their academic, clinical experience and if they felt prepared to enter the practice area	Case Study used Qualitative and Quantitative methods Survey mailed from alumni office. Clinical Instructional Experience Questionnaire (CIEQ) contained quantitative and qualitative questions. Purposive sampling NQNs (n=33) 33% response rate 6 months to 1 year after graduation	89% identified that they had learnt to set priorities. 56% felt they had developed organisational skills. 51% had learnt advanced technical skills on placement.	Low response rate and single study site Findings not generalisable
Johanson, (2013) USA https://doi.org/10.1097/01.nurse.0000432075.34645.11	How do new BSN nurses perceive their nursing education?	To determine if the nursing degree prepared nurses for the demand of the profession	Quantitative non-experimental descriptive design Postal survey developed by the researchers. Systematic random selection of NQNs (n=58) from the past 2 years from the North Carolina Nursing Board 20% response rate	NQNs felt prepared for the transition to practice but felt that they needed more clinical time to practice essential clinical skills.	Although regional study, small sample size findings not generalizable

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Laschinger, (2016) Canada https://doi-org.elib.tcd.ie/10.1016/j.ijnurstu.2016.01.005	Starting out: A time-lagged study of new graduate nurses' transition to practice	To what extent do situational and personal work life factors change over a one-year period of early career employment as a registered nurse and identify the extent that the linear combination of situational and personal work life factors predicts NQNs retention outcomes over a one-year timeframe.	Random sampling NQNs (n = 406) A short form of the NWI-R (Aiken and Patrician, 2000) was developed for this study to reflect support for professional practice	High expectations that were unrealistic (i.e., lower person-job fit). Difficult work environment due to incivility from staff. High levels of burnout in NQNs.	Risk of bias self-reported questionnaires
Numminen et al., (2016) Finland https://doi.org/10.1111/jonm.12280	Practice environment and its association with professional competence and work-related factors: perception of newly graduated nurses	To explore NQNs perceptions of their practice environment and its association with their self-assessed competence, turn over intention and job satisfaction as work related factors	Quantitative cross-section correlational design Practice Environment Scale of the Nursing Work Index NQNs (n=318) 30% response rate	Negative perceptions were evident in relation to communication with positional hierarchy. NQNs identified confidence in the quality of care, found managers competent, supportive, and courageous, they had opportunities for professional development and participation in decision making. These are positive using management and leadership attributes.	Low response rate, single site,

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Smith and Chalker, (2005) USA https://doi.org/10.1097/00124645-200503000-00002	Preceptor continuity in nurse internship program	Evaluate the impact of preceptor continuity in the Nurse Internship Program (NIP). NIP is a 4-month program for nurse graduates where new graduates are placed in two to four clinical settings, medical and surgical.	Descriptive retrospective design Preceptor Continuity in the Nurse Intern Program' internal postal survey Convenience sampling NQNs (n=216)	A single preceptor is beneficial to interns as they helped NQNs take responsibility for four to six patients and increased their confidence in skill development and clinical decision making. On the other hand, having multiple preceptors assisted interns to improve clinical skills and knowledge and were a resource for problem solving.	Single site a military hospital with varying influences that were not national, the intern program was developed and implemented by the hospital
Steen et al., (2011) USA https://doi.org/10.1097/nnd.0b013e3181a68acc	Effect of student nurse intern position on ease of transition from student nurse to registered nurse	Investigated the effect of the student nurse intern position on the ease of transition to RN.	Quantitative study NQNs (n=50)	Established functional working relationship with staff and feeling familiar with the environment promoted a level of comfort. 63% of interns identified that intern experiences resulted in the pursuit of nursing in different areas from which they were originally interested. Conflict with other staff did not affect interns' decisions to change units. 81% of NQNs who remained on the same ward after internship felt more pressure to perform from management compared with only 45% who changed wards upon graduation. Similarly, 60% of participants who remained on the same ward after internship felt increased pressure to perform from other registered nurses compared with only 20% who changed wards upon graduation.	One hospital in one geographic area. No control group, as only interns who had participated in the internship program.

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Takase et al., (2014) Japan https://doi.org/10.1016/j.nedt.2013.04.017	Competence development as perceived by degree and non-degree graduates in Japan: A longitudinal study	To explore changes in NQNs perceptions of the demands-abilities and supplies-needs misfits and their impact on turnover intention.	Longitudinal quantitative Nursing Competence Scale and the Work Environment Scale and the Modified Withdrawal Cognition Scale. Participation at 3 rd , 6 th , 9 th , and 12 th month NQNs (n=175) from 5 Hospitals	As time went by and experience was gained by the end of the year, they rated themselves reasonably / almost fully competent. NQNs experienced unrealistic demands.	Multiple sites longitudinal study
Wangensteen et al., (2012) Norway https://doi.org/10.1016/j.profnurs.2011.11.014	Newly graduated nurses' perception of competence, critical thinking, and research utilisation	To describe NQNs perceptions of competence and identify possible predictors influencing their perceptions	Nurse Competence Scale, California Critical Thinking Disposition Inventory, Research Utilization Questionnaire sent by post. NQNs (n=12)	NQNs who had prior healthcare experience before entering nursing scored competence higher in comparison to those that did not have prior experience. The 'Helping role' was the highest reported as more frequently competence used compared to 'coaching/teaching' which scored lower.	Small sample size Single site

Qualitative Studies (n=37)

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Ahmad et al., (2022) Kuwait https://doi-org.elib.tcd.ie/10.47391/jpma.3912	Experiences regarding internship among Bachelor of Science in nursing students in Peshawar: A qualitative study	To explore the experiences of NQNs during their internship in a tertiary care setting.	Qualitative phenomenological descriptive study semi-structured (30-60 mins) interviews Non-probability purposive sampling NQNs (n=11) (3 hospitals) September 2020 to May 2021	'Personnel Problems' -personal weaknesses, e.g. feeling difficult, lack of clinical experience and low morale. Most were very uncertain during the initial days of internship and felt pressure both physically and mentally. Not accepted as qualified nurses by society. Lack of support and high expectations.	Small sample size from 3 hospitals. Results more relevant to Kuwait as the nursing workforce is made of several grades so findings not generalisable.
Alharbi et al., (2023) Saudi Arabia https://doi.org/10.3390%2Fhealthcare11142048	The experiences of newly graduated nurses during their first year of practice	To explore the experiences of NQNs during their first year of practise.	Qualitative descriptive design Purposive sampling NQNs (n=15)	Support is essential for transition. Found difficult to understand and apply policies and procedures in the workplace. Fear of dealing with new or deteriorating patients but support from staff nurses helped them to overcome this fear and build confidence.	Small sample size Single site

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Alsalamah and Fawaz, (2023) Saudi Arabia https://doi.org/10.1002/nop2.1302	Exploring facilitators and barriers for successful transition among new Saudi graduate nurses: A qualitative study	Explore factors that promote and hinder NQN transition	Qualitative Phenomenological Focus groups. NQNs (n=35)	Fear of making a mistake and lack of confidence in their ability slowed their performance. Expected to perform at the same level as experienced nurses. Overwhelming workloads. Experienced bullying and lack of support from peers so felt they couldn't ask for help. Helpful preceptors made them feel safe and supported, were inspiring and motivating. Monthly refresher training workshops helpful.	Convenience sample One hospital limits generalisability.
Andersson and Edberg, (2010) Sweden https://doi.org/10.3928/00220124-20100326-05	The transition from rookie to genuine nurse: Narratives from Swedish nurses 1 year after graduation	To describe the experiences of NQNs during their first year in their new professional role.	Qualitative Design NQNs (n=8) with 1 year experience as RN.	Being a rookie, which includes striving for acceptance and striving for respect; and becoming a genuine nurse, which includes being able to shoulder responsibility, being able to prioritize tasks, and being able to convey confidence.	Small sample size, Single site, Findings reported are part of a larger study
Clark and Springer, (2012) USA https://doi-org.elib.tcd.ie/10.1016/j.outlook.2011.08.003	Nurse residents' first-hand accounts on transition to practice.	To examine the "lived experience" of NQNs and to assess the level of job satisfaction during the first year of their nursing practice	Qualitative descriptive study NQNs (n=37) 8 days to 19 weeks experience Focus Groups (1 Hr)	Every day varied. They were overwhelmed with the workload. Fast pace of the wards meant they arrived early to prepare themselves for the day. Running and thinking. Satisfaction in working with supportive preceptors, felt valued and part of the team. Fear of harming a patient by missing a cue or not knowing. Stress sources - unsupportive preceptors, unable to access policies, strained with documentation and staff shortages.	Bias risk as got time off the wards to attend the focus groups, manager aware who participated.

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Delaney, (2003) USA https://doi.org/10.3928/0148-4834-20031001-05	Walking a fine line: graduate nurses' transition experiences during orientation	To explore NQNs transition experience during orientation	Phenomenological qualitative method NQNs (n=10) undertaking a 12-week orientation programme to assist them in their transition.	NQNs valued the knowledge and experience of the more experienced preceptors, and they had negative perceptions of the less experienced preceptors. They only realised the responsibility once they were qualified and felt frightened about caseload and time management and the fact that patients relied on them for care.	Rich data, Small sample size and specific graduate programme together with the single site makes the findings difficult to generalise.
Della Ratta, (2016) USA https://doi-org.elib.tcd.ie/10.1111/jocn.13358	Challenging graduate nurses' transition: Care of the deteriorating patient	To understand NQNs experiences of caring for a deteriorating patient during the first year of practice	Qualitative, interpretive method semi-structured interviews (28mins-1hr) Purposive Sampling NQNs (n=8) working in different areas	Found it challenging and questioned their capability of becoming a nurse. Trusted relationships and support enabled them to build skills and confidence in caring for deteriorating patients.	One site different transitional programme Small sample size

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Ellerton and Gregor, (2003) Canada https://doi.org/10.3928/0022-0124-20030501-05	A study of transition: the new nurse graduate at 3 months	To explore the adequacy of preparation of NQNs qualifying with a degree in nursing	A descriptive qualitative study One to one semi-structured interviews Convenience sampling NQNs (n=11)	Described the challenges they faced in relation to organisation of patient care or trying to find their way through procedures or charts for lengthy periods to find relevant information that experienced nurses would do much more efficiently.	Small sample size, Rich data was obtained from participants across three sites.
Etheridge, (2007) USA https://doi.org/10.3928/00220124-20070101-05	Learning to think like a nurse: stories from new nurse graduates	To explore NQNs' perceptions of clinical nursing judgement in the acute care setting	Descriptive longitudinal phenomenological study using semi-structured interviews	NQNs did not understand the meaning of nursing clinical judgement. Phrase learning to think like a nurse was associated with the feelings of confidence, taking on additional responsibility and thinking critically. NQNs were fearful of missing indications of change in patients' status, inability to recognise the meaning of assessment data, fear of not knowing what was going on.	Single site Longitudinal study Number of participants not included
Gautam et al., (2023) Nepal https://doi.org/10.1186/s12912-023-01418-2	Transition to professional practice: Perspectives of new nursing graduates of Nepal	To explore NQNs' perceptions of the transition to professional practice.	Qualitative Descriptive Semi-structured interviews (35-42 mins) Purposive sampling NQNs (n= 10) from two private hospitals in Nepal. To participate they had to have worked in the hospital for 1 year.	High expectations made them feel inadequate. Differences between what is taught in college and happens in practice. Students felt intimidated by the reality of the nurses' role/ level of responsibility. Confidence and demotivated when they were not trusted by patients or family and senior nurses' accusations. Transition was difficulty as the orientation period was short. NQNs felt unsupported and were the victims of hierarchical culture. They asked seniors for advice and guidance to understand practice.	A small sample size from two private hospitals that were experiencing shortages of nurses due to high staff turnover at that time limits the generalisability of the findings.

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Hart, (2019) UK https://doi.org/10.12968/bjon.2019.28.6.362	The experience of preparing for and transitioning to registered practice	Retrospective account of how final placements prepared NQNs for transition.	Qualitative Descriptive One to One interview (n=6) NQNs	Support in the CLE important for learning. Mentors stepping back enabled the students to experience independent practice, this helped build confidence. The recognised the value of 3 years of education and the consolidation of learning in the final placement. Feeling part of team and belongingness positively impacts transition.	Reduced generalisability of findings one site one area
Ho et al., (2010) China PMID: 21140342	Role transition and working adaption in new nursing graduates: a qualitative study	To understand the role transition experience of NQNs as they transitioned into clinical practice during their first three months on the job.	Qualitative descriptive approach Semi-structured interview NQNs (n=50)	NQNs adapted to the role of registered nurse in three stages in the first 3 months. Understanding: NQNs knowledge and skills are insufficient to handle routine work, adapting to the role transition is difficult, feelings of anxiety emerged related to fears of incompetence, communication difficulties must be faced in the handover process, new nurses adopt feelings of attachment to their preceptors, they must work to adopt appropriate attitudes and approaches to nursing practice, and support is sought from family, teachers and friends. Acclimation: Learning to care for patients independently, seeking role models, learning to adapt to night shifts	Rich data

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Hsiao et al., (2021) Taiwan https://doi-org.elib.tcd.ie/10.1080/10376178.2022.2029519	Role transition of newly graduated nurses: a qualitative study	To explore how Taiwanese NQNs perceived their new role and the process through which they transition into the professional role.	Charmaz's (2006) constructivist grounded theory One to one interview (45 mins -1 hour) Purposive, theoretical sampling and snowball sampling NQNs (n=30) in 3 tertiary and 2 community hospitals	Described the journey of role transition in four stages. The stages involved in role transition were identified- Hesitation, psychological preparation, development, and appreciation. The hesitation stage also known as a phase of passive learning. Psychological preparation – NQNs started to take full work responsibility. Development stage they gained work confidence, and, in the appreciation stage, they fully understood the role of the registered nurse.	Rich data from several sites
Hung et al., (2017) Hong Kong http://dx.doi.org/10.5176/2345-7198.5.1.16	The transition challenges faced by new graduate nurses in their first year of professional experience	To illustrate the transition experience of NQNs and to identify the factors affecting their adaptation processes.	Exploratory Qualitative Semi-structured, face-to-face individual interviews Purposive and snowball sampling NQNs (n=14) with one year experience as registered nurse in different areas	Experienced reality shock in their first few months which caused them tremendous stress. Many participants had attained a sense of achievement and satisfaction describing their first year as 'fruitful and unforgettable'. To improve their Organizational skills were lacking but developed during transition. Self-adaption and positive attitude helped with transition. Most participants' experienced negative attitudes from senior colleagues - isolation and bullying this led to frustration and feelings of helplessness.	Single site

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Kelly and Ahern, (2009) Australia https://doi.org/10.1111/j.1365-2702.2008.02308.x	Preparing nurses for practice: a phenomenological study of the new graduate in Australia	Explore the expectations of final year nursing students before they start employment and to describe the experiences of NQNs during their first six months as registered nurse.	Qualitative Husserl's phenomenological approach (BSN-NQN n=13) Individual interviews before registration, one month and six months post registration.	Before registration they held positive perceptions about their impending role as a registered nurse and what it would encompass. After one month as RN, it became apparent that nursing comprised of a culture that embraced cliques which excluded them. The NQNs were unprepared for negative attitudes and the limited amount of assistance with unfamiliar tasks they received from RNs. Rotating to different wards recreated the feelings they experienced on commencing employment.	Rich data Single site
Kumaran and Carney, (2014) Ireland 10.1016/j.nepr.2014.06.002	Role transition from student nurse to staff nurse: Facilitating the transition period	To explore the experience of role transition	Heideggerian Hermeneutic approach (n=10) NQNs	The NQNs identified positive feelings at the achievement of their degree and registration as a nurse. These feelings changed to 'nervous' and 'feeling vulnerable' when they realised the responsibility and accountability of the RN. They were most nervous about taking their own patient caseload. Experience of their feelings of recognition, acknowledgement and acceptance by patients and MDT.	One site Rich data

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Lea and Cruickshank, (2007) Australia	The experience of new graduate nurses in rural practice in New South Wales	To explore the role transition for NQNs in rural practice in New South Wales	Qualitative hermeneutic-phenomenological Purposive sample was drawn from eight rural health care facilities in NSW where participants were employed as new graduate nurses in the first year of a graduate nurse transition program. NQNs (n=10) interviewed	The ward culture, workload, and level of responsibility within rural healthcare facilities were of concern for the NQNs and influenced their retention within the rural nursing workforce.	Small sample size Representation from eight sites
Lea and Cruickshank, (2015) Australia https://doi.org/10.1111/jocn.12720	The support needs of new graduate nurses making the transition to rural nursing practice in Australia	Explored the experiences of NQNs making the role transition in rural health care facilities in Australia	Exploratory, descriptive, qualitative case study Purposive sampling NQNs (n=15) Individual interviews at three to four months, six to seven months, and 10 to 11 months.	NQNs progress along the transition continuum. Role realised on graduation. Important to allocate workload within the NQNs abilities.	Rich data

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Lee et al., (2013) Taiwan https://doi.org/10.1111/j.1365-2702.2012.04189.x	'Struggling to be an insider': a phenomenological design of new nurses' transition.	To understand the transition process of NQNs.	Qualitative Phenomenological Focus groups – 8 weekly group interviews. NQNs (n=16)	NQNs had to work hard to be part of the team due to their inability to complete certain tasks. Challenging relationships with senior nurses and hierarchical culture. NQNs felt they had to tolerate the mistreatment from senior nurses.	Rich data Single site
Malouf and West, (2011) Australia https://doi-org.elib.tcd.ie/10.1016/j.nedt.2010.10.002	Fitting in: A pervasive new graduate nurse need	To examine NQNs experiences of transition to acute care nursing practice.	Qualitative NQNs (n=9) interviews at 3 stages in their first year of practice.	Developing working relationships and acceptance is an important part of transition. Fitting in and being part of the social group was important for NQNs as they had a sense of being. NQNs were challenged when it came to fitting in as they had to change wards as part of the Transition to Practice Programme.	Rich data
Martin and Wilson, (2011) USA http://dx.doi.org/10.20467/1091-5710.15.2.21	Newly registered nurses' experience in the first year of practice: a phenomenological study	To examine the lived experience of NQNs in their first-year post registration	Qualitative study using interpretative phenomenology. Purposive Sampling NQNs (n=7) 1 year experience in acute care. Individual recorded interviews	Adaptation to the culture of nursing was linked to the level of caring relationships from colleagues and inter-professional team members, as well as to competence. Only realised responsibility once qualified.	One site Small sample size

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McCalla-Graham and De Gagne, (2015) USA https://doi.org/10.3928/00220124-20150220-17	The lived experience of new graduate nurses working in an acute care setting	To explore the lived experiences of NQNs employed in an acute care clinical setting in southwest Florida.	Qualitative Phenomenological NQNs (n=10) Individual Interviews	After registration NQNs felt part of the team and socialised into the clinical area. Independence developed after the graduation programme when supports were no longer available.	Single site Small sample size
McKenna and Newton, (2008) Australia	A phenomenological exploration of how new nurses develop their knowledge and skill over the first 18 months following graduation	To explore the ways NQNs develop their knowledge and skill during and immediately after their first year of graduate practice.	Qualitative descriptive Focus groups NQNs (n= 25) 4 hospitals	Socialisation into a clinical area and acceptance by colleagues can take up to one year post registration to achieve. The development of NQNs does not end at transition some may still be working to develop a sense of belonging, independence in their practice and exploring their future development.	Small sample size Multi-site study
Murray et al., (2019) Australia https://doi.org/10.1111/jocn.14839	New graduate nurses' understanding and attitudes about patient safety upon transition to practice	To explore the transition experiences of NQNs with particular attention to patient safety.	Qualitative descriptive approach Semi-structured interviews NQNs (n=11)	Due to transition shock NQNs focus on time management and task completion more so than patient safety and holistic care. Medication Management was a significant stressor that adds to time management issues. They felt they moved two steps forward, one step backward with their understanding of patient care and safety.	Single site Small sample size

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Ortiz, (2016) USA https://doi.org/10.1016/j.nepr.2016.04.001	New graduate nurses' experiences about lack of professional confidence	Level of professional confidence upon entry into professional practice and how it developed during their first year of practice in the hospital setting	Descriptive Qualitative Design NQNs (n=12)	Feelings of professional confidence varied during the first year as RN. They felt a lack of professional confidence throughout each month of employment and the extent of depended on situations. Making mistakes and poor communication experiences with colleagues decreased their lack of professional confidence.	Small sample size
Prosen and Ličen, (2023) Slovenia https://doi.org/10.1186/s12909-023-04747-7	Newly graduated nurses' perceptions of their professional role and professional competency: a qualitative focus group study	To explore NQNs' perceptions of their new professional role and professional competency associated with this role.	Qualitative study Purposive sampling professional and social networks and snowball sampling NQNs (n=18) with (1.5 years' experience) 4 face-to-face focus group interviews	Transition and support, challenges related to the scope of the practice of nursing. Reality shock experienced by some. Orientation was too short lack of support. Leadership, organisational, documentation, communication, technology, and interprofessional skills while recognised as important are perceived as the most challenging by NQNs.	One site finding not generalisable Risk of group think
Ten Hoeve et al., (2018) Netherlands https://doi-org.elib.tcd.ie/10.1111/jocn.14307	The voice of nurses: Novice nurses' first experiences in a clinical setting. A longitudinal diary studies	To investigate the experiences of novice nurses during their first 2 years after graduation.	Qualitative longitudinal approach Written diaries NQNs (n=19) across multiple wards in one hospital with 1 years' experience as RN.	Most (n = 13) had positive experiences with patients and this impacted self-confidence and self-concept. Feelings of respect and trust from patients enhanced their commitment to the profession. Some (n=14) experienced negative attitude from patients-verbal harassment e.g. public criticism. Positive relationships with doctors boosted confidence while others had negative experiences and felt belittled. Support, feedback and feeling part of the team were important.	Single site findings not generalisable.

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Toothaker et al., (2022) USA https://doi.org/10.33940/culture/2022.12.1	The challenges of transition to practice expressed through the lived experience of new-to-practice nurses	To describe the lived experiences of NQNs' safe transition into practice and their perceptions of functioning as safe practitioners	Descriptive, phenomenological arm of a larger, mixed methods study (Safety Transition Education to Practice study) Interviews about their first 6 months of practice One to one online semi structured interviews NQNs (n=11)	Transition to practice is overwhelming and uncertain. Lack of practical knowledge – felt there was so much they did not know. Felt unprepared to meet the demands of the role of registered nurse. Needed more hands-on skills and experience. Lack of real-world knowledge made them stressed. On graduation they were not ready and had a lack of confidence in their ability. They were safety conscious and liked the safety culture of the practice areas. Staff shortages threatened patient safety.	Participants selected from the mixed methods study so not representative of one area but different areas so variation of results. Their training was impacted by the pandemic
Urban and Barnes, (2020) USA https://doi.org/10.1097/NND.0000000000000608	Transition to practice: The lived experience of new graduate nurses in early solo flight	To explore NQNs experiences of their transition to independent practice	Qualitative Design One to one interview NQNs (n=15)	The NQNs felt overwhelmed, navigating work-based relationships, and finding their way in independent practice	Single site
Urban and Brandenburg, (2022) USA https://doi.org/10.1097/nnd.0000000000000759	Understanding the lived experiences of new graduate nurses with 8–10 months of experience	To describe the lived experiences of NQNs with 8–10 months of employment within their first year of nursing practice	Qualitative Phenomenological Face to face semi-structured interviews NQNs (n=16)	During this transition stage, NQNs are emerging from the overwhelming and stressful days of early independent practice. Their lived experiences reflect unique characteristics related to this final stage of the Transition to Practice year.	One site not generalisable

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Voldbjerg et al., (2016) Denmark https://doi.org/10.1111/jocn.13628	Newly graduated nurses' use of knowledge sources in clinical decision-making: an ethnographic study	To explore what knowledge NQNs use in clinical decision making, why they use it, and how it is used, new graduates used three sources of knowledge for clinical decision making: other, self, and gut feeling.	Ethnographic study participant observation and semi structured interviews NQNs (n=9) in medical and surgical wards	When uncertain, the NQNs asked the experienced nurse and doctor, as these were viewed as knowledgeable, trustworthy, and legitimate sources.	Small sample size, single site study
Wangensteen et al., (2008) Norway https://doi-org.elib.tcd.ie/10.1111/j.1365-2702.2007.02229.x	The first year as a graduate nurse – an experience of growth and development	To illuminate how recently graduated nurses experience their first year as a nurse.	Qualitative design individually interviews. NQNs (n=12) working in hospitals and home care	Uncertainty and chaos; need for induction; need for a supportive environment; need for recognition; awareness of responsibility; need for positive experiences; becoming experienced; and managing challenges.	In depth data Mixed locations with small sample size

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Walker, (1998) New Zealand PMID: 10481649	The transition to registered nurse: the experience of a group of New Zealand degree graduates	Explore issues faced by NQNs in their first year as registered nurse and to identify if the degree outcomes had mediated this transition process.	Qualitative Design Purposive sampling NQNs (n=5) two focus groups, one held at 4 months and the other at 9 months after starting work.	Five themes were identified: accepting responsibility, accepting their level of knowledge, becoming a team member, professional standards, and workplace conditions. NQNs used their cultural safety knowledge but perceived their knowledge of research as linked to further academic study. NQNs were able to critique their own practice but they found it more difficult to challenge their colleagues' practice and the wider agency culture.	Small sample size
Willman et al., (2021) Sweden https://doi-org.elib.tcd.ie/10.1111/jocn.15483	Insufficiently supported in handling responsibility and demands: Findings from a qualitative study of newly graduated nurses	To explore NQNs experiences and how they manage complex patient situations.	Qualitative study design. 4 Focus Groups Convenience sample NQNs (n=16) with 6 months experience post registration.	Did not feel sufficiently prepared and supported to meet responsibilities and demands. Competence not taken into consideration when allocating responsibility. Lack of experience could impact patient safety.	Convenience sample Small sample size

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Yildiz and Ergun, (2020) Turkey http://dx.doi.org/10.33808/clinexphealthsci.604266	Transition experiences of newly graduated nurses	To explore the transition experiences of NQNs in the first year of their profession.	Qualitative NQNs (n=30) from 8 hospitals January 2018 and March 2018	The needs of NQNs are different from to experienced nurses. NQNs expected feedback and support from colleagues and managers. Feeling part of the team were the main socio-cultural and developmental tasks of NQNs. Stress was experienced during transition to the role.	Small sample size No. of sites involved
Zheng et al., (2023) China https://doi.org/10.1016/j.nedt.2022.105682	New nurses' experience during a two-year transition period to clinical practice: A phenomenological study.	To explore the experience of NQNs during the two-year transition period to clinical practice.	Descriptive phenomenological study Face-to-face, semi-structured in-depth interviews two teaching hospitals NQNs (n=14) within three months of completing transition.	Challenges experienced stress and anxiety; perceived change of mentality and self-reflection; Response: self-encouragement; self-compulsion, tolerance, adaptation; peer support and affirmation; 3. Growth: overall clinical competency improved; nursing skills improved; knowledge enhanced, Reflection: self-inadequacy; rotation benefits; the merits of different departments; lack sense of belonging; Expectation: desire to be treated equally; hope to have more opportunities.	Multiple Sites Small sample size Rich data

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Zinsmeister and Schafer, (2009) USA https://doi.org/10.1097/nnd.0b013e318194b58c	The exploration of lived experiences of the graduate nurses making the transition to registered nurse during the first year of practice	Explored the lived experiences of nine NQNs during their first 6 to 12 months of clinical nursing practice.	Qualitative, phenomenological research approach Selection of the purposive sample was based on criteria: (a) graduate nurses working as staff nurses for at least 6 months but no longer than 1 year and (b) graduate nurses working within a specified healthcare organization. NQNs (n=9) were interviewed by several data collectors in a private area at the place of employment	Preceptor experience influenced their positive experience during transition. Orientation period helped to transition them to the role. Managers tailored the orientation to the needs of the NQNs as all were recognised as having different needs. High levels of satisfaction were reported and feelings of pride in their role. They were clear on expectation but reminded to give themselves as NQNs time to adjust to the new role. Mixed view on professional confidence with some feeling more confident than others, some reported knowing what to do but were not sure if they could do it.	Small sample size Different interviewers, interviews took place in the workplace – risk of bias

Mixed Methods Studies (n=8)

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Aboshaiqah and Qusin, (2018) Saudi Arabia https://doi.org/10.1016/j.nedt.2018.05.021	Nursing interns perception of clinical competence upon completion of preceptorship experience in Saudi Arabia	To determine if the preceptorship program provided nursing interns with the appropriate education to enhance clinical competence	Mixed methods Data was collected concurrently using a Demographics Questionnaire, the Clinical Competence Questionnaire and 2 open ended questions about improvement of the internship programme and factors that impact on clinical competence Sample n=92 71% response rate * The participants in the preceptorship program were known as interns and after completing their four year degree in nursing programme are registered to do another 1 year internship practice in the clinical setting.	The internship programme assisted the interns in increasing their competence in prioritizing and recognising deteriorating patients, multitasking, and demonstrating complex nursing skills. They felt it was a constructive experience. The interns identified factors such as availability, and approachability and trustworthiness of preceptors as influential factors.	Small sample size Single site – results difficult to generalise

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Halpin et al., (2017) UK https://doi.org/10.1111/jan.13344	A longitudinal, mixed methods investigation of newly qualified nurses' workplace stressors and stress experiences during transition	To investigate transition in NQNs by exploring stressors and stress experiences during their first 12 months as RN.	Longitudinal, explanatory sequential mixed methods design Phase 1 – 3 Nurse Stress Scale, Phase 4 semi-structured, one-to-one (n=14) interviews 12 months post registration	Stressed trying to manage the workload as staff availability was limited. Negative attitude of co-workers was stressful for the new grads. Fear as they had increased responsibility.	Rich data
Hussein et al., (2017) Australia https://doi.org/10.1186/s12912-017-0236-0	New graduate nurses' experiences in a clinical speciality: a follow up study of newcomer perceptions of transitional support	Examine NQNs' perspectives changed over 12 months during a Transitional Support program and explored how organisational factors and clinical supervision influenced their experiences	A convergent mixed methods study Phase 1: The survey was distributed at 8-10 weeks and then at 10-12 months after commencement NQNs (n=114) completed the baseline survey and (n=87) completed the follow up survey. Two thirds worked on non-critical care areas and one third worked in non-critical care areas. Manchester Clinical Supervision Scale (MCSS-26)	The respondents identified that orientation is the foundation of success. The majority were positive and indicated the success was attributed to the program. NQNs were given orientation days on the wards which were supernumerary. NQNs responded positively to the welcome they received and formal introduction to the team. Identified the significance of support during transition, CNMs and nurses were crucial for acceptance and learning. The respondents identified the importance of the ability to understand the clinical capability of the new graduate. Some staff had unrealistic expectations of new graduates clinical capabilities and the limited time they spent orientating the new grads was viewed as unhelpful.	One site Mixed methods Rich data

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Kim and Shin, (2020) Korea https://doi.org/10.1016/j.profnurs.2020.08.006	Exploring barriers and facilitators for successful transition in new graduate nurses: A mixed methods study	To explore the barriers to, and facilitators of NQNs' successful transition	Convergent mixed methods design NQNs (n = 212) two K university medical centres. Convenient Sample Quantitative (n=212) - cross-sectional Casey-Fink Graduate Nurse Experience Survey Qualitative focus group interview design (n=22). October to December 2017.	Challenges – dealing with emergencies, cardiac arrest, respiratory therapy, prioritisation, and time management most difficult skills. Stress, fears, workload, excessive role expectation, and emotional difficulties related to bullying hampered role transition. Stress includes fears about skill ability, level of knowledge, communication with doctors, patients, and senior nurses, workload, expectations, and unsupportive environments. Interactions impacted self-confidence.	Risk of bias convenience sample small sample size from two hospitals findings not generalisable.
Parker et al., (2014) Australia DOI: 10.1016/j.nedt.2012.07.003	New graduate nurses' experiences in their first year of practice	To explore NQNs' experiences of entering the workforce and to identify factors that affect transition, satisfaction, and retention.	Mixed methods cross-sectional combining qualitative and quantitative methods. Online survey was developed from the literature with satisfaction items adapted from the Hegney and Mc Carthy (2000) survey. 24% response rate for the online surveys (n=282) NQNs, seven focus groups were conducted with (n=55) NQNs with 6-10 in each group	NQNs were clear on roles and responsibilities, but 26% identified that they did not have or were unsure if they had enough information to carry out their job; 22% felt unable to meet their own expectations; 45% of newly qualified nurses experiences increased stress levels with role expectations with no difference across genders; 85% were confident in meeting others expectations; and 85% felt they had the ability to perform competently. The majority described work as emotionally and physically challenging due to the heavy workload.	Risk of bias was acknowledged by the researchers as only graduates from a single site participated, the small sample size makes the findings difficult to generalise.

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Pfaff et al., (2014) Canada https://doi.org/10.1016/j.ijnurstu.2014.01.001	Exploring new graduate nurse confidence in interprofessional collaboration: A mixed methods study	Explored new graduate nurses' confidence in inter-professional collaboration using a convenient sample of new graduate nurses from one college	Explanatory sequential Mixed methods design Phase 1 online survey Phase 2 postal Interviews Convenience sampling NQNs (n=514) were sent the survey snowball sampling NQNs (n=16) interviews.	The study found higher levels of confidence in inter-professional collaboration in the acute setting, compared to the community and long-term care settings. No difference in confidence based on gender, prior experience in health sector, preceptorship/mentorship, or formal orientation was found. However, supportive relationships within the team and with managers facilitated confidence to engage in inter-professional collaboration, with participation in formal and informal opportunities increasing confidence through exposure to different disciplines	One site Mixed methods Rich data
Sterner et al., (2023) Sweden https://doi.org/10.1016/j.nepr.2023.103782	Prepared to learn but unprepared for work: A cross sectional survey study exploring the preparedness, challenges, and needs of NQNs entering a hospital-based transition program	To investigate NQNs perceptions of educational preparedness, their challenges, and their expectations during their transition to hospital care and introduction to work.	Mixed methods - Cross-sectional survey design with open ended questions NQNs (n=248) enrolled in a regional transition program in 6 hospitals (three-cohorts during September 2021, January 2022, and September 2022).	Theoretical preparation was rated high while the practical preparation was rated lower. Most of the respondents (71.8%) identified workload as a challenge, 56% experienced fear (i.e., fear making mistakes, fears about patient safety), 54.8% identified lack of confidence in their own abilities, 45.6% identified role expectations, and 16.9% identified social interactions/relations as challenging. Only 6.9% did not experience any of these challenges.	Experiences would have been impacted by Covid. 65% response rate is recorded but no. distributed is unknown this is inaccurate. No mention of pilot testing or reliability tests on the survey or information on how it was developed.

Authors, Year and Country	Title	Aim	Type of Study and Data Collection Methods	Key Findings	Strengths and Weaknesses
Woo and Newman, (2019) Singapore https://doi.org/10.1016/j.ijnss.2019.11.002	The experience of transition from nursing students to newly graduated registered nurses in Singapore	To investigate the experience of NQNs following their initial 6e12 months of transition to RN	Sequential mixed-method approach 1 st Phase- descriptive quantitative design Questionnaire (online – developed for the study) (n=30) 2 nd Phase - descriptive qualitative design focus group (n=5) interview Purposive sampling.	Stress due to perceived experience and knowledge deficits. Felt a lack of clinical skills to deliver patient care and lack of ability and confidence to manage responsibilities, communicate with patients/relatives, doctors, and interpretation of laboratory results. Difficulty adjusting to professional identity and nursing in the real world. Reality shock at realising role of the nurse.	Findings not generalisable due to small sample Findings not representative of larger population size

Appendix 3.1 Levels of Competence

Levels of competence for the National Competence Assessment (NMBI, 2019; p. 7)

“Competence is defined as the attainment of knowledge, intellectual capacities, practice skills, integrity and professional and ethical values required for safe, accountable and effective practice as a Registered Nurse. To assist in determining if a nursing student has met the required level of competence, NMBI have detailed performance criteria based on Benner (1984) and Steinaker and Bell (1979) for each domain and relevant indicators which demonstrate if the performance criteria have been met” (NMBI, 2019, p.7).

(Benner, 1984)
Novice
The nursing student has no/limited experience and understanding of the clinical situation, therefore, they are taught about the situation in terms of tasks or skills, taking cognisance of the theory taught in the classroom. The nursing student is taught rules to help them apply theory to clinical situations and to perform tasks.
Advanced beginner
The nursing student demonstrates acceptable performance based on previous experience gained in real clinical situations.
Competent
A nursing student who has gained experience and therefore can plan actions with a view to achieving efficiency and long-term goals. She/he has the ability to manage the complexity of clinical situations.

(Steinaker and Bell, 1979)
Exposure
The nursing student has the opportunity to observe a situation, taking cognisance of the learning objectives of the programme and the practice placement.
Participation
The nursing student becomes a participant rather than an observer with the support of the Preceptor, where learning opportunities are identified in partnership.
Identification
The nursing student takes more responsibility for their own learning and participation and initiates appropriate action and evaluates same.
Internalisation
The nursing student makes informed decisions based on the information available and works as an autonomous practitioner.
Dissemination
The nursing student uses critical analysis to determine the outcomes of their actions and can give a rationale for their action to others.

Appendix 3.2 Benner's Model Applied to the 4-year Undergraduate Nursing Programme

Source - (Landers et al., 2020, p. 162)

Novice Advanced Beginner	Novice (Year 1: Level 1) EXPOSURE The student is a novice to nursing practice. - The student has acquired the necessary theoretical knowledge commensurate with first year of the program. - Knowledge is context-free, independent of specific cases (gained from experience), and theoretical principles are applied universally. - It is expected that the student will have a basic understanding of the broad concepts underpinning nursing care.² - The student requires exposure to all aspects of clinical practice³ (client care activities and clinical tasks).² - It is expected that the registered nurse will directly supervise the student when s/he is participating in care.³ - The student may require continuous prompting in the provision of person-centered care.^{3,4} - The student may require considerable direction in identifying her/his learning needs.³ - The student begins to apply the theoretical knowledge and the clinical skills (acquired in the Clinical Skills Resource Simulation Center [CSSRC]) through participating in patient/client care activities.¹
Novice Advanced Beginner	Novice (Year 2: Level 2) PARTICIPATION The student has had some exposure and some participation in the provision of care in the practice environment. - Student has acquired the necessary theoretical and clinical knowledge/skills commensurate with second year of the program. - Student begins to recognize recurring meaningful components gained from prior/current experiences in actual situations.² - Student needs both the assistance and close supervision of the registered nurse while s/he participates in the provision of person-centered care.^{3,4} - Frequent prompting may be required to support the student in the provision of person-centered care and in the identification of its underpinning evidence.³ - Student demonstrates acceptable performance at clinical level commensurate with stage of learning.³ - NSQ8981675 Student becomes more involved in practice and begins to identify patient/client needs under the supervision of a preceptor/registered nurse.^{1,3,4} - Student begins to identify her/his learning needs through discussion with her/his preceptor.⁴
Advanced Beginner	Advanced Beginner (Year 3: Level 3) IDENTIFICATION The student has acquired the necessary theoretical and clinical knowledge/skills commensurate with third year of the program. - Under the indirect supervision of a registered nurse, the student can identify the needs of persons and primary carers in practice and begins to adopt a problem-solving approach to the provision of safe nursing care.^{2,3,4} - The student actively participates in the assessment, planning, delivery, and evaluation of person-centered nursing and is able to provide a rationale for her/his actions.^{3,4} - The student demonstrates acceptable performance at clinical level.^{1,3} - The student recognizes recurring patterns of clinical situations gained from <i>prior experience in actual nursing care activities</i>.² - The student demonstrates awareness of the need for best practice and can identify her/his learning needs.^{2,3,4} - The student continues to need the support and guidance of a preceptor or senior nurse.³ - The student can identify her/his learning needs from clinical experience.^{3,4} - The student begins to internalize nursing care situations (based on experiences) to guide actions.^{2,3,4}
Advanced Beginner Competency	Competent (Year 4: Level) INTERNALISATION The student has acquired the necessary theoretical and clinical knowledge/skills commensurate with fourth/fifth year of the program. - The student will be expected to competently apply a systematic approach to the provision of person-centered care. - The student requires less prompting from a registered nurse and is able to transfer knowledge to new situations.^{2,3} - The student is able to support the person and their primary carers.⁴ - The student demonstrates a professional approach/ attitude to nursing care.^{2,3} - The student accepts and is accountable for her/his own practice.^{1,2,3} - The student practices collaboratively with professional colleagues within the clinical environment.^{2,3} - The student must demonstrate evidenced-based practice and critical reasoning.² - The student requires less supervision whilst caring for a group of individuals and is able to transfer knowledge to new situations.^{2,3,4} - Student gains 'competency' from planning nursing care activities based on increased clinical and theoretical knowledge and analytical thinking.^{1,2,3,4} - The student is able to provide safe, effective, evidenced-based and compassionate nursing to people throughout the life continuum in accordance with the division of nursing for which s/he proposes to registrar.^{1,2,3,4}

Note: Behavioral Learning Theory ¹; Cognitive Learning Theory ²; Social Learning Theory ³; Humanistic Learning Theory ⁴. (Baumgart et al., 2011¹; Ausubel, 1978²; Bandura, 1971, 1977³; Rogers, 1975⁴) (Benner, 1984; NMBL, 2016, pp. 22-23; Steinaker & Bell, 1979).

Appendix 3.3 Stages of Assessment of Nursing Students at each Year of the Programme

The level of competence required for each year of the programme

“During each practice placement, nursing students have to achieve all domains and all indicators at the stated minimum level. In cases where the level is identified as ‘and/or’ the HEI will have a local policy identifying which level of competency is required. This level may vary according to the practice placement learning opportunities” (NMBI, 2019; p.8).

“In cases where students may not be exposed to a specific learning opportunity to meet a required indicator, the preceptor must contact the CPC and/or Academic Link to put a plan in place to meet the learning outcome of this indicator. For example, the student and Preceptor, through simulated learning and discussion, can achieve the required learning outcomes” (NMBI, 2019; p.8).

Please see below the level of competence required for each year:

Year	Benner	Steinaker and Bell	Level of Supervision
Year 1	Novice	Exposure and/or participation	Direct supervision
Year 2	Advanced beginner	Participation and/ or identification	Close supervision
Year 3	Advanced beginner	Participation and/or identification	Indirect supervision
Year 4 Supernumerary	Advanced beginner	Identification	Distant supervision
Year 4/4.5 Internship	Competent	Internalisation and dissemination	Distant supervision

Appendix 4.1 NMBI Approved Education Bodies for General Nursing

General Nursing

Course Title	Leads to Registration	Location	Course Provider	Website
BSc (Hons) in Nursing in General Nursing	RGN	Westmeath	Athlone Institute of Technology	AIT »
BSc in Nursing (General)	RGN	Dublin	Dublin City University	DCU »
BSc (Hons) General Nursing	RGN	Louth	Dundalk Institute of Technology	DKIT »
BSc (Hons) General Nursing	RGN	Mayo	Galway Mayo Institute of Technology	GMIT »

BSc (Hons) General Nursing	RGN	Kerry	Institute of Technology Tralee	ITTralee »
BSc (Hons) General Nursing	RGN	Donegal	Letterkenny Institute of Technology	LYIT »
BSc (Hons) General Nursing	RGN	Galway	University of Galway	GY »
BSc Nursing Science General	RGN	Sligo	St. Angela's College Sligo	St Angela's »
BSc General Nursing	RGN	Dublin	Trinity College Dublin	TCD »
BSc General Nursing	RGN	Cork	University College Cork	UCC »
BSc General Nursing	RGN	Dublin	University College Dublin	UCD »
BSc General Nursing	RGN	Limerick	University of Limerick	UL »
BSc (Hons) General Nursing	RGN	Waterford	Waterford Institute of Technology	WIT »

Appendix 4.2 Number of Allocated Nurse Training Places per Year

Table 1 Number of pre-registration programmes and places

Programme title	Programme duration (years)	Leading to registration as	No. of programmes	No. of places	Quota of places for mature applicants ⁴	No. of HEIs	No. of main healthcare agencies
Children's and General (Integrated) Nursing	4.5	Registered Children's Nurse (RCN) and Registered General Nurse (RGN)	4	130	15%	4	1
General Nursing	4	Registered General Nurse (RGN)	14	925	15%	13	22
Intellectual Disability Nursing	4	Registered Nurse Intellectual Disability (RND)	8	210	35%	8	10
Psychiatric Nursing ⁵	4	Registered Psychiatric Nurse (RPN)	12	423	35%	12	14
Midwifery	4	Registered Midwife (RM)	6	144	20%	6	7

⁴ This is a dynamic quota and it may vary.

⁵ This is also called Mental Health Nursing in some HEIs.

Source: Nursing and Midwifery Board of Ireland (2020, p. 9)

Appendix 4.3 Advertisement in the INMO Magazine



Trinity
College
Dublin

The University of Dublin



Research Participants Needed

Who is eligible to take part?
All 2019 Graduate General Nurses of the BSc (Hons) in General Nursing programme

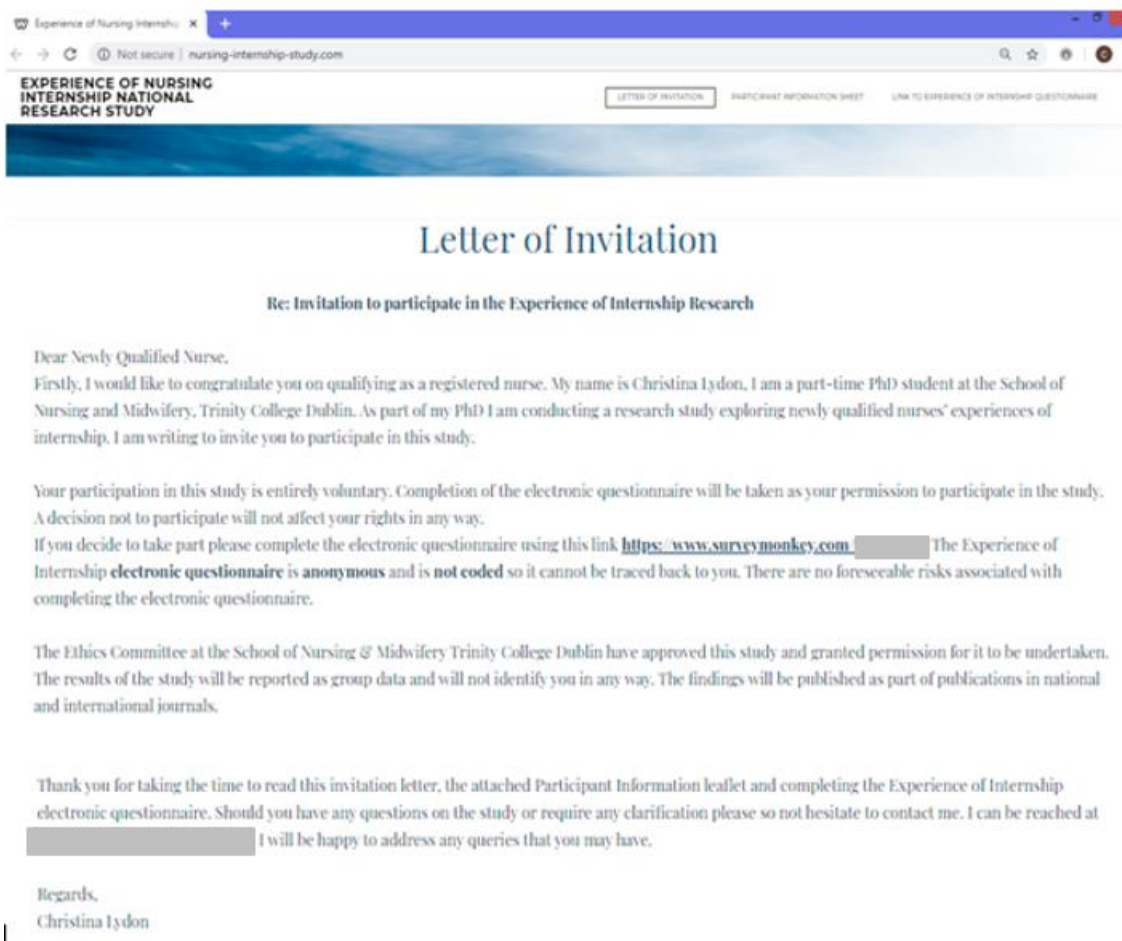
What is the research about?
The research aims to explore newly qualified general nurses' experiences and perceived value of the internship period.

Who is undertaking the research?
The research is being undertaken by Christina Lydon, a PhD student at the School of Nursing and Midwifery, Trinity College Dublin.

What is involved?
You will be asked to complete an electronic survey. You can take part by visiting www.nursing-internship-study.com/ where you will be able to access the Participant Information Leaflet and Survey Link, or by scanning the QR Code with the QR Scanning App on your phone.

If you would like more information please contact Christina Lydon by email: [REDACTED]

Appendix 4.4 Webpage



Appendix 4.5 Experience of Internship Questionnaire



Trinity College Dublin
Institute of Nursing, Health and Society
Healthcare Research

Experience of Internship Questionnaire

Welcome to My Survey

Dear Participant,

This study investigates the experiences of newly qualified general nurses following their internship period and you are being invited to participate.

If you decide to take part, please complete the Experience of Internship electronic questionnaire by pressing the NEXT button at the bottom of the screen. The electronic questionnaire is anonymous and is not coded so it cannot be traced back to any individual. There are no foreseeable risks attached to completing the electronic questionnaire. Please click on the yes button if you consent to completing the electronic questionnaire and return of the completed questionnaire is taken as consent to participate.

The electronic questionnaire will take 15 minutes to complete.

It is expected that individual interviews will be conducted as a component of this study (subject to ethical approval). If you would be willing to participate in an interview, please contact the researcher by email _____ or text _____ . Thank you for your consideration.

Thank you for participating.

Kind regards

Christina Lydon

1. I consent to participating in this study by completing the electronic questionnaire

☐ Yes

1

Demographics

* 2. Please click on the appropriate role that reflects your NMBI registration status

- ☐ Registered General Nurse
- ☐ .
- ☐ .
- ☐ .

* 3. What year did you start your undergraduate nurse training

- ☐ 2014
- ☐ 2015
- ☐ Other (please specify)

* 4. What year did you complete your internship?

- ☐ 2018
- ☐ 2019
- ☐ 2020
- ☐ Other (please specify)

* 5. How long did it take you to complete your internship

- ☐ 36 weeks
- ☐ Other (please specify)

* 6. Where did you complete your intern placements?

	Acute Hospital	Day Hospital	Community Setting
Placement 1	☐	☐	☐
Placement 2	☐	☐	☐
Placement 3	☐	☐	☐
Placement 4	☐	☐	☐

Other (please specify)

* 7. What age category are you in

☐ 20-25	☐ 41-45
☐ 26-30	☐ 46-50
☐ 31-35	☐ >50
☐ 36-40	

* 8. Did you have a part-time job during internship?

- ☐ Yes
- ☐ No

If you answered Yes, what was your part-time job during internship?

* 9. Where did you undertake your nursing degree education

☐ Trinity College Dublin	☐ Institute of Technology Tralee
☐ Dublin City University	☐ University College Cork
☐ University College Dublin	☐ Waterford Institute of Technology
☐ Athlone Institute of Technology	☐ Dundalk Institute of Technology
☐ Letterkenny Institute of Technology	☐ GMIT Castlebar
☐ St Angela's College Sligo	☐ NUI Galway
☐ University of Limerick	

Pre Internship Preparation

* 10. What structures were put in place to prepare you for the transition from supernumerary student to intern working at independent level?

- ☐ No preparation
 ☐ 4th year induction included information about internship
 ☐ Bespoke orientation internship programme by the hospital

Other (please specify)

* 11. It was made clear right from the start what was expected from students on internship.

Strongly Agree	Agree	Disagree	Strongly Disagree
☐	☐	☐	☐

* 12. There were clear guidelines for my learning.

Strongly Agree	Agree	Disagree	Strongly Disagree
☐	☐	☐	☐

* 13. I felt prepared for internship.

Strongly Agree	Agree	Disagree	Strongly Disagree
☐	☐	☐	☐

* 14. Did the internship period meet your expectations?

- ☐ Yes
 ☐ No

* 15. Could you have been better prepared for internship?

Yes

No

☐☐

If you answered YES to the previous question, please explain how you could have been better prepared for internship.



Experience of Internship Questionnaire

Experience during Internship

- * 16. The internship period consolidated my learning and helped me to link theory to practice more than any of my supernumerary placements.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

- * 17. During internship, were you satisfied with the opportunities made available to you to advance your knowledge and skills required for registration?

Yes

No

☐☐

If you answered No to the previous question, please explain

- * 18. During internship, there was greater emphasis on setting and achieving goals during clinical placement than when supernumerary.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

- * 19. During internship, I was satisfied with the opportunities to give shift handover to the nursing team.

Very Satisfied

Satisfied

Dissatisfied

Very Dissatisfied

☐☐☐☐

20. If you responded Dissatisfied or Very Dissatisfied to the previous question, please identify how often on average you gave shift handover?

Once per Day

Once per Shift

Once per Week

☐☐☐

Other (please specify)

* 21. During internship, I was satisfied with the opportunities to participate in medication management under supervision?

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

22. If you responded Dissatisfied or Very Dissatisfied to the previous question, please identify how often on average you participated in medication management under supervision.

- ☐ All drug rounds in my section during shift ☐ Once per week
☐ One drug round during shift

Other (please specify)

* 23. During internship, I was satisfied with the opportunities to participate in the doctors ward rounds/ multidisciplinary team.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

24. If you responded Dissatisfied or Very Dissatisfied to the previous question, please identify how often on average you participated in the doctor's ward rounds.

- ☐ All shifts ☐ Once per Month
☐ Once per Week
☐ Other (please specify)

* 25. During internship, I felt part of the nursing team?

Strongly Agree	Agree	Disagree	Strongly Disagree
☐	☐	☐	☐

* 26. During internship, I felt part of the multidisciplinary team.

Strongly Agree	Agree	Disagree	Strongly Disagree
☐	☐	☐	☐

* 27. During internship, I felt prepared for the recognition and management of the acutely ill patient more than when I was a supernumerary student.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

* 28. During internship, I advanced my knowledge and skills in the recognition and management of the acutely ill patient.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

* 29. During internship, I was satisfied with my patient allocation/caseload that enabled me to advance my knowledge and skills in preparation for working as a registered nurse.

Very Satisfied

Satisfied

Dissatisfied

Very Dissatisfied

☐☐☐☐

If you answered Dissatisfied or Very Dissatisfied, please explain below

* 30. On average how many patients were you allocated to care for per shift?

4

5

6

7

☐☐☐☐

Other (please specify)

* 31. I felt supported in caring for this caseload.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

32. If you responded Disagree or Strongly Disagree to the previous question, please outline why you felt unsupported

* 33. During internship, I was satisfied with the opportunities to advance my skills in recording clinical practice for my caseload in the patient healthcare record.

Very Satisfied

Satisfied

Dissatisfied

Very Dissatisfied

☐☐☐☐

* 34. During internship, I was satisfied with the opportunities to advance my skills in admitting patients.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	N/A
☐	☐	☐	☐	☐

* 35. During internship, I was satisfied with the opportunities to advance my skills in discharging patients, within my caseload.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	N/A
☐	☐	☐	☐	☐

* 36. During internship, I was satisfied with the opportunities to complete community referral documentation (e.g. PHN, CMHN, Day Hospital).

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

* 37. During internship, within my caseload I was satisfied with the opportunities to gain competence in planning and organising patient care.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

* 38. During internship, within my caseload I was satisfied with the opportunities to gain competence in prioritizing patient care.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

* 39. During internship, within my caseload, I was satisfied with the opportunities to gain competence in time management of patient care.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

* 40. During internship, did you have enough opportunities to link with specialist nurses when caring for patients'?

Yes	No
☐	☐

If you answered Yes or No to the previous question, please give details below.

* 41. During internship, I had opportunity to work alongside the Clinical Nurse Manager to gain ward management experience.

☐ Yes

☐ No

No. of times and duration each time

42. Please provide examples of valuable management experiences gained

* 43. Internship improved my ability to provide handover of patients between wards and departments?

Yes

No

Face to Face

☐☐

Phone

☐☐

Other (please specify)

* 44. When stressful events occurred during internship, there were sufficient debriefing opportunities available to support me following the event.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

If you answered Disagree or Strongly Disagree to the previous question, please outline

* 45. Internship prepared me to communicate with family members as a registered nurse.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

* 46. Are there any key clinical skills that you would like to have gained more experience in during internship to assist you in your role as a registered nurse?

Yes

No

☐☐

If you answered Yes please give details below



Experience of Internship Questionnaire

Support during Internship

* 47. Clinical staff were helpful in assisting me to learn during internship

Strongly Agree

☐

Agree

☐

Disagree

☐

Strongly Disagree

☐

* 48. In general, I was well supported on internship.

Strongly Agree

☐

Agree

☐

Disagree

☐

Strongly Disagree

☐

* 49. Clinical and patient commitments prevented clinical staff from supporting me on internship.

Strongly Agree

☐

Agree

☐

Disagree

☐

Strongly Disagree

☐

* 50. In general, there were too many students on placement for clinical staff to provide support.

Strongly Agree

☐

Agree

☐

Disagree

☐

Strongly Disagree

☐

* 51. Clinical staff had time to support me in the clinical area.

Strongly Agree

☐

Agree

☐

Disagree

☐

Strongly Disagree

☐

* 52. I was well supported on internship by the staff of the School of Nursing & Midwifery.

Strongly Agree

☐

Agree

☐

Disagree

☐

Strongly Disagree

☐

* 53. I had good access to supervisory support from my preceptor/ co preceptor during my internship.

Strongly Agree

☐

Agree

☐

Disagree

☐

Strongly Disagree

☐

* 54. During internship, I was satisfied with the support from my preceptor and co preceptor.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

* 55. During internship, I was satisfied with the support from my CPC.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

* 56. During internship, I was satisfied with the support from my Clinical Nurse Manager.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

* 57. During internship, I was satisfied with the support from my intern nursing colleagues.

Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
☐	☐	☐	☐

* 58. Are there other ways you could have been further supported during internship?

Yes	No
☐	☐

If you answered Yes to the previous question please give details below

* 59. Internship was more stressful than supernumerary placements.

Strongly Agree	Agree	Disagree	Strongly Disagree
☐	☐	☐	☐

60. If you answered Agree or Strongly Agree to the previous question, please give details of the main stressors or challenges during internship

* 61. As I progressed through internship I experienced less stress

Strongly Agree	Agree	Disagree	Strongly Disagree
☐	☐	☐	☐



Feedback during Internship

* 62. How often did you get feedback from your preceptor /co preceptor?

Every Shift

Every Week

Only during Assessment

☐☐☐

Other (please specify)

* 63. When was feedback generally delivered?

During the Shift

At the End of the Shift

Only during Assessment

☐☐☐

Other (please specify)

* 64. During internship, I was provided with helpful feedback on my progress.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

If you answered Disagree or Strongly Disagree, please give details below.

* 65. I was satisfied with the opportunities to discuss areas for improvement with my preceptor/ co preceptor?

Very Satisfied

Satisfied

Dissatisfied

Very Dissatisfied

☐☐☐☐

* 66. Is there improvement needed in relation to the provision of feedback during internship?

Yes

No

☐☐

67. If you answered Yes to the previous question, please give details below

☐

Guidance on ways to improve areas highlighted

☐

Demonstration/ explanation on ways to improve areas highlighted

Other (please specify)

Assessments during Internship

* 68. During internship, there was enough protected time for each of my competency assessment meetings with my preceptor?

Strongly Agree

☐

Agree

☐

Disagree

☐

Strongly Disagree

☐

Reflective Practice during Internship

* 69. Reflection was a beneficial component of internship.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐
☐
☐
☐

70. If you answered Strongly Agree or Agree, how was structured reflection beneficial during internship?

- ☐ Enabled me to share experiences with colleagues in a safe environment
- ☐ Realised colleagues had similar experiences to myself
- ☐ Learnt from the scenarios presented
- ☐ Enabled me to deal with situations presented as they arose in clinical practice
- ☐ I gained solutions from the scenarios to similar situations that I encounter
- ☐ Identified the importance of resilience and coping strategies
- ☐ Identified the importance of self-awareness
- ☐ Identified the importance of communication skills and applying particular methods to particular situations
- ☐ Further consolidated my learning and linking theory to practice

Other (please specify)

Value of Internship Placements

* 71. Internship is a valuable placement for nurse education and training.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐
☐
☐
☐

* 72. In what way was internship a valuable experience for you?

☐

Enabled me to link theory to practice

☐

Enabled me to gain clinical experience at independent level with the support of a preceptor

☐

Enabled me to deliver patient care independently

Other (please specify)

* 73. Internship prepared me for transitioning to registered nurse, more than supernumerary placements.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐
☐
☐
☐

* 74. What areas of your internship were most beneficial in preparing you for transitioning to registered nurse?

* 75. The internship period was extremely valuable in preparing me for working as a newly qualified nurse.

Strongly Agree

Agree

Disagree

Strongly Disagree

☐☐☐☐

If you answered Disagree or Strongly Disagree, please outline

* 76. Are there other ways you feel internship could be improved to help prepare nurses for transitioning to registered nurse?

Yes

No

☐☐

If you answered Yes, please give details below.

Thank you for taking time to complete this questionnaire.

Please press the green button **DONE below** to submit.

If you wish to partake in an interview, which are about the same topic, please
text me

or email me with your name, phone number and hospital (training) site.

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Appendix 4.6 Participant Information Leaflet – Phase One



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Dear Newly Qualified Nurse,

My name is Christina Lydon, I am a part-time PhD student at the School of Nursing and Midwifery, Trinity College Dublin. As part of my PhD I am conducting a research study exploring newly qualified nurses' experiences of internship. I am writing to invite you to participate in this study.

Purpose of the Study. The aim of this research study is to explore newly qualified nurses' experiences of internship and to determine the value of the internship period in preparing the student for transition to registered nurse. The internship period is the final 36 weeks of placement of the undergraduate degree in nursing programme.

What will the study involve? The study will consist of two parts, and you can decide to participate in one, or both parts or indeed, neither if you so choose. The first part involves the completion of Experience of Internship electronic questionnaire, via this link <https://www.surveymonkey.com/>. The electronic questionnaire will take 15 minutes to complete. I would be grateful if you would take the time to complete the attached electronic questionnaire.

Why have I been asked to take part? You have been asked to participate because you are a newly qualified nurse who recently graduated from an Irish institution, with a degree in nursing, and as part of that degree, you undertook the internship period.

Do I have to take part? No – participation is entirely voluntary. This Participant Information Sheet outlines details about the research study. Participants have the option of withdrawing before the study commences (even if they have agreed to participate) without repercussions, or at any time, whether before it starts or while participating.

Will my participation in the study be kept confidential? Yes. All details will be kept confidential. Your identity will be anonymised. I will ensure that no clues to your identity will be given to anyone or released in any form of publication.

What will happen to the information that I give? The data will be kept confidential for the duration of the study. It will be available only to me and the research supervisors. It will be securely stored in the TCD secure server OneDrive. On completion of the project, the information will be retained for minimum of a further five years and then destroyed. In the event of malpractice or a disclosure of a serious nature, I will be obliged to report criminal activity to the Director of Nursing at the institution from which the disclosure or issue arose.

What will happen to the results? The results will be presented collectively. The results will be viewed by my supervisors, a second marker and the external examiner. The study will be published in academic journals.

What are the possible disadvantages of taking part? I don't envisage any negative consequences for you in taking part.

Who has reviewed this study? The Ethics Committee at the School of Nursing and Midwifery Trinity College Dublin have approved this study and granted permission for it to be undertaken.

Any further queries? If you need any further information, you can contact me: Christina Lydon
[REDACTED] Thank you

Appendix 4.7 Cover Letter – Phase One

Letter of Invitation to participate in the Experience of Internship Research

Re: Invitation to participate in the Experience of Internship Research

Dear Newly Qualified Nurse,

Firstly, I would like to congratulate you on qualifying as a registered nurse. My name is Christina Lydon, I am a part-time PhD student at the School of Nursing and Midwifery, Trinity College Dublin. As part of my PhD, I am conducting a research study exploring newly qualified nurses' experiences of internship. I am writing to invite you to participate in this study.

Your participation in this study is entirely voluntary. Completion of the electronic questionnaire will be taken as your permission to participate in the study. A decision not to participate will not affect your rights in any way.

If you decide to take part please complete the electronic questionnaire using this link <https://www.surveymonkey.com>. The Experience of Internship **electronic questionnaire** is **anonymous** and is **not coded** so it cannot be traced back to you. There are no foreseeable risks associated with completing the electronic questionnaire.

The results of the study will be reported as group data and will not identify you in any way. The findings will be published as part of publications in national and international journals.

Thank you for taking the time to read this invitation letter, the attached Participant Information leaflet and completing the Experience of Internship electronic questionnaire. Should you have any questions on the study or require any clarification please do not hesitate to contact me. I can be reached at [REDACTED] or [REDACTED] I will be happy to address any queries that you may have.

Regards,

Christina Lydon

Appendix 4.8 Intern Year Evaluation Questionnaire

(Drennan et al., 2010)

Evaluation Student Nurse Questionnaire					
Please record your responses to the questions by <u>ticking</u> the appropriate box or filling in the spaces as requested.					
START HERE					
A. Please indicate below your level of agreement or disagreement with the following statements in relation to your internship:					
***** RESPONSE KEY FOR QUESTIONS BELOW *****					
Strongly Agree ①	Agree ②	no opinion ③	Disagree ④	Strongly Disagree ⑤	
1. I was able to relate theory to practice on internship					① ② ③ ④ ⑤
2. Clinical staff were helpful in assisting me to learn on internship					① ② ③ ④ ⑤
3. I was well supported on internship					① ② ③ ④ ⑤
4. I was well prepared for internship					① ② ③ ④ ⑤
5. Orientation in Semester 1 prepared me for internship					① ② ③ ④ ⑤
6. Internship helped me develop my practical clinical skills					① ② ③ ④ ⑤
7. Clinical and patient commitments prevented clinical staff from supporting me on placement					① ② ③ ④ ⑤
8. Clinical staff were responsible for student learning in the clinical area					① ② ③ ④ ⑤
9. There were too many students on placement for clinical staff to provide support					① ② ③ ④ ⑤
10. Clinical staff had time to support me in the clinical area					① ② ③ ④ ⑤
13. I had access to appropriate learning experiences in the clinical area					① ② ③ ④ ⑤
14. I was able to apply theory to practice on internship					① ② ③ ④ ⑤
15. I was fairly assessed on internship					① ② ③ ④ ⑤
16. I can now practice safely and effectively following internship					① ② ③ ④ ⑤
***** RESPONSE KEY FOR QUESTIONS BELOW *****					
Strongly Agree ①	Agree ②	no opinion ③	Disagree ④	Strongly Disagree ⑤	
17. My internship has increased my confidence as a nurse					① ② ③ ④ ⑤
18. My internship has prepared me for practice following qualification					① ② ③ ④ ⑤
19. I feel I have all the necessary skills and training to fulfil my role as a nurse					① ② ③ ④ ⑤
20. I feel I have all the necessary skills and training to manage the clinical environment					① ② ③ ④ ⑤
21. I was well supported on internship by the staff of the School of Nursing, Midwifery & Health Systems at UCD					① ② ③ ④ ⑤
22. I felt part of the clinical team					① ② ③ ④ ⑤
23. I had good access to the supervisory support on internship					① ② ③ ④ ⑤
24. It was made it clear right from the start what was expected from students on internship					① ② ③ ④ ⑤
25. I was provided with helpful feedback on my progress on internship					① ② ③ ④ ⑤
26. Staff made a real effort to understand the difficulties I faced on placement					① ② ③ ④ ⑤
27. The management experience exercise was effective in preparing me for my future role					① ② ③ ④ ⑤
28. The DoCAT documentation provided clear guidelines for my learning					① ② ③ ④ ⑤
29. Overall I was satisfied with my internship					① ② ③ ④ ⑤
Please respond to the following questions about yourself:					
H. Gender:					
☐ Male					
☐ Female					

I. Please indicate the discipline in which you are undertaking your degree

☐ General Nursing

☐ Psychiatric Nursing

J. Please indicate the hospital in which you undertook your Internship:

☐ Mater Misericordiae University Hospital

☐ St. Vincent's University Hospital

☐ St. Michael's Hospital

☐ St. John of God Hospital

Thank you for taking the time to complete this questionnaire.

Your assistance in providing this information is very much appreciated. If there is anything else you would like to tell us about your experience in the clinical area please do so in the space provided below.

Appendix 4.9 Permission to Adapt the Questionnaire

From: Drennan, Jonathan [mailto:jonathan.drennan@ucck.ie]
Sent: 05 July 2017 12:09
To: Christina Lydon <christina.lydon@ucck.ie>
Subject: [Unknown URL in email]Re: research query

Dear Christina,

Thank you for your email. No, there is no need to contact my co-authors - they are happy for me to grant permission for the questionnaire to be used/amended.

I hope this helps and best of luck with your research.

Kind regards,

Jonathan

Jonathan Drennan
Professor of Nursing and Health Services Research
School of Nursing and Midwifery
College of Medicine and Health
Brookfield Health Sciences Complex
University College Cork
College Road
Cork T12 AK54
Ireland

Email: [REDACTED]

Phone: [REDACTED]



On 4 Jul 2017, at 19:52, Christina Lydon <[REDACTED]> wrote:

Dear Professor Drennan,

My name is Christina Lydon and I will be undertaking a PhD in Nursing in Trinity College. My area of focus is internship.

I contacted you earlier this year regarding your report "An Evaluation of the Internship Year at the School of Nursing, Midwifery and Health Systems UCD".

I am seeking permission from you and your colleagues to adapt this questionnaire for my PhD research. I will acknowledge you and your colleagues as the original authors.

Do I need to contact your colleagues also for permission to adapt the questionnaire?

I look forward to your reply.

Many thanks again

Kind regards

Christina Lydon

Appendix 4.10 Test Blueprint

Background and Information

My name is Christina Lydon, I am a part-time PhD student at the School of Nursing and Midwifery, Trinity College Dublin. As part of my PhD I am conducting a research study exploring newly qualified nurses' experiences and the value of internship.

I am using an adapted version of a previously used instrument (Drennan et al., 2010) and to establish content validity of this adapted instrument I would like you to rate the individual items used and the survey in its entirety. Participation is voluntary and all information gathered will be treated in the strictest confidence. All responses will be considered considering other responses received and will be used to adapt the survey if deemed necessary.

INSTRUCTIONS:

1. For each section: you are asked to evaluate the relevance and clarity of each statement. You can indicate statements that could be amended or deleted. You can also suggest statements/ questions that should be included. Please use the feedback sheet or make notes in the questionnaire (see p5).
2. Finally, you are asked to evaluate /provide any additional feedback regarding the content validity of the research instrument using the Feedback Sheet provided.

You can copy and paste this symbol and place at the relevant response - ✓

For further information, please contact:

Ms. Christina Lydon: 

Section One

[Instruction to participant] The following section concerns your experiences about and views on the value of the internship period. Please indicate your agreement with the statements by placing a tick in the box which most corresponds to your view. *Please note that confidentiality is guaranteed.*

Place only one tick in each line.

Expert to evaluate relevance of questions/ statement

- 1. Level of representativeness (how each item can be used to measure newly qualified nurses' views on their experience and value of the internship period) on a scale of 1 to 4, with 4 being the most representative.**
- 2. Level of clarity, how clearly the item is worded: on a scale of 1 to 4**

Experience of Internship Survey: Please complete each question by clicking the appropriate box.

[illegible]

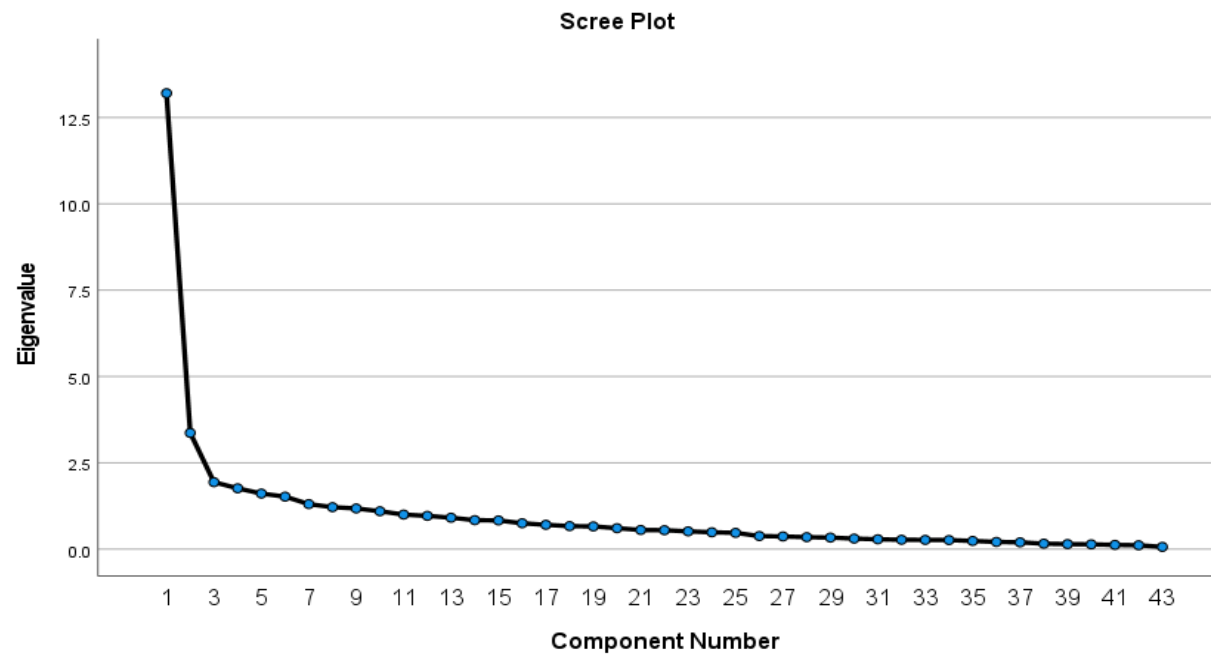
		Not Representative	Needs major Revision	Needs minor Revisions	Representative		Item NOT Clear	Needs major revision	Needs minor revision	Item IS clear
		1	2	3	4		1	2	3	4
Reflective Practice during Internship										
43(a)	Reflection was a beneficial component of internship									
43(b)	If you answered Strongly Agree or Agree to the previous question , please explain how structured reflection was beneficial during internship? Add suggested responses Enabled me to share experiences with colleagues in a safe environment Realised colleagues had similar experiences to myself Learnt from scenarios presented Enabled me to deal with situations as they arose in clinical practice I gained solutions from the scenarios to similar situations that I encountered Identified the importance of resilience and coping strategies Identified the importance of self-awareness									
Value of Internship Placements										
44	Internship is a valuable placement for nurse education and training									
45	In what way was internship a valuable experience for you? Enabled me to link theory to practice Enabled me to deliver patient care independently Enabled me to gain clinical experience at independent level with the support of a preceptor Other									
46	Internship prepared me for transitioning to registered nurse, more than supernumerary placements.									
47	What areas of your internship were most beneficial in preparing you for transitioning to registered nurse?									
48	The internship period was extremely valuable in preparing me for working as a newly qualified nurse									
49(a)	Are there other ways you feel internship could be improved to help prepare nurses for transitioning to registered nurse?									
49(b)	If you answered Yes to the previous question, please give details below									

Thank you for taking time to complete this electronic survey

Appendix 4.11 Principal Component Analysis Results

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.865
Bartlett's Test of Sphericity	Approx. Chi-Square	2567.004
	Df	903
	Sig.	.000



Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	13.206	30.711	30.711	13.206	30.711	30.711	9.463
2	3.368	7.833	38.544	3.368	7.833	38.544	9.890
3	1.941	4.515	43.059	1.941	4.515	43.059	5.318
4	1.764	4.102	47.161				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Component Correlation Matrix

Component	1	2
1	1.000	.431
2	.431	1.000

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Appendix 4.12 Post Pilot Changes on the Experience of Internship Questionnaire

Please click on the appropriate role below that reflects your NMBI registration status.

I am a : Registered General Nurse ☐

What year did you start your undergraduate nurse training

What year did you **complete** your internship

How long did it take you to complete your internship? 36 weeks ☐ other

Where did you complete your intern placement?

Placement 1 - Acute Hospital Setting ☐ Day Hospital ☐ Community Setting ☐

Placement 2 - Acute Hospital Setting ☐ Day Hospital ☐ Community Setting ☐

Placement 3 - Acute Hospital Setting ☐ Day Hospital ☐ Community Setting ☐

Placement 4 - Acute Hospital Setting ☐ Day Hospital ☐ Community Setting ☐

Additional Information:

What age category are you in? 20-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 41-45 ☐ 46-50 ☐ >51 ☐

Did you have a part-time job during internship? Yes ☐ No ☐

What was your part-time job during internship?

Where did you undertake your nursing degree education?

Trinity College Dublin ☐ Dublin City University ☐ University College Dublin ☐

Athlone Institute of Technology ☐ Letterkenny Institute of Technology ☐ St Angela's College Sligo ☐

University of Limerick ☐ Institute of Technology Tralee ☐ University College Cork ☐

Waterford Institute of Technology ☐ Dundalk Institute of Technology ☐

Galway Mayo Institute of Technology Castlebar ☐ National University of Ireland Galway ☐

Please complete each question by clicking the appropriate box that best describes your experience.

Pre Internship Preparation

- 1 What structures were put in place to prepare you for the transition from supernumerary student to intern working at independent level?

No preparation

☐

Bespoke orientation internship programme by the hospital

☐

4th year induction included information about internship

☐

Other ☐

- 2 It was made clear right from the start what was expected from students on internship.

Strongly Agree

Agree

Disagree

Strongly disagree

- 3 There were clear guidelines for my learning.

Strongly Agree

Agree

Disagree

Strongly Disagree

- 4 I felt prepared for internship.

Strongly Agree

Agree

Disagree

Strongly Disagree

- 5 Did the internship period meet your expectations?

Yes ☐ No ☐

- 6 Could you have been better prepared for internship?

(a)

Yes ☐ No ☐

- (b) If you answered **Yes** to the previous question, please explain how you could have been better prepared for internship

Experience during Internship

- 7 The internship period consolidated my learning and helped me to link theory to practice more than any of my supernumerary placements.
Strongly Agree Agree Disagree Strongly Disagree
- 8 During internship, were you satisfied with the opportunities made available to you to
(a) advance your knowledge and skills required for registration?
Yes ☐ No ☐
- 8 If you answered No to the previous question, please explain
(b) _____
- 9 During internship, there was greater emphasis on setting and achieving goals during clinical placement than when supernumerary.
Strongly Agree Agree Disagree Strongly Disagree
- 10 During internship, I was satisfied with the opportunities to give shift handover to the
(a) nursing team.
Very satisfied Satisfied Dissatisfied Very Dissatisfied
- 10 If you responded Dissatisfied or Very Dissatisfied to the previous question, please
(b) identify how often on average you gave shift handover?
Once per day ☐ once per shift ☐ once per week ☐ Other _____
- 11 During internship, I was satisfied with the opportunities to participate in medication management under supervision?
(a) Very satisfied Satisfied Dissatisfied Very Dissatisfied
- 11 If you responded Dissatisfied or Very Dissatisfied to the previous question, please
(b) identify how often on average you participated in medication management under supervision.
All drug rounds in my section during shift ☐
One drug round during shift ☐
Once per week ☐
Other _____
- 12 During internship, I was satisfied with the opportunities to participate in the doctors
(a) ward rounds/ multidisciplinary team.
Very satisfied Satisfied Dissatisfied Very Dissatisfied
- 12 If you responded Dissatisfied or Very Dissatisfied to the previous question, please
(b) identify how often on average you participated in the doctor's ward rounds.
All shifts ☐ Once per week ☐ once per month ☐ Other _____
- 13 During internship, I felt:

- (a) part of the nursing team? Strongly Agree Agree Disagree Strongly Disagree
- (b) part of the multidisciplinary team Strongly Agree Agree Disagree Strongly Disagree
- 14 During internship, I felt prepared for the recognition and management of the acutely ill patient more than when I was a supernumerary student.
Strongly Agree Agree Disagree Strongly Disagree
- 15 During internship, I advanced my knowledge and skills in the recognition and management of the acutely ill patient.
Strongly Agree Agree Disagree Strongly Disagree
- 16 During internship, I was satisfied with my patient allocation/caseload that enabled me to advance my knowledge and skills in preparation for working as a registered nurse.
(a) Very satisfied Satisfied Dissatisfied Very Dissatisfied
- (b) If you responded Dissatisfied or Very Dissatisfied to the previous question, please give details below
-
- (c) On average how many patients were you allocated to care for per shift?
4 5 6 7 Other ☐ _____
- (d) I felt supported in caring for this caseload.
Strongly Agree Agree Disagree Strongly Disagree
- (e) If you answered Disagree or Strongly Disagree to the previous question, please outline why you felt unsupported
-
- 17 During internship, I was satisfied with the opportunities to advance my skills in recording clinical practice for my caseload in the patient healthcare record?
Very satisfied Satisfied Dissatisfied Very Dissatisfied
- 18 During internship, I was satisfied with the opportunities to advance my skills in:
- (a) admitting patients Very satisfied Satisfied Dissatisfied Very Dissatisfied N/A
- (b) discharging patients within my caseload Very satisfied Satisfied Dissatisfied Very Dissatisfied N/A
- 19 During internship, I was satisfied with the opportunities to complete community referral documentation?(e.g. PHN, CMHN, Day Hospital).
Very satisfied Satisfied Dissatisfied Very Dissatisfied
- 20 During internship, within my caseload I was satisfied with the opportunities to gain competence in;
- (a) planning and organising patient care Very satisfied Satisfied Dissatisfied Very Dissatisfied
- (b) prioritizing patient care Very satisfied Satisfied Dissatisfied Very Dissatisfied

- (c) time management of patient care Very satisfied Satisfied Dissatisfied Very Dissatisfied
- 21 During internship, did you have enough opportunities to link with specialist nurses when caring for patients'?
- (a) Yes ☐ No ☐
- 21 If you answered Yes or No to the previous question, please give details below
- (b) _____
- 22 During internship, I had opportunity to work alongside the Clinical Nurse Manager to gain ward management experience
- (a) Yes ☐ No ☐ No. of Times ____ Duration _____
- 22 Please provide examples of valuable management experiences gained
- (b) _____
- 23 Internship improved my ability to provide handover of patients between wards and departments
- Yes ☐ No ☐ _____
- Phone ☐ Face to Face ☐
- 24 When stressful events occurred during internship, there were sufficient debriefing opportunities available to support me following the event.
- Strongly Agree Agree Disagree Strongly Disagree
- 24 If you answered Disagree or Strongly Disagree to the previous question, please outline
- (b) _____
- 25 Internship prepared me to communicate with family member as a registered nurse.
- Strongly Agree Agree Disagree Strongly Disagree
- 26 Are there any key clinical skills that you would like to have gained more experience in during internship to assist you in your role as a registered nurse?
- (a) Yes ☐ No ☐
- 26 If you answered Yes to the previous question, please give details below
- (b) _____

Support during Internship

- 27 Clinical staff were helpful in assisting me to learn during internship
- Strongly agree Agree disagree Strongly disagree
- 28 In general, I was well supported on internship
- Strongly agree Agree disagree Strongly disagree
- 29 Clinical and patient commitments prevented clinical staff from supporting me on internship.
- Strongly agree Agree disagree Strongly disagree
- 30 In general, there were too many students on placement for clinical staff to provide support
- Strongly agree Agree disagree Strongly disagree

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- 31 Clinical staff had time to support me in the clinical area.
Strongly agree Agree disagree Strongly disagree
- 32 I was well supported on internship by the staff of the School of Nursing & Midwifery
Strongly agree Agree disagree Strongly disagree
- 33 I had good access to supervisory support from my preceptor/ co preceptor during my internship
Strongly agree Agree disagree Strongly disagree
- 34 During internship, I was satisfied with the support from my;
- (a) preceptor and co preceptor Very satisfied Satisfied Dissatisfied Very Dissatisfied
- (b) CPC Very satisfied Satisfied Dissatisfied Very Dissatisfied
- (c) Clinical Nurse Manager Very satisfied Satisfied Dissatisfied Very Dissatisfied
- (d) nursing colleagues Very satisfied Satisfied Dissatisfied Very Dissatisfied
- (e) intern nursing colleagues Very satisfied Satisfied Dissatisfied Very Dissatisfied
- 35 Are there other ways you could have been further supported during internship?
- (a) Yes ☐ No ☐
- 35 If you answered yes to the previous question, please give details below
- (b) _____
- 36 Internship was more stressful than supernumerary placements.
- (a) Strongly Agree Agree Disagree Strongly disagree
- (b) If you answered Agree or Strongly Agree to the previous question, please give details of the main stressors or challenges during internship
- (c) As I progressed through internship I experienced less stress
Strongly Agree Agree disagree Strongly disagree
- Feedback during Internship**
- 37 How often did you get feedback from your preceptor /co preceptor?
Every shift ☐ Every week ☐ Only during assessment ☐ Other ☐ _____
- 38 When was feedback generally delivered?
During the shift ☐ At the end of the shift ☐ Other ☐
- 39 During internship I was provided with helpful feedback on my progress.
- (a) Strongly Agree Agree disagree Strongly disagree

- 39 If you answered Disagree or Strongly Disagree to the previous question, please give details below

40 I was satisfied with the opportunities to discuss areas for improvement with my preceptor/ co preceptor?

Very satisfied Satisfied Dissatisfied Very Dissatisfied

41 Is there improvement needed in relation to the provision of feedback during internship?

(a) Yes ☐ No ☐

41 If you answered Yes to the previous question, please give details below

(b) Guidance on ways to improve areas highlighted ☐

Demonstration on ways to improve areas highlighted ☐

Other _____

Assessments during Internship

42 During internship, there was enough protected time for each of my competency assessment meetings with my preceptor?

Strongly agree Agree Disagree Strongly disagree

Reflective Practice during Internship

43 Reflection was a beneficial component of internship.

Strongly agree Agree Disagree Strongly disagree

(a) 43 If you answered Strongly Agree or Agree, how was structured reflection beneficial during internship?

Enabled me to share experiences with colleagues in a safe environment ☐

Realised colleagues had similar experiences to myself ☐

Learnt from the scenarios presented ☐

Enabled me to deal with situations presented as they arose in clinical practice ☐

I gained solutions from the scenarios to similar situations that I encounter ☐

Identified the importance of resilience and coping strategies ☐

Identified the importance of self-awareness ☐

Value of Internship Placements

44 Internship is a valuable placement for nurse education and training.

Strongly agree Agree Disagree Strongly disagree

45 In what way was internship a valuable experience for you?

Enabled me to link theory to practice ☐ Enabled me to deliver patient care independently ☐

Enabled me to gain clinical experience at independent level with the support of a preceptor ☐

Other ☐

46 Internship prepared me for transitioning to registered nurse, more than supernumerary placements.

Strongly agree Agree Disagree Strongly disagree

47 What areas of your internship were most beneficial in preparing you for transitioning to registered nurse?

48 The internship period was extremely valuable in preparing me for working as a newly qualified nurse.

Strongly Agree Agree Disagree Strongly Disagree

49 Are there other ways you feel internship could be improved to help prepare nurses (a) for transitioning to registered nurse?

Yes ☐ No ☐

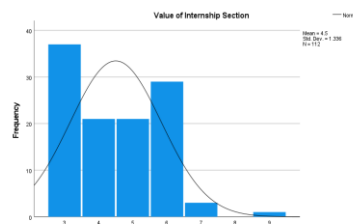
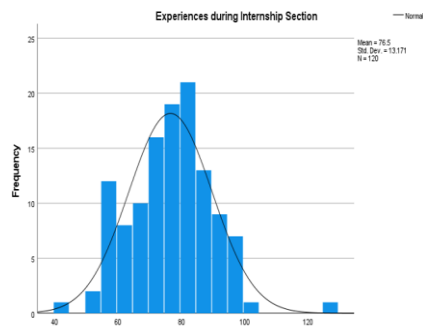
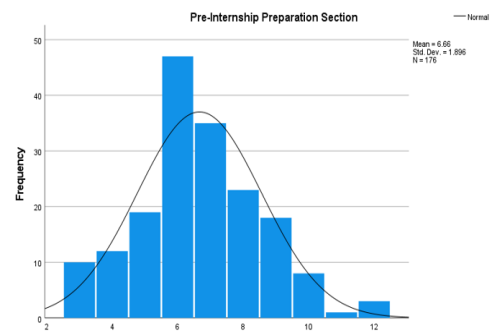
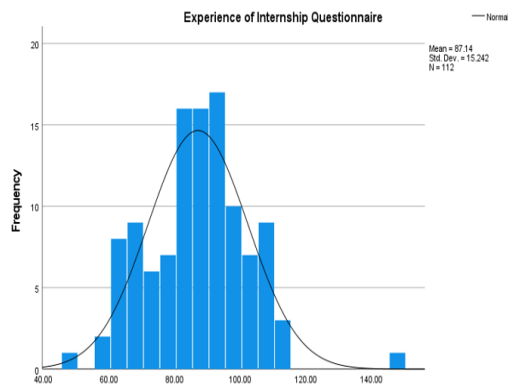
49 (b) If you answered **Yes** to the previous question, please give details below

Thank you for taking time to complete this electronic questionnaire

Appendix 4.13 Segment of the Code Book

What Structures were put in place	1=4th year induction	2=No preparation	3=Bespoke induction	4=other	999=missing
other examples - string					
It was made clear right from the start what was expected from students on internship.	1= Strongly Agree	2= Agree	3=Disagree	4=Strongly Disagree	999= missing
There were clear guidelines for my learning.	1= Strongly Agree	2= Agree	3=Disagree	4=Strongly Disagree	999= missing
I felt prepared for internship	1= Strongly Agree	2= Agree	3=Disagree	4=Strongly Disagree	999= missing
Did the internship period meet your expectations	1=Yes	2=No	999=missing		
Could you have been better prepared for internship	1=Yes	2=No	999=missing		
If you answered Yes to the previous question, please explain how you could have been better prepared for internship	string data				
The internship period consolidated my learning and helped me to link theory to practice more than any of my supernumerary placements.	1= Strongly Agree	2= Agree	3=Disagree	4=Strongly Disagree	999= missing

Appendix 4.14 Histograms of Normality Tests for Experience of Internship Questionnaire



Shapiro-Wilk test for normality

Questionnaire Sections	Skewness	Kurtosis	df	p
Pre-Internship Preparation	.253	.125	176	<.001
Experiences during Internship	.246	1.132	120	.024
Value of Internship	.427	-.501	112	<.001
Full Questionnaire	.303	1.106	112	.039

Appendix 4.15 Decision Framework for Parametric and Non-Parametric Tests

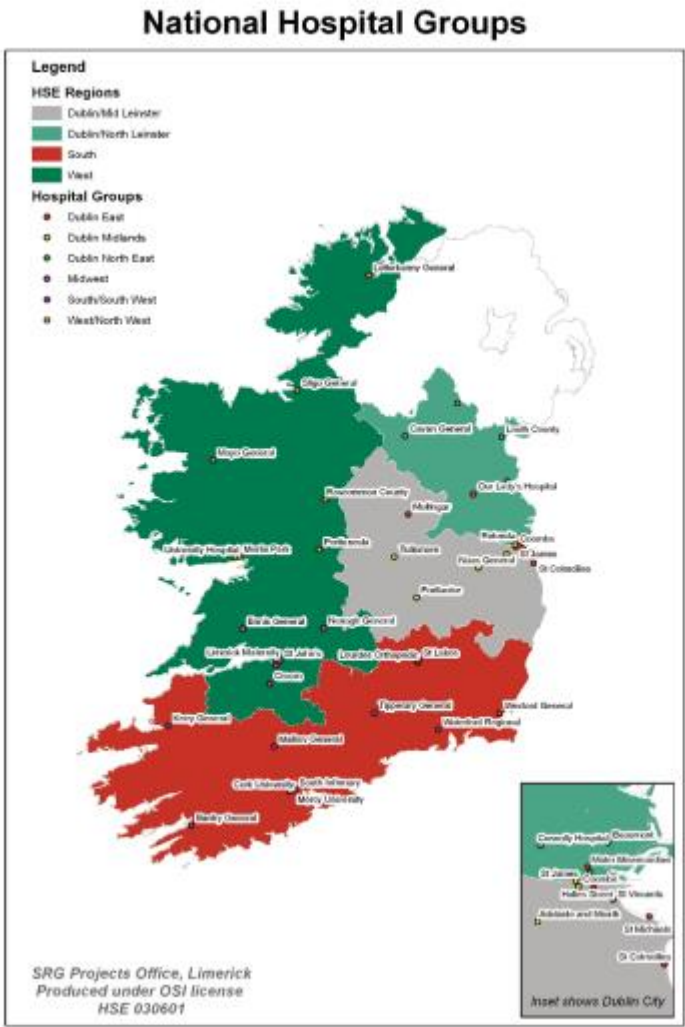
	Outcome variable						
		Nominal	Categorical (>2 Categories)	Ordinal	Quantitative Discrete	Quantitative Non-Normal	Quantitative Normal
Input Variable	Nominal	χ^2 or Fisher's	χ^2	χ^2 -trend or Mann-Whitney	Mann-Whitney	Mann-Whitney or log-rank ^a	Student's <i>t</i> test
	Categorical (2>categories)	χ^2	χ^2	Kruskal-Wallis ^b	Kruskal-Wallis ^b	Kruskal-Wallis ^b	Analysis of variance ^c
	Ordinal (Ordered categories)	χ^2 -trend or Mann-Whitney	*	Spearman rank	Spearman rank	Spearman rank	Spearman rank or linear regression ^d
	Quantitative Discrete	Logistic regression	*	*	Spearman rank	Spearman rank	Spearman rank or linear regression ^d
	Quantitative non-Normal	Logistic regression	*	*	*	Plot data and Pearson or Spearman rank	Plot data and Pearson or Spearman rank and linear regression
	Quantitative Normal	Logistic regression	*	*	*	Linear regression ^d	Pearson and linear regression

(Campbell and Swinscow, 2009)

Appendix 4.16 Segment of the Map of the Literature

Authors and Year	Literature Review Main Findings	Comparison with variables from the experience of Internship Questionnaire
Anderson et al., (2018)	Registered nurses highlighted that time was needed to teach students and increasing patient caseloads limited this time.	Time and support Time as a factor and in general there was enough support Supervisory support from preceptor
Law and Chan (2016)	The study found that the undergraduate paid employment on the same units meant students were taken for granted with regards to the level of ongoing teaching, support and constructive feedback that they still required as students and then as new graduates.	Feedback and support Helpful feedback and in general enough support and supervisory support
Wieland et al., (2007)	Students felt more involved in-patient care and liaising with the medical teams and gained experience in key clinical skills such as PEGS.	Felt supported with the caseload and felt part of MDT and nursing team
Bradshaw et al., (2018)	The results focused on four themes: interpersonal issues affecting the experiences of students. The ability to foster and maintain relationships more important in the experience of internship. Where positive relationships did not exist, interns felt excluded. Fostered relationships enhanced the learning experience in clinical practice. The continuity of preceptor made it easier to maintain this relationship and establish in less hectic wards. Where participants felt valued and part of the team this increased their learning. The interns understood the boundaries of their role and relationship. Some interns felt lonely and isolated in distant sites this was alleviated by discussing experiences.	Overall experience and feeling part of team and nursing team Feeling part of the nursing team and supervisor support Felt part of nursing team and opportunities to advance knowledge and skills
Clarke and Holmes (2007)	The new graduates identified that they had 'islands of knowledge' and found it difficult to apply that to patient care, with the newly qualified nurses identifying that the rostered period enabled them to practice only basic skills as opposed to learning technical skills or management skills. Some nurses did not feel valued, felt they had little support, while others felt crowded and wanted staff to step away so they could learn themselves. Drug rounds were anxious times for new graduates. There was more emphasis on having a range of skills but no reference to the level required. Newly qualified nurses were keen to learn complex dressings and IV medications, so they would be accepted in the team. However, most nurses were confident by six months after having time to consolidate their learning.	Felt supported in caring for the caseload and linking theory to practice Medication Management and Stress

Appendix 4.17 Map of the Hospital Groups



Appendix 4.18 Information for Gatekeeper



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

Information for Gatekeeper

Newly qualified general nurses' experiences and perceived value of their internship: a Republic of Ireland cross-sectional study

Dear Gatekeeper,

Thank you for agreeing to be co-lead investigator/ gatekeeper for the recruitment of participants for my study.

Information about this study

The aim of the study is to evaluate newly qualified general nurses' experiences and the perceived value of the internship period. I will do so by inviting General Nurses who qualified in 2019, 2020 and 2021 in the Republic of Ireland to participate in online semi-structured interviews. The General Nurses who qualified in 2019, 2020 and 2021 in the Republic of Ireland will receive the information about the study and an invitation to participate in a personal email sent to them by you. This information will also be available on posters advertising the study that I will ask you to place around the hospital. The interviews will last 60 minutes. This study has received ethical approval from the Clinical Research Ethics Committee at University Hospital and at the Trinity College Dublin School of Nursing and Midwifery Research Ethics Committee. The inclusion and exclusion criteria for the study are as follows:

Inclusion Criteria	Exclusion Criteria
Newly qualified general nurses' who graduated from the national BSc (Hons) in General nursing programme or any such programme at any institution in the Republic of Ireland in 2019, 2020 and 2021.	Newly qualified nurses who received their undergraduate nurse education outside Ireland. Interns who are currently on their internship placements.

What I Need Your Assistance With

Please can you:

a) **send invitation emails** (draft attached) to registered nurses (from the inclusion criteria list above) in your hospital, with

b) the **Participant Information Leaflet attached and Consent Form** to their email for their information. This will introduce staff to, and inform staff of, the study, invite them to participate, inform them of their rights, and provide them with my contact details for taking part in the online semi-structured interviews via zoom.

c) display the **poster** in the clinical areas - I will send you printed copies.

The semi-structured interviews will take place during February and March.

If you have any questions or queries about this letter of request or this study, please phone me at or email at [REDACTED]

Many thanks for taking the time to read this and for your assistance with this research study.

Kind regards,

Christina Lydon (Researcher)

Appendix 4.19 Cover Letter and Participant Information Leaflet – Phase Two

Letter of Invitation to participate in the Experience of Internship Individual Interviews

Re: Invitation to participate in the Experience of Internship Individual Interviews

Dear Newly Qualified Nurse,

Firstly, I would like to congratulate you on qualifying as a registered nurse. My name is Christina Lydon, I am a part-time PhD student at the School of Nursing and Midwifery, Trinity College Dublin. As part of my PhD, I am conducting a research study exploring newly qualified nurses' experiences of internship. I am writing to invite you to participate in this study. You may have already completed the Experience of Internship Questionnaire in Phase One.

Participation in the individual interviews is entirely voluntary. A decision not to participate will not affect your rights in any way.

If you decide to take part please contact me at [REDACTED]. There are no foreseeable risks associated with participating in the interviews.

The results of the study will be reported as group data and will not identify you in any way. The findings will be published as part of publications in national and international journals.

Thank you for taking the time to read this invitation letter and the attached Participant Information leaflet. Should you have any questions on the study or require any clarification please do not hesitate to contact me. I can be reached at [REDACTED] or [REDACTED]. I will be happy to address any queries that you may have.

Regards,

Christina Lydon

PARTICIPANT INFORMATION LEAFLET

Newly qualified general nurses' experiences and perceived value of their internship: a Republic of Ireland cross-sectional study.

Researcher Christina Lydon Part-time PhD Student at the School of Nursing and Midwifery, Trinity College Dublin [REDACTED]

You are being invited to take part in a research study that will be carried out at your hospital by Christina Lydon. Before you decide whether or not you wish to take part, you should read the information provided in this leaflet carefully. Take time to ask questions – don't feel rushed or under pressure to make a quick decision. You should understand the risks and benefits of taking part in this study so that you can make a decision that is right for you.

Why is this study being done?

This study is being done to evaluate the internship period for nursing students, that is, the final 36 weeks of clinical placement of the undergraduate degree in nursing programme.

The aim of this study is to explore newly qualified general nurses' experiences of internship in the Republic of Ireland and to determine the value of the internship period in preparing the student for transition to registered nurse.

Why am I being asked to take part?

You have been invited to participate because you are a newly qualified general nurse who recently graduated from an Irish institution, with a degree in nursing, and as part of that degree, you undertook the internship period.

Do I have to take part? What happens if I say no? Can I withdraw?

No – you do not have to take part. Participation is entirely voluntary, a decision not to consent will have no adverse consequences. This Participant Information Leaflet outlines details about the research study. Participants have the option of withdrawing before the study commences (even if they have agreed to participate) without repercussions, or at any time, whether before it starts or while participating up to the data analysis stage. You can do this by contacting the researcher Christina Lydon by email and she will be able to organise this for you.

How will the study be carried out?

The participants will be asked to participate in a face to face or online semi-structured interview via Zoom (secure account held by TCD) at a mutually suitable time.

What will happen to me if I agree to take part?

If you agree to participate, you contact the researcher who will phone or email you to arrange a date and time that suits you to discuss the study and decide whether you wish to participate in the face to face or online semi-structured interview via Zoom. Firstly, you will have an opportunity to ask any questions you may have in relation to the study. You will be asked to complete the consent form and return it to the researcher via email. The researcher will ask a number of questions about your internship experience. The interview will last approximately 60 minutes, will be audio recorded and the researcher will record some notes during the interview. A copy of your typed transcript will be available to you afterwards at your request. This is a Republic of Ireland cross-sectional study and interviews will be conducted in a range of settings across the country.

Are there any benefits to me or others if I take part in the study?

There are no direct benefits for the participants.

Are there any risks to me or others if I take part in the study?

There are no foreseeable risks associated with the research. But, in the event of a disclosure of malpractice or a disclosure of a serious nature, I will be obliged to report criminal activity to the Director of Nursing at the institution from which the disclosure or issue arose. I will also report any substantive adverse events to the TCD School of Nursing and Midwifery Research Ethics Committee.

Will I be told the outcome of the study? Will I be told the results of any tests or investigations performed as part of this study that relate to me?

The results will be presented collectively. The results will be published in academic journals, in a thesis and will be presented at national and international conferences.

What information about me (personal data) will be used as part of this study?

Only minimal personal information about you will be collected for this study. You will be asked to sign a consent form wherein your name will be disclosed. You will be asked for a contact detail such as a phone number or email address so that you can be contacted about the interview, should you choose to participate. I will audio record the interview and keep a transcript of your interview in a coded file and the consent form will be stored electronically in a separate file on my doubly encrypted password protected laptop for 7 years.

Will my healthcare records (chart) be used?

No, your healthcare records or chart will not be needed for this study.

What will happen to the information about me?

Your privacy is important, many steps have been taken to protect your confidentiality and keep your data safe, in line with the GDPR (2018). A Risk Assessment of the data protection implications of this research has been carried out. This research study has been approved by the Research Ethics Committee at the Hospital and at the Trinity College Dublin School of Nursing and Midwifery Research Ethics Committee.

How will my personal information be kept safe from others?

The information about you will always be kept safely. The transcript of your interview will be assigned a code that way only the researcher will be able to determine the participant. The electronic consent form will be stored in a separate electronic file and kept for 7 years.

The recording of your interview, your name, phone number and your email address will be stored on my password protected doubly encrypted laptop. The researcher will be the only person able to open these electronic files.

Who will be able to read and use my personal information as part of this study?

Only the researcher will be able to read and use the information about you during the study. My two supervisors will be able to read the coded information, but will not know the name of the

participant. I have attended data protection training. The information we have about you will be stored on a password protected doubly encrypted laptop with a backup file on the TCD One Drive. At the end of the research, I will have to write reports. Some of these reports may be printed in national and international research journals and presented at professional education meetings, conferences nationally and internationally. No identifiable information will be published.

What are my rights?

Your personal information is used for scientific research which is in the public interest.

Article 6, (e) and Article 9, 2, (j) of the General Data Protection Regulation (GDPR) Regulation (EU) 2016/679

If you have any worries about taking part in this research you can contact the researcher, Christina Lydon, to discuss them at [REDACTED]. You can also contact the Trinity College Data Protection Officer, Secretary's Office, Trinity College Dublin, Dublin 2 or by email at dataprotection@tcd.ie. Website: www.tcd.ie/privacy.

You have a right to:

- check the information on file about you and get a copy of it
- ask that the information on file about you is no longer kept
- have incorrect information about you corrected or removed
- ask for the information on file about you to be removed.

You have the right to make a complaint with the Data Protection Commissioner by post at 21 Fitzwilliam Square South, Dublin 2 or by email at dpo@dataprotection.ie

Has a research committee given permission for this study?

Yes, permission for this study has been granted by the Research Ethics Committee at your hospital of employment and by the TCD Research Ethics Committee at the School of Nursing and Midwifery. Once the research is completed, I will write a report for the Research Ethics Committees to update them on the study progress.

Who is organising and paying for this study? How will the results be used?

This study has been part funded by the researcher and a scholarship from the Adelaide Health Foundation, based at Tallaght University Hospital. This research may be used to inform changes to the internship programme.

Will I be paid for taking part?

No, participants will not be paid to take part in the study.

Will it cost me anything if I agree to take part?

No, there will be no cost for you if you take part in this study.

Who should I contact if I want more information or to complain?

If you have any concerns or questions, you can contact:

- Researcher: Ms. Christina Lydon at [REDACTED]
- Data Protection Officer, Trinity College Dublin: Data Protection Officer, Secretary's Office, Trinity College Dublin, Dublin 2, Ireland. Email: dataprotection@tcd.ie. Website: www.tcd.ie/privacy.
- By law, if you are not happy with how the information, we have about you is being stored and used, you can complain to the Office of the Data Protection Commission, 21 Fitzwilliam Square South, Dublin 2, Ireland. Website: www.dataprotection.ie.

Will I be contacted again?

If you would like to take part in this study, you will be asked to sign the Consent Form below. You will be given a copy of this Participant Information Leaflet and a copy of the Consent Form to keep.

You will be contacted by phone or by email within 48 hours of your interview as a reminder and to confirm its suitability.

If you have any questions please contact me at [REDACTED].

Thank you for supporting this research study.

Appendix 4.20 Consent Form – Phase Two

CONSENT FORM

Newly qualified nurses' experiences and perceived value of their internship: a Republic of Ireland cross-sectional study.

To be completed by the **PARTICIPANT**:

I have read and understood the information leaflet.	YES	NO
I have had the opportunity to discuss the study, ask questions about the study and I have received satisfactory answers to all my questions.	YES	NO
I have received enough information about this study.	YES	NO
I understand that I am free to withdraw from the study at any time without giving a reason and this will not affect my future medical care.	YES	NO
I agree to allow the researchers use my information (personal data) as part of this study as outlined in the information leaflet.	YES	NO
I agree to allow the researchers access my medical records as part of this study <i>(if applicable)</i>	YES	NO
I agree to be contacted by researchers as part of this study <i>(if applicable)</i>	YES	NO
I agree to give a [insert sample] sample(s) as part of this study. <i>(if applicable)</i>	YES	NO
I consent to take part in this research study having been fully informed of the risks, benefits and purpose of the study	YES	NO
I give my explicit consent to have my data processed as part of this research study	YES	NO
[Statement on future research placed here] <i>(if applicable)</i>	YES	NO

Participant's Name (Block Capitals):	
Participant's Signature:	
Date:	

To be completed by the **RESEARCHER**:

I have fully explained the purpose and nature (including benefits and risks) of this study to the participant in a way that he/she could understand. I have invited him/her to ask questions on any aspect of the study.	YES	NO
I confirm that I have given a copy of the information leaflet and consent form to the participant.	YES	NO

Researcher's Name (Block Capitals):	
Researcher's Title and Qualifications:	
Researcher's Signature:	
Date:	

Appendix 4.21 Electronic Flyer – Phase Two



Research Participants Needed

Who is eligible to take part?
All General Nurses who graduated from the BSc (Hons) in General Nursing programme in 2019, 2020 & 2021.

What is the research about?
The research aims to explore newly qualified general nurses' experiences and value of the internship period.

Who is undertaking the research?
The research is being undertaken by Christina Lydon, a PhD student of the School of Nursing & Midwifery, Trinity College Dublin.

What is involved?
You will be asked to participate in a face to face or online semi-structured interview.

How can I take part?
You can take part in this research by contacting the researcher at _____ or on mobile _____

 **Trinity College Dublin**
The University of Dublin

If you would like more information please contact Christina Lydon Email _____

Appendix 4.22 Interview Schedule

Participant Number: _____ Date of Interview: _____

Initial Interview Questions

1. In what way did internship help prepare you for transition to the role of registered nurse?

Prompts: Most valuable experience gained during internship

2. Speak to me about your internship experience in particular learning opportunities to link theory to practice?

Prompts – opportunities to set and achieve goals more so than supernumerary placements

Prompts – opportunities to participate in doctors' rounds

Prompts – opportunities to participate in medication management under supervision

Prompts – opportunities to give shift handover

Prompts – opportunities to gain experience in recognising and managing acutely ill patient

3. Talk to me about your internship experience in particular experience gained in managing a patient caseload?

Prompts - planning and organising

Prompts - Time management

Prompts - Recording clinical practice

Prompts – Admission, discharge and referral to community services

Prompts - Communicating with family members

4. Can you tell me about support during internship?

Prompts- did you feel part of the nursing team

Prompts- did you feel part of the MDT team

Prompts - support from CNM/CPC /Preceptor / nursing colleagues /interns

5. Talk to me about feedback on your progress during internship?

Prompts - opportunity to discuss areas for improvement

Prompts - competency assessments process

6. Can you describe the contribution that reflective practice made to your learning during internship?

Prompts:

Talk to me more about that
that's interesting

Subsequent interview questions will be based on the initial responses and will include additional probing questions to further explore and reflect on the experience of internship and the value of it in preparing them for transition to the role of registered nurse.

Have you any other comments to add
Thank the participant for his/her time

The following is a list of core principles that will be adhered to throughout each interview:

- Respect for persons - Respect the autonomy, decision-making and dignity of participants.
- Minimising any possible risks (physically or psychologically).
- Confidentiality of the participants will be reassured.
- Information between participants will not be shared.
- Procedures are in place to protect the personal data of participants. This will be explained to all participants during the consent process and detailed in the Participant Information Leaflet.

Appendix 4.23 Ethical Approval Letter – Phase One



Coláiste na Tríonóide, Baile Átha Cliath
Trinity College Dublin
Ollscoil Átha Cliath | The University of Dublin

Christina Lydon
School of Nursing and Midwifery
Trinity College Dublin
24 D'Olier St
Dublin 2

1st November 2018

Study title: Newly qualified nurses' experiences and perceived value of their internship: an all-Ireland cross-sectional study.

Dear Christina,

I am pleased to inform you that your study has been granted ethical approval from the School of Nursing and Midwifery Research Ethics Committee.

Thank you very much.

Yours sincerely,

A handwritten signature in black ink that reads "Maria Brenner".

Dr. Maria Brenner
Chair of School of Nursing and Midwifery Research Ethics Committee

Scoil an Aitirneais agus an Chosúlachais
Dáil na nEalaíochán Stáite,
Coláiste na Tríonóide,
Baile Átha Cliath,
Ollscoil Átha Cliath,
24 Sliod D'Olier,
Baile Átha Cliath 2, Éire.

School of Nursing and Midwifery
Faculty of Health Sciences,
Trinity College Dublin,
The University of Dublin,
24 D'Olier Street,
Dublin 2, Ireland.

+353 1 8962892
nursing.midwifery@tcd.ie
nursing-midwifery.tcd.ie

Appendix 4.24 Ethical Approval – Phase Two

(Please note ethical approval was also received from the REC at each Hospital Site)



Christina Lydon
School of Nursing and Midwifery
Trinity College Dublin
24 D'Olier Street
Dublin 2

6th December 2021

Application Ref: Chair_02_21.22

Study title: Newly qualified general nurses' experiences and perceived value of their internship: a Republic of Ireland cross-sectional study

Dear Christina,

I am pleased to inform you that your ethics application has been approved.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Sharon O'Donnell".

Prof Sharon O'Donnell
Chair of SNMREC

Appendix 4.25 Data Protection Officer Approval



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

05 January 2021

Study Title: Newly qualified general nurses' experiences and perceived value of their internship: A Republic of Ireland cross-sectional study

Dear Christina

I have reviewed the Data Protection Risk Assessment and supporting documentation (Interview Schedule, Participant Information Leaflet, Consent Form) in respect of this research study and am satisfied that the intended processing of personal data for the purposes of the study as described therein is in compliance with data protection legislation, specifically the EU General Data Protection Regulation 2016 (GDPR), Data Protection Acts 1988-2018 and Health Research Regulations 2018.

Please note that the completion of a Risk Assessment is not a one-time exercise, but a continual process. If at any stage there are changes to the processing envisaged by this assessment please contact me.

Be advised that the Trinity College Data Protection Office may carry out a review to assess if the processing is being performed in accordance with the information provided.

I wish you the very best of luck with your research.

Sincerely,

A handwritten signature in black ink, appearing to be 'A. J. L.', written over a horizontal line.

Data Protection Officer

Secretary's Office,
Trinity College Dublin,
Dublin 2, Ireland.

Appendix 6.1 Phase Two – Themes and Subthemes

Codes			Subtheme	Theme
Career changing	Enthusiastic learner	Hindsight	Happy at the Helm	Changing Tides
Challenges	Journal	Self-motivation		
Determination	Excluded			
Anxious	Inclusion	Quitting	The Anchor	
Appreciation	Nervous	Reassurance		
Confidence	Less daunting	Relief		
Disappointed	Overwhelming	Fear		
Dread	Stress	Respect		
Admissions	Clinical skills training	Practical Skills Sessions		Entangled in Time
CVADs	Skills	Bad news		
Cannulation Venepuncture	Advocate	Efficiency		
Handover	Broad range of skills	Planning and organising		
Referrals	Dr's rounds	EWS		
Family Comms	Documentation	Prioritisation		
Flushes	Tasks	Time management		
Discharges	Surgical experience	Escalation protocol		
Medications	Nutrition Methods	Monitoring		
Deteriorating pt.	Knowing patients	Awareness of Scope		

Codes			Subtheme	Theme
Reality of practice	Theory to practice	Knowledge deficits	Receptivity in the face of a Pandemic	Clinical Agility
Emotionally prepared	Rationale for care	Clinical decisions		
Professional development	Automatically knowing	Thinking		
Intern Role	reflecting	Awareness of scope		
Night Shift	Caseload	Team Nursing		
Responsibility	Insight	Independence		
Scope limitations	Hands on experience	Named nursing		
Discuss progress + Feedback	Skills record book	COVID		
Goals	Competency assessment	Gradual progression		
Learning outcomes	Peer support			
Nurses	MDT support	Resource prompt		
Personalities	CPCs	Intern support		
CF support	HCA	Supportive environment		
CNMs + Observant CNMs	Building relationships	HEI support		
CNS	Preparation	PPGs		
Encouragement	Mentorship	Preceptorship		
Accepted as learner	Health and wellbeing	Daily routine	Sum of the Parts	
Approachable	Ward attributes	Supernumerary		
Belongingness	Environment	Different ward practices		
Shadowing CNM	Countersigned	short placements		
Depends	Expected to perform	Addressed by name		
Student Status + Employee v Student	Orientation to ward	Debrief		
Communication	Busyness + Staffing	Missed learning opportunity		

Appendix 9.1 Publications and Presentations

Publications

Lydon, C., O' Brien, F., and Mooney, M. (2024). Newly qualified general nurses' experiences of pre-registration internship: A Republic of Ireland cross-sectional study. *Heliyon*, 10(20), e39427. <https://doi.org/10.1016/j.heliyon.2024.e39427>

Oral Presentations

Lydon, C., O' Brien, F., Mooney, M. (2023) Newly Qualified General Nurses' Experiences of Internship: A Republic of Ireland cross-sectional study. School of Nursing and Midwifery International Conference, University College Dublin, 10/9/2023.

