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To investigate nurse preceptors' perceptions of their role and responsibilities when preceptoring undergraduate nursing students in the South West of Ireland

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This thesis is submitted in fulfilment of the degree of Master of Science by Research to the Institute of Technology, Tralee, Co. Kerry, Ireland

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Submitted to Quality and Qualifications Ireland (QQI), April, 2020

Declaration of Authorship

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Master of Science is entirely of my own work. I have exercised reasonable care to ensure that the work is original and does not to the best of my knowledge breach any law of copyright and has not been taken from the work of others and to the extent that such work has been cited and acknowledged within the text of my work.

Signed:

Date:

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Glossary and Terms

α	Cronbach's alpha
CINAHL	Cumulative Index of Nursing and Allied Health Literature
CPC	Clinical Placement Coordinator
CNM	Clinical Nursing Manager
CST	Critical Social Theory
F	Frequency
GDPR	General Data Protection Regulation
HSE	Health Service Executive
IREC	Institute Research Ethics Committee
ITT	Institute of Technology Tralee
IUA	Irish University Association
M	Mean
MOU	Memorandum of Understanding
n	Number
NLIC	National Leadership and Innovation Center for Nursing and Midwifery
NMBI	Nursing and Midwifery Board of Ireland
NRPSR	Nurse Registration Programme Standards and Requirements
p	Probability
PHN	Public Health Nurse
PRRA	Preceptor Role and Responsibility Assessment
USA	United States of America
SPSS	Statistical Package for the Social Sciences
SD	Standard Deviation
QCLE	Quality Clinical Learning Environment

Abstract

Background: In Ireland, there is limited research and no clear guidance related to a preceptor's role and responsibilities. The Nursing and Midwifery Board of Ireland (2016) has indicated that it plans to develop a national approach to preparing preceptors for their role and responsibilities.

Aim: To investigate preceptors' perceptions of their role and responsibilities when preceptoring undergraduate BSc nursing students.

Research design: A correlational, quantitative descriptive design.

Data collection: The Preceptor Roles and Responsibilities Assessment (PRRA) (Omer, Suliman and Moola, 2016) was adapted for data collection. The modified PRRA comprised of 4 preceptor roles encompassing 43 preceptor responsibilities, utilizing a 5-point Likert scale to evaluate the respondents' level of agreement on a preceptor's responsibilities.

Sample: A convenience sample of 462 registered nurses and midwives in the South West of Ireland participated in the questionnaire, giving a response rate of 57.7%.

Data analysis: Valid questionnaires 380 were processed for data analysis, using the IBM SPSS statistics software package.

Result: The respondents had a high perception of their role and responsibilities as a preceptor. The respondents ranked the statement “*support developing skills while ensuring safe practice*” as the most agreed with preceptor responsibility and “*customize a clinical coaching plan for specific learning needs*” as the least agreed with preceptor responsibility. There were statistically significant relationships between the respondents’ perceived role and socio-demographic variables “Formal preceptor training/preparation” ($p = 0.002$) and “Work Area” ($p = 0.004$). There were statistically significant relationships between preceptors perceived responsibilities and socio-demographic variables “Gender” ($p < 0.01$), “Formal preceptor training/preparation” ($p < 0.01$) and “Employer” ($p < 0.01$). Furthermore, the modified PRRA is a valid and reliable tool for examining a preceptor’s role and responsibilities.

Conclusion: The registered nurses and midwives in the South West of Ireland reported a high perception of their role and responsibilities as a preceptor. Findings reported a statistically significant relationship between the respondents’ perceived role and socio-demographic variables of “Formal preceptor training/preparation” and “Work Area”. Therefore it is important that formal preceptor training continues to be supported by the employer and implemented for all registered nurses and midwives to enhance their overall understanding of a preceptor’s role and responsibilities. The provision of specific knowledge and skills required for preceptoring in the specific ‘work area’ needs to be included as a component of preceptorship education. These findings will inform the Nursing and Midwifery Board of Ireland in developing a national guideline to prepare preceptors for their role and responsibilities. Preceptor programmes should be developed based on these guidelines to enhance understanding of the role and responsibilities of a preceptor.

Chapter One – Introduction

Introduction

This study investigates nurse preceptors' perceptions of their role and responsibilities in the South West of Ireland. The aim of this chapter is to introduce the research study.

1.1 Background of the Study

A “Preceptor” is defined by the Oxford Dictionary as “*a teacher or instructor*” (Oxford University Press, 2018). The term “preceptor” is widely used in the training of healthcare professionals, such as doctors, nurses and pharmacists (Stedman 2012; Conte, 2015; Merriam-Webster, 2018), a preceptor is a person of expertise in an area of practice that facilitates the learning of the less experienced.

The term “preceptor” is widely utilized in nurse education. In Saudi Arabia, a preceptor is a hospital employed nurse who is regarded as a clinical teaching assistant (Omer, Suliman and Moola, 2016). Their role is to support student nurses in developing practice skills and to help integrate them into the culture of nursing practice through a process of interaction (Omer, Suliman and Moola, 2016). In New Zealand, a preceptor is a competent nurse that has completed a preceptorship training programme and competently carries out unique activities in clinical practice (Nurse Educator DNM office, 2016). A preceptor provides support and assistance to new nurses or undergraduate students (Nurse Educator DNM office, 2016). In the United States of America (USA), a preceptor is “*an academically and experientially qualified person*

who has received formal training to function as a resource and role model for nursing students” (Accreditation Commission of Education, 2016, p. 19). In Ireland, a preceptor is defined as a registered nurse or midwife, who has undertaken a preceptorship programme, to support undergraduate nursing students’ practice learning in a clinical environment (Nursing and Midwifery Board of Ireland (NMBI), 2016). A nurse preceptor is described as an experienced nurse, who is in a formal relationship with students, and facilitates and supports student learning in clinical practice, as well as validating their competence.

In Ireland, the preceptor role for registered nurses and midwives was implemented in 2002 when nurse education in Ireland was transformed into a four-year honours degree programme at third-level institutions (Morgan and Keogh, 2005). All registered nurses and midwives in clinical practice are preceptors as the *“preceptoring of student is an inherent part of the role of all nurses”* according to the Nursing Education Forum (2000, p. 79). However, the NMBI (2016) requires that preceptors are prepared for the role by completing a preceptor preparation programme. The training options include a full-day preceptor preparation programme for those who have no previous preceptor training; a half-day refresher programme for those who have experience with preceptor training; and an online pre-preceptor preparation course. While undergraduate nursing students are required to complete 63 weeks of theoretical instruction over their 4 year nursing programme, they are required to complete 45 weeks of clinical instruction and 36 weeks of internship (NMBI, 2016). Therefore, preceptors are significantly important in the education of undergraduate nursing students.

Similarly, the term “mentor”, is used in nurse education in Ireland. The National Leadership and Innovation Center for Nursing and Midwifery (NLIC) (2018) states that a nurse mentor facilitates the learning process of mentees who are registered nurses and midwives. Therefore, a nurse mentor, who is in a partnership with mentees, is not responsible for a mentee’s practice (NLIC, 2018). However, nurse mentors in other countries, such as the United Kingdom, are registered nurse and midwives who mentor undergraduate nursing students (Nursing and Midwifery Council, 2008; Royal College of Nursing, 2017). Literature was sourced that investigated a registered nurse’s role and responsibilities when mentoring undergraduate nursing students (Mead, Hopkins and Wilson, 2011; Jokelainen, et al., 2013; Nunez, et al., 2017; Rylance, et al., 2017; Wilson, 2014; Tuomikoski, et al., 2018; Zhao, Watson and Chen, 2018). Marquis and Huston (2009) and Myrick, et al. (2011) state that the difference between “mentor” and “preceptor” is vague, therefore, both terms are often utilized interchangeably. Based on their recommendation, the term nurse “preceptor” is utilized throughout this research study, as it is comparable to nurse “mentor”.

1.2 A Preceptor’s Role and Responsibilities in Ireland

The role of a preceptor is to assess and evaluate nursing student nurses in order for them to achieve their clinical learning outcomes and domains of competence (NMBI, 2016). Furthermore, the Quality Clinical Learning Environment (QCLE) (NMBI, 2015) illustrates that a preceptor’s role is to

- supervise, teach, assess and provide ongoing feedback to students
- orientate and socialise students in clinical practice
- identify learning needs, plan clinical learning, and illustrate best practice

- share clinical knowledge and skills
- be a role model
- support learning continuously
- maintain the confidentiality of students' learning progress

The QCLE adds that a preceptor needs to both work with students, and to develop a relationship with them during their clinical practice (NMBI, 2015). A preceptor is also required to take a systematic approach to their nursing practice that is adherence to policies, guidelines, protocols, standard and evidence-based practice (NMBI, 2015). However, this description of a preceptor's role and responsibilities was only briefly embedded in the QCLE guideline (NMBI, 2015). It is apparent that there is neither a detailed description of a preceptor's role and responsibilities, or designated guidelines of a preceptor's role and responsibilities in Ireland. It is important to examine the perspective of nurse preceptors in order to 1) get a clear understanding of the role of the preceptor, 2) contribute to the empirical evidence on a nurse preceptor, and 3) find a gap in the literature which the present research could address.

1.3 Statements of the Problem

In a review of the literature sourced there was no study that examined a preceptor's perception of their role and responsibilities in Ireland using a quantitative approach. No study was sourced that identified a preceptor's perception of their role and responsibilities in a setting outside of the acute hospital settings using a quantitative approach. Therefore, it was necessary to conduct a study to examine the preceptor's perceptions of their role and responsibilities within various health care settings. This

study also explored the relationship between a preceptor's socio-demographic profile and their role and responsibilities as a preceptor, such as their years of work experience, education level etc. This was the first study to investigate the relationship between socio-demographic variables and the role and responsibilities of a preceptor in Ireland.

1.4 Purpose of the Study

The purpose of this study was to gain an insight into how registered nurses and midwives perceive their role and responsibilities as a preceptor in the South West of Ireland. This study was underpinned by the positivist paradigm, believing in an objective reality that is measurable. A questionnaire was utilized for data collection, comprising of the preceptor's socio-demographic profile and the modified Preceptor Roles and Responsibilities Assessment (PRRA), which was developed by Omer, Suliman and Moola (2016). The purpose of the questionnaire was to examine the preceptors' perceptions of their role and responsibilities utilizing a 5-point Likert scale. The study was conducted in various health care settings in the South West of Ireland, affiliated to one educational Institute. Valid questionnaires 380 were processed for data analysis.

1.5 Significance of the Study

The findings of this research study will

- guide the development of national guidelines on a preceptor's role and responsibilities
- guide the development and delivery of preceptor preparation programmes

- contribute to the literature on a preceptor's perceived role and responsibilities from an Irish perspective
- contribute to the literature on a preceptor's perceived role and responsibilities for those working outside of acute hospital settings from an Irish perspective
- contribute to the literature on any relationship between a preceptor's socio-demographic profile and their perceived role and responsibilities.

1.6 Structure of this Thesis

In Chapter 2 an examination of the empirical literature is presented. Research that examined the role and responsibilities of a preceptor (n=33) from the perspective of nurse preceptors is presented.

The research methodology is outlined in Chapter 3. The research's aims, objectives and hypotheses are outlined. The research sample and ethical issues are explained. This is followed by a description of data collection and analysis.

In Chapter 4 a description of the findings of the research are given. The results are presented using tables, graphs, bar charts and text. The sample profile of the respondents is initially presented, followed by descriptive and inferential statistics relating to the role and responsibilities of the preceptor.

In Chapter 5, a discussion of the findings is presented and comparisons with results from research studies are offered.

Chapter 6 concludes the research study. Conclusions are drawn and the strengths and limitations of the study outlined. The significance of the findings for practice, education and research are identified.

Conclusion

This chapter sets the scene for the research study as existing problems are stated, the purpose of the study is illustrated, and the significance of the study is foreseen after a brief description of the background of nurse education and a nurse preceptor's role and responsibilities in Ireland.

Chapter Two - Literature Review

Introduction

The aim of this chapter is to present a review of the empirical literatures that examined the role and responsibilities of the preceptor from the perspective of nurses and midwives. Parahoo (2014) states that a literature review has four purposes: to prepare for an academic paper, to deepen the understanding of the topic, to apprise a research project and to engage with a systematic review. The purpose of this literature review is to gain a deep understanding and knowledge from existing literature in order to develop a research study that investigates nurse preceptors' perceptions of their role and responsibilities in the South West of Ireland.

2.1 Search Strategy

The search for relevant literature included databases and manual searches. The databases utilised in the search included Cumulative Index of Nursing and Allied Health Literature (CINAHL), Google Scholar, EBSCO, Elsevier, ScienceDirect, Research Gate, and Wiley Online Library. The key words used when searching for literature included: nurse, preceptor roles, preceptor responsibilities, clinical teaching, preceptor competence and others. The search word strategy is presented in Appendix A. The inclusion criteria were set to English, and publication in the years between 2000 and 2019 inclusive. The reference lists of studies included in the review were hand searched and relevant abstracts read for their relevance. The search process yielded 33 relevant

studies which met the inclusion criteria. The search strategy and results are presented in Appendix B.

2.1.1 Evaluation of data points

Data was evaluated according to the significance and methodological quality of the study. All the research studies met the criteria as a primary research study, published in peer-reviewed journals between 2000 and 2019. Each research study was investigated for its research design, sampling, data collection strategies, and findings pertinent to the role and responsibilities of a preceptor, and the trustworthiness of the study.

2.1.2 Data analysis and Interpretation

Each of the research studies (n=33) pertaining to the role and responsibilities of a preceptor is analysed. The research studies were grouped into three themes based on their findings. This included the examination of a preceptor's role and responsibilities, the prioritization of a preceptor's role and responsibilities, and the implementation of a preceptor's role and responsibilities.

2.1.3 Presentation of Results:

The studies (n=33) included in the literature review were comprised of quantitative studies (n=9), qualitative studies (n=18), and mixed-method studies (n=6). These studies focused on the preceptors' perceptions of their role and responsibilities when preceptoring undergraduate nursing students.

2.1.4 Evaluation of Results

The quantitative studies (n=9) utilized questionnaires to collect data. This included the Characteristics of Effective Clinical Instructors (Katz, 1984), the Preparation of Nurse Who Precept BSN student [*sic*] (Alspach, 2005), the Clinical Preceptor Experience Evaluation Tool (O'Brien and Bremmer, 2008), the Clinical Teaching Competence Inventory based on Sonthisombat's model (2008), the Preceptor Roles and Responsibilities (Boyer, 2008), the Nursing Times Survey online (Gainbury, 2010), the Clinical Self-Assessment Tool (Health Workforce Australia, 2014), the Mentors' Competence Instrument (Tuomikoski, et al., 2018a), and the Mentors' Behaviour Scale (Zhao, Watson and Chen, 2018). The research designs adopted for these quantitative research studies were quantitative descriptive, exploratory, quantitative cross-sectional, descriptive comparative, and descriptive cross-sectional. The sample sizes ranged from 62 to 871. A summary of the questionnaires adopted in these quantitative research studies are presented in Appendix C.

The research designs adopted for the qualitative research studies (n=18) were phenomenology, ethnography and grounded theory. The data collection methods included one-to-one interviews, semi-structured interviews, focus group interviews, observation of field work, and self-administered questionnaires via email or post. The sample sizes varied from 5 to 470.

Mixed-method research studies (n=6) were included in the literature review. Among them, most studies (n=5) collected both qualitative and quantitative data to examine a preceptor's role and responsibilities, and one study utilized the findings of qualitative

data to construct a questionnaire to collect quantitative data. The research designs adopted for mixed-method studies were descriptive, comparative descriptive, and descriptive exploratory. The sample sizes varied from 16 to 470.

2.2 Research studies pertinent to a preceptor's role and responsibilities

2.2.1 Examining a Preceptor's Role and Responsibilities

The theme includes research studies (n=20) that examined a preceptor's role and responsibilities.

A phenomenological study was conducted by Öhrling and Hallberg (2000) to determine the experiences of nurses in their role of preceptoring student nurses. A convenience sample of preceptors (n=17) were recruited for the study from two hospitals in Sweden. Data was collected through individual interviews and was subsequently analysed using a phenomenological-hermeneutic approach which utilises a three step process of naive reading, structural analysis and holistic interpretation. Through the data analysis, two subthemes emerged; *“including the student in their daily work”* and *“increasing awareness of their own process of learning”* (Öhrling and Hallberg, 2000, p. 231). The first subtheme included the preceptor's responsibilities of identifying students' learning needs, facilitating their learning, giving priority to patient care, enhancing students' sense of responsibilities in patient care, developing a trusting relationship with students, working together closely to role model clinical practice, facilitating communication between students and preceptors, and observing and assessing students' competence. The second subtheme included preceptor responsibilities, such as self-reflection, self-

awareness, and acting as a facilitator and communicating with nursing educators to support learning of students. The study is limited due to a lack of a detailed description of how the data was analysed in the study. This is an issue according to Polit and Beck (2010) who state that it is necessary for a study to provide sufficient information regarding its quality-enhancement strategy in order for readers to determine its quality.

A comparative descriptive mixed-method study was undertaken by Cele, Gumede and Kubheka (2002) to investigate the role and responsibilities of preceptors in the clinical practice area from the perspectives of nurse preceptors and registered nurses. A purposive and systematic random sampling approach was adopted which included preceptors (n=16) and staff nurses (n=40) in a hospital in South Africa. Three questionnaires were designed based on the literature review and objectives of the study, including open and closed-ended questions. The questionnaire included demographic data, educational information, employment history, the preceptoring role of supporting students, and problems they had encountered when preceptoring. Staff nurses were also asked about the role of a staff nurse in supporting students. The questionnaires were examined for face and content validity and a pilot study was conducted prior to data collection to ensure the suitability of the instrument. Content analysis was adopted for interpreting descriptive data. The findings of this study indicated that both registered nurses and preceptors demonstrated procedures and provided support and encouragement to students in clinical practice. While the registered nurse helped students solve problems in clinical practice, the nurse preceptors were aware of their extended role and responsibilities as a preceptor, which included: orientating students into the new environment, assessing and evaluating students' clinical practice and offering clinical teaching in bridging the theory and practice gap. Staff nurses acceded

to the great value of nurse preceptors in student accompaniment. The generalizability of the findings of this study is limited due to the small sample size of nurse preceptors (n=16) and the collection of data only involved one regional hospital in South Africa. The application to research when the sample size is limited is noted by Parahoo (2014). The reliability of this survey tool was not reported in this study and is therefore unknown, if this may have impacted on the quality of the data (Polit and Beck, 2010).

Bourbonnais and Kerr (2007) used a qualitative approach to explore the role of a preceptor when preceptoring undergraduate nursing students. A purposive sample of female preceptors (n=8) was recruited in one hospital in Canada. Data was collected utilizing one-to-one interviews and was analysed adopting a thematic analysis method (Burnard, 1991). Findings of the study revealed a center theme of “*safe passage*” in the preceptor role. The preceptors acknowledged their role as a teaching “*process*”, in which they assessed the level of competence of students, planned learning activities, evaluated their performance in order to maintain safe patient care and reassure students (Bourbonnais and Kerr, 2006, p. 1545). The preceptors provided help and protection through observing students’ performance in a vigilant stance and questioning students to facilitate knowledge development and reflection. The preceptors had a clear understanding of their role of: providing help to student, being a protector, teaching skills of decision making and prioritisation, offering guidance and information, being available to students, and developing professional attitude of students. Furthermore, the preceptors were aware that their role was enhanced with the development of educational skills and communicating with nursing educators for support. The sample representative of preceptors from one hospital and one educational institute in Canada may limit the generalizability of the findings to others across Canada or to other countries. Research

findings and conclusions from a single study may limit the generalizability of the findings to the population at large (Parahoo, 2014). Only female nurses included in the study may indicate a potential bias (Šimundić, 2013).

Carlson, Wann-Hansson and Pilhammar (2008) conducted an ethnographic study to describe how nurse preceptors fulfil their responsibilities in their role of teaching undergraduate nursing students during clinical placement. The study was conducted in both the cardiology ward and surgical ward in one regional university hospital in Sweden. Data was collected through field work by observing nurse preceptors (n=13) and focus group interviews with nurse preceptors (n=16). The data was transcribed and then analysed using the constant comparative method. Credibility of the study was ensured as all authors were involved in data analysis and were in agreement with the findings (Lincoln and Guba, 1985). Three themes emerged from the findings. The first theme “*Adjust level of precepting*” found that preceptors were responsible for planning and adjusting their responsibilities based on students’ needs, as well as knowing what to expect from students based on their preconceived ideas and past preceptoring experience. The second theme “*Perform precepting strategies*” found that preceptors were responsible for creating a safe environment, providing situational feedback, and teaching in use of two identified techniques: perceptual techniques, such as demonstrating skills; cognitive techniques, such as asking reflective questions. The third theme “*Evaluate precepting*” found that preceptors were responsible for assessing students and critiquing knowledge constructively. The limitation of study is that only two wards of one general hospital in Sweden was involved in this study, which may hinder the generalizability of the findings to other nurse preceptors in the same hospital

or other hospitals across Sweden or other countries. Parahoo (2014) notes the limitation of studies where only one site is chosen may hinder the generalizability of the findings.

An ethnographic study influenced by symbolic interaction was conducted by Carlson, Pilhammar and Wann-Hansson (2010) to discover the role of nurse preceptors in mediating nursing as a profession to undergraduate nursing students in clinical practice. A purposive sample was recruited in one clinical setting affiliated to one Swedish education Institute. The data was collected through observing nurse preceptors (n=13) during a six-month period of field work and through conducting focus group interviews with preceptors (n=16). Data collection and data analysis were conducted simultaneously in the study following the ethnographic approach. This method is supported by Boswell and Cannon (2014) who state that data collection and data analysis takes place concurrently with most qualitative methods. Text was transcribed and the pattern of behaviours was sorted through repeated reading of content deriving from focus group interviews. Tradition of naturalistic inquiry (Lincoln and Guba, 1985) was adopted in explaining and clarifying the meanings of subthemes. Three subthemes emerged in the findings in respect of the role of a preceptor in mediating nursing as profession to student nurses in clinical practice. In the first subtheme, the medical and technical role of a nurse preceptor was identified to facilitate students' skill practice while maintaining a safe environment, to engage with nursing practice as guided by nursing regulation and protocols, and to demonstrate practical skills which cannot be learnt from theory/text books. In the second subtheme, the administrative role of a preceptor was interpreted as to demonstrate skills in written, verbal reporting and nursing care documentation, as well as the provision of nursing care including planning, prioritizing and assessing. In addition, the administrative role of a preceptor was to be a

team leader who provided nursing care in collaboration with other health care professionals, and to provide a communication channel for students, patients and family. In the third subtheme, the caring role of a nurse preceptor was illustrated as to provide individualized patient care, to support students in developing communication skills and clinical competence, to act as a role model, and to encourage students to reflect on their own capacity in order to enhance their independence in practice. The limitation of study is that only one educational institute and one health care setting in Sweden was involved in this study, which may hinder the generalizability of the findings to other educational institutes and health care settings across Sweden or other countries. This study was taking a participant observation approach during field work. Parahoo (2014) highlights that participating in activities while in the process of observation may prevent researcher from taking notes and capturing a comprehensive picture of what is happening in the setting.

Paton (2010) conducted a qualitative research study to seek the professional practice knowledge that preceptors acquire in their role of preceptoring undergraduate nursing students. A sample of nurse preceptors was recruited in southern Alberta of Canada. Five individual interviews and fifteen focus groups, in which three to five preceptors attended each group, were conducted for data collection. Data was subsequently transcribed and one primary investigator, along with coinvestigators, was involved in data analysis. Four subthemes emerged from the findings of this study. Subtheme one “*artfully connecting*”, the role of a preceptor was to be present with students, to get to know them and be aware of their “unknown” surrounding routines and experiential knowledge, to include students in their experiences, to share their knowledge, and to reflect on the changeability in the process of patient care (Paton, 2010, p. 145).

Subtheme two “*creating a culture of respect*”, preceptor role was described as to facilitate students’ learning needs concerning the needs of patients, family and other health care professions, as well as academic requirements (Paton, 2010, p. 146). Subtheme three “*acknowledging contextual realities*”, preceptor role was considered to integrate ward-specific knowledge with students’ knowledge (Paton, 2010, p. 146). Subtheme four “*preserving the ideas of ethical, competent, and respectful practice*”, the role of a preceptor was to be conscious of their professional accountability in maintaining a safe and competent practice (Paton, 2010, p. 146). Furthermore, the preceptors were responsible for assessing and evaluating students’ knowledge and competence, clarifying and documenting their perceptions, addressing their concerns, role modelling care in a holistic approach, and guiding the student to see the context beyond the task. The generalizability of the findings may be limited as the research study was conducted in the southern region of the Canadian province.

A qualitative descriptive study was conducted by Haitana and Bland (2011) which explored preceptor role and responsibilities in preceptoring student nurses. A purposeful sample of preceptors (n=5) was recruited from a provincial hospital in New Zealand conducting semi-structured audio-taped interviews. A step-by-step process by Burnard (1991) was used for data analysis and rigour was maintained in this research study as guided by Lincoln and Guba’s (1985) criteria and Tuckett’s (2005)’s operational techniques. Findings from this study indicated that the preceptors played a significant role in building a relationship with students in clinical practice. The role of a preceptor was to get to know and make connections with students. Spending time with students was significantly important to enable a preceptor to fulfil the role of evaluating and assessing students, offering more learning opportunities and receiving feedback from

students regarding their teaching, as well as developing a sense of trust in their relationship with students. The preceptors were also aware of their primary obligation to maintain safe practice and to protect the public in their clinical practice. Thus, they needed to make a professional judgement to allow a certain level of autonomy in students' clinical practice, taking their knowledge and skills into consideration. Preceptors strongly agreed that their role of developing a cohesive working relationship with students and creating a positive and effective working environment for themselves and students required a preceptor and student working together for the entire placement. The study was conducted in one small regional hospital in New Zealand which may have an impact on the generalizability of the findings to other hospitals in New Zealand and to other countries. This study was conducted in one small regional hospital in New Zealand and as previously refer to by Parahoo (2014) this may impact the accuracy of results.

Jokelainen, et al. (2013) undertook a cross-cultural phenomenographic study to investigate the role of British and Finnish nurse preceptors in facilitating student nurses in their placement learning and professional development. A sample of 22 Finnish preceptors and 17 British preceptors was recruited from each country. Focus group interviews were performed, ranging from 3-5 preceptors in each group. Data was analysed using a phenomenographic approach (Marton, 1994). Four subthemes emerged from the finding. In the first subtheme, preceptors from both countries recognized their role of establishing a positive relationship with students and focusing on the individual students in clinical learning and professional development. This included identifying their educational and individual learning goals, and knowing them and treating them equally as a peer. In the second subtheme, both British and Finnish preceptors reported

their preceptoring role of acting as a facilitator in the clinical practice, which included being supportive, orientating students to the placement and providing various learning opportunities in order to enhance their sense of belonging in the clinical practice. In the third subtheme, the preceptors identified their role of working and interacting with students, providing teaching, guidance and encouragement to develop their competence, and offering emotional support. In the fourth subtheme, the preceptors from both countries emphasized their important role of being an assessor, which included assessing students' achievements, continuous reflection, providing feedback, and evaluating their performance and outcomes. The focus group interview approach and presence of more than one moderator in the interview may have prevented some preceptors from expressing their opinion, which may limit the generalizability of the findings. This is confirmed by Polit and Beck (2010) that the individual may not feel comfortable to share their views and opinions in a group format interview.

A Nordic qualitative study was conducted by Hilli, et al. (2014) to obtain an understanding of how nurse preceptors perceived their preceptoring role in supporting the learning and development of student nurses in clinical practice. A sample of preceptors (n=31) were recruited from Western Finland and Northern Sweden. The research study adopted a hermeneutical approach (Gadamer, 2004) in its research design. Thematic narrative interviews were conducted as the method of data collection and a hermeneutical approach guided data analysis (Gadamer, 2004). The trustworthiness of the study was ensured in the research study in the process of data analysis and presentation of the findings. Three subthemes emerged in the findings. In the first subtheme, preceptors acknowledged their role of "*developing a supportive relationship with students*" (Hilli, et al., 2014, p. 1422), which was fundamental for

clinical learning and practical development of students. However, the supportive relationship was based on the preceptors' primary responsibility of patient care. In order to develop a supportive relationship with students, the role and responsibilities of a preceptor were to: introduce students to a safe and permissive clinical environment, act as a role model in teaching and providing guidance, be knowledgeable in both theory and practice of nursing, acting as an educator, and guiding students into the nursing profession. In the second subtheme, the preceptors identified their role of "*teaching students in a safe and supportive learning environment*" (Hilli, et al., 2014, p. 1422). This required preceptors to be aware of students' needs, their level of practice, and the learning objectives in order to facilitate their practice, set the learning goals and offer feedback and evaluation during clinical practice. In the third subtheme, the preceptors adopted various strategies in their preceptoring role of helping students to link theory to practice for a holistic approach of nursing care. The preceptors encouraged students to think aloud as well as offering explanations in the process of nursing care. They also demonstrated technical skills and encouraged students to critically reflect on their experience. The authors of the research study addressed their concern at the level of disclosure of the preceptors in the group format interviews, as it can be an issue informed by Polit and Beck (2010).

Hsu, et al. (2014) conducted a quantitative study to evaluate the role and responsibilities of a preceptor in clinical teaching from the perspective of preceptors. The Clinical Teaching Competence Inventory (CTCI) for nurse preceptors, based on Sonthisombat (2008)'s model, was developed and tested in Taiwan, consisting of 41 items. Sonthisombat (2008)'s model was validated by means of conducting a pilot study and utilized Mann-Whitney rank sum test for testing its reliability. Reliability of the CTCI

was examined through interviewing experienced nurse preceptors and reviewing the literature. Content validity was tested by nursing experts as well as conducting a pilot survey. A convenience sample of preceptors (n=389) from two medical centers and one regional hospital in northern Taiwan participated in the study for evaluating their role of clinical teaching using the CTCI instrument. Exploratory factor analysis and Principal axis factoring extraction methods were adopted for data analysis. The internal consistency of the instrument was examined using Cronbach's alpha, with values ranging from 0.82 to 0.87 for four subscales. The findings reported that the role of a preceptor included "*student evaluation*", "*goal setting and individual teaching*", "*teaching strategies*" and "*demonstration of organized knowledge*" (Hsu, et al., 2014, p. 220). The role "*student Evaluation*" included responsibilities of observing and assessing students' performance, evaluating their own performance, providing feedback. (Hsu, et al., 2014, p. 220). The role "*goal setting and student teaching*" involved assessing learning needs, planning practice activities, facilitating practice to achieve the goal and objectives among other items (Hsu, et al., 2014, p. 220). The role "*teaching strategies*" included responsibilities of communicating with students, demonstrating up-to-date knowledge and skills in patient care, encouraging critical thinking, as well as adopting various strategies in clinical teaching. The role "*demonstration of organized knowledge*" comprised of providing the rationale for decision making and action, giving information in an organized manner, ensuring the clarity and accuracy in answering questions, and being able to coordinate and solve conflict (Hsu, et al., 2014, p. 220). The limitation of this research study includes the fact that the study was conducted in Taiwan, where the language, nurse education, tradition and culture were dissimilar to those of Ireland and other western countries. Parahoo (2014) affirms that researchers must consider the social and cultural factors in the environment where research takes place in determining

the generalisability of the findings. Thus, the CTCI, which was tested and developed within Taiwan, requires further investigation outside of the country to ensure the generalizability of the findings.

A hermeneutic phenomenological study was taken by Wilson (2014) to explore preceptor responsibilities as perceived by nurse preceptors. A purposeful sample of preceptors (n=12) was recruited from various clinical settings in southern England. A range of one to three in-depth face-to-face interviews was conducted with each preceptor for data collection which were recorded and transcribed. NVivo 8 was utilized for storing and organizing data. The data analysis process took diverse approaches. It included verification and clarification with participants, use of vocative texts (Nicol, 2008) and adopting four fundamental thematic structures based on Van Manen's (1997) theory of "existentials", which are subsumed to "temporality", "spatiality", "corporeality" and "relationality". Preceptor "temporality" meant that the preceptors facilitated students learning and treated students as individuals. Preceptor "spatiality" suggested that the preceptors created a clinical environment that facilitated students to engage with patients, family and other health care professionals. The preceptors worked in partnership with students to be an effective and accountable educator. Preceptor "corporeality" indicated the preceptor role of being an educational tool as they demonstrated procedures, role-modelled practice and communicated with students with verbal and nonverbal skills. Preceptor "relationality" linked all subthemes together as the preceptors were "*educational use of self*" in supporting, teaching and assessing students, protecting and respecting patients, and getting support from and working collaboratively with their peers.

Bengtsson and Carlson (2015) conducted a qualitative research study to explore the knowledge and skills required of a preceptor to undertake a preceptoring role. A purposive sample of preceptors (n=64) were recruited in the health care sector in the southern region of Sweden to answer one single written, self-administered global question online. Content analysis (Burnard, 1996) was adopted for data analysis. Two themes emerged in the findings of the study, “*tools for effective precepting of students and healthcare professionals*” and “*in-depth knowledge and understanding of preceptorship in an academic setting*” (Bengtsson and Carlson, 2015). The preceptors addressed the need for enhancing their knowledge and skills in their preceptoring role. This included developing teaching and learning strategies, adopting specific tools, gaining knowledge on adult learning and assessment principles, promoting self-assessment, self-reflection and critical thinking of students, strengthening communication skills. To fulfil their role of a preceptor, they needed to be aware of their own teaching style and develop their competence as a preceptor, as well as having a good understanding of the theoretical aspects of nurse education. The data collection method is presented as the limitation of the study as a self-administered global question online promotes the sample size but not in-depth answers which may hinder the generalizability of the findings. This is supported by Polit and Beck (2010) that the validity and accuracy of data through a self-reported method of data collection is a serious issue and researchers are advised to be sensitive to the potential biases in the process of data analysis.

A qualitative study was carried out by Murphy (2015) in Ireland to seek an understanding of preceptor role as perceived by nurse preceptors. A purposive sample of preceptors (n=8) from a teaching hospital in the West of Ireland participated in the

study. Semi-structured interviews were adopted for data collection and thematic analysis was used for data analysis, adopting an interpretive approach. The reliability and validity were examined to ensure rigor of this research study. This included confirming the transcripts with participants based on Guba and Linda (1985)'s recommendation, and utilizing NVivo for data analysis. Nurse preceptors perceived their role as a facilitator, a teacher, a mentor, a supporter, and an assessor in the findings of the study. One preceptor specified that a preceptor acted as a role model and ensured his/her own up-to-date nursing practice to assist students in meeting the learning objectives. Similarly, another preceptor acknowledged their need to have evidence-based knowledge and experience to guide students in achieving their competence in practice as well as accomplishing the learning outcomes. In addition, a role of a preceptor was to facilitate a student's transition to be a staff nurse by acting as a supporter and a mentor. A preceptor also played a role in creating a positive learning environment, where they facilitated teaching activities, maintained safety in practice and worked collaboratively with the multidisciplinary team. Involvement of only one educational institute and one hospital in the study limits the generalizability of the findings. Generalizability measures the usefulness of a study for more boarder groups or situations (Parahoo, 2014). As the author of the study was an experienced qualified nurse, there is a risk that bias may play a role in influencing the findings of the research study (Šimundić, 2013).

The role of a preceptor in preceptoring undergraduate nursing students was investigated in Hall (2016)'s qualitative exploratory study. A non-probability snowball sampling method was adopted to recruit preceptors (n=9) in tertiary care settings in Northeast Tennessee of the USA. Two focus group interviews were conducted for data collection.

Conventional content analysis was deployed for data analysis in keeping with the inductive process utilized in naturalistic inquiry. Validity and reliability were examined in this study. One primary role, along with two secondary roles of a preceptor, was identified in the findings. The primary role of a preceptor was a protector. The nurse preceptors were responsible for protecting students. They supported and safeguarded students' professional and personal development. They communicated with students to ensure the safe practice of a student and provide encouragement. They were responsible for protecting their profession, which included humility, safety of patients and continuing professional development. One of the secondary roles of a preceptor was as a socializer. The preceptors were responsible in assessment of students in order to facilitate their needs and integrate them into clinical placement. Another secondary role of a preceptor was as a teacher. The preceptors provided instruction to students with professional nursing knowledge. The preceptors were supported by the peers in the provision of opportunities to develop procedural skills of students. The preceptors also taught students the practice knowledge, which could not be learnt from theory. Their teaching role also involved "*assessing a student's skill level, attitude, and motivation for entering the profession*" (Hall, 2016, p. 25). Hall (2016) acknowledged that a sample representative of preceptors from a semi-urban area of a state in USA involving eight out of nine white female interviewees may limit the generalizability of the findings. This may present potential bias (Šimundić, 2013; Parahoo, 2014).

Nunez, et al. (2017) conducted a phenomenological research study to explore the role of the nurse preceptor when preceptoring student nurses. A purposive sample of preceptors (n=9) was recruited from a health setting in Santiago, Chile. In-depth interviews were conducted for data collection. External interviewers participated in the interview

process minimizing the bias during data collection. Validity and reliability of the study was examined in the process of data analysis, which is supported by Streubert and Carpenter (2010)'s description of data analysis method. Four subthemes emerged in the findings of the study, which were "*vocation and gratification*", "*personal and professional challenge*", "*big responsibility*", and "*transmission of experience*" (Nunez, et al., 2017, p. 358). A preceptor role was described as "*vocation*" as the preceptors expressed their willingness and aptitudes to teach and prepare future nurses. It was also reported by the preceptors as a gratifying experience. The preceptors carried substantial responsibilities in their role of preceptoring student nurses. They had a strong influence on students, in their view of nursing practice, and in their transition to the nursing profession. They were responsible in the preparation and training of "good professionals". The nurse preceptors were accountable for patient care, which included the care provided by student nurses. They were role modelling and adopting teaching-learning techniques in clinical practice to achieve the objectives as a preceptor. Moreover, the preceptors acknowledged their role of transmitting both professional and personal experience to students, as well as passing on their professional wisdom and the knowledge that goes beyond the classrooms. The sample representative of one health care setting in a city of Chile limits the generalizability of the findings. Furthermore, considering the social and culture factors of where the research study was conducted, it may have an impact on producing generalizable findings (Parahoo, 2014).

Anderson, Moxham and Broadbent (2018) conducted a grounded theory study to investigate registered nurses' understanding of the standard requirements of their role in the provision of professional development to undergraduate nursing students in clinical placement. A purposive sample of preceptors (n=15) was recruited in the state of

Queensland, Australia. Semi-structured individual interviews were conducted for data collection. A constant comparative method was adopted for data analysis as guided by ground theory methodology (Parahoo, 2014). The central theme of the findings of this research study was “*doing the right thing*” in supporting and teaching students in clinical placement. Four subthemes were developed embracing the central theme, where were “*sense of responsibility*”, “*added extra*”, “*choice*”, and “*nursing standard*” (Anderson, Moxham and Broadbent, 2018, p. 233). The preceptors admitted that they were responsible to develop students’ professional practice and provide them with quality clinical experiences. They needed to enhance their awareness of the nursing standard requirement in their role of teaching and supporting students. However, extra time was essential for implementing the role in addition to their regular workload. In addition, personal choice needed to be considered for nurses working with or without students, as well as suitability to teach. There are several limitations of the study. The findings of this research study may be biased as the participants were a specific group of registered nurses who were interested in students and volunteered to be the part of the research study (Šimundić, 2013). Thus, the research findings may not be generalizable. The sample representative the state of Queensland of Australia further limits the generalizability of the findings.

Chigavazira, et al. (2018) conducted a study to adapt and validate a Clinical Supervision self-Assessment Tool (CSAT) which was utilized to evaluate a registered nurse’s role and responsibilities when preceptoring undergraduate nursing students. A convenience sample of preceptors (n=229) participated in the study in one teaching hospital in Australia. The CSAT, developed by Health Workforce Australia (2014), the validity and reliability of the tool was unknown at the time to Chigavazira, et al. (2018). In order

to adapt it to their study, the CSAT was examined for content validity. The pilot study was then conducted to test the CSAT. The modified CSAT, called the mCSAT, consisted of two scales, 30 items related to a preceptor's skills and 30 items related to a preceptor's knowledge, utilizing a 5-point Likert scale which ranged from strongly disagree to strongly agree. The mCSAT was analysed adopting exploratory factor analysis. The internal consistency of the mCSAT was assessed by Cronbach's alpha, in which the values were all above 0.90 for emerged factors of two scales. Three factors were discovered as a result of factor analysis among two scales. They were "*evaluating learning*", "*facilitating learning*" and "*Problem solving*" (Chigavazira, et al., 2018, p. 30). All items describing a preceptor's skill and knowledge were pertinent to a preceptor's role and responsibilities as a preceptor. Chigavazira, et al. (2018) discovered that there was a statistical difference between the scores of the registered nurses who had undertaken preceptor training in the form of hospital based in-service programmes or a postgraduate preceptor qualification and those who had not undertaken preceptor training. There was no significant difference in the scores according to a registered nurse's years of work experience. The generalizability of the findings was limited as a result of the convenience sample of registered nurses from one acute hospital in Australia. Therefore, it is necessary for the mCSAT to be adopted to other clinical settings in Australia or other countries to further test the instrument and produce generalizable findings.

Ferreira, Dantas and Valente (2018) conducted a descriptive, exploratory qualitative research study in examining the knowledge and competencies required for a registered nurse in fulfilling the role of a preceptor in clinical practice. A sample of registered nurses (n=6) in the city of Niteroi, Brazil, was recruited for the research study. Semi-

structured interviews were adopted for data collection and content analysis was deployed for data analysis. Four subthemes emerged in the findings. The first subtheme, the preceptors' role was identified as a teacher and they were responsible and committed to educate and provide training to student nurses. The second subtheme, the preceptors required to develop a variety of knowledge types to fulfil the role as a preceptor, such as planning more practical activities of students. The third subtheme, preceptor and students "*faced the reality of practice*" (Ferreira, Dantas and Valente, 2018, p. 1567). The role of a preceptor, along with students, was to establish a trusting professional relationship with patients and other team members, and put their knowledge, including local knowledge, common sense, and procedural knowledge, into practice. The fourth subtheme, the preceptors admitted the need for continuing training to fulfil their role as a preceptor, as well as provision of times. The generalizability of the findings is limited as the registered nurses participating in the research study were from one health care setting in a city of Brazil. The language, culture and nurse education of where the research study was conducted is significantly different from western countries, which further limits the generalizability of the findings. Although the authors declared that the data was analysed based on content analysis, the details of how the data was processed was not reported in the study (Ferreira, Dantas and Valente, 2018). Parahoo (2014) articulates that it is important for researchers to answer major questions of the study in order to assess the validity and reliability of data.

L'Ecuyer, Hyde and Shatto (2018)'s qualitative study was to explore the nurse preceptors' role competencies as perceived by nurse preceptors. A sample of preceptors (n=553), following their attendance at a preceptor academy, was recruited in Missouri, Midwestern USA. They were instructed to respond to the question of "*In your opinion,*

what are the most critical skills necessary to ensure preceptor competency” in the form of text sentences or phrases via email over a period of nine years (L’Ecuyer, Hyde and Shatto, 2018, p. 235). Content analysis was adopted for data analysis involving three members of the research team. The findings of the study consisted of 25 items pertaining to the role competencies of a preceptor which were extracted into three subthemes. The subtheme “*knowledge of a preceptor*” included the preceptor role competencies of “*expertise and knowledge*”, “*learning style*”, “*personality issues and types*”, “*role preparation*” and “*emotional intelligence*” (L’Ecuyer, Hyde and Shatto, 2018, p. 236). The subtheme “*preceptor skills*” included the preceptor role competencies of “*communication*”, “*flexibility and adaptability*”, “*feedback and evaluation*”, “*interpersonal skills*”, “*organization*”, “*role model*”, “*open to improving skills*”, “*critical thinking*”, “*setting goals*”, and “*protectors and safety*” (L’Ecuyer, Hyde and Shatto, 2018, p. 236). The subtheme “*preceptor attitude*” included the preceptor role competencies of “*patience*”, “*desire to be a preceptor*”, “*understanding*”, “*approachable*”, “*kindness*”, “*confidence*”, “*trustworthy*” and “*positive attitudes*” (L’Ecuyer, Hyde and Shatto, 2018, p. 236). The findings of this research study offered an in-depth knowledge of a preceptor’s role expectation, which could provide benefit to nurse preceptors in identifying needs for continuing development in their role of a preceptor, and to nursing educators in providing training to prepare preceptors for their role. Several limitations of the study are identified. The demographic data of the nurse preceptors were not collected. Hence, it was not possible to examine the preceptors’ responses against personal characteristics, such as age, experience, education etc. The ranking of the items cannot be provided by content analysis. A further study in a quantitative approach is recommended to validate the items derived from this research study.

Zhao, Watson and Chen (2018) conducted a study to assess preceptors' role and responsibilities through validating a preceptor self-evaluation survey. The survey, the Mentor's Behaviour Scale (MBS), was created through a literature review comprising of 46 items utilizing a 5-point Likert scale. A purposeful sample of preceptors (n=871) from 7 hospitals in north, south, and southwest of China completed the MBS online. The MBS was examined for content validity analysis, exploratory factor analysis and principal component analysis. As a result, a 12 items scale subsided to 3 factors emerged from the MBS through validation process. The internal consistency of the MBS was examined utilizing Cronbach's alpha, resulting in a value of 0.85 for total scale. Factor one "*Guide Personal Growth*" consisted of four items, which were "*guide student's personal development*", "*stimulate student to provide the best possible care*", "*discuss learning goals with student*" and "*develop student critical thinking ability*". Factor two "*Professional Development*" comprised of four items, which were "*show student how to make decision on patient care*", "*encourage the use of evidence-based practice*", "*give student an objective and comprehensive evaluation*" and "*make student aware of the legal issues involved in nursing*". Factor three "*Psychosocial Support*" made up of 4 items, which were "*be warm and friendly to student*", "*respect student*", "*support and encourage student*" and "*be a good role model for students*". In addition, the study found that the preceptors with preceptor training had a higher score than those with no preceptor training. The MBS is limited as it was developed and tested in China. Further testing outside of the country is required to confirm the generalizability of the tool.

Summary

The research studies (n=20) included in this theme examined a preceptor's role and responsibilities. The studies included quantitative studies (n=3), qualitative studies (n=16), and mixed-method studies (n=1). The main findings that emerged from the studies are divided into subthemes which include:

The importance role of a preceptor is to develop a relationship with students to facilitate and evaluate their learning. This includes helping students settle into a new environment (Cele, Gumede and Kubheka, 2002; Jokelainen, et al., 2013; Hall, 2016); assessing their needs (Öhrling and Hallberg, 2000; Carlson, Wann-Hansson and Pilhammar, 2008; Paton, 2010; Hilli, et al., 2014; Hsu, et al., 2014); providing opportunities for practice (Haitana and Bland, 2011; Jokelainen, et al., 2013; Hsu, et al., 2014; Wilson, 2014; Hall, 2016; Anderson, Moxham and Broadbent, 2018; Chigavazira, et al., 2018; Ferreira, Dantas and Valente, 2018); communicating their progress (Öhrling and Hallberg, 2000; Carlson, Wann-Hansson and Pilhammar, 2008; Wilson, 2014; Hall, 2016); evaluating their competence (Öhrling and Hallberg, 2000; Cele, Gumede and Kubheka, 2002; Bourbonnais and Kerr, 2007; Carlson, Wann-Hansson and Pilhammar, 2008; Paton, 2010; Haitana and Bland, 2011; Jokelainen, et al., 2013; Hilli, et al., 2014; Hsu, et al., 2014; Chigavazira, et al., 2018; L'Ecuyer, Hyde and Shatto, 2018) and developing their autonomy in practice (Carlson, Pilhammar and Wann-Hansson, 2010; Haitana and Bland, 2011).

Preceptors act as a protector to ensure a safe work environment (Carlson, Wann-Hansson and Pilhammar, 2008; Paton, 2010; Hilli, et al., 2014; Hall, 2016); prioritize

patient care (Öhrling and Hallberg, 2000; Haitana and Bland, 2011; Hilli, et al., 2014; Hall, 2016; Nunez, et al., 2017), and maintain safe practice while preceptoring (Bourbonnais and Kerr, 2007; Carlson, Pilhammar and Wann-Hansson, 2010; Murphy, 2015; Hall, 2016; Nunez, et al., 2017).

Preceptors act as an educator by updating skills and knowledge of professional practice involving family, peers and other health care professionals (Wilson, 2014; Bengtsson and Carlson, 2015; Murphy, 2015; Ferreira, Dantas and Valente, 2018; L'Ecuyer, Hyde and Shatto, 2018). They support students' learning by bridging the theory and practice gap (Cele, Gumede and Kubheka, 2002; Carlson, Pilhammar and Wann-Hansson, 2010; Paton, 2010; Hilli, et al., 2014; Murphy, 2015; Hall, 2016; Nunez, et al., 2017). They teach and role model clinical practice (Bourbonnais and Kerr, 2007; Carlson, Pilhammar and Wann-Hansson, 2010; Paton, 2010; Hilli, et al., 2014; Wilson, 2014; Murphy, 2015; Hall, 2016; Nunez, et al., 2017; Ferreira, Dantas and Valente, 2018; L'Ecuyer, Hyde and Shatto, 2018). Their educator role also requires them to be competent with the knowledge and skills as a preceptor, such as applying teaching strategies when preceptoring (Carlson, Wann-Hansson and Pilhammar, 2008; Hilli, et al., 2014; Hsu, et al., 2014; Bengtsson and Carlson, 2015; Nunez, et al., 2017; Chigavazira, et al., 2018; Ferreira, Dantas and Valente, 2018; L'Ecuyer, Hyde and Shatto, 2018; L'Ecuyer, Hyde and Shatto, 2018). They need to be self-aware of their own attitudes and teaching style towards students (Bengtsson and Carlson, 2015; L'Ecuyer, Hyde and Shatto, 2018).

2.2.2 Prioritizing a Preceptor's Role and Responsibilities

This theme includes research studies (n=5) that investigated preceptors' prioritization of their role and responsibilities as a preceptor.

Heffernan, et al. (2009) conducted a research study to identify the characteristics of the preceptor role from the perspective of preceptors in general and mental health nursing. A convenience sample was recruited in the South West of Ireland. The data collection took a two-phase process approach which ensured the validity of the study as inductions derived from the first phase of data collection was validated through the second phase of data collection. In the first phase, documentary analysis (n= 520) produced a thematic analysis of the data. This was followed by focus group interviews (n=12) in order to analyse the data qualitatively and inductively. In the second phase, the findings derived from the first phase were used to construct a questionnaire, which was then completed by preceptors (n=191). Four subthemes emerged from 74 items in the questionnaire. A 5-point Likert scale between 0 and 4 was used to measure the level of importance perceived by preceptors for each item. The internal consistency of the questionnaire was examined using Cronbach's alpha coefficient, resulting in a value of 0.919. The first subtheme "*the importance of preceptor characteristics*" found that all the items were rated as important by the nurse preceptors. The preceptors in both general nursing and mental health nursing reported that "*communication skills*", "*being approachable*", "*being supportive of students*" and "*possessing a positive image of nursing*" were the most important characteristics of a preceptor when undertaking the role of a preceptor. Preceptors in general nursing perceived "*having an understanding of the undergraduate programme*" as the least important characteristic of a preceptor and preceptors in mental

health nursing perceived “*maintaining his/her education*” as the least important characteristic of a preceptor. The second subtheme “*the demonstration of general preceptor characteristics*” found that preceptors from both general nursing and mental health were in agreement with “*being supportive of students*” as the most important item and “*approachable attitudes*” as the least important item (Heffernan, et al., 2009, p. 7). The third subtheme “*the specific knowledge demonstrated by preceptors*” found that preceptors from both general nursing and mental health concurred that the most important items were “*the importance of orientation to clinical area*” and “*the role of student*” and the least important items were “*the concept of reflection*” and “*the role of link lecturer*” (Heffernan, et al., 2009, p. 8). The fourth subtheme “*the specific skills demonstrated by preceptors*” found that preceptors from general nursing and mental health nursing rated “*teaching skills*” as the most important item and “*communication skills*” as the least important item (Heffernan, et al., 2009, p. 8). Despite general nurse preceptors and mental health nurse preceptors having a similar perception of the role and responsibilities of a preceptor, the study discovered that those from mental health nursing rated the subthemes “*the demonstration of general preceptor characteristics*”, “*the specific knowledge demonstrated by preceptors*”, and “*the specific skills demonstrated by preceptors*” higher than those from general nursing. The sample is only representative of nurses from the south west region of Ireland and only involved clinical sites affiliated with one educational institute. This limits the generalisability of the findings and therefore its application to Ireland as a whole or to other countries.

Rogan (2009) conducted a quantitative, descriptive study to explore nurse preceptors’ perceived role and responsibilities for preceptor preparation. A convenience sample of registered nurses (n=75) was recruited from two acute hospitals in the Midwestern state

of the USA. A modified survey, The Preparation of Nurses Who Precept BSN students (Alspach, 2005), was adopted for data collection. The survey consisted of 33 items. Each item was rated either “essential”, “useful” or “not needed” by registered nurses. The study found that an understanding of a preceptor’s responsibilities was most essential for preceptor preparation. This was followed by “*teaching how to set priorities and organize workload*” and “*preceptor roles*” (Rogan, 2009, p. 568). The next seven highest rated essential items were: “*teaching critical thinking*”, “*evaluating student performance constructively*”, “*setting realistic goals with students*”, “*supervising students*”, “*assessing students learning needs*”, “*planning to meet goals for preceptorship*”, and “*preceptor qualification*” (Rogan, 2009, p. 568). The study found that there was a small difference in the preceptors’ perceived role and responsibilities according to their years of work experience and preceptorship experience. However, there was a significant difference in their perceived role and responsibilities according to their area of practice, which included critical care settings, and medical and surgical settings. The small sample size (n=75) and the sample of nurses from two hospitals of the Midwestern state limit the generalisability of the findings across states in the USA, as previously indicated a small sample size can reduce the power of the study (Parahoo, 2014). Furthermore, Polit and Beck (2010) indicate that validity and reliability are the most important criteria for evaluating quantitative instrument. However, reliability and validity of the modified instrument were not reported in this research study. It, therefore, has a negative impact on the quality of the study (Parahoo, 2014).

A descriptive quantitative study was conducted by Smith, Swan and Penprase (2011) to evaluate the role and responsibilities of the preceptor during clinical teaching. A convenience sample (n=89) of preceptors working in anaesthesia was recruited in a

large Midwestern teaching hospital in the USA. A modified survey, Characteristics of Effective Clinical Instructors (Katz, 1984), was adopted for data collection. The instrument was previously adopted by Hartland and Londoner (1997)'s study and examined for content and context validity, as well as using a test-retest procedure to ensure the reliability of the instrument resulting in mean interrater reliability coefficient of 0.66. The survey comprised of 24 items regarding a preceptor's role and responsibilities in clinical practice. A 5-point Likert scale was used to identify the level of importance of each item, varying from somewhat important to critically important. The findings reported that the five most important items regarding the role and responsibilities of the preceptor were: "*clinical competence/judgement*", "*ego strength/self-assurance*", "*calm during times of stress*", "*appropriately encourages independence*", and "*stimulates student involvement*" (Smith, Swan and Penprase, 2011, p. 66). The five least important items reported by preceptors were: "*preceptor educational course*", "*sensitivity*", "*use of student care plan*", "*scholarly teaching/knowledge*", and "*mentoring style*" (Smith, Swan and Penprase, 2011, p. 66). The limitation of the study included a small sample size (n=89) and only one nursing speciality within one hospital in the USA, therefore, the generalizability of the findings is compromised. This is also suggested by LoBiondo-Wood and Haber (2000) that a larger sample size is required to ensure a representative distribution of the populations.

A quantitative, cross-sectional design was adopted by O'Brien, et al. (2014) in the research study to evaluate the preceptor's role in preceptoring undergraduate nursing students. A convenience sample of nurses, midwives and enrolled nurses (n=337) was recruited across 9 acute public hospitals in New South Wales of Australia. The Clinical Preceptor Experience Evaluation Tool (CPEET) was adopted for data collection, which

was examined for construct and content validity by O'Brien and Brenner (2008). There were 39 items subsumed to 4 domains, which were "role", "job satisfaction", "experience and education", and "challenges" (O'Brien, et al., 2014, p. 22). Of these, 17 items were related to the role of the preceptor. A 7-point Likert scale was used to rate the participant's level of agreement with each item ranging from 1= strongly disagree to 7 = strongly agree. The CPEET was tested for reliability for all 4 domains, in which Cronbach's alpha was reported 0.96 for preceptor "role" domain. The research study found that the preceptors rated the following items of a preceptor role highest: "preceptors are a support person for students during their clinical placement", "preceptors treat students fairly" and "preceptors promote students active participation in patient care" (O'Brien, et al., 2014, p. 22). The items "Clinical preceptors are a professional friend to student", "Clinical preceptors facilitate students' learning by using case studies and care plans" and "clinical preceptors are a professional confidante to students" were ranked lowest by the preceptors (O'Brien, et al., 2014, p. 22). The findings also reported that there was no statistically significant relationship between the nurse preceptors perceived role and their age, speciality, educational level, post-registration experience or preceptor preparation. However, the preceptors with a university facilitator available to support students in the clinical practice ranked items higher in the "role" domain. The study was limited as it did not report how the CPEET was validated. Furthermore, the role of a preceptor was only one of four domains and was therefore not discussed in adequate detail.

Omer, Suliman, and Moola (2016) conducted a descriptive comparative quantitative research study to investigate a preceptor's role and responsibilities as perceived by nurse preceptors. A convenience sample of nurse preceptors (n=62) was recruited from

a College of Nursing and a general hospital in Jeddah, Saudi Arabia. A modified questionnaire, based on Preceptor Roles and Responsibilities framework (Boyer, 2008), was adopted for data collection. The questionnaire, Preceptor Roles and Responsibilities Assessment (PRRA) comprised of 43 preceptor responsibilities, which were divided into 4 groups that reflected the role of a preceptor. These were protector, evaluator, educator, and facilitator. The questionnaire used in this study was construct and content validated and examined for internal consistency, resulting a Cronbach's alpha value of 0.944 for the importance scale. A 4-point Likert scale was adopted to measure the level of importance varying from 1 = "definitely not important" to 4 = "extremely important". It found in the study that preceptors perceived the role of a preceptor in order of importance as: protector, facilitator, educator and evaluator. The preceptors rated "*protect patients from health care errors*", "*supports developing skills while ensuring safe practice*" as the most important responsibility of a preceptor (Omer, Suliman, and Moola, 2016, p. 58). The preceptors perceived "*implements effective learning plan*" as the least important responsibility of a preceptor (Omer, Suliman, and Moola, 2016, p. 58). The generalizability of the findings is limited as a result of a small and convenience sample (n=62) involving only one hospital and one nursing college in a regional area in Saudi Arabia (LoBiondo-Wood and Haber, 2002; Šimundić, 2013; Parahoo, 2014).

Summary

The research studies (n=5) included in this theme investigated preceptors' prioritization of their role and responsibilities as a preceptor. The studies included quantitative studies (n=4) and a mixed-method study (n=1). The studies adopted a Likert scale to evaluate the preceptors' perceptions of their role and responsibilities as a preceptor. The research

studies (n=5) were conducted in the following countries, Ireland, the USA, Australia, and Saudi Arabia, and each study found differing opinions on how the preceptors prioritized their role and responsibilities as a preceptor. This may be influenced by the standards and requirements of a preceptor's role and responsibilities in each of the four countries, as well as the differences in their nursing cultures and nurse education. However, the studies (n=2) reported that supporting students was perceived as one of the most important preceptor responsibilities (Heffernan, et al. 2008; O'Brien, et al., 2014). The studies (n=2) reported that a preceptor's education was perceived as one of the least important preceptor responsibilities (Heffernan, et al., 2008; Smith, Swan and Penprase, 2011). Furthermore, the studies (n=2) reported that use of a student's care plan was perceived as one of the least important preceptor responsibilities (Smith, Swan and Penprase, 2011; O'Brien, et al., 2014).

2.2.3 Implementing a Preceptor's Role and Responsibilities

The theme includes research studies (n=9) that investigated implementation of a preceptor's role and responsibilities.

Brammer (2006) conducted a phenomenological study to investigate registered nurses' perception of their role with students in clinical practice. A purposive sample of registered nurses (n=30) was recruited from 15 public and private hospitals in central and south eastern Queensland of Australia. Individual semi-structured interviews were conducted for data collection and 28 transcripts of interview were analysed adopting a phenomenographic approach. Rigour was ensured in this qualitative study by utilising the method of a decision trail during the research process. Eight themes were identified

in the findings of the study concerning registered nurses' understanding of their role with students in clinical practice. The themes included "*the facilitator, the teacher/coach, the overseer/supervisor, the peer supporter and role model, the instructor, the manager/ foreman, the authority, and the resister/dissenter*" (Brammer, 2006, pp. 968-969). The eight identified roles of a staff nurse were further grouped into four categories in describing staff nurses' interaction with students and in developing their learning in clinical practice. A student-centred approach included the role of a registered nurse as a facilitator and a teacher/coach. A workload-orientated approach involved the role of a registered nurse as a supervisor, a peer supporter and a role model. A nurse taking-control approach considered a registered nurse's role of being a manager/foreman, and an authority. A self-control approach was taken by a registered nurse who had no interest in interacting with students and preferred to avoid students. As a result, they acted as a resister/dissenter. It implied that registered nurses' perceived understanding of their role with students may positively or negatively impact on their clinical learning and professional development. The sample representative of registered nurses in one state in Australia may limit the generalizability of the findings to other states in Australia or other countries.

A mixed-method descriptive study was conducted in Ireland by McCarthy and Murphy (2010) in exploring preceptor role in preceptoring undergraduate nursing students. A convenience sample of preceptors (n=470) affiliated to one university was recruited including hospital and community care sites in Ireland. A 24-item questionnaire was self-developed for data collection using Likert scales, which was examined for content validity and tested for internal consistency resulting in Cronbach's alpha value ranging from 0.78 to 0.92 for different subscales. Two open-ended questions were also included

in data collection for exploring nurse preceptors' view and experience pertaining to a preceptor role. The content analysis was adopted in examining the qualitative data. Findings of the study revealed that, in term of a preceptor role as an evaluator, 76.9% of preceptors had "*never failed a BSc student*" and 47.2% of preceptors admitted that they "*find it difficult to fail a BSc student*" (McCarthy and Murphy, 2010, p. 239). Correspondingly, the preceptors reported from qualitative data that failing a student was troublesome as it required managerial support with the decision. Only 20.8% of nurse preceptors reported "*get feedback on role as preceptor*" and more than half of them (57.5%) were undertaking the preceptor role with little or no feedback (McCarthy and Murphy, 2010, p. 239). Consequently, it can be inferred that a lack of preceptor evaluation prevents them from recognizing their own limitation in the preceptor role. Regarding the preceptor role as a facilitator, 61.6% of preceptors admitted that they "*can collaborate with link lecturers*" when preceptoring student nurses, while 16.3% of them were dissent from the role description, and 17.2% of them were undecided (McCarthy and Murphy, 2010, p. 239). The limitations of this research study are that the preceptor role was not illustrated in detail as per a self-developed questionnaire and the nurse preceptors are affiliated to one educational institute in Ireland. This may impede the generalizability of the findings to other educational institutes or to those in other countries as acknowledged in Parahoo (2014)'s research.

An exploratory study, conducted by Mead, Hopkins and Wilson (2011), explored the role of the preceptor from the perspective of preceptors. It adopted a quantitative method for data collection. A convenience sample of preceptors (n=69) was recruited at a preceptor conference across three large health boards in the United Kingdom. A modified survey, the Nursing Times Survey online (Gainbury, 2010), was used for data

collection. The survey comprised of 9 questions, of which 7 questions only provided the binary options of “yes” or “no” as an answer, 1 question gave the options of “yes”, “no” or “unsure” and 1 question provided a 5- point Likert scale on the frequency they performed an action varying from “never” to “all the time”. The study found that the nurse preceptors had no doubts about failing students as they felt they were capable of managing conflict situations. Most of the preceptors (98%) were not affected by potentially negative opinions about their preceptor role as a result of failing students. Only, 10% of the preceptors would not fail a student if they felt they would have difficulty proving that their concerns were valid. Of those surveyed, only 12% would not fail a student as they believed that their decision would be overturned by the University and 13% would err on the side of caution and gave students the benefit of the doubt rather than fail them outright. Regarding their role of completing their students’ evaluation documents, 70% of the preceptors reported that they never “fudged” the paper and ticked off competencies without checking, while 18% stated that they did occasionally, with 11% admitting that they did under very rare circumstance and 1% admitted that they did it often. There are a number of limitations of this research study. The authors of the research study acknowledge the bias in the process of data collection as it only included the nurse preceptors who attended a conference. The sample size of nurse preceptors (n=69) is also relatively small as it is affirmed by Boswell and Cannon (2014) that a larger sample size is commonly obtained in quantitative research in order to make the conclusion generalizable. The modified instrument was not reported for validity and reliability; thus, the quality of the research study is questionable (Polit and Beck, 2010; Parahoo, 2014).

A descriptive mixed-method research study was conducted by Horton, et al. (2012) to evaluate nurse preceptors' perceived role and responsibilities after attending a preceptor training programme, the Nurse Preceptor Academy (NPA). A purposive sample of nurse preceptors (n=171) who had attended the NPA was recruited from 18 area hospitals in the Midwestern USA. A questionnaire, developed by an investigator, was mailed to preceptors for data collection. It comprised of questions using a 5-point Likert scale ranging from 1 = no, 2 = probably not, 3 = undecided, 4 = probably, to 5 = yes to evaluate preceptors perception of role preparation for quantitative data, open-ended questions and comment sections for qualitative data. In the findings of the study, most of the nurse preceptors (63%) reported that the weekly goals were set with students in order to fulfil their preceptoring role. Half of the preceptors (49%) reported the effective teaching and communication when preceptoring as a result of enhanced awareness of different personality types. Nearly half of the preceptors (49%) reported that they evaluated students weekly. 44% of the preceptors were assessed by students for their performance. Nevertheless, only 33% of the preceptors informed that they completed their final meeting with students, manager and/or educator. Only a quarter of preceptors were able to adopt Novice to expert model by Benner in fulfilling their preceptoring role. There are several limitations of this study. The self-developed questionnaire was not tested for validity and reliability, which affects the quality of the study (Polit and Beck, 2010). The survey, was mailed to participants more than 6 months post attending NPA, produced a negative impact on the reliability of the data. Queirós, Faria and Almeida (2017) assert that the precise answers given by the participants, along with the survey structure, determines the reliability of survey data. Furthermore, a 25% response rate was unsatisfactory as acknowledged by the researchers, which is also suggested by Parahoo (2014).

A descriptive, exploratory, mixed-method study was conducted by Madhavanpraphakaran and Balachandran (2013) to explore nurse preceptors' perceptions of their role of preceptoring final year undergraduate nursing students. A convenience sample of preceptors (n=76) was recruited at Sultan Qaboos University Hospital in 2011. The self-administered survey comprised of demographics, a 30-item questionnaire measuring the effectiveness of the preceptor role, seven closed-ended questions related to preceptor role, and three open-ended questions commenting on support and obstacles of preceptorship. The 30-item questionnaire used a 5-point Likert scale ranging from 1 = not at all to 5 = most of the times, which were divided into six subthemes: "*teaching and learning, critical thinking, evaluation, communication, professional behaviour, personal traits*" (Madhavanpraphakaran and Balachandran, 2013, p. 30). The survey was examined for content and face validity. The internal consistency was ensured based on Cronbach's alpha reliability coefficient value of 0.81. The findings deriving from quantitative data indicated that the preceptoring role was effectively implemented as perceived by the preceptors. It was reported by 87% of the preceptors that students had a positive response to their constructive feedback. A further 75% observed students demonstrating professional behaviour and effective communication in practice. However, there was a deficit in developing students' critical thinking abilities with only 59% giving a positive rating and suggesting a gap in connecting theory to practice in clinical education as only 54% of the preceptors rated teaching and learning experiences positively. There were several findings from preceptors' response to close-ended questions. Of the preceptors surveyed 69.7% outweighed patient care over preceptoring students in their practice. Furthermore, in order to better fulfil their preceptor role, 70% of those surveyed wanted to gain more knowledge by reading, while 68% wanted to gain more knowledge by attending

workshops. The preceptors also indicated that they would like to meet more often with nursing lecturers (64.5%) when preceptoring. The generalizability of the findings is limited due to the small sample size (n=76) and recruitment of preceptors from only one hospital in Sudan (Haber, 2002; Boswell and Cannon, 2014). Furthermore, generalizability of the findings may be influenced by Sudanese social and cultural norms.

In addition to evaluating the importance of a preceptor's role and responsibilities, the Omer, Suliman and Moola (2016)'s study also investigated the preceptors' performance. The modified PRRA adopted a 4-point Likert scale to measure the frequency of attendance of a preceptor's role and responsibilities, varying from 1 = "never attended to" to 4 = "always attend to". This scale was examined for internal consistency, resulting a Cronbach's alpha value of 0.973. The preceptors identified the role of a preceptor according to frequency to attendance as: protector, facilitator, evaluator and educator. The preceptors rated the item "*protect patients from health care errors*", "*supports developing skills while ensuring safe practice*" as the most frequently attended responsibilities of a preceptor (Omer, Suliman, and Moola, 2016, p. 58). The preceptors rated item "*customizes clinical coaching plan to match with preceptee learning needs*" as the least frequently attended responsibility of a preceptor (Omer, Suliman, and Moola, 2016, p. 58).

Rylance, et al. (2017) undertook a qualitative study to evaluate preceptor role experience as perceived by nurse preceptors. A purposive sample of preceptors (n=169) from four nursing specialties, who attended a mentoring update workshop, was recruited in the United Kingdom. The data was collected through an evaluative questionnaire

comprising of two questions over a duration of 9 months. A descriptive thematic analysis was adopted for analysing narrative data, which is based on the method described by Colaizzi (1978). Two subthemes were identified in the findings of the study, which were “*mentor-student relationship*” and “*clinical environment*” (Rylance, et al., 2017, p. 407). The preceptors reported that transferring their own knowledge to students and facilitating students’ development and ongoing progression were the most rewarding aspects of their role as a preceptor. Regarding their preceptoring role of providing feedback and contributing to students’ learning experience in a positive approach, the preceptors considered it as an enjoyable experience, rather than an obligation. They reported that being a preceptor helped them to stay up to date in terms of nursing knowledge and helped facilitate reflective practice. They also acknowledged that the students’ attributes and the clinical environment had a significant impact on their preceptoring role. In addition, a lack of support from the peers was perceived as a barrier in fulfilling a preceptor role. There are a number of limitations in this research study. The sample representative of nurse preceptors in a single trust limits the generalisability of the findings. The sample of nurse preceptor was largely recruited from the mental health field. This may further limit the generalizability of the findings as cited by Parahoo (2014). Data collection through self-administered questionnaires may have an effect on the validity and accuracy of the collected data (Polit and Beck, 2010).

Tuomikoski, et al. (2018b) conducted a descriptive, cross-sectional study to explore the role and responsibilities of nurse preceptors in preceptoring undergraduate nursing students in clinical practice. A random sample of preceptors (n=576) participated in the study in all five university hospitals in Finland. A questionnaire, Mentor’s Competence

Instrument (MCI), was utilized for data collection using the Webropol online survey tool. The MCI was developed by Tuomikoski, et al. (2018a) and tested for content validity through the process of systemic review, expert evaluation and a pilot study. It was examined for structure validity using exploratory factor analysis. The MCI comprised of 63 items subsumed to 10 subthemes, using a 4-point Likert scale ranging from 1= totally disagree to 4 = totally agree. Internal consistency of the instrument (Cronbach's alpha) varied from 0.76 to 0.90 for all subthemes in the study (Tuomikoski, et al., 2018b). The study found that more than half of the preceptors reported that they perceived themselves as highly competent in their role of "*reflection during precepting*", "*identifying the student's need for precepting*", "*precepting practice between preceptor and student*", "*preceptor characteristics*", "*supporting the student's learning process*", "*constructive feedback*" and "*goal-oriented precepting*" (Tuomikoski, et al., 2018b, p. 81). However, only 26% of the preceptors considered themselves highly competent in their role of "*student-centered evaluation*" (Tuomikoski, et al., 2018b, p. 81). Tuomikoski, et al. (2018b) found that those with preceptor training ranked their role higher than those with no preceptor training and the difference between the two groups was statistically significant. However, the preceptors' gender, age, and work experience had no impact on their perceived role. Tuomikoski, et al. (2018b) advocated to adopt the MCI in different contexts and cultures of clinical practice to produce generalizable results, that correlate with Parahoo (2014)'s recommendation.

Giroto, et al. (2019) conducted a cross-sectional study to analyse preceptor's perception of their role as an educator in preceptoring student nurses. A purposeful sample of nurse preceptors (n=115), who were employed in the Brazilian Unified Health System and

from 18 cities of Brazil, participated in the study. A self-developed questionnaire was designed to evaluate preceptor role and responsibilities, comprising of 35 items using a 5-point Likert scale. Construct validity of the instrument was examined by the specialists and reliability of the instrument was verified using Cronbach's alpha, resulting in the value of 0.84. The preceptors were also answering two open questions in relation to their understanding of preceptorship and the preceptor role. The content analysis methods were deployed for analysing qualitative data. It found that preceptors had both positive and negative opinions about their role of being an educator. They had positive opinions regarding items of "*I learn from students*" (97.8%) , "*I am aware of my own learning needs*" (95.7%) and "*my educational goals take attitudes, skills and knowledge into account*" (96%) (Giroto, et al., 2019, p. 3). However, the preceptors admitted that "*students' evaluation is not my responsibilities*" (85.3%) (Giroto, et al., 2019, p. 3). Less than two thirds (64.5%) of the preceptors knew "*the curriculum of the course in which I am a preceptor*" and only 55.4% "*had pedagogical training to develop my educational activities*" (Giroto, et al., 2019, p. 3). The findings from the qualitative data indicated that the preceptors perceived their role of integrating students to the health services through the teaching and learning process, and utilizing active methods in clinical teaching in order to link theory to practice. The study is limited due to the small sample size (n=115) of nurse preceptors participating in the study. The self-developed questionnaire may require further testing to produce a generalizable result in health care services outside of Brazil.

Summary

The research studies (n=9) reviewed investigated the implementation of role and responsibilities of a preceptor. The quantitative studies (n=3) and mixed-method studies (n=4) adopted Likert scales to evaluate how preceptors implemented their role and responsibilities. The qualitative studies (n=2) collected data through interviews and questionnaires to evaluate how preceptors implemented their role and responsibilities as a preceptor. The studies (n=3) reported that the preceptors were confident providing feedback to students (Madhavanpraphakaran and Balachandran, 2013; Rylance, et al., 2017; Tuomikoski, et al., 2018) and setting goals with students (Horton, et al., 2012; Madhavanpraphakaran and Balachandran, 2013; Tuomikoski, et al., 2018). However, the studies (n=5) reported that the preceptors had negative opinions with regards to their role and responsibilities when evaluating students (McCarthy and Murphy, 2010; Mead, Hopkins and Wilson, 2011; Horton, et al., 2012; Tuomikoski, et al., 2018; Giroto, et al., 2019). Furthermore, the studies (n=3) reported that preceptors had negative opinions with regards to their role and responsibilities when educating students (Horton, et al., 2012; Madhavanpraphakaran and Balachandran, 2013; Giroto, et al., 2019). This is echoed in the findings of Omer, Suliman and Moola (2016)'s study that a preceptor's role as an evaluator and an educator were perceived as the least performed in practice.

Conclusion

This literature review examined research studies (n=33) pertinent to a preceptor's role and responsibilities from the perspective of preceptors. The studies were presented under three themes; preceptors' role and responsibilities; those that attempted to identify how preceptors prioritize their role and responsibilities; and those that evaluated how nurses

perform as preceptors. Despite differences in geographical locations, nursing culture, and nurse education many similar roles and responsibilities were identified in the literature.

This literature review confirms that it is necessary to conduct a study to investigate a preceptor's role and responsibilities in Ireland. The reasons are given as follows.

- The quantitative studies reviewed were from the United Kingdom, USA, Taiwan, Australia, Saudi Arabia, China and Finland. Among them, only two studies were from Europe.
- There was no quantitative study found that explored the role and responsibilities of nurse preceptors in Ireland. Since there is no clear guidance related to a preceptor's role and responsibilities in Ireland, it is imperative that their role and responsibilities are examined in order to influence the development of National guidelines on the role and responsibilities of a preceptor.
- The quantitative studies (n=4) found that investigated the relationship between a preceptor's training and their perceived role and responsibilities in acute hospitals only.
- The quantitative studies (n=4) found that investigated the relationship between a preceptor's socio-demographic profile, such as the years of work experience, and their perceived role and responsibilities were undertaken in acute hospitals only.
- The quantitative studies (n=2) found that investigated the relationship between the health care settings and preceptors' perceived role and responsibilities were within the acute hospital setting only

- Only one quantitative instrument was sourced that measured the preceptor's role and responsibilities (Omer, Suliman and Moola, 2016). This instrument was utilized on a small number of nurse preceptors from one acute hospital. This was the only suitable instrument identified in the literature that can be used to measure a preceptors' role and responsibilities.
- No study was found that examined the role and responsibilities of a preceptor in a health care setting outside of acute hospitals. The NMBI (2015) requires undergraduate nursing students to complete clinical placements in health settings outside of acute hospitals, which is also in line with the European Union guideline (Council Directive 2013/55/EC, 2013). This includes a 4-week placement in Primary Health Care and Community Nursing, a 6-week placement in care of the older person, and a 2-week placement in Mental Health and Psychiatry (NMBI, 2015). Therefore, investigating nursing preceptors' perceptions of their role and responsibilities in areas outside of the acute hospital setting are also an important contribution to the literature.

For these reasons, this study intends to close the aforementioned gaps by conducting a quantitative study in South West Ireland of registered nurses and midwives within various health care settings, which includes clinical sites outside of the acute hospitals. This study will investigate preceptors' perceived role and responsibilities. This study will further seek to identify any relationship between preceptors' socio-demographic profile and their perceived role and responsibilities as a preceptor. The findings of the study will inform local, regional and national development of preceptor education and contribute to the development of national guidelines on a preceptor's role and responsibilities in Ireland.

Chapter Three – Methodology

Introduction

The methodology chapter describes how this study was conducted. Gray, Grove and Sutherland (2017, p. 38) states that “*methodology refers to the type of research selected to answer the research question*”. The methodology of a study includes a study design, data collection methods, ethical issues related to a study, where and how data is acquired, and data analysis methods (Parahoo, 2014).

3.1 Philosophical Underpinnings

The philosophical underpinnings of this research study are discussed in this section. Polit and Beck (2010, p. 14) define a paradigm as “*a world view, general perspective on the complexities of the real world*”. The positivist paradigm has been dominantly utilized in nursing research, along with three other paradigms, postpositivism, interpretivism and critical social theory (Weaver and Olson, 2006). Scotland (2012) describes how each paradigm is discussed in respect of its own ontological and epistemological assumptions. Ontology deals with the “*nature of being*” while epistemology is the “*theory of knowledge*” (Crotty, 1998, p. 3). Scotland (2012) explains that ontology is to know what reality is and epistemology is to create, acquire and communicate knowledge.

The positivist paradigm is based on the idea that the world is an objective that can be measured (Jolley, 2013). It interprets the world according to logic, truth, laws, axioms and predictions (Gray, Grove and Sutherland, 2017). Positivism utilizes the rigid control

of contextual variables to seek objective generalizable theory (Weaver and Olson, 2006). The positivist paradigm is based on the ontological assumptions that reality is objective and exists independent of human observation (Scotland, 2012). The epistemological position of positivism is objectivism. Objectivism believes objective truth, that is to say, the meaning of reality is separated from the operation of any consciousness (Crotty, 1998). The positivist paradigm is largely welcomed by quantitative researchers as they believe that reality is an objective that can be measured by scientific methods (Jolley, 2013). This is supported by Parahoo (2014, p. 42) that *“the quantitative approach comes from a philosophical paradigm that views human phenomena as being amenable to objective study, in particular to measurement”*. In order to be completely objective, quantitative researchers seek or develop appropriate instruments to measure human behaviours (Gray, Grove and Sutherland, 2017).

The post-positivist paradigm was developed based on the positivist paradigm. Both share similar ontological and epistemological beliefs. However, postpositivism acknowledges that being completely objective is impossible and it seeks objectivity and a neutral stance of phenomena (Polite and Beck, 2010). It discovers the pattern and trend of reality for the purpose of describing, explaining and predicting phenomena (Gray, Gove and Sutherland, 2017).

The interpretive paradigm, also called the constructivist paradigm, believes that reality is interpreted by people with their lived experience and observation (Weaver and Olson, 2005). It is based on the ontological belief of relativism and epistemological views of subjectivism (Scotland, 2012). It disaccords with the positivist paradigm of objective truth or measurable fact (Jolley, 2013). The interpretive paradigm is broadly adopted by

qualitative researchers (Jolley, 2013; Gray, Grove and Sutherland, 2017), and therefore, is not suitable for this research study.

Finally, Critical Social Theory (CST) is the paradigm that views realities as socially constructed entities which were influenced internally (Scotland, 2012). The CST paradigm is based upon the ontological and epistemological assumption of historical realism and subjectivism. Habermans (1999 cited in Princeton, 2015, p. 73) contributed to the development of the CST as viewing reality in three distinct dimensions: objective perspective, subjective perspective, and a social world which was constructed and legitimated. The CST is applied in nursing research for the purpose of addressing oppressive social and political conditions impacting on health and health care (Browne, 2000). Therefore, this is not appropriate for this research study.

In summary, the four philosophical paradigms that are often adopted in nursing research were discussed in this section with respect to their own ontological and epistemological beliefs. The positivist paradigm was chosen for the philosophical underpinning of this research study, as the paradigm is based on the ontological assumption of an objective reality and an epistemological stance of objectivism. As the researcher believes that a preceptor's role and responsibilities can be objectively identified and an appropriate instrument can be utilized to measure a preceptor's perception of their role and responsibilities, the positivist paradigm is suitable for the philosophical underpinning of this research study.

3.2 Research Aim and Objectives

Aim

The aim of this study is to investigate nurse preceptors' perceptions of their role and responsibilities when preceptoring undergraduate nursing students in the South West of Ireland.

Objectives

1. To describe the socio-demographic profiles of nurse preceptors in the South West of Ireland
2. To examine nurse preceptors' perceptions of their role and responsibilities
3. To determine any relationship between preceptors' socio-demographic variables and perceptions of their role
4. To determine any relationship between preceptors' socio-demographic variables and perceptions of their responsibilities

3.3 Hypotheses

To address the third Objective, the following null hypotheses were generated.

- Hypothesis 1: There is no relationship between preceptors' perceptions of their role and gender.

- Hypothesis 2: There is no relationship between preceptors' perceptions of their role and formal preceptor training/preparation.
- Hypothesis 3: There is no relationship between preceptors' perceptions of their role and years of work experience.
- Hypothesis 4: There is no relationship between preceptors' perceptions of their role and years of preceptorship experience.
- Hypothesis 5: There is no relationship between preceptors' perceptions of their role and age.
- Hypothesis 6: There is no relationship between preceptors' perceptions of their role and education level.
- Hypothesis 7: There is no relationship between preceptors' perceptions of their role and health care setting.
- Hypothesis 8: There is no relationship between preceptors' perceptions of their role and type of employer.

To address the fourth objective, the following null hypotheses were generated.

- Hypothesis 9: There is no relationship between preceptor ranking of a preceptor's responsibilities and gender.

- Hypothesis 10: There is no relationship between the preceptors ranking of responsibilities and preceptor training/preparation.
- Hypothesis 11: There is no relationship between the preceptors ranking of responsibilities and type of employer.

3.4 Study Design

This study adopts a correlational, quantitative descriptive research design. Parahoo (2014) states that quantitative research measures concepts and variables objectively and examines possible relationships by means of numerical and statistical procedures. Similarly, Fisher, Bonne and Neumann (2014) assert that quantitative research intends to identify a conglomerate of variables, which is assessed or surveyed respectively through an empirical study, and relationships between these variables.

A descriptive research design intends to “*describe the phenomenon of interest and its component variables within one single subject group*” (Gray, Grove and Sutherland, 2017, p. 200). Similarly, Boswell and Cannon (2014) state that a descriptive design explores the characteristics of one sample population. Correspondingly, Fisher, Boone and Neumann (2014) assert that a descriptive study identifies attributes within a population.

Parahoo (2014) reveals that a quantitative descriptive study is adopted when little is known about a phenomenon. A quantitative descriptive study utilizes measurements to seek answers “what is” the phenomenon (Parahoo, 2014). A quantitative descriptive

study emphasizes the description of phenomena; however, it also discovers patterns or trends as well as observations of possible links between variables (Parahoo, 2014). In this research study, the phenomenon under investigation is nurse preceptors in Ireland. Despite provision of preceptor training and the professional obligation of nurses and midwives to act as a preceptor in Ireland, there is little known regarding their perceived role and responsibilities as a preceptor. According to the literature, there were two mixed-method studies and one qualitative study found that investigated a preceptor's role and responsibilities in Ireland; however, there was no quantitative study found that investigated a preceptor's role and responsibilities in Ireland. Therefore, this study adopts a quantitative descriptive research design to utilize quantitative measurements to generate empirical data on nurse preceptors' perceived role and responsibilities as well as examining any relationship between socio-demographic variables associated with the phenomenon under investigation. Polit and Beck (2010) also confirm that a quantitative descriptive design is utilized to describe relationships between variables rather than illustration of causal relationships with assurance.

Furthermore, this study adopts a correlational design. A correlational design of a research study examines how variables are linked to each other (Parahoo, 2014). There are different opinions about the relationships between a descriptive design and a correlational design. Boswell and Cannon (2014) state that correlational design is the most commonly used type of descriptive design when exploring the relationships between variables. Parahoo (2014) asserts that both descriptive studies and correlational studies are overlapping categories of quantitative studies, along with causal studies. It is suggested that combining both descriptive and correlational elements is an approach commonly adopted in research studies (Parahoo, 2014). Gray, Grove and Sutherland

(2017) also highlight the confusion of labelling a study as a descriptive design or a correlational design. They explain that it depends on the primary purpose of a study: to describe variables, or to describe relationships between and among variables (Gray, Grove and Sutherland, 2017). The primary purpose of this research study is to describe a phenomenon. In addition, the relationship between the preceptors' perceived role and responsibilities and their socio-demographic profiles are also explored. Therefore, Parahoo (2014)'s suggestions on research design supports the justification for the research design of this study. In summary, the research design is a correlational, quantitative descriptive approach.

3.5 Research Instrument

The data for this study was collected using a questionnaire (Appendix D). Boswell and Cannon (2014) state the utilization of a questionnaire for data collection has a distinct advantage, as it enables researchers to reach out to a large population with minimum expense, maintains the respondents' privacy, and is less time consuming (Boswell and Cannon, 2014).

The questionnaire included an information leaflet, which served three purposes. First, it provided information about the study and included; an explanation of the aim and the rationale of the study, the description of the potential respondents, and the researcher's contact details. Secondly, it explained how to complete the questionnaire, the estimated time required to complete the questionnaire, and how to submit a completed questionnaire. Thirdly, it provided the benefits and risks of the study, and explained how completing the study implied that the respondent was providing consent.

The questionnaire of this research study consisted of two sections. The first section asked questions in relation to the respondents' socio-demographic profile in the South West of Ireland. According to Boswell and Cannon (2014), a description of the socio-demographic characteristics of the respondents enhances the quality of a quantitative research report. This also allowed the researcher to further examine the relationship between the socio-demographic variables and the phenomenon under investigation. The questions included:

- **Gender:** Is the respondent male or female? Respondents were required to tick the box next to "Male" or "Female" to answer the question.
- **Formal preceptor training/preparation:** Has the respondent attended formal preceptor training/preparation? Respondents were required to tick the box next to "Yes" or "No" to answer the question.
- **Years of work experiences:** How many years of work experience does the respondent have? Respondents were required to fill in the number of "year/years".
- **Years of preceptorship experiences:** How many years of preceptorship experience does the respondent have? Respondents were required to fill in the number of "year/years".
- **Age group:** Which age group does the respondent belong to? There were 6 groups; less than 23 years, 23-25 years, 26-29 years, 30-39 years, 40-49 years, and 50 years and over. Respondents were required to tick the box next to the age group that applied to them. This takes consideration of cultural sensitivities in revealing one's age (Rubin and Babbie, 2009). Respondents may be reluctant to disclose their age in a questionnaire, but it would be more comfortable for them to provide this personal information within an age range.

- **Education Level:** What level of education does the respondent have? Certificate, Diploma, Degree, Master, or PhD? Respondents were required to tick the box next to the highest level of nurse education that they have achieved.
- **Work Area:** Where does the respondent work: Acute (hospital sector), Continuing Care (community, rehabilitation), Maternity Services, Mental Health Services, or Primary Care (e.g. GP practice, public nursing)? Respondents were required to tick the box next to work area that applied to them
- **Employer:** Is the respondent employed by the Health Service Executive (HSE) or in the Private Sector? Respondents were required to tick the box that applies to them. The options available were either the HSE or the Private Sector.

Section two of the questionnaire comprised of 43 statements related to a preceptor's responsibilities subsumed into four preceptor roles, which were: a Protector, an Evaluator, an Educator and a Facilitator. This was adopted from the Preceptor Roles and Responsibilities Assessment (PRRA) instrument, developed by Omer, Suliman and Moola (2016). The PRRA was based on a practice model of preceptor roles and responsibilities created by Boyer (2008) (Appendix E). According to the PRRA, a preceptor's Protector role consists of 9 responsibilities; their Evaluator role consists of 7 responsibilities; their Educator role consists of 10 responsibilities; and their Facilitator role consists of 17 responsibilities. The PRRA was assessed for construct and content validity by expert faculty members (Omer, Suliman and Moola, 2016). The internal consistency of the instrument was measured using Cronbach's alpha, achieving 0.944 and 0.973 in two 4-point Likert scales adopted in Omer, Suliman and Moola (2016)'s study. Boswell and Cannon (2014) indicate that adopting or developing a data collection tool in a research study must serve two purposes, answering research

questions and determining the target population. Sullivan-Bolyai and Grey (2002) add that the problem, the hypothesis, the setting and the population all need to be taken into consideration when choosing the most appropriate method and instrument for data collection. One of the authors, Prof. Suliman, who developed the PRRA was contacted via email and permission was granted to utilize the instrument for this study (Appendix F). Seeking permission to acquire an existing instrument for a study is recommended by Gray, Grove and Sutherland (2017).

To summarize, a questionnaire was utilized for data collection. It included an information leaflet, a section to record a preceptor's socio-demographic profile, and a section adopting the PRRA. This questionnaire was deemed to be an appropriate instrument to measure the variables of this research study, as well as meeting the aim and objectives outlined.

3.6 Pilot Study

A pilot study was conducted prior to data collection. Parahoo (2014) recommends using "piloting" to test instruments on a small sample group to determine its feasibility. Ten nurse preceptors were invited to participate in the pilot study. They shared similar characteristics, they were all female preceptors and worked in the same acute hospital. Five of the preceptors were from the Emergency Department, two were from the surgical ward, and the remaining preceptors were from a medical ward, the maternity ward and the mental health inpatient unit. Four out of ten preceptors had completed formal preceptor training. The preceptors were instructed to complete the questionnaire and provide feedback by means of completing an Evaluation of the Pilot Study survey.

This survey is included in Appendix G. It included time required to complete the questionnaire, and asked the preceptors to evaluate the information leaflet and the questionnaire itself in terms of content, clarity, clarification, relevance, structure, design, and concerns, etc. The preceptors reported that it took an average of 7 minutes to complete the questionnaire. Minor changes were made based on their recommendations including the numbering of the statements in section two of the questionnaire. Some statements were modified to help enhance respondents' understanding, such as using "protect nursing profession/registration" instead of "protect nursing profession" and using "competence assessment workbooks year 1 to 4" instead of "Benner's model". The registered nurses and midwives in Ireland are familiar with these terms as they are commonly used in the requirements and standards provided by the NMBI for guiding a preceptor's practice while preceptoring undergraduate nursing students.

The PRRA required adaptation for this research study. Some of the statements related to a preceptor's responsibilities were rephrased to be consistent with common terms used in the context of nurse education and nursing practice in Ireland, such as replacing "capability" with "competence", "novice preceptees" with "students", "institution" with "hospital", "manager" with "clinical nurse manger", and "educator" with "clinical practice facilitator". A 5-point Likert scale was adopted instead of two 4-point Likert scales to measure the level of agreement as perceived by respondents pertinent to their role and responsibilities as a preceptor, with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5= strongly agree. Krosnick and Presser (2010) infer that reliability is maximized on a scale with more than three points and less than 7 points, and validity is more satisfactory on a scale with a moderate number of points.

Therefore, a 5-point Likert scale was appropriate for measuring nurse preceptors' responses to the statements in the questionnaire. Furthermore, a check list was included at the end of the questionnaire to ensure the respondents answer all of the items included in the questionnaire.

For the pilot study, the internal consistency reliability of the instrument was measured using Cronbach's alpha. Laerd Statistics (2019) states that Cronbach's alpha (α) is commonly used to measure the reliability of a scale comprising of multiple Likert questions. The internal consistency reliability of each preceptor role was: Protector ($\alpha = 0.737$), Evaluator ($\alpha = 0.828$), Educator ($\alpha = 0.899$) and Facilitator ($\alpha = 0.951$). The overall internal consistency reliability of the instrument was 0.967. Polit and Beck (2010) affirm that the normal range of a Cronbach's alpha is between 0.00 to 1.00 and the value greater than 0.70 is considered satisfactory.

3.7 Data Collection

The questionnaires were distributed throughout clinical sites in the South West of Ireland following gatekeeper approval, ethical approval, and access approval. The duration of data collection was from May 2019 to August 2019. The questionnaires, along with a research collection box for completed questionnaires, were placed in each ward/unit/staff room in clinical sites. For the community mental health services, permission was given to attend their weekly meetings and to invite the mental health nurses that were in attendance to participate in the study. Practice nurses in GP practices and public health nurses in primary health centres were contacted by telephone. The

questionnaires were posted to clinical sites if they accepted the invitation to participate in the study.

3.8 Sampling

Questionnaires (n=800) were distributed to registered nurses and midwives in the clinical sites. This was due to cost as this study was self-funded by the researcher. The clinical sites were widely spread geographically across the South West of Ireland, therefore, accessing them was both time consuming and costly. Of the 800, 462 questionnaires were returned, resulting in a response rate of 57.7%.

Population

The population in this research study were registered nurses and midwives working in the clinical sites that have a Memorandum of Understanding (MOU) with the Nursing Department of the Institute of Technology Tralee in the South West of Ireland. A convenience sample was drawn from the population. There were approximately 1,177 registered nurses and midwives in the health care service sites which included both Public and Private Sectors. The sites included the following number of registered nurses and midwives:

- Approximately 600 registered nurses and midwives in two public hospitals
- Approximately 220 registered nurses in one private hospital
- Approximately 150 mental health nurses in inpatient and community services in the South West of Ireland
- 8 practice nurses in GP practices, 54 Public Health Nurses and 43 community nurses in the public health service in the South West of Ireland

- Approximately 102 registered nurses from the Community hospitals

Sampling Strategy

The sample strategy includes sample size determination with rationale and inclusion criteria (Boswell and Cannon 2014).

Haber (2002) emphasizes that it is necessary to determine the sample size prior to conducting the study. With the assistance of a statistician, a sample size was calculated using G*Power software, adopting Independent samples t-test procedure. Input parameters are given as follows: Two tailed test, effect size $d=0.4$, A err prob. = .05, Power = .8 and Allocation ratio $N_2/N_1 = 1$. A sample size of 200 nurse preceptors was estimated to provide an adequate sample size for data analysis. Please see Appendix H for Determination of Sample Size using G*Power 3 software. The Independent samples t-test is adopted to:

“determine if a difference exists between the means of two independent groups on a continuous dependent variable. More specifically, it will let you determine whether the difference between these two groups is statistically significant” (Laerd Statistics, 2019).

As one of the objectives of the research study is to determine the relationship between the preceptors’ socio-demographic profiles and their role and responsibilities as a preceptor, adopting the independent samples t-test for calculating sample size was justifiable.

Inclusion Criteria:

- Registered nurses and midwives
- Working in health care sites that have an MOU with IT Tralee

- Acting as a preceptor in clinical practice

In summary, there were approximately 1,177 registered nurses and midwives working in the health care services in the South West of Ireland that have an MOU with the Nursing Department of the Institute of Technology Tralee. Of the 800 distributed questionnaires, 462 were returned leading to a response rate of 57.7%. This meets the requirement of the sampling strategy in term of sample size and inclusion criteria. The response rate indicates that the sample size is likely to be representative of the registered nurses and midwives in the South West of Ireland.

3.9 Ethical Considerations

3.9.1 Ethical Principles and Ethical Consideration

The Nursing and Midwifery Board of Ireland (2014, p. 3) defines Ethics as “*principles, values and virtues that enable people to live a morally good life*”. Three basic ethical principles are associated with research study involving human subjects, as stated in the Belmont Report (1979), which are respect for persons, beneficent and justice.

The Belmont Report (1979) brings attention to two ethical issues regarding the principle of respect for a person, which are treating an individual as an autonomous agent and protecting an individual with diminished autonomy. Dooley and McCarthy (2012) refer to an autonomous person as one who can take actions and make decisions about themselves based on their personal values and beliefs. The Nursing and Midwifery Board of Ireland (2014, p. 11) requires nurses to “*respect each person as an individual*”,

“respect their right to self-determination” and to seek *“informed consent”*. An autonomous person gives express consent to participate in a research study by means of a consent form (Dooley and McCarthy, 2012). Correspondingly, Van Der Arend (2003) emphasizes that explicit informed consent must be sought from respondents when conducting an ethical research study. Furthermore, respondents are free to withdraw from the study without repercussions (Van Der Arend, 2003; Dooley and McCarthy, 2012; Greaney, et al., 2012). The respondent’s autonomy was respected throughout the study. All registered nurses and midwives working in the clinical sites that have an MOU with the Institute of Technology Tralee were invited to participate in the study. However, the provision of a paper format questionnaire allowed them to make their own decision on whether or not they wished to take part in the study after reading the information leaflet and reviewing the items of the questionnaire. Consent was sought from the respondents via the information leaflet. It was stated in the information leaflet under the heading of *“What are the risks for participants”* that *“it is important for participants to know that written consent is not sought, but completion of the questionnaire will be considered as implying consent”*.

Maintaining the confidentiality and anonymity of respondents in a study is also associated with the principle of respect for a person. The confidentiality and anonymity of the respondents and how it would be maintained was outlined in the consent form (Dooley and McCarthy, 2012) and was implemented by the utilization of the specific methodology of the study (Greaney, et al., 2012), which involved several steps. First the preceptor demographics section of the questionnaire excluded the respondents’ name, data of birth and contact information. This warranted the anonymity of the respondents. Next the completed questionnaires were only used for this specific study and were

stored in a locked drawer cabinet in a locked room on the Institute of Technology Tralee's campus. Only the researcher could gain access to the completed questionnaires. Finally, the questionnaires were then coded into the IBM Statistical Package for Social Sciences for processing on one computer. The computer can only be accessed by the researcher with a password. These steps safeguarded the respondent's confidentiality and anonymity. Respect for a person is also concerned with protecting someone who is not capable of self-determination, as discussed in the Belmont Report (1979). This includes the immature as defined by age and the incapacitated due to illness, mental disability and certain circumstances in which the liberty of individual is severely restricted (Belmont Report, 1979). Greaney, et al. (2012) assert that the capacity and authorization of the respondents must be taken into consideration when seeking consent in respect of the legislation and laws of the country in which the study is conducted. As the respondents were all registered nurses and midwives in clinical practice, the principle of protecting person with no capacity of self-determination was not applicable to this study.

The principle of beneficence guides nursing practice under two rules, preventing harm and promoting wellbeing (Dooley and McCarthy, 2012). It encompasses two ethical principles of non-maleficence and beneficence (Dooley and McCarthy, 2012). Nurses are required to protect an individual from harm when their safety or wellbeing is affected or at risk (NMBI, 2014). The Belmont Report (1979) articulates that it is a researcher's obligation to anticipate the benefit and risk of the study, as well as maximizing benefits and reducing risks. Dooley and McCarthy (2012) confirm that respondents need to be informed as to the nature and scope of the study, as well as the risks and benefits of participating in the study prior to giving their consent. The

principle of beneficence was applied in this study when developing the information leaflet, in which the nature and scope of the study were explained and the potential benefits and the risks of the study were anticipated and outlined to the respondents.

The principle of justice ensures that an individual is treated equally and that resources are distributed fairly (Dooley and McCarthy, 2012). Registered nurses and midwives in Ireland have an obligation to respect individuals equally and to prevent prejudice against people based on their social status, such as age, gender, religion and disability (NMBI, 2014). In this study, all registered nurses and midwives working in the health services of the South West of Ireland were invited to participate including: all age groups, all educational levels, all levels of working experience, and all levels of preceptorship experience. Participation was also open to all registered nurses and midwives regardless their gender, religion, disability, and nationality. A consent form, as affirmed by Dooley and McCarthy (2012), ensures just treatment. Polit and Beck (2010) illustrate that a respondent's decision to decline participation in a study or to withdraw from a study must be respected to maintain just treatment. The information leaflet attached with this study's questionnaire clearly stated that the respondents were recruited on a voluntary basis and had a right to withdraw from the study if they so choose. It further stated that completion of the questionnaire inferred consent.

3.9.2 Ethical Approval, Gatekeeper Approval and Access Approval

During the process of conducting a research study, a research ethics committee examines research protocols and ensures the research is ethically sound (Dooley and McCarthy, 2012). The Institute Research Ethics Committee (IREC) is responsible for overseeing

all postgraduate research degree and professional research activities in the Institute of Technology Tralee (ITT) (Academic Council, 2018).

The IREC at the ITT classified this research study as minimal risk based on the initial research proposal. Initially ethical approval was to be acquired from the Cork Research Ethic Committee. However, due to industrial action, there was a significant delay in their reviewing and granting ethical approval for research studies. This would subsequently lead to an unforeseeable delay of the ethical approval for this research study. As an alternative, the IREC and the HSE recommended that gatekeeper approval be sought from the Directors of Nursing of the clinical sites involved. This included acute hospitals, community hospitals, mental health services, and public health nursing and GP Practices. The Directors of Nursing were very supportive and gave their permission to proceed. Thereafter, the IREC granted ethical approval for this study and classified it as minimal risk on this occasion (Appendix I). As there was a private health care site involved, ethical approval was sought from the health care site's ethical committee, this approval was reviewed and granted by the Royal College of Surgeons in Dublin (Appendix J). After obtaining ethical approval from both the Public and Private Sectors, access approval was sought at each clinical site to gain access to registered nurses and midwives. This was also granted which allowed data collection to proceed.

3.9.3 Procedures which will be used to Maintain Confidentiality of Records:

In Ireland, the Data protection Act 2018 and the General Data Protection Regulation (GDPR) 2016 regulate personal data (Data protection Commission, 2019). This includes *“collecting, storing, retrieving, consulting, disclosing or sharing with someone else,*

erasing or destroying personal data” (Data protection Commission, 2019, p. 3). Although the questionnaire is designed to be anonymous, it is considered to contain personal data and requires protection by law. According to the European Commission (2018) the information should be treated as personal data if there is a risk that re-identification of person whose data have been collected could occur.

Records will be maintained for a minimum period of 5 years after publication in a secure location in accordance with the guidelines from the Irish University Association (2014) and will only be used for data entry into data analysis software. Electronic data will be held on a password protected computer accessible only to the researcher and management of the data will be governed by the GDPR (2016) and the Data Protection Act (2018).

In summary, the ethical principles in relation to this research study were discussed in this section. The processes used to obtain ethical approval, gatekeeper approval and access approval were also provided in this section. The confidentiality of the records is maintained according to the relevant guidelines and regulations.

3.10 Data Analysis

Statistical procedures, which play a central role in quantitative research, were utilized as a means of data analysis (Fisher, Boone and Neumann (2014). The IBM Statistical Package for Social Sciences (SPSS) V22.0 was adopted to assist in data analysis for this study.

3.10.1 Data Screening and Cleaning

Data screening and cleaning was conducted with the assistance of the statistician prior to data analysis. Dancey, Reidy and Rowe (2012) refer to data screening and cleaning as the processes used to identify and resolve the errors and missing data of a dataset. In this study, the missing data and unengaged response were examined during data screening and cleaning.

Missing Data

This questionnaire was a double-sided design in a booklet format, as it was presentable and cost-effective in the researcher's opinion as it required less paper. Information was provided in the questionnaire to ensure respondents completed the questionnaire. The last page contained a check list for the respondent to confirm that all sections of the questionnaire were completed. Dancey, Reidy and Rowe (2012) draw attention to the potential problem of using a questionnaire with a double-sided design as some respondents may forget to turn over the page to answer the questions printed on the reverse side. This led to the identification of 8 questionnaires with missing data as the respondents failed to complete the reverse side of the questionnaire. Those were classified as the Missing Completely at Random (MCAR) data. The MCAR data indicates that there is "*no systemic difference between the observed and missing data*" (Hughes, et al., 2019, p. 1296). Swalin (2018) suggests that the MCAR data can be safely eliminated depending on their occurrences. After discussing with the statistician, a decision was made to remove them from the dataset of 462 respondents, resulting in a dataset of 454 respondents. Imputation was also

adopted to impute the missing data based on computing the overall mean (Swalin, 2018). This process was conducted by the statistician.

Unengaged Responses

Even a well-designed questionnaire cannot guarantee that all respondents will do their utmost to complete the questionnaire accurately and thoughtfully (DeSimone, Harms and DeSimone, 2015; Curran, 2016). The dataset was explored to ensure the inclusion of those respondents who were fully engaged in the questionnaire. Unengaged responses can be identified through lengthy strings of invariant responses (DeSimone, Harms and DeSimone, 2015; Curran, 2016). For example, some respondents gave a score of 4 “agree” to all 43 statements in the questionnaire. Curran (2016) assumes that giving the same opinion for all questions of the questionnaire infers there is a lack of engagement of the respondents in the study. Further, DeSimone, Harms and DeSimone (2015) recommend the use of statistical screening methods to identify unengaged responses. Engagement was assessed by examining the standard deviation of each respondent’s responses across the complete latent variable set of 43 Likert statements. Since a 5-point Likert scale was utilised, a minimum achieved standard deviation threshold of approximately .2 was set. This process resulted in the exclusion of 74 questionnaires. On completion of the data screening and cleaning, a dataset of 380 questionnaires were finalized for data analysis.

3.10.2 Statistical Analysis

Jolley (2013) states that there are two types of statistics, descriptive and inferential. Descriptive statistics summarize data and inferential statistics provide the level of significance (Jolley, 2013). In other words, descriptive statistics identify the difference of the data and inferential statistics examine the significance of the difference.

Descriptive Statistics

Descriptive statistics were generated utilizing a number of numeric terms. This includes frequency, mean and standard deviation.

Frequency is utilized in the form of percentages (%) and absolute numbers (n) (Parahoo, 2014). In this study, the preceptor's socio-demographic variables were described utilizing a frequency distribution, which is defined as "*a systematic arrangement of numeric values from the lowest to the highest, together with a count (or percentage of the number of time each value was obtained)*" (Polit and Beck, 2010, p. 392). A frequency distribution can be ungrouped and grouped (Gray, Grove and Sutherland, 2017). In this study, the preceptors' socio-demographic variables "Years of work experience" and "Years of preceptorship experience" were not described based on a frequency distribution of each year of the respondent's experience. Rather, each of those two variables was organized into a grouped frequency distribution according to the percentage distributions of the respondents'

years of experience for each. Both were grouped into 5 groups as a result of a percentage distribution, which are presented in Table 1 and Table 2.

Table 1: A Grouped Frequency Distribution of “Years of Work Experience”

Years of Preceptorship Experience			
Years	Frequency (n)	Percent (%)	Cumulative Percent (%)
3 and below	78	20.5	20.5
4 to 9	65	17.1	37.6
10 to 13	76	20.0	57.6
14 to 19	72	18.9	76.6
Above 19	89	23.4	100.0

Table 2: A Grouped Frequency Distribution of “Years of Preceptorship Experience”

Years of Work Experience			
Years	Frequency (n)	Percent (%)	Cumulative percent (%)
6 and below	73	19.2	19.2
7 to 13	77	20.3	39.5
14 to 19	58	15.3	54.7
20 to 28	94	24.7	79.5
Above 28	78	20.5	100.0

The preceptors' socio-demographic variable "Age group" was divided into 6 groups in the questionnaire, however, it was regrouped into 4 groups according to a percentage distribution of the respondents' age, which is presented in Table 3.

Table 3: "Age Group" Regrouped into 4 Groups according to a Percentage Distribution

Age Groups			
Age	Frequency (n)	Percent (%)	Cumulative Percent (%)
Under 30	57	15.0	15.0
30-39	103	27.2	42.2
40-49	121	31.9	74.1
50 and above	98	25.9	100

The primary justification for generating groups with equal percentage for each group is to facilitate the running of statistical tests. Statistical tests facilitate assumptions when each group has a similar and reasonable number of respondents in each group. Running tests when some groups have very low numbers can result in breached assumptions underlying certain statistical tests. Parab and Bhalerao (2010) affirm that it is necessary to organize data into a correct distribution to facilitate statistical analysis.

The mean is an average score that is calculated by the sum of the scores divided by the number of scores. The mean offers a center point as accurately as possible of all measured scores (Boswell and Cannon, 2014). Sullivan-Bolyai and Bova (2014)

recommend reporting the mean with the standard deviation as it measures the average deviation of the scores from the mean. Furthermore, standard deviation examines all scores, therefore, it is useful to interpret individual scores as well as calculating many inferential statistics (Sullivan-Bolyai and Bova, 2014).

Additionally, it is important to introduce the term “calculated variable”, which refers to the data that is calculated from other variables (Gray, Grove and Sutherland, 2017). In this study, the Preceptor Role was a calculated variable as it was a calculated mean score from the scores of four roles; a Protector, an Evaluator, a Facilitator and an Educator. Those four roles were also calculated variables as they were calculated mean scores determined by the scores of the statements subsumed to them.

Inferential Statistics

Inferential statistics were generated utilizing non-parametric statistical analysis and a Pearson’s Product-Moment Correlation test.

Non-parametric statistical analysis is applied in studies with an abnormal distribution of population parameters, in other words, severely skewed data at nominal level, ordinal level and interval level (LoBiondo-Wood, 2014; Gray, Grove and Sutherland, 2017). In this study all 43 statements that represent a preceptor’s responsibilities, were scored by the respondents using a 5-point Likert scale (ordinal scale) and were negatively skewed (Appendix K). This indicates that there is a considerable amount of data higher than the mean score (Gray, Grove and Sutherland, 2017), therefore, the

data was deemed to be abnormally distributed in this study. This required the application of non-parametric statistical analysis for this study.

The tests adopted for non-parametric statistical analysis were Independent Samples Mann-Whitney U test and Independent Samples Kruskal-Wallis Test. Both are utilized to test abnormal distributed data (Prel, et al., 2010). Jolley (2013) provides guidance on selecting the appropriate statistical procedure, which confirms the decision of utilizing these two tests to conduct inferential statistical analysis on the findings of the study.

The Mann-Whitney U test compares data distribution of two independent samples within one population (Nachar, 2008). The Mann-Whitney U test null hypothesis specifies that *“the two independent samples coming from the same population are homogeneous and have the same distribution”* (Nachar, 2008, p. 14). Rejection of null hypothesis means that there is a statistical significance of the data distributions among the two independent samples (Nachar, 2008). In this study, the Mann-Whitney test was utilized on the socio-demographic variables of “Gender”, “Formal preceptor training/preparation” and “Employer” as each of these independent variables had 2 independent samples/groups.

The Kruskal-Wallis test is an expansion of the Mann-Whitney U test and is utilized to test more than two independent samples within one population (Ostertagová, Ostertag and Kováč, 2014). Similar to the Mann-Whitney U test, the Kruskal-Wallis test null hypothesis stipulates the same distribution of the independent samples from same population (Ostertagová, Ostertag and Kováč, 2014). The rejection of the null hypothesis indicates a statistical significance of the data distributions when testing

more than two independent samples. In this study, the Kruskal-Wallis test was utilized on the socio-demographic variables of “Years of work experience”, “Years of preceptorship experience”, “Age group”, “Education level”, and “Work area” as each of these independent variables had more than two independent samples/groups.

The value for probability (p) is calculated to determine the level of significance resulting from a non-parametric statistical test (Prel, et al., 2010). The p value is commonly predetermined at 0.05 (Prel, et al., 2010). A p value above 0.05 indicates that data distributions among the groups are not significantly different and a p value below 0.05 indicates that data distributions among the groups are significantly different (Prel, et al., 2010; Jolley, 2013; LoBiondo-Wood and Haber, 2014).

A Pearson's product-moment correlation measures the linear relationship between two variables which can be interval or ratio (Chee, 2013). A Pearson's product-moment correlation is utilized to examine if a variable is associated with another variable and to determine their relationship and the degree of their relationship (Chee, 2013). The letter r represents the correlation coefficient, with a value ranging from -1 to 1 (Polit and Beck, 2010; Chee, 2013; Gray, Grove and Sutherland, 2017). It indicates that two variables are not related when the r value is zero; two variables are positively related if the r value is above zero; two variables are negatively related if the r value is less than zero (Gray, Gove and Sutherland, 2017). The further the r value is towards 1 (or -1), the stronger the relationship between the two variables. A Pearson's product-moment correlation is utilized in this research study to examine the correlation between the preceptors' socio-demographic variables of “Gender”, “Formal preceptor training/preparation”, and “Employer” on their ranking of 43

statements of a preceptor's responsibilities. As the variables need to be interval or ratio, the Coefficient of Variance was calculated using the mean score and standard deviation reported by the respondents for each statement as it represents a ratio of the standard deviation to mean. In addition, a p value, which is set at a standard level of 0.5 (Parahoo, 2014), is also utilized to demonstrate the statistical significance of the findings.

In summary, the data was screened and cleaned for data analysis and statistical analysis was performed utilizing the SPSS software, which generated descriptive and inferential statistics.

3.11 Reliability and Validity

The quality of a quantitative study is assessed by its reliability and validity (Polit and Beck, 2010). Reliability examines the accuracy of an instrument as well as the consistency of the attributes measured in the instrument, while validity determines how well the measurement used in an instrument measures the objective of the study (Polit and Beck, 2010). The PRRA has been previously assessed for construct and content validity (Omer, Suliman and Moola, 2016). The modified PRRA utilized in this research study was also validated by a panel of nursing experts and the statistician. The internal consistency of the instrument was calculated utilizing Cronbach's alpha, resulting in an overall value of 0.96. For the internal consistency of each preceptor role, "Protector" role was calculated as 0.89, "Evaluator" role as 0.87, "Educator" role as 0.91, and a "Facilitator" role as 0.93. The internal consistency of the modified PRRA was satisfactory as all values were greater than 0.70 according to Polit and Beck (2010).

This confirms that the modified PRRA is valid and reliable, and therefore determines that this research study is deemed to be of good quality.

Conclusion

The positivist paradigm was chosen for the philosophical underpinning of this research study, as the paradigm is based on the ontological assumption of an objective reality and an epistemological stance of objectivism. This was deemed to be suitable for meeting the aim of this research study which is to investigate nurse preceptors' perception of their role and responsibilities when preceptoring undergraduate nursing students in the South West of Ireland. This study is a cross-sectional, correlational, quantitative descriptive research design. The instrument utilized for data collection was a questionnaire which included a preceptor's socio-demographic profile and a modified PRRA. The modified PRRA was comprised of 43 statements related to a preceptor's responsibilities subsumed into four preceptor roles, which were: a Protector, an Evaluator, an Educator and a Facilitator. A 5-point Likert scale was adopted to measure the level of agreement as perceived by the respondents pertinent to their role and responsibilities as a preceptor, with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. Ethical approval was granted by the Institute Research Ethics Committee (IREC) and minimal risk and ethical issues were discussed in relation to this research study. Approximately 1,177 registered nurses and midwives working in the clinical sites that have an MOU with the Institute of Technology Tralee were invited to participate in the study. Of the 800 distributed questionnaires, 462 were returned, resulting in a response rate of 57.7%. Statistical procedures were performed to analyse data using the SPSS. This included data screening and cleaning, descriptive statistical

analysis, and inferential statistical analysis. The instrument was examined previously for construct and content validity. The reliability of the instrument was examined for internal consistency utilizing Cronbach's alpha, which yielded a satisfactory result of 0.96.

Chapter Four – Findings

Introduction

This chapter presents the research findings pertinent to a preceptor's role and responsibilities in the South West of Ireland. The data was collected and then analysed with respect to the research objectives outlined in Chapter 3 of this study.

4.1 Sample Profile

The first research objective was to describe the sample with reference to the socio-demographic variables. The respondent characteristics are presented in Table 4.

The sample consisted of registered Nurses and Midwives working in clinical sites that have a Memorandum of Understanding (MOU) with the Institute of Technology Tralee in the South West of Ireland. A total of 800 questionnaires were distributed to registered nurses and midwives working in clinical sites and 462 questionnaires were returned, representing a 58% response rate. Of the returned questionnaires, only 380 were deemed valid and could be used in data analysis.

Gender

The respondents (91%, n=347) were predominantly female with males representing (9%, n=33) of the sample. This is presented in Figure 1.

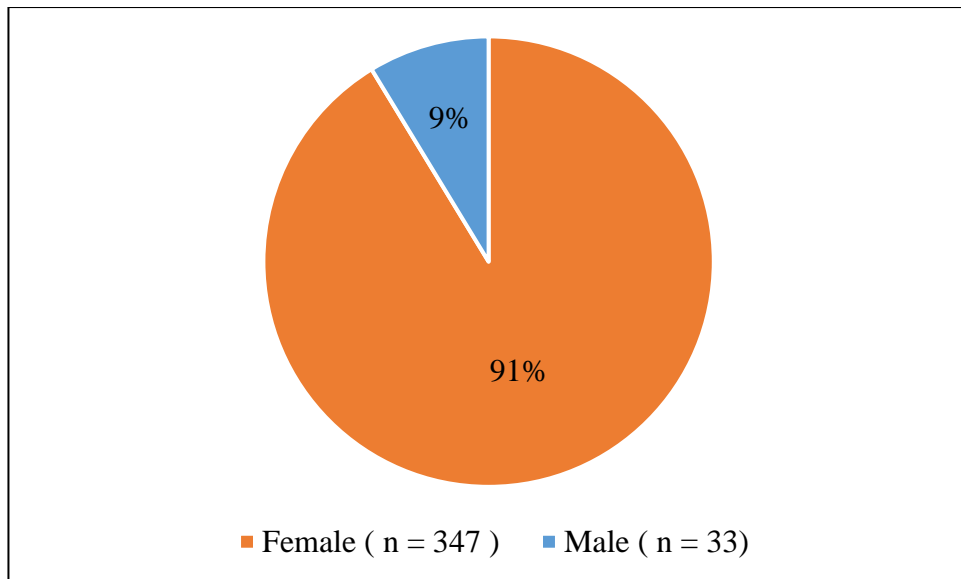


Figure 1: Gender of the Respondents

Formal Preceptor Training/Preparation

The majority of the respondents (81%, n=305) had completed formal preceptor training/preparation while the remainder (19%, n=70) had no formal preceptor training for their role as a preceptor.

Years of Work Experience

The years of preceptorship experience according to the respondents varied from less than 1 year to up to 38 years. The respondents (24.7%, n=94) had 20 to 28 years' work experience. This was followed by 20.5% (n=78) of the respondents with more than 28 years' work experience, 20.3% (n=77) of the respondents had 7 to 13 years' work experience, 19.2% (n=73) of the respondents had less than 7 years' work experience, and the remaining 15.3% (n=58) of the respondents had 14 to 19 years' work experience.

Years of preceptorship Experience

Of these 20.5% (n=78) had less than 4 years of preceptorship experience, 17.1% (n=65) of the respondents had 4 to 9 years preceptoring experience, 20% (n=76) of the respondents had 10 to 13 years preceptoring experience, 18.9% (n=72) of the respondents had 14 to 19 years preceptoring experience, and the remaining respondents (23.4%, n=89) had more than 19 years of preceptoring experience.

Age Group

About one third of the respondents were aged between 40 and 49 years of age (31.9%, n=121). The next age group were those aged between 30 and 39 years of age (27.2%, n=103), followed closely by those that were aged 50 years and older (25.9%, n= 98). The remaining respondents were aged 30 years and under (15%, n=57). Therefore, the majority of the respondents were aged 49 years and under (74.1%, n=281). This is presented in Figure 2.

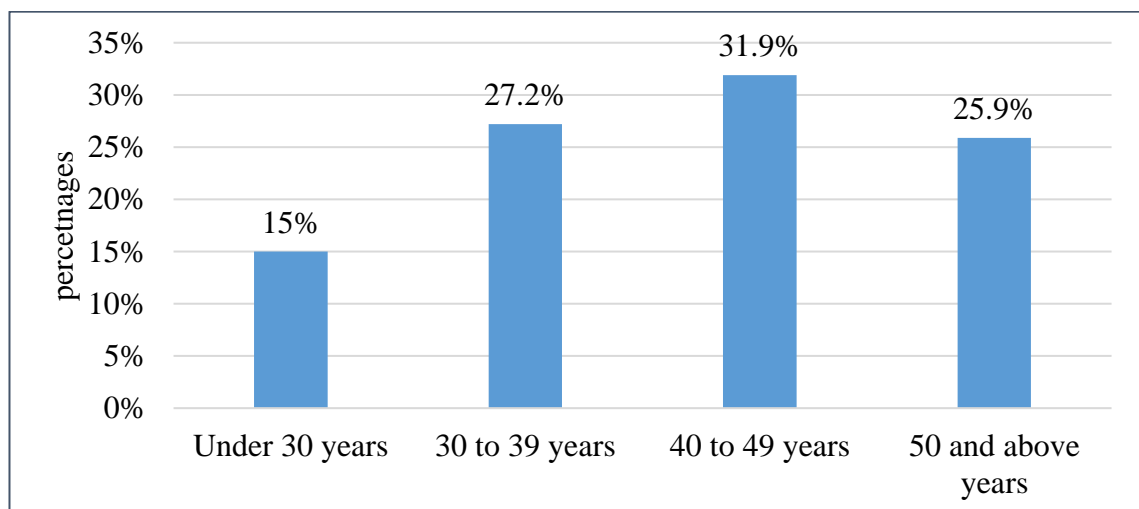


Figure 2: Age Groups of the Respondents

Education Level

Over half of the respondents (61.1%, n=231) indicated that their highest level of qualification was a Degree qualification. This was followed by 16.7% (n= 63) of the respondents who had achieved a Diploma in nurse education, 12.2% (n=46) of the respondents held a nursing Certificate, which is the minimum level of qualification for registered nurses and midwives in Ireland. A small number of the respondents (10.1%, n=38) had achieved a Master's Degree in nurse education.

Work Area

The majority of the respondents (64.9%, n=246) reported that they worked in the Acute hospital settings, 12.9% (n=49) of the respondents had worked in the Mental Health Services. 10% (n=38) of the respondents had worked in Primary Care (e.g. GP practice, public health nursing). 8.4% (n=32) of the respondents had worked in Continuing Care which included community and rehabilitation services. The remaining respondents (3.7%, n=14) had worked in the Maternity Services.

Employer

The majority of the respondents (87%, n=330) were employed in the Public Sector, Health Service Executive (HSE). The remaining respondents (13%, n=49) were employed in the Private Sector.

Summary

To summarize, the majority of the respondents were female (91%, n=347) and the majority of the respondents (81%, n=305) completed a formal preceptor training programme. The majority of the respondents were aged 49 years and under (74.1%, n=281). More than half of the respondents (61.1%, n=231) reported that they had a Degree level of education. The majority of the respondents (64.9%, n=246) worked in the Acute hospital settings. The respondents (87%, n=330) were primarily employed in the Public Sector. A summary of the data is presented in Table 4.

Table 4: Sample Profile

	n (%)
Gender	
Female	347 (91%)
Male	33 (9%)
Formal Preceptor Training	
Yes	305 (81%)
No	70 (19%)
Years of Work Experience	
6 years and below	73 (19.2%)
7 to 13 years	77 (20.3%)
14 to 19 years	58 (15.3%)
20 to 28 years	94 (24.7%)
Above 28 years	78 (20.5%)
Years of Preceptorship Experience	
3 years and below	78 (20.5%)
4 to 9 years	65 (17.1%)
10 to 13 years	76 (20%)
14 to 19 years	72 (18.9%)
Above 19 years	89 (23.4%)
Age Group	
Under 30 years	57 (15%)
30-39 years	103 (27.2%)
40 to 49 years	121 (31.9%)
50 years and above	98 (25.9%)
Education Level	
Certificate	46 (16.7%)
Diploma	63 (12.2%)
Degree	231 (61.1%)
Master	38 (10.1%)
Work Area	
Acute (Hospital Section)	246 (64.9%)
Continuing Care (Community, rehabilitation)	32 (8.4%)
Maternity Services	14 (3.7%)
Mental Health Services	49 (12.9%)
Primary Care (e.g. GP Practice, public health nursing)	38 (10%)
Employer	
HSE	330 (87%)
Private Sector	49 (13%)

4.2 Preceptors' Role and Responsibilities

The second objective of this research study was to examine registered nurses and midwives' perceptions of their role and responsibilities when preceptoring undergraduate nursing students in the South West of Ireland. The perception of role and responsibilities among respondents was calculated as the total score achieved by a registered nurse or midwife on the modified Preceptor Roles and Responsibility Assessment (PRRA) tool (Omer, Suliman and Moola, 2016). The PRRA consists of 43 statements (responsibilities) divided into 4 subscales (Roles): Protector (9 statements); Evaluator (7 statements); Facilitator (17 statements) and Educator (10 statements). The mean and standard deviation scores were used in data analysis.

4.2.1 Preceptors' Role

The total score of respondents was calculated as the sum of all 43 statements with possible scores ranging from 74 to 213 and higher scores representing higher perception of role and responsibilities as ranked by the respondents. The mean score for the statements subsumed into the Preceptors Role was 4.20 and a standard deviation of 0.45 indicating that respondents strongly agreed with the role of a preceptor. The mean scores for the subscales/Roles: Protector, Evaluator, Facilitator and Educator were high, ranging from 4.12 to 4.29. The Role Protector reported the highest mean score of 4.29 and a standard deviation of 0.56. This was followed by the Evaluator Role reporting a mean score of 4.20 and a standard deviation of 0.51, next was the Facilitator Role reporting a mean score of 4.20 and a standard deviation of 0.48. The Educator Role reported a mean score of 4.12 and a standard deviation of 0.55. It is evident that the

distribution of mean scores was somewhat negatively skewed, showing a pile-up of scores on the right of the distribution. This means that most respondents had higher scores, which implies that they had high perceptions of their four roles of a preceptor.

Protector Role

The Protector Role consists of 9 statements (responsibilities), which are presented in Table 5 from the highest to the lowest mean score of each statement. The mean scores of the 9 statements were high, ranging from 4.06 to 4.48. This indicates that the respondents had high perceptions of their responsibilities subsumed into the Protector Role. The statement “*Support developing skills while ensuring safe practice*” was ranked the highest with a mean score of 4.48 and a standard deviation of 0.57. This indicates that this statement was the most agreed with responsibility in this category. The statement “*Protects students from adverse behaviours of others, e.g. patient, health care workers*” was ranked the lowest with a mean score of 4.06 and a standard deviation of 0.89. This indicates that this statement was the least agreed with responsibility in this category.

Table 5: 9 Preceptor Responsibilities subsumed to Protector Role

	Mean	Std. Deviation
Protector Role (n=380)	4.29	0.56
Supports developing skills while ensuring safe practice	4.48	0.57
Ensures safe learning environment for students to learn and practice in	4.39	0.71
Protects students from making errors that might threaten self/others	4.37	0.75
Acts as advocate for students	4.30	0.78
Considers hospital policies and procedures when delegating	4.30	0.73
Ensures adherence to hospital policies and procedures (standard of practice)	4.29	0.77
Protects nursing profession/registration	4.24	0.88
Protects patients from health care errors	4.21	0.82
Protects students from adverse behaviours of others, e.g. patient, health care workers	4.06	0.89

Evaluator Role

The Evaluator Role consists of 7 statements (responsibilities), which are presented in Table 6 from the highest to the lowest mean score of each statement. The mean scores of the 7 statements were high, ranging from 4.14 to 4.30. This indicates respondents had high perceptions of their responsibilities subsumed into the Evaluator Role. The statement “*works within hospital policies and procedures as an evaluator*” was ranked the highest with a mean score of 4.30 and a standard deviation of 0.51. This indicates that this statement was the most agreed with responsibility in this category. The statement “*evaluates adherence to policies and procedures (standard of practice)*” was ranked the lowest with a mean score of 4.14 and a standard deviation of 0.71. This indicates that this statement was the least agreed with responsibility in this category.

Table 6: 7 Preceptor Responsibilities subsumed to Evaluator Role

Evaluator Role (n=380)	Mean	Std. Deviation
		4.20
Works within hospital policies and procedures as an evaluator	4.30	0.60
Discusses performance issues/concerns with Clinical Nursing Manager (CNM)/Clinical Practice Coordinator (CPC)/Link lecturer	4.25	0.70
Collects evidence of competence level of students through observation of clinical practice	4.21	0.67
Recognizes competence limitation in self	4.20	0.69
Documents observation of competence, or lack thereof	4.16	0.73
Identifies delegation and/or accountability concerns	4.16	0.68
Evaluates adherence to policies and procedures (standard of practice)	4.14	0.71

Facilitator Role

The Facilitator Role consists of 17 statements (responsibilities), which are presented in Table 7 from the highest to the lowest mean score of each statement. The mean scores of the 17 statements were high, ranging from 3.90 to 4.42. This indicates the respondents had high perceptions of their responsibilities subsumed into the Facilitator Role. The statement “*Act as example for professional role performance*” was ranked the highest with a mean score of 4.42 and a standard deviation of 0.60. This indicates that this statement was the most agreed with responsibility in this category. The statement “*understand/support social need of students for example mature students with family commitments*” was ranked the lowest with a mean score of 3.90 and a standard deviation of 0.98. This indicates that this statement was the least agreed with responsibility in this category.

Table 7: 17 Preceptor Responsibilities subsumed to Facilitator Role

	Mean	Std. Deviation
Facilitator Role (n=380)	4.20	0.48
Act as example for professional role performance	4.42	0.60
Models professional behaviour	4.41	0.60
Adhere to standard of practice	4.39	0.59
Recognizes own limitations	4.38	0.59
Helps students settle into new environment	4.36	0.68
Models clinical judgement	4.35	0.65
Introduces students to team and other staff	4.33	0.76
Gives constructive feedback	4.31	0.57
Role-models self-care and resilience as a nursing professional	4.23	0.69
Develops the competence of students	4.17	0.63
Ensures progression of student as per Competence Assessment workbooks (Year 1 to 4)	4.17	0.74
Resolves conflicts/issues as they arise	4.14	0.67
Works to ensure colleague support for students	4.10	0.69
Develops critical thinking skills in students	4.08	0.73
Supports adjustment to all the new elements that students face within their transition	4.05	0.74
Ensures support of colleagues for socialization and orientation process	4.04	0.73
Constructively critiques knowledge	4.03	0.72
Foster integration into work culture	4.02	0.73
Serves as an exemplar of “how to access evidence”	3.97	0.75
Establish communication between students, CNM, CPC and link lecturer	3.96	0.86
Understand/support social need of students for example mature students with family commitments	3.90	0.98

Educator Role

The Educator Role consists of 10 statements (responsibilities), which are presented in Table 8 from the highest to the lowest mean score of each statement. The mean scores of the 10 statements were high, ranging from 3.79 to 4.36. This indicates the respondents had high perceptions of their responsibilities associated with the Educator Role. The statement “*communicates with students in their progress*” was ranked the highest with a mean score of 4.36 and a standard deviation of 0.58. This indicates that this statement was the most agreed with responsibility in this category. The statement “*customizes a clinical coaching plan for specific learning needs*” was ranked the lowest with a mean score of 3.79 and a standard deviation of 0.92. This indicates that this statement was the least agreed with responsibility in this category.

Table 8: 10 Preceptor Responsibilities subsumed to Educator Role

	Mean	Std. Deviation
Educator Role (n=380)	4.12	0.55
Communicates with students in their progression	4.36	0.58
Provides opportunities for learning	4.34	0.63
Assesses learning needs	4.22	0.67
Develops the competence of students	4.17	0.63
Ensures progression of student as per Competence Assessment workbooks (Year1 to 4)	4.17	0.74
Develops critical thinking skills in students	4.08	0.73
Plans learning activities collaboratively	4.06	0.77
Constructively critiques knowledge	4.03	0.72
Implements an effective learning plan	4.01	0.81
Customizes a clinical coaching plan for specific learning needs	3.79	0.92

4.2.2 Preceptors' Responsibilities

The PRRA is made up of 43 individual statements that describe the responsibilities of the preceptor. Appendix K shows registered nurse and midwives' ranking of preceptor responsibilities on the PRRA from the statement with the highest mean score to the statement with the lowest mean score, ranging from 3.79 to 4.48. When data related to ranking of individual statements was combined, regardless of roles, the following information emerged.

The three statements ranked highest out of 43 were “*Supports developing skills while ensuring safe practice*” with a mean score of 4.48 and a standard deviation of 0.57; “*Act as example for professional role performance*” with a mean score of 4.42 and a standard deviation of 0.60; “*Models professional behaviour*” with a mean score of 4.41 and a standard deviation of 0.60.

The three statements ranked lowest out of 43 were “*Customizes a clinical coaching plan for specific learning needs*” with a mean score of 3.79 and a standard deviation of 0.92; “*Understand/support social need of students for example mature students with family commitments*” with a mean score of 3.90 and a standard deviation of 0.98; “*Establish communication between students, CNM, CPC and link lecturer*” with a mean score of 3.96 and a standard deviation of 0.86.

Summary

The mean score for the statements subsumed into the Preceptor Role was 4.20 with a standard deviation of 0.45, indicating that respondents strongly agreed with their role of a preceptor. The mean scores of 43 individual statements (responsibilities) ranged from 3.79 to 4.48, indicating that the respondents agreed with the responsibilities of a preceptor. This further implies that the respondents had a high perception of their role and responsibilities as a preceptor.

4.3 Preceptors' Socio-demographic Profiles and Perceptions of their Role

The third research objective was to determine the relationship between preceptors' socio-demographic variables and their perceptions of the role. In this section, the results of the analysis that investigates the relationship between socio-demographic variables and perceptions of the role are presented. The Independent-Samples Mann-Whitney U Test and Independent-Samples Kruskal-Wallis Test were used to investigate the relationship between preceptors' socio-demographic variables and perceptions of their role. Within this section and related to the third research objective, the results of the statistical analysis performed to answer the research hypotheses are presented.

Gender

Hypothesis 1: There is no relationship between preceptors' perceptions of their role and gender.

The findings indicate that the relationship between preceptors' perceptions of their role and "Gender" was not statistically or clinically significant.

The mean score of the Preceptor Role was similar for both male respondents (n=33, 9%, M=4.21) and female respondents (n=347, 91%, M=4.20). This indicates that both male and female respondents had high perceptions of their role as a preceptor.

Male respondents ranked the four roles of a preceptor from the highest to the lowest mean score as: a Protector (M=4.34, SD=0.50), a Facilitator (M=4.20, SD=0.40), an

Evaluator (M=4.14, SD=0.56) and an Educator (M=4.13, SD=0.60), while female respondents ranked the four roles of a preceptor from the highest to the lowest mean score as: a Protector (M=4.29, SD=0.56), an Evaluator (M=4.21, SD=0.51), a Facilitator (M=4.19, SD=0.49) and an Educator (M=4.12, SD=0.54). This demonstrates that they ranked the Evaluator Role and the Facilitator Role differently.

The Mann-Whitney U test was run to determine if there were differences in the mean score of the Preceptor Role between males and females. The distributions of the mean score of the Preceptor Role for males and females were similar, as assessed by visual inspection. The median score of the Preceptor Role for males (4.16) and females (4.23) was not statistically significantly different, $U = 5679$, $z = -0.77$, $p = .939$, using an exact sampling distribution for U (Dineen and Blakesley, 1973).

These results accept null hypothesis 1, indicating there is no relationship between preceptors' perceptions of their role and gender.

Formal Preceptor Training/Preparation

Hypothesis 2: There is no relationship between preceptors' perceptions of their role and formal preceptor training/preparation.

The findings indicate that the relationship between preceptors' perceptions of their role and "Formal preceptor training/preparation" had both clinical significance and statistical significance ($p = 0.004$).

The mean score of the Preceptor Role was significantly higher for the respondents (n=305, 81%, M=4.24) who had undertaken formal preceptor training or preparation in comparison with the respondents (n=70, 19%, M=4.07) who had not undertaken formal preceptor training/preparation. The summary is presented in Figure 3. This demonstrates that the respondents with formal preceptor training/preparation had a higher perception of their role as a preceptor than those without training/preparation.

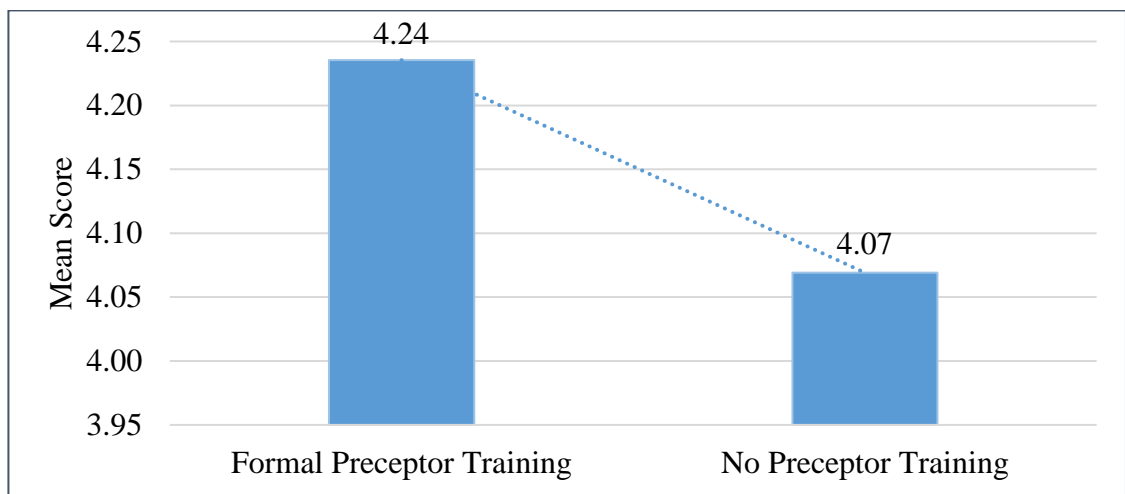


Figure 3: Mean Score of the Preceptor Role according to “Formal Preceptor Training/Preparation”

The respondents from both groups ranked the four roles of a preceptor from the highest to the lowest mean scores as: a Protector, an Evaluator, a Facilitator and an Educator. In spite of their agreement on the ranking order, the mean scores of four roles of a preceptor were significantly higher for the respondents (n=305, 81%) who had undertaken formal preceptor training/preparation than the respondents (n=70, 19%) who had not undertaken formal preceptor training or preparation. The summary is presented in Figure 4. This further confirms that the respondents with formal preceptor training had higher perceptions of the four roles of a preceptor than those without formal preceptor training/preparation.

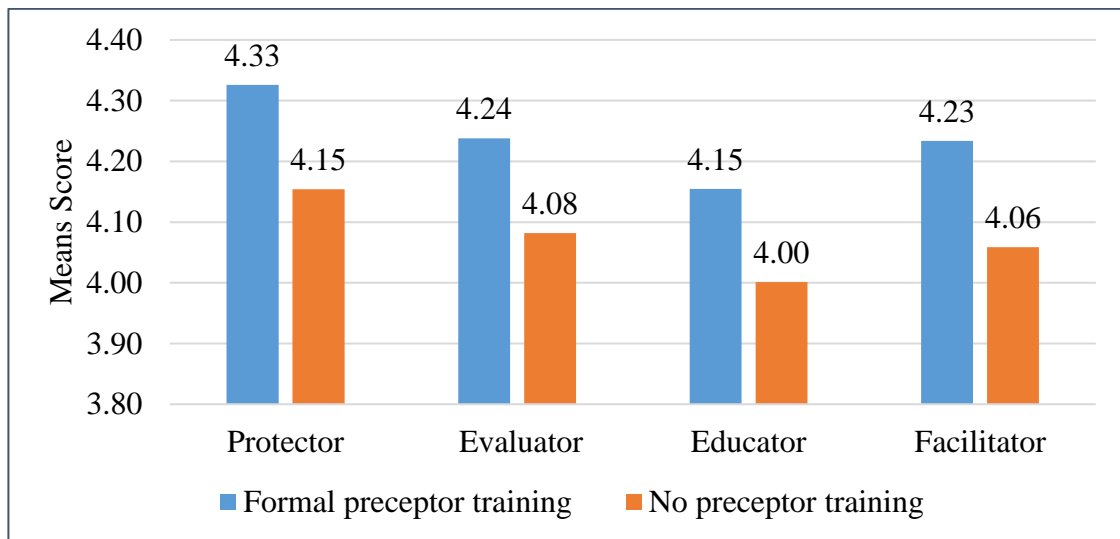


Figure 4: Mean Scores of the four Roles of a Preceptor according to “Formal Preceptor Training/Preparation”

The Mann-Whitney U test was run to determine if there were differences in the mean score of the Preceptor Role between the respondents with formal preceptor training/preparation and those without. The distributions of the mean score of the Preceptor Role for those with and without formal preceptor training/preparation were similar, as assessed by visual inspection. The median score of the Preceptor Role was statistically significantly higher those with formal preceptor training/preparation (4.23) than those without (4.02), $U = 8,351$, $z = -2.842$, $p = .004$, using an exact sampling distribution for U (Dineen & Blakesley, 1973).

These results reject null hypothesis 2 as there is a relationship between preceptors’ perceptions of their role and formal preceptor training/preparation.

This further infers that there is a 60% probability that a randomly sampled score from the respondents who had undertaken formal preceptor training/preparation is higher than

a randomly sampled score from the respondents who had not undertaken formal preceptor training/preparation.

In addition, the Mann-Whitney U test was run to determine if there were differences between the mean score of each of the 4 roles of a preceptor between the respondents with formal preceptor training/preparation and those without. The distributions of the mean score of each of the 4 roles of a preceptor for those with and without formal preceptor training/preparation were similar, as assessed by visual inspection. The median score of each of the 4 roles of a preceptor was statistically significantly higher those with formal preceptor training/preparation than those without. The statistical figures are presented in Table 11.

Table 9: The Mann-Whitney U test examined the Relationship between each of the 4 Roles of a Preceptor and “Formal Preceptor Training/Preparation”

	Mann-Whitney U test	Standardised Test Statistic	P value	Median Score of Formal preceptor training/preparation	
				Yes (n=305)	No (n=70)
Protector	8,716	-2.405	0.016	4.33	4.11
Evaluator	8,716	-2.415	0.016	4.14	4.00
Educator	8,810	-2.291	0.022	4.10	4.00
Facilitator	8,329	-2.875	0.004	4.24	4.00

Years of Work Experience

Hypothesis 3: There is no relationship between preceptors' perceptions of their role and years of work experience.

The findings indicate that the relationship between preceptors' perceptions of their role and "Years of work experience" was not statistically significant but it was clinically significant.

The mean score of the Preceptor Role was 4.13 for the respondents (n=73, 19.2%) with 6 years or less work experience. This increased to 4.18 for the respondents (n=77, 20.3%) that had 7 to 13 years of work experience. This increased further to 4.23 for the respondents (n=58, 15.3%) that had 14 to 19 years of work experience. There was a slight decrease for the respondents (n=94, 24.7%) with 20 to 28 years of work experience, with a mean score of 4.22. The highest mean score was 4.26 for the respondents (n=78, 20.5%) with over 28 years of work experience. The summary is presented in Figure 5. This demonstrates that the respondents had a higher perception of their role of a preceptor that corresponds with their increased years of work experience.

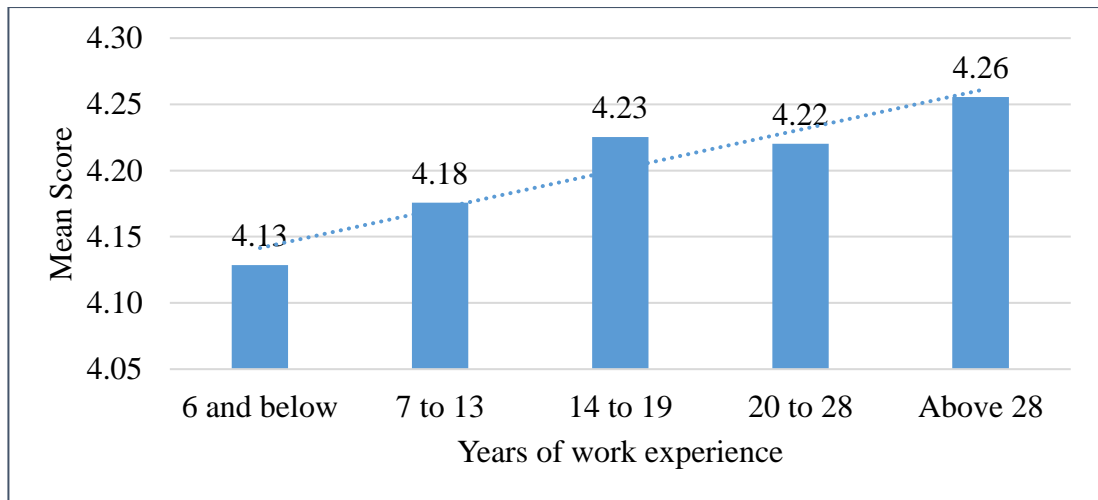


Figure 5: Mean Score of the Preceptor Role according to “Years of Work Experience”

However, the Independent Samples Kruskal-Wallis Test was run to determine if there were differences in the mean score of the Preceptor Role between all groups and it was found to not be statistically significant ($p=0.269$).

These results accept null retain hypothesis 3, indicating there is no relationship between preceptors’ perception of their role and years of work experience.

Years of Preceptorship Experience

Hypothesis 4: There is no relationship between preceptors’ perceptions of their role and years of preceptorship experience.

The findings indicate that the relationship between preceptors’ perceptions of their role and “Years of preceptorship experience” was not statistically significant but it was clinically significant.

The mean score of the Preceptor’s Role was 4.14 for the respondents (n=78, 20.5%) with less than 3 years of preceptorship experience. This increased to 4.16 for the respondents (n=65, 17.1%) with 4 to 9 years of preceptorship experience. This continued to rise to 4.18 for the respondents (n=76, 20%) with 10 to 13 years of preceptorship experience. There was a sharp increase of the mean score (M=4.28) for the respondents (n=72, 18.9%) with 14 to 19 years of preceptorship experience. Subsequently, the mean score declined (M=4.25) for the respondents (n=89, 23.4%) with over 19 years of preceptorship experience. The summary is presented in Figure 6. This demonstrates that the respondents had a higher perception of their role as a preceptor that corresponds with their increased years of preceptorship experience.

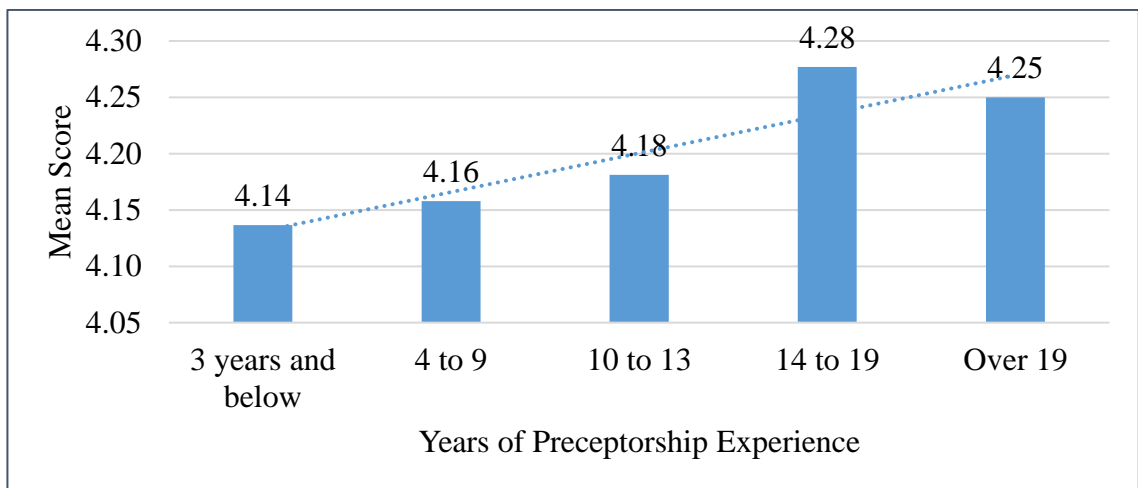


Figure 6: Mean Score of the Preceptor Role according to “Years of Preceptorship Experience”

However, the Independent Samples Kruskal-Wallis Test was run to determine if there were differences in the mean score of the Preceptor Role between all groups and it was found to not be statistically significant ($p = 0.260$).

These results accept null hypothesis 4, indicating there is no relationship between preceptors' perceptions of their role and years of preceptorship experience.

Age Group

Hypothesis 5: There is no relationship between preceptors' perceptions of their role and age.

The findings indicate that the relationship between preceptors' perceptions of their role and "Age group" was not statistically significant but it was clinically significant.

The mean score of the Preceptor Role was 4.11 for the respondents (n=57, 15%) under 30 years of age. This was followed by a mean score of 4.15 for the respondents (n=103, 27.2%) between 30 and 39 years of age. A mean score of 4.23 was for the respondents (n=121, 31.9%) aged between 40 and 49 reported, and a mean score of 4.28 for the respondents (n=98, 25.9%) who were aged 50 years and above. The summary is presented in Figure 7. This demonstrates that the respondents had a higher perception of their role of a preceptor that corresponds with their increased age.

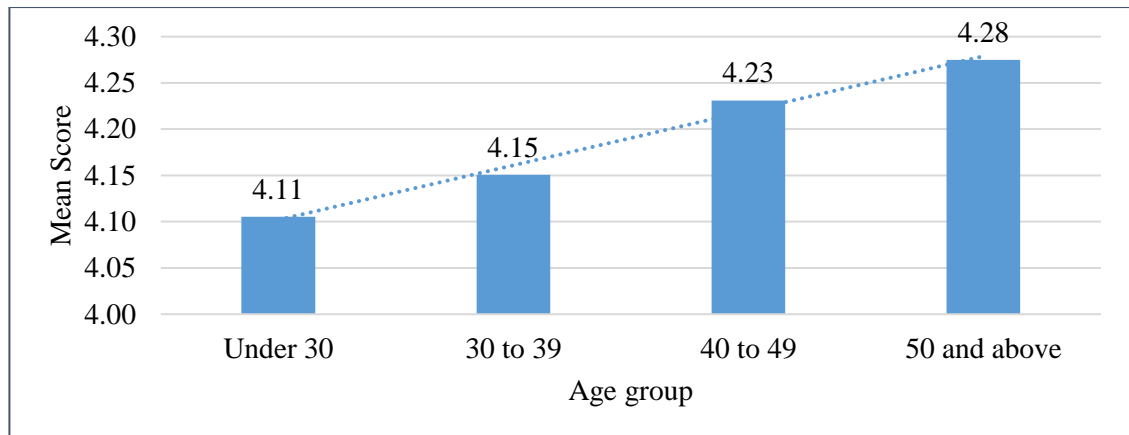


Figure 7: Mean Score of the Preceptor Role according to “Age Group”

However, the Independent Samples Kruskal-Wallis Test was run to determine if there were differences in the mean score of the Preceptor Role between all groups and it was found to not be statistically significant ($p = 0.078$).

These results accept null hypothesis 5, indicating there is no relationship between preceptors’ perceptions of their role and age.

Education Level

Hypothesis 6: There is no relationship between preceptors’ perceptions of their role and education level.

The findings indicate that the relationship between preceptors’ perceptions of their role and their “Education level” was not statistically or clinically significant.

The lowest mean score of the Preceptor Role was 4.16 for the respondents ($n=46$, 16.7%) who had achieved a nursing Certificate. The mean scores were similar among

the other three groups: the respondents (n=63, 12.2%) who had a nursing Diploma had a mean score of 4.23, the respondents (n=231, 61.1%) who had a nursing Degree had a mean score of 4.20, and the remaining respondents (n=38, 10.1%) with a Master's degree had a mean score of 4.22. The summary is presented in Figure 8. This indicates that there was no difference in the respondents' perceptions of their role of a preceptor when their highest level of nurse education was either the Diploma, the Degree, or the Master's Degree.

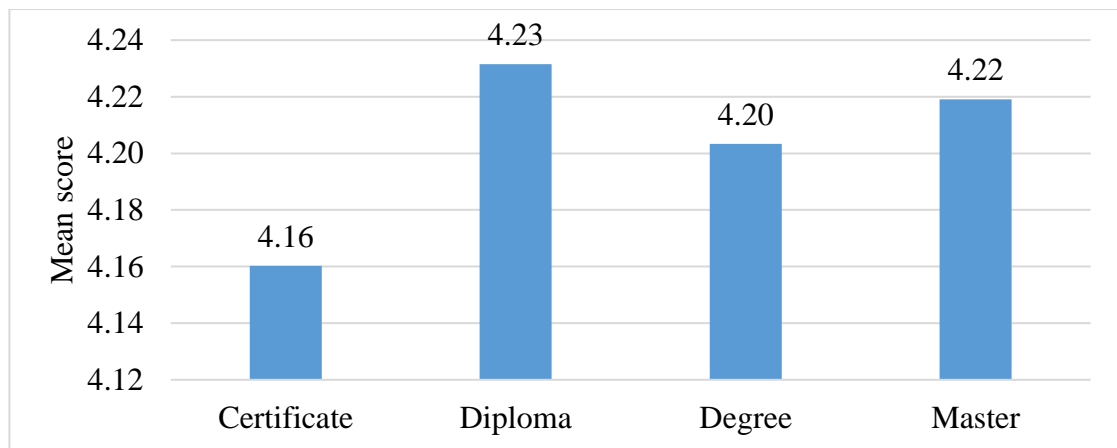


Figure 8: Mean Score of the Preceptor Role according to "Education Level"

Furthermore, the Independent Samples Kruskal-Wallis Test was run to determine if there were differences in the mean score of the Preceptor Role between all groups and it was found to not be statistically significant ($p = 0.978$).

These results accept null hypothesis 6, indicating there is no relationship between preceptors' perceptions of their role and education level.

Work Area

Hypothesis 7: There is no relationship between preceptors' perceptions of their role and health care setting.

The findings indicate that the relationship between preceptors' perceptions of their role and "Work area" was both clinically significant and statistically significant ($p = 0.002$).

The highest mean score of the Preceptor Role was 4.40 for the respondents ($n=38$, 10%) working in Primary Care. The second highest mean score was 4.28 for the respondents ($n=32$, 8.4%) working in Continuing Care. This was closely followed by the respondents ($n=49$, 12.9%) working in Mental Health Services, resulting in a score of 4.27. The mean score was significantly lower at 4.15 for the respondents ($n=246$, 64.9%) working in the Acute hospital settings. The lowest mean score was 4.12 for the respondents ($n=14$, 3.7%) working in Maternity Services. The summary is presented in Figure 9. There was a significant difference in the mean scores of the Preceptor Role among the respondents from 5 different health care settings. This indicates that there were significant differences in how they perceived their role of a preceptor depending on the health care settings in which they worked.

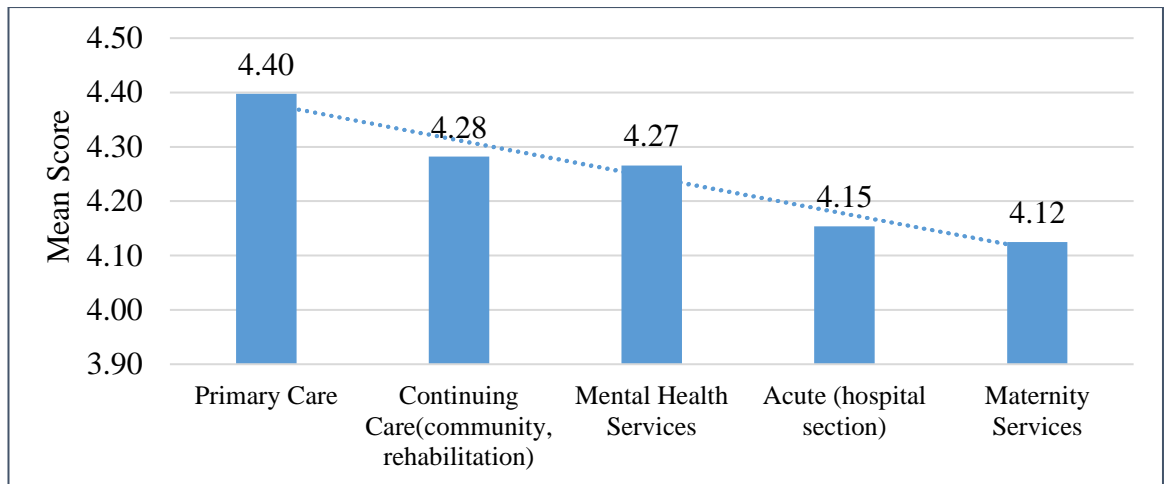


Figure 9: Mean Score of the Preceptor Role according to “Work Area”

Despite the differences in health care settings, all respondents ranked the Protector Role highest, with mean scores ranging from 4.23 to 4.53, and the Educator Role lowest, with mean scores ranging from 4.01 to 4.29. This infers that the respondents had a higher perception of their Protector Role than their Educator Role when preceptoring undergraduate nursing students. However, they disagreed when ranking the Facilitator Role and the Evaluator Role. The respondents working in the Acute hospital settings (n=246, 64.9%) and Continuing Care (n=32, 8.4%) ranked the Evaluator Role higher than the Facilitator role, while the respondents working in Primary Care (n=38, 10%), the Mental Health Services (n=49, 12.9%) and the Maternity Services (n=14, 3.7%) ranked the Facilitator Role higher than the Evaluator Role. The summary is presented in Figure 10.

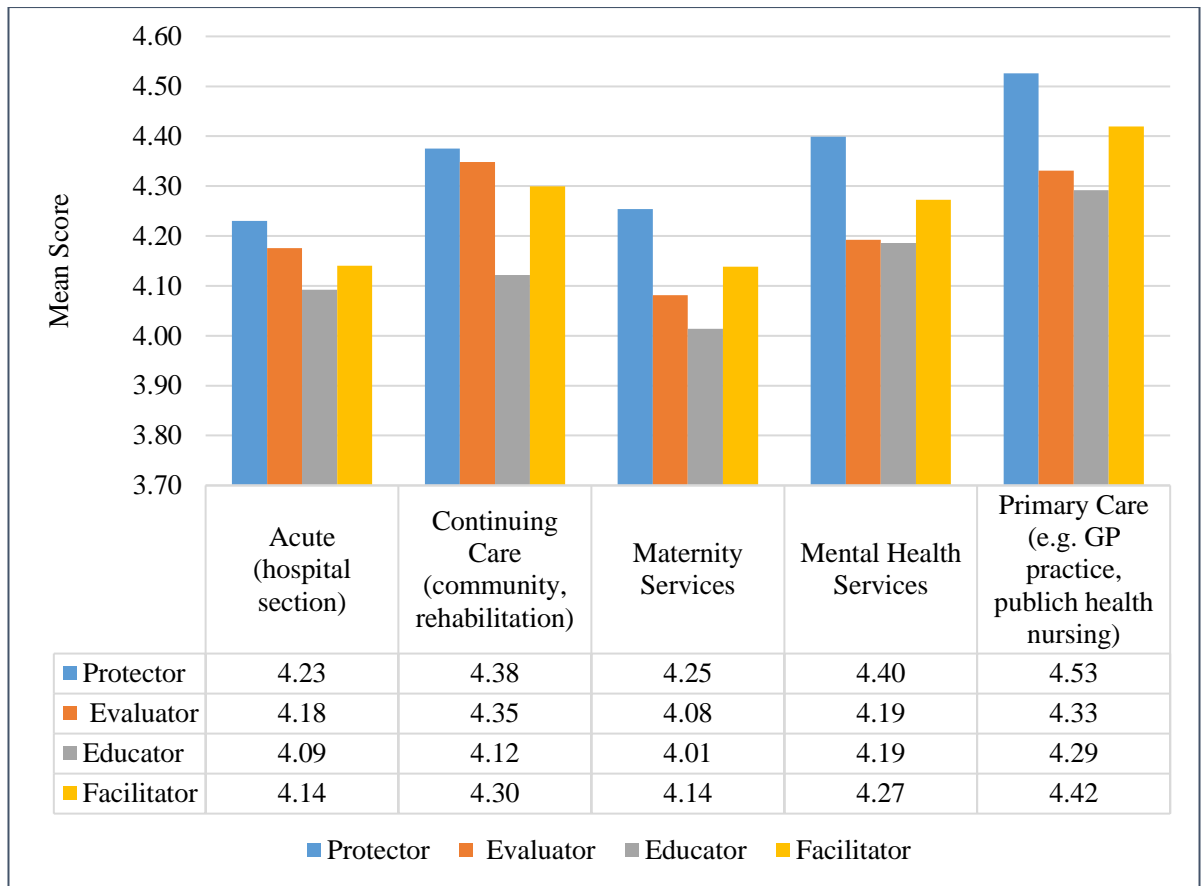


Figure 10: Mean Scores of the four Roles of a Preceptor according to “Work Area”

The Independent Samples Kruskal-Wallis test was conducted to determine if there were differences in the mean score of the Preceptor Role between the health care settings where respondents worked: the "Acute" (n = 246), "Continuing Care" (n = 32), "Maternity Services" (n = 14), “Mental Health Services” (n = 49), and "Primary Care" (n = 38). The distributions of the mean scores of the Preceptor Role were similar for all groups, as assessed by visual inspection of a boxplot. The median scores of the Preceptor Role were statistically significantly different between different health care settings, $\chi^2(4) = 17.285$, $p = .002$. Subsequently, pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons. Adjusted p-values are presented. This post hoc analysis revealed statistically significant

differences in median scores of the Preceptor Role between the “Acute” (4.093) and “Primary Care” (4.677) ($p = .008$), but not any other group combination.

These results reject null hypothesis 7 as there is a relationship between preceptors’ perceptions of their role and health care setting.

In addition, the Kruskal-Wallis test was also conducted to determine if there were differences in the mean scores of each of four roles of a preceptor between the health care settings where respondents worked: the "Acute" ($n = 246$), "Continuing Care" ($n = 32$), "Maternity Services" ($n = 14$), “Mental Health Services” ($n = 49$), and "Primary Care" ($n = 38$). The distributions of the mean scores of each of four roles of a preceptor were similar for all groups, as assessed by visual inspection of a boxplot. The median scores of each of four roles of a preceptor were statistically significantly different between the different health care settings. The statistical figures are presented in Table 12.

Table 10: The Kruskal-Wallis Test examined the Relationship between each of the 4 Roles of a Preceptor and “Work Area”

Kruskal-Wallis test	$\chi^2(4)$	P value
Protector	12.653	0.013
Evaluator	11.731	0.019
Educator	9.563	0.048
Facilitator	19.831	0.001

Employer

Hypothesis 8: There is no relationship between preceptors' perceptions of their role and type of employer.

The findings indicate that the relationship between preceptors' perceptions of their role and "Employer" was not statistically significant but it was clinically significant.

The mean score of the Preceptor Role was 4.26 for the respondents (n=49, 13%) employed in the Private Sector. This was higher than the mean score of 4.19 for the respondents (n=330, 87%) employed in the Public Sector. This is presented in Figure 11. This demonstrates that the respondents employed in the Private Sector had a higher perception of their role of a preceptor than those employed in the Public Sector.

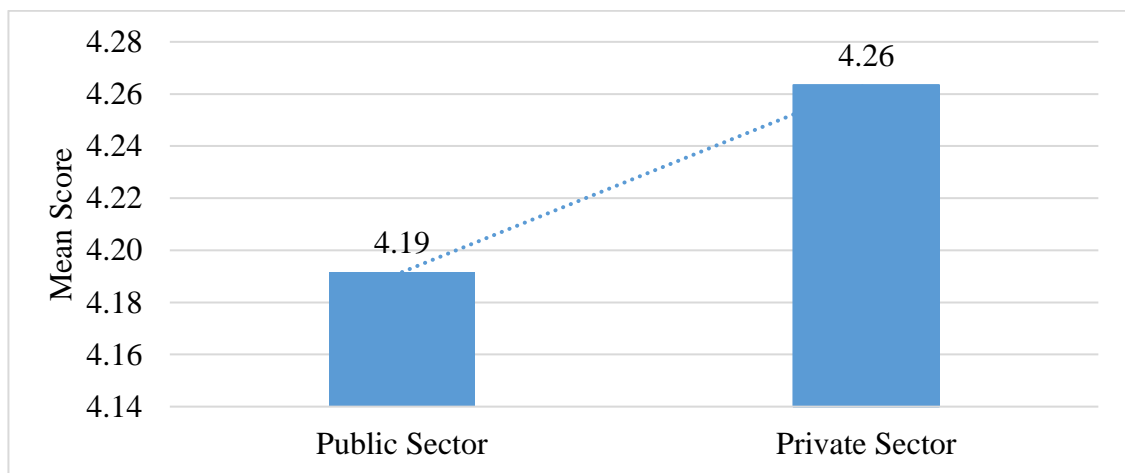


Figure 11: Mean Score of the Preceptor Role according to "Employer"

The respondents (n=49, 13%) from the Private Sector ranked the four roles of a preceptor from the highest to the lowest mean scores as; a Protector (M=4.31), a

Facilitator (M=4.31), an Evaluator (M=4.20) and an Educator (M=4.18), while the respondents (n=330, 87%) employed in the Public Sector ranked the four roles from the highest to the lowest mean scores as; a Protector (M=4.29), an Evaluator (M=4.20), a Facilitator (M=4.18) and an Educator (M=4.11). The Facilitator Role was ranked highest by the respondents working in the Private Sector; however, it was ranked second lowest by the respondents employed by in the Public Sector. Additionally, the mean score of the Facilitator Role was significantly higher for the respondents (n=49, 13%, M=4.31) employed in the Private Sector than those employed in the Public Sector (n=330, 87%, M=4.18). This infers that there was a higher perception of the Facilitator Role among respondents employed in the Private Sector than those employed in the Public Sector.

The Mann-Whitney U test was run to determine if there were differences in the mean score of the Preceptor Role between the respondents employed in the Public Sector and in the Private Sector. The distributions of the mean score of the Preceptor Role for the respondents employed in the Public Sector and in the Private Sector were similar, as assessed by visual inspection. The median score of the Preceptor Role for the respondents employed in the Public Sector (4.22) and employed in the Private Sector (4.19) was not statistically significantly different, $U = 8611$, $z = 0.735$, $p = .462$, using an exact sampling distribution for U (Dineen and Blakesley, 1973).

These results accept null hypothesis 8, indicating there is no relationship between preceptors' perceptions of their role and type of employer.

Summary

The research hypotheses tested the relationship between preceptors' perceptions of their role and socio-demographic variables. The results indicated no statistically significant relationship between their perceived role and the variables; "Gender" ($p = 0.939$), "Years of work experience" ($p = 0.269$), "Years of preceptorship experience" ($p = 0.260$), "Age group" ($p = 0.078$), "Education level" ($p = 0.978$), "Employer" ($p = 0.462$). However, there was a statistically significant relationship between their perceived role and the following variables; "Formal preceptor training/preparation" ($p = 0.004$), and "Work Area" ($p = 0.002$).

4.4 Preceptors' Socio-demographic Profiles and Perceptions of their Responsibilities

The fourth research objective was to determine relationship between preceptors' socio-demographic variables and their responsibilities. In this section, the results of the analysis that investigates the relationship between socio-demographic variables and perceptions of their responsibilities are presented. A Pearson's product-moment correlation was used to investigate the relationship between preceptors' socio-demographic variables and perceptions of their responsibilities. Within this section and related to the fourth research objective, the results of the statistical analysis performed to answer the research hypothesis are presented.

Gender

Hypothesis 9: There is no relationship between preceptors ranking of responsibilities and gender.

The findings indicate that both male and female respondents ranked the preceptor responsibilities similarly. A Pearson's product-moment correlation confirms the correlation between the male and female respondents on their ranking of 43 statements of a preceptor responsibilities was statistically significant ($p < 0.01$).

Both male respondents ($n=33$, 9%, $M=4.61$, $SD=0.56$) and female respondents ($n=347$, 91%, $M=4.47$, $SD=0.57$) ranked “*Supports developing skills while ensuring safe practice*” as the most agreed with preceptor responsibility. Female respondents ($M=4.41$, $SD=0.60$) ranked “*Act as example for professional role performance*” as the 2nd most agreed with preceptor responsibility; this was ranked 3rd by male respondents ($M=4.52$, $SD=0.57$). Female respondents ($M=4.41$, $SD=0.60$) ranked “*Models professional behaviour*” as the 3rd most agreed with preceptor responsibility; this was ranked 4th by male respondents ($M=4.52$, $SD=0.51$). Female respondents ($M=4.38$, $SD=0.72$) ranked “*Ensures safe learning environment for students to learn and practice in*” as the 4th most agreed with preceptor responsibility; this was ranked 5th by male respondents ($M=4.45$, 0.62). Female respondents ranked “*Adhere to standard of practice*” ($M=4.38$, $SD=0.59$) as the 5th most agreed with preceptor responsibility; this was ranked 2nd by male respondents ($M=4.58$, $SD=0.50$).

Female respondents ($M=3.79$, $SD=0.90$) ranked “*Customizes a clinical coaching plan for specific learning needs*” as the least agreed with preceptor responsibility; this was ranked the 2nd least agreed with by male respondents ($M=3.79$, $SD=0.91$). Female respondents ($M=3.91$, $SD=0.99$) ranked “*Understand/support social needs of students for example mature students with family commitments*” as the 2nd least agreed with

preceptor responsibility; this was ranked the 3rd least agreed with by the male respondents (M=3.79, SD=0.91). The female respondents (M=3.95, SD=0.76) ranked “*Serves as an exemplar of “how to access evidence”*” as the 3rd least agreed with preceptor responsibilities; the male respondents (M=3.95, SD=0.76) differed as they ranked this statement the 14th least agreed with preceptor responsibilities. The male respondents (M=3.67, SD=0.96) ranked “*Establish communication between students, CNM, CPC and Link lecturer*” as the least agreed with preceptor responsibility; this was ranked the 4th least agreed with by the female respondents (M=3.99, SD=0.85)

A Pearson's product-moment correlation was performed to assess the relationship between the ratings of 43 statements of a preceptor's responsibilities of both male and female respondents (n=380). Preliminary analyses showed the relationship to be linear with both variables normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$), and there were no outliers. There was a statistically significant, strong positive correlation between the rankings of 43 statements of a preceptor responsibilities among both male and female respondents, $r(41) = .715, p < .01$.

The results reject null hypothesis 9 indicating that there is a relationship between preceptors ranking of responsibilities and gender

Formal Preceptor Training/Preparation

Hypothesis 10: There is no relationship between the preceptors ranking of responsibilities and preceptor training/preparation.

The findings indicate that there was no difference in how the respondents with or without formal preceptor training or preparation ranked the preceptor responsibilities. A Pearson's product-moment correlation confirms the correlation between these two groups on their ranking of 43 statements of a preceptor responsibilities was statistically significant ($p < 0.01$).

The respondents who had undertaken preceptor training/preparation ($n=305$, 81%, $M=4.5$, $SD=0.89$) and those who had not ($n=70$, 19%, $M=4.4$, $SD=0.49$) ranked “*Supports developing skills while ensuring safe practice*” as the most agreed with preceptor responsibility. Both groups also ranked “*Adhere to standard of practice*” as the 4th most agreed with preceptor responsibility. The respondents that had undertaken preceptor training /preparation ranked “*Act as example for professional role performance*” ($M=4.46$, $SD=0.58$) and “*Introduces students to team and other staff*” ($M=4.44$, $SD=0.65$) as the 2nd and 3rd most agreed with preceptor responsibilities. However, the respondents who had not undertaken preceptor training/preparation differed as they ranked “*Ensures safe learning environment for students to learn and practice in*” ($M=4.36$, $SD=0.62$) and “*Models professional behaviour*” ($M=4.34$, $SD=0.59$) as the 2nd and 3rd most agreed with preceptor responsibilities respectively.

The respondents who had undertaken preceptor training/preparation ($M=3.84$, $SD=0.89$) ranked “*Customizes a clinical coaching plan*” as the least agreed with preceptor responsibility; this was ranked the 2nd least agreed with preceptor responsibility by the respondents without formal preceptor training/preparation ($M=3.61$, $SD=1.03$). The respondents who had undertaken preceptor training/preparation ranked “*Serves as an exemplar of “how to access evidence”*” ($M= 3.98$, $SD=0.74$) as the 2nd least agreed with

preceptor responsibility. The respondents who had undertaken preceptor training/preparation ranked “*Understand/support social needs of students for example mature students with family commitment*” (M=3.99, SD=0.96) as the 3rd least agreed with preceptor responsibility; this was ranked the least agreed with by those without formal preceptor training/preparation (M=3.53, SD=0.99). The respondents with formal preceptor training/preparation (M=4.0, SD=0.84) ranked “*Establish communication between students, CNM, CPC and Link lecturer*” as the 4th least agreed with preceptor responsibility; this was ranked 3rd least agreed with by those without formal preceptor training/preparation (M=3.81, SD=0.97).

A Pearson's product-moment correlation was performed to assess the relationship between the ratings of 43 statements of a preceptor's responsibilities of the respondents (n=380) with and without preceptor training or preparation. Preliminary analyses showed the relationship to be linear with both variables normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$), and there were no outliers. There was a statistically significant, strong positive correlation between the rankings of 43 statements of a preceptor's responsibilities of those with and without preceptor training, $r(41) = .788, p < .01$.

The results reject null hypothesis 10 indicating that there is a relationship between the preceptors ranking of responsibilities and preceptor training/preparation.

Years of Work Experience

The findings indicate that respondents ranked the preceptor responsibilities differently according to their years of work experience. For statistical analysis 5 groups were created according to years of work experience. The 3 statements ranked most agreed with and the 3 statements ranked least agreed with for each of the 5 age groups are presented in Table 13.

The statement “*Support developing skills while ensuring safe practice*” was ranked as the most agreed with preceptor responsibility by all groups except for one group, the respondents with 14 to 19 years of work experience, who ranked it the 2nd most agreed with preceptor responsibility. The respondents with 14 to 19 years of work experience ranked “*Models professional behaviours*” as the most agreed with preceptor responsibility, this did not appear in the top 3 responsibilities for any other group.

The statement “*Customizes a clinical coaching plan for specific learning needs*” was ranked the least agreed with preceptor responsibility by all groups. While that was the only statement common to all groups, the statement “*Understanding/support social needs of students for example mature student with family commitments*” was ranked the 2nd least agreed with preceptor responsibility by two groups, the respondents with 6 years and under work experience and the respondents with 20 to 28 years of work experience. This statement was also ranked 3rd least agreed with by the respondents with 7 to 13 years of work experience.

Table 11: The most and least agreed with Preceptor Responsibilities according to “Years of Work Experience”

Years of work experience	The 3 statements ranked highest	The 3 statements ranked lowest
6 years and below (n=73)	<p>Support developing skills while ensuring safe practice (M=4.45)</p> <p>Protects patients from healthcare errors (M=4.42)</p> <p>Models clinical judgement (M=4.4)</p>	<p>Customizes a clinical coaching plan for specific learning needs (M=3.7)</p> <p>Understanding/support social needs of students for example mature student with family commitments (M=3.73)</p> <p>Serves as an exemplar of “how to access evidence” (M=3.81)</p>
7-13 years (n=77)	<p>Support developing skills while ensuring safe practice (M=4.42)</p> <p>Adhere to standard of practice (M=4.4)</p> <p>Recognizes own limitations (M=4.39)</p>	<p>Customizes a clinical coaching plan for specific learning needs (M=3.77)</p> <p>Establishes communication between students, CNM, CPC and link lecturer (M=3.91)</p> <p>Understand/support social needs of students for example mature students with family commitments (M=3.92)</p>
14-19 years (n=58)	<p>Models professional behaviours (M=4.50)</p> <p>Support developing skills while ensuring safe practice (M=4.48)</p> <p>Act as example for professional role performance (M=4.48)</p>	<p>Customizes a clinical coaching plan for specific learning needs (M=3.86)</p> <p>Constructively critiques knowledge (M=3.98)</p> <p>Protect students from adverse behaviours of others, e.g. patient, health care workers (M=4.0)</p>
20-28 years (n=94)	<p>Support developing skills while ensuring safe practice (M=4.51)</p> <p>Protects patients from healthcare errors (M=4.45)</p> <p>Ensures safe learning environment for students to learn and practice in (M=4.44)</p>	<p>Customizes a clinical coaching plan for specific learning needs (M=3.82)</p> <p>Understand/support social needs of students for example mature students with family commitments (M=3.87)</p> <p>Foster integration into work culture (M=3.97)</p>
Above 28 years (n=78)	<p>Support developing skills while ensuring safe practice (M=4.55)</p> <p>Acts as example for professional role performance (M=4.49)</p> <p>Adhere to standard of practice (M=4.47)</p>	<p>Customizes a clinical coaching plan for specific learning needs (M=3.82)</p> <p>Establishes communication between students, CNM, CPC and link lecturer (M=3.96)</p> <p>Implements an effective learning plan (M=3.97)</p>

Years of Preceptorship Experience

The findings indicate that respondents ranked the preceptor responsibilities differently according to their years of preceptorship experience. The 3 statements ranked most agreed with and the 3 statements ranked least agreed with for each of the 5 age groups are presented in Table 14.

The statement “*Support developing skills while ensuring safe practice*” was ranked as the most agreed with preceptor responsibility by all groups except for one group, the respondents with 4 to 9 years of preceptorship experience, who ranked it the 3rd most agreed with preceptor responsibility. The respondents with 4 to 9 years of preceptorship experience ranked “*Protects patients from healthcare errors*” as the most agreed with preceptor responsibility, this did not appear in the top 3 responsibilities for any other group.

The statement “*Customizes a clinical coaching plan for specific learning needs*” was ranked as the least agreed with preceptor responsibility by all groups. While that was the only statement common to all 5 groups, the statement “*Understand/support social needs of students for example mature students with family commitments*” was ranked the 2nd least agreed with responsibility by three groups, the respondents with 3 years and below preceptorship experience, those with 4 to 9 years of preceptorship experience, and those that with over 19 years of preceptorship experience. This statement was ranked as the 3rd least agreed with preceptor responsibility by the respondents with 14 to 19 years of preceptorship experience. However, this statement did not appear in the

three least agreed with responsibilities among the respondents with 10 to 13 years of preceptorship experience.

Table 12: The most and least agreed with Preceptor Responsibilities according to “Years of Preceptorship Experience”

Years of preceptorship experience	The 3 statements ranked highest	The 3 statements ranked lowest
3 years and below (n=78)	Support developing skills while ensuring safe practice (M=4.41) Protects patients from healthcare errors (M=4.4) Models professional behaviours (M=4.4)	Customizes a clinical coaching plan for specific learning needs (M=3.68) Understanding/support social needs of students for example mature student with family commitments (M=3.77) Serves as an exemplar of “how to access evidence” (M=3.83)
4-9 years (n=65)	Protects patients from healthcare errors (M=4.43) Act as example for professional role performance (M=4.43) Support developing skills while ensuring safe practice (M=4.42)	Customizes a clinical coaching plan for specific learning needs (M=3.68) Understand/support social needs of students for example mature students with family commitments (M=3.86) Plans learning activities collaboratively (M=3.88)
10-13 years (n=76)	Support developing skills while ensuring safe practice (M=4.46) Introduce students to team and other staff (M=4.45) Models professional behaviours (M=4.39)	Customizes a clinical coaching plan for specific learning needs (M=3.82) Establishes communication between students, CNM, CPC and link lecturer (M=3.86) Serves as an exemplar of “how to access evidence” (M=3.91)
14-19 years (n=72)	Support developing skills while ensuring safe practice (M=4.51) Helps students settle into new environment (M=4.50) Recognizes own limitations (M=4.49)	Customizes a clinical coaching plan for specific learning needs (M=3.87) Foster integration into work culture (M=4.01) Understand/support social needs of students for example mature students with family commitments (M=4.03)
Above 19 years (n=89)	Support developing skills while ensuring safe practice (M=4.6) Acts as example for professional role performance (M=4.48) Ensures safe learning environment for students to learn and practice in (M=4.47)	Customizes a clinical coaching plan for specific learning needs (M=3.89) Understand/support social needs of students for example mature students with family commitments (M=4.03) Supports adjustment to all the new elements that students face within their transition (M=4.02)

Age Group

The findings indicate that respondents ranked the preceptor responsibilities differently according to their age. For statistical analysis 4 groups were created according to their age. The 3 statements ranked most agreed with and the 3 statements ranked least agreed with for each of the 5 groups are presented in Table 15.

The statement “*Support developing skills while ensuring safe practice*” was ranked as the most agreed with preceptor responsibility by all groups, except for one group, the respondents under 30 years of age, who ranked it as the 2nd most agreed with preceptor responsibility. The respondents under 30 years of age ranked “*Protect patients from health care errors*” as the most agreed with preceptor responsibility, this did not appear in the top 3 responsibilities for any other group.

There was a significant difference in how all 4 groups ranked the 3 least agreed with preceptor responsibilities. Only 2 statements appeared in the 3 least agreed with responsibilities for more than one group. They were “*Works to ensure colleague support for students*” and “*Ensures support of colleagues for socialization and orientation process*”, and were only common to two groups each.

Table 13: The most and least agreed with Preceptor Responsibilities according to “Age Group”

Age	The 3 statements ranked highest	The 3 statements ranked least lowest
Under 30 years (n=57)	Protects patients from healthcare errors (M=4.47) Support developing skills while ensuring safe practice (M=4.42) Models clinical judgement (M=4.37)	Evaluate adherence to policies and procedures (standard of practice) (M=3.95) Works to ensure colleague support for students (M=4.0) Foster integration into work culture (M=4.0)
30-39 years (n=103)	Support developing skills while ensuring safe practice (M=4.38) Recognizes own limitations (M=4.35) Models professional behaviours (M=4.34)	Implements an effective learning plan (M=4.02) Works to ensure colleagues support for students (M=4.02) Ensures support of colleagues for socialization and orientation process (M=4.03)
40 -49 years (n=121)	Support developing skills while ensuring safe practice (M=4.5) Act as example for professional role performance (M=4.49) Recognizes own limitations (M=4.47)	Develops critical thinking skills in students (M=4.09) Ensures support of colleagues for socialization and orientation process (M=4.10) Documents observation of competence, or lack thereof (M=4.10)
50 years and above (n=98)	Support developing skills while ensuring safe practice (M=4.61) Act as example for professional role performance (M=4.52) Ensures safe learning environment for students to learn and practice in (M=4.52)	Protect students from adverse behaviours of others, e.g. patient, health care workers (M=4.1) Plans learning activities collaboratively (M=4.1) Supports adjustment to all the new elements that students face within their transition (M=4.12)

Education Level

The findings indicate that respondents ranked the preceptor responsibilities significantly different according to their education levels. The 3 statements ranked most agreed with and the 3 statements ranked least agreed with according to their education levels are presented in Table 16.

The statement “*Support developing skills while ensuring safe practice*” was ranked as the most agreed with preceptor responsibilities by all groups, except for one group, the respondents who had achieved a nursing certificate. This statement did not appear in the top 3 preceptor responsibilities in their group. They ranked “*Introduce students to team and other staff*” as the most agreed with preceptor responsibility, this did not appear in the top 3 responsibilities for any other group.

The statement “*Customizes a clinical coaching plan for specific learning needs*” was ranked as the least agreed with preceptor responsibility by all groups except for one, the respondents who had achieved a nursing certificate, who ranked it the 2nd least agreed with preceptor responsibility. The respondents who had achieved a nursing certificate ranked “*Serves as an exemplar of “how to access evidence”*” as the least agreed with preceptor responsibility, this did not appear in the top 3 responsibilities for any other group.

Table 14: The most and least agreed with Preceptor Responsibilities according to “Education Level”

Education Level	The 3 statements ranked highest	The 3 statements ranked lowest
Certificate (n=46)	<p>Introduce students to team and other staff (M=4.43)</p> <p>Communicates with students in their progression (M=4.41)</p> <p>Helps students settle into new environment (M=4.39)</p>	<p>Serves as an exemplar of “how to access evidence (M=3.80)”</p> <p>Customizes a clinical coaching plan for specific learning needs (M=3.80)</p> <p>Implements an effective learning plan (M=3.89)</p>
Diploma (n=63)	<p>Support developing skills while ensuring safe practice (M=4.54)</p> <p>Models professional behaviours (M=4.48)</p> <p>Ensures safe learning environment for students to learn and practice in (M=4.44)</p>	<p>Customizes a clinical coaching plan for specific learning needs (M=3.84)</p> <p>Foster integration into work culture (M=3.94)</p> <p>Establishes communication between students, CNM, CPC and link lecturer (M=3.97)</p>
Degree (n=231)	<p>Support developing skills while ensuring safe practice (M=4.5)</p> <p>Act as example for professional role performance (M=4.42)</p> <p>Models professional behaviours (M=4.42)</p>	<p>Customizes a clinical coaching plan for specific learning needs (M=3.79)</p> <p>Understand/support social needs of students for example mature students with family commitments (M=3.84)</p> <p>Establishes communication between students, CNM, CPC and link lecturer (M=3.95)</p>
Masters (n=38)	<p>Support developing skills while ensuring safe practice (M=4.5)</p> <p>Ensures safe learning environment for students to learn and practice in (M=4.47)</p> <p>Adhere to standard of practice (M=4.47)</p>	<p>Customizes a clinical coaching plan for specific learning needs (M=3.76)</p> <p>Develops critical thinking skills in students (M=3.89)</p> <p>Constructively critiques knowledge (M=3.97)</p>

Work Area

The findings indicate that respondents ranked the preceptor responsibilities differently depending on the health care settings in which they worked. The 3 statements ranked

most agreed with and the 3 statements ranked least agreed with for each of the five health care settings are presented in Table 17.

The statement “*Support developing skills while ensuring safe practice*” was ranked the most agreed with preceptor responsibility by the respondents working in three health care settings, the Acute hospital settings, Continuing Care, and the Mental Health Services. The respondents working in these three health care settings also ranked the statement “*Acts as example for professional role performance*” as one of the three most agreed with preceptor responsibilities. The respondents working in the Acute hospital settings and the Mental Health Services shared the same top 3 preceptor responsibilities but ranked them in a different order. The respondents working in the Maternity Services ranked “*Adhere to standard of practice*” as the most agreed with preceptor responsibility while the respondents working in Primary Care ranked “*Introduces students to team and other staff*” as the most agreed with preceptor responsibility. The respondents from those two health care settings shared no statements in their top 3 preceptor responsibilities with any other groups.

The statement “*Customizes a clinical coaching plan for specific learning needs*” was ranked as the least agreed with preceptor responsibility by the respondents working in three health care settings, the Acute hospital settings, Continuing Care and Primary Care. This responsibility was ranked as the 2nd least agreed with by the respondents working in the Mental Health Services and 3rd least agreed with by the respondents working in the Maternity Services. This was the only statement common to all 5 health care settings. The statement “*Understanding/support social needs of students for example mature student with family commitments*” was ranked the least agreed with

preceptor responsibility by the respondents working in Continuing Care and the Mental Health Services.

Table 15: The most and least agreed with Preceptor Responsibilities according to “Work Area”

Work Area	3 statements ranked highest	3 statements ranked least lowest
Acute (Hospital Sector) (n=246)	Support developing skills while ensuring safe practice (M=4.43) Act as example for professional role performance (M=4.35) Models professional Behaviours (M=4.34)	Customizes a clinical coaching plan for specific learning needs (M=3.77) Understanding/support social needs of students for example mature student with family commitments (M=3.87) Serves as an exemplar of “how to access evidence” (M=3.91)
Continuing Care (n=32)	Support developing skills while ensuring safe practice (M=4.56) Introduces students to team and other staff (M=4.56) Act as example for professional role performance (M=4.53)	Customizes a clinical coaching plan for specific learning needs (M=3.75) Supports adjustment to all the new elements that students face within their transition (M=3.94) Foster integration into work culture (M=3.97)
Maternity Services (n=14)	Adhere to standard of practice (M=4.50) Models professional behaviours (M=4.50) Models clinical judgement (M=4.50)	Understand/support social needs of students for example mature students with family commitments (M=3.50) Develops critical thinking skills in students (M=3.64) Customizes a clinical coaching plan for specific learning needs (M=3.71)
Mental Health Services (n=49)	Support developing skills while ensuring safe practice (M=4.65) Models professional behaviours (M=4.59) Acts as example for professional role performance (M=4.57)	Understand/support social needs of students for example mature students with family commitments (M=3.78) Customizes a clinical coaching plan for specific learning needs (M=3.82) Establishes communication between students, CNM, CPC and link lecturer (M=3.88)
Primary Care (n=38)	Introduces students to team and other staff (M=4.74) Protects nursing profession/registration (M=4.66) Ensures safe learning environment for students to learn and practice in (M=4.63)	Customizes a clinical coaching plan for specific learning needs (M=3.97) Constructively critiques knowledge (M=4.08) Establishes communication between students, CNM, CPC and link lecturer (M=4.16)

Employer

Hypothesis 11: There is no relationship between the preceptors ranking of responsibilities and type of employer.

The findings indicate that the respondents employed by the HSE and in the Private Sector ranked the preceptor responsibilities similarly. A Pearson's product-moment correlation confirms that the correlation between these two groups on their ranking of 43 statements of a preceptor responsibilities was statistically significant ($p < 0.01$).

The statement “*Supports developing skills while ensuring safe practice*” was ranked as the most agreed with preceptor responsibility by the respondents employed by the HSE ($n=330$, 87%, $M=4.49$, $SD=0.57$), this statement was ranked 4th by the respondents employed in the Private Sector ($n=49$, 13%, $M=4.53$, $SD=0.54$). The statement “*Acts as example for professional role performance*” and “*Models professional behaviour*” was ranked as the 2nd and 3rd most agreed with preceptor responsibilities by the respondents from both groups. The statement “*Introduces students to team and other staff*” was ranked as the most agreed with preceptor responsibility by the respondents employed in the Private Sector ($M=4.53$, $SD=0.54$), while the respondents employed by the HSE ranked it as the 13th most agreed with responsibility ($M=4.31$, $SD=0.79$).

The statement “*Customizes a clinical coaching plan for specific learning needs*” was ranked as the least agreed with responsibility by the respondents from both groups. They disagreed with the ranking of other least agreed with preceptor responsibilities.

A Pearson's product-moment correlation was performed to assess the relationship between the ratings of 43 statements of a preceptor's responsibilities of the respondents employed by the HSE and in the private sector. Preliminary analyses showed the relationship to be linear with both variables normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$), and there were no outliers. There was a statistically significant, strong positive correlation between the ratings of 43 statements of a preceptor's responsibilities of those employed by the HSE and in the private sector, $r(41) = .642, p < .01$.

The results reject hypothesis 11 indicating that there is a relationship between the preceptors ranking of responsibilities and type of employer.

Summary

There was a statistically significant relationship between the variables "Gender" ($p < 0.01$), "Formal preceptor training/preparation" ($p < 0.01$) and "Employer" ($p < 0.01$), and the preceptors' perceived responsibilities. There was a clinically significant relationship between the variables "Years of work experience", "Years of preceptorship experience", "Age group", "Education level" and "Work area", and the preceptors' perceived responsibilities.

Conclusion

The first research objective was to describe the socio-demographic profile of nurse preceptors in the South West of Ireland. This was addressed in Section 4.1. It found that the majority of respondents (n=347, 91%) were female, were employed in the Public Sector (n=330, 87%), and had undertaken formal preceptor training/preparation (n=305, 81%). It also found that the majority of the respondents had a Degree level of nurse education (n=231, 61.1%) and they worked in the Acute hospital settings (n=246, 64.9%). The summary of the respondents' sample profile is presented in Table 4.

The second study objective was to examine nurse preceptors' perception of their role and responsibilities. This was addressed in Section 4.2. The respondents had a high perception of their role of a preceptor as a result of a mean score of 4.20 and a standard deviation of a 0.45 for the statements subsumed into the Preceptor Role. The respondents ranked the four roles of a preceptor from the highest to the lowest mean scores: a Protector, an Evaluator, a Facilitator and an Educator. The respondents had a high perception of their responsibilities as a preceptor, as the mean score of each statement (responsibility) ranged between 3.79 and 4.48. The statement "*support developing skills while ensuring safe practice*" (M=4.48, SD=0.57) was ranked as the most agreed with preceptor responsibility by the respondents. The statement "*customize a clinical coaching plan for specific learning needs*" (M=3.79, SD=0.92) was ranked as the least agreed with preceptor responsibility by the respondents.

The third objective was to determine if there is any relationship between preceptors' socio-demographic profile and perceptions of their role. This was addressed in Section

4.3. Results indicated there was statistically significant relationship between their perceived role and the variables of “Formal preceptor training/preparation” ($p = 0.004$) and “Work Area” ($p = 0.002$).

The fourth and final objective was to determine if there is any relationship between preceptors’ socio-demographic profile and perceptions of their responsibilities. This was addressed in Section 4.4. Results indicated that there was a statistically significant relationship between the variables “Gender” ($p < 0.01$), “Formal preceptor training/preparation” ($p < 0.01$) and “Employer” ($p < 0.01$), and the preceptors’ perceived responsibilities.

Chapter Five – Discussion

Introduction

In this chapter, the findings of the research study are subsumed into three subsections, preceptors' perceptions of their role, preceptors' perceptions of their responsibilities, and preceptors' socio-demographic profiles and perceptions of their role and responsibilities. The significant findings under each subsection are discussed in depth with reference to the literature.

5.1 Preceptors' Perceptions of their Role

In this research study, the PRRA tool was adopted (Omer, Suliman and Moola, 2016) to examine the respondents' perceptions of their role and responsibilities as a preceptor. The modified PRRA utilized a 5-point Likert scale to measure the level of agreement of 43 individual statements (preceptor responsibilities), ranging from 1 strongly disagree to 5 strongly agree. A higher score represents a higher level of agreement (high perception) pertinent to the role and responsibilities of a preceptor. The mean score for the statements subsumed into the Preceptor Role was 4.20 with a standard deviation of 0.45 indicating that the respondents strongly agreed with their role as a preceptor. Contrary to this, McCarthy and Murphy (2010) found that nurse preceptors were unsure of their preceptor role.

This study confirms that nurse preceptors agreed all 4 roles, a Protector, an Evaluator, an Educator and a Facilitator, applied to their role as a preceptor. Similarly, Murphy

(2015) found that those four identified roles emerged from her qualitative study undertaken in Ireland.

Protector Role

The role of a Protector is to maintain the safety of patients and students from negative consequences (Omer, Suliman and Moola, 2016). The mean score of the Protector Role was 4.29 with a standard deviation of 0.56, indicating that the preceptors strongly agreed with this role as preceptor according to a 5-point Likert scale. The nurse preceptor's role as a Protector is supported by a variety of literature (Horton, et al., 2012; Jokelainen, et al., 2013; Murphy, 2015; Hall, 2016; Omer, Suliman and Moola 2016). Murphy (2015) specified that the Protector Role of a preceptor included maintaining a safe environment and providing a safety net for students. In this study, nurse preceptors ranked the Protector Role highest of all 4 roles. Similarly, nurse preceptors ranked Protector as the highest of the four preceptor roles using the PRRA in Omer, Suliman and Moola (2016)'s study in Saudi Arabia. This corresponds with the findings from study by Hall (2016) who identified a preceptor's primary role as a Protector. Hall (2016) further illustrated that it was essential for a preceptor to ensure patient safety, maintain their personal value and the integrity of the nursing profession while preceptoring in clinical practice (Hall, 2016). However, literature by Madhavanpraphakaran and Balachandran (2013) indicated that nurse preceptors who were registered nurses and were more committed to patient care felt that preceptoring a student nurse was not a priority. This may be the reason that the literature excludes Protector as a key role in the preceptor's role description (Hsu, et al., 2014; Tuomikoski, et al., 2018).

Evaluator Role

The role of an Evaluator is to assess students to ensure they meet the required level of competence in their nursing practice (Omer, Suliman and Moola, 2016). The mean score of the Evaluator Role was 4.20 with a standard deviation of 0.51, indicating that the preceptors strongly agreed with this role according to a 5-point Likert scale. The nurse preceptor's role as an Evaluator is supported by a variety of literature (Cele, Gumede and Kubheka, 2002; Rogan, 2006; Carlson, Wan-Hansson and Pilhammar, 2008; Horton, et al., 2012; Hsu et al., 2014; Murphy, 2015; Chigavazira, et al., 2018; Tuomikoski, et al., 2018). Cele, Gumede and Kubheka (2002) discovered that a preceptor had a larger role to play in a student nurse's success in comparison to that of a staff nurse. This includes their role as an Evaluator, which was to assess and evaluate the student nurses' performance (Cele, Gumede and Kubheka, 2002). Comparably, Murphy (2015) confirmed that a preceptor's role in Ireland included assessing student nurses. The NMBI (2015) emphasized that assessment, which was the central component of any programme of education, was to ensure student nurses become safe and competent nurses. Nevertheless, a preceptor's role as an Evaluator was not always implemented effectively according to McCarthy and Murphy (2010) and Horton, et al. (2012). McCarthy and Murphy (2010) discovered that most of the nurse preceptors in Ireland had never failed a student (76.9%) and nearly half of the preceptors reported they had difficulty in failing a student (47.2%). Horton, et al. (2012) also found that less than 50% of nurse preceptors evaluated their student nurses' performance. They further discovered that 18% of nurse preceptors admitted fudging evaluation documentation and ticking off competencies without checking occasionally (Horton, et al., 2012). In this study, nurse preceptors ranked the Evaluator role as the second highest of all four

roles. This is contrary to finding by Omer, Suliman and Moola (2016) who reported that the preceptor's role as an Evaluator was ranked the lowest of all four roles. Tuomikoski, et al. (2018, p. 80) also ranked the theme "*student centered evaluation*" as the lowest among 10 themes pertinent to a preceptor's role and responsibilities. While this study demonstrates that nurse preceptors agreed with their Evaluator role, a further study is warranted to investigate its implementation among nurse preceptors in the South West of Ireland.

Facilitator Role

The role of a Facilitator includes role modelling, socializing and team leading (Omer, Suliman and Moola, 2016). The mean score of the Facilitator role was 4.20 with a standard deviation of 0.48, indicating that the preceptors strongly agreed with this role as a preceptor according to a 5-point Likert scale. The nurse preceptor's role as a Facilitator is supported by a variety of literature (Öhrling and Hallberg, 2000; Brammer, 2006; Jokelainen, et al., 2013; Hilli, et al., 2014; Rylance, et al., 2017; Chigavazira, et al., 2018). A preceptor's role as a Facilitator was to facilitate learning (Öhrling and Hallberg, 2000; Rylance, et al., 2017; Chigavazira, et al., 2018), and to introduce preceptees to the nursing profession (Hilli, et al., 2014). Jokelainen et al. (2013) specified that the Facilitator Role of a preceptor included establishing a supportive working and learning environment, getting to know student nurses, orientating them to the clinical practice, enhancing their sense of belonging, and socializing. In this study, the Facilitator Role was ranked third of the four preceptor roles. This is also supported by the literature as the Facilitator role was identified as essential but not a primary role of a preceptor (Omer, Suliman and Moola, 2016). However, Zhao, Watson and Chen

(2018, p. 183) had a different opinion as the nurse preceptors in their study ranked “*psychosocial support*” highest among three themes in respect to a preceptor’s role. In their study, a preceptor’s role of “*psychosocial support*” included their responsibilities of being warm and friendly, being respectful, being supportive, encouraging and role modelling (Zhao, Watson and Chen, 2018).

Educator Role

The role of an Educator is to instruct and support students (Omer, Suliman and Moola, 2016). The mean score of the Educator role was 4.12 with a standard deviation of 0.55, indicating that the preceptors strongly agreed with this role according to a 5-point Likert scale. The literature shows that a preceptor’s role as an Educator is important for a student nurse’ success in clinical practice. A preceptor’s role as an Educator included bridging the theory and practice gap (Hilli, et al., 2014; Murphy, 2015; Ferreira, Dantas and Valente, 2018; Giroto, et al., 2019), transferring knowledge (Nunez, et al., 2017; Rylance, et al., 2017), providing reflective learning (Giroto, et al., 2019), teaching preceptees in clinical practice (Carlson, Wann-Hansson and Pilhammar, 2008; Hall, 2016; Anderson, Moxham and Broadbent, 2018; Ferreira, Dantas and Valente, 2018; Zhao, Watson and Chen, 2018), offering learning opportunities (Anderson, Moxham and Broadbent, 2018), and utilizing teaching strategies (Carlson, Wann-Hansson and Pilhammar, 2008; Chan, et al., 2019). Despite the literature highlighting the importance of the Educator Role, contrary findings were reported in a study by Omer, Suliman and Moola (2016) where the Educator Role was ranked least important out of a possible four roles by nurse preceptors. This role is also not perceived positively in the literature with Madhavanpraphakaran and Balachandran (2013, p. 31) stating that only 54%

preceptors gave a positive response to the statement “*teaching and learning experience especially the correlation between theory and practice*”. Student nurses who were perceived to be weak in theoretical knowledge and who were unable to acknowledge their own weakness may negatively impact on a preceptor’s role as an Educator (Bengtsson and Carlson, 2015). Furthermore, a lack of time spent teaching student nurses combined with a preceptor’s increased workload may also negatively impact a preceptor’s role as an Educator (McCarthy and Murphy, 2010; Nunez, et al., 2017). A further study is necessary to identify why education is ranked the least important of the four roles. In addition, the findings by Martensson, et al. (2016) showed that a preceptor preparation course could develop and enhance a preceptor’s role performance as an educator.

5.2 Preceptors’ Perceptions of their Responsibilities

Preceptor responsibilities ranked highest

Nurse preceptors ranked the statement “*Support developing skills while ensuring safe practice*” highest out of the 43 responsibilities, with a mean score of 4.48 and a standard deviation of 0.57. Similarly, it was ranked 2nd highest according Omer, Suliman and Moola (2016). The importance of this responsibility was confirmed by Öhrling and Hallberg (2000) who stated that nurse preceptors were required to keep a balance between the nursing care provided by students, in order to meet their learning needs, and their responsibility towards the patients. Similarly, Nunez, et al. (2017) illustrated that nurse preceptors were responsible for patient care, for student nurses’ tasks and the decisions made by student nurses regarding patient care. The Code of Professional

Conduct and Ethics (NMBI, 2014) states that registered nurses in Ireland are responsible for the care provided by the student nurses while guiding and directing their nursing practice.

Nurse preceptors ranked the statements “*Act as example for professional role performance*” and “*Models professional behaviours*” as the 2nd and 3rd highest of the preceptor responsibilities, with mean scores of 4.42 (SD=0.60) and 4.41 (SD=0.60). This differs from Omer, Suliman and Moola (2016)’s findings in which these two responsibilities were not ranked in the top 5 preceptor’s responsibilities. These two responsibilities are discussed conjointly as literature often refers to a preceptor’s responsibilities as a “*role model*” rather than “*role performance*” and “*model professional behaviour*”. Öhrling and Hallberg (2000) illustrated that a preceptor was a role model by means of providing an opportunity to student nurses to be physically close to them to observe their performance as a nurse. Preceptors were role models for critical thinking skills in nursing care and for professional behaviour (Hilli, et al., 2014). Similarly, Wilson (2014) described a preceptor as a teaching tool as they utilized their body to demonstrate and model practice and utilized their body language and their voice to deliberate communication. Carlson, Pilhammar and Wann-Hansson (2010) highlighted that role modelling was particularly important in developing student nurses’ ethical awareness as this was seldom discussed from a theoretical perspective. By fulfilling their responsibility of “*role modelling*”, student nurses could mirror their preceptor’s professional behaviours (L’Ecuyer, Hyde and Shatto, 2018).

Preceptor responsibilities ranked lowest

Nurse preceptors ranked the statement “*Customizes a clinical coaching plan for specific learning needs*” lowest of all preceptor responsibilities, with a mean score of 3.79 and a standard deviation of 0.92, indicating the preceptors least agreed with this preceptor responsibility. In Omer, Suliman and Moola (2016)’s study this was ranked 2nd least important. Equally this responsibility was perceived as important in a number of qualitative studies (Öhrling and Hallberg, 2000; Carlson, Wann-Hansson and Pilhammar, 2008; L’Ecuyer, Hyde and Shatto, 2018). Both Carlson, Wann-Hansson and Pilhammar (2008) and L’Ecuyer, Hyde and Shatto (2018) strongly emphasized that a preceptor’s responsibility began by supporting student nurses in formulating individual learning plans based on their needs. Öhrling and Hallberg (2000) further illustrated that a preceptor’s responsibilities included assessing a preceptee’s competence, understanding their learning needs, providing support, and making a plan for their clinical learning situation. The Quality Clinical Learning Environment (QCLE) (NMBI, 2015) outlined that a preceptor is required to identify a preceptee’s learning needs and plan their learning experience. However, Murphy (2015, p. 83) pointed out that nurse preceptors in Ireland, “*are guided by the nursing students’ workbook and they facilitate them to reach their learning outcomes*”. In other words, nurse preceptors facilitate the clinical practice of their student nurses as instructed by the learning outcomes outlined in their workbook. This is supported by the Nurse Registration Programmes Standards and Requirements (NMBI, 2016, p. 126), which requires that preceptors “*are fully acquainted with the expected learning outcomes related to that practice placement*” in meeting student nurses’ learning needs. Preceptors may perceive their responsibility, therefore, is to fulfil a student nurse’ educational needs. However, Jokelainen, et al.

(2013) highlighted that it was important to establish individual learning objectives in identification of both educational and personal needs.

Nurse preceptors ranked the statement “*Understanding/support social need of students for example mature students with family commitments*” as the 2nd least agreed with preceptor responsibility, with a mean score of 3.90 (SD=0.98). This responsibility was ranked 4th least important by Omer, Suliman and Moola (2016). Similarly, Obrien, et al. (2014) discovered that the preceptor’s responsibility “*clinical preceptors are professional friend to students*” [sic] was ranked the least important in a preceptor’s role domain. This demonstrates that the literature supports the ranking of this preceptor responsibility in this study.

Nurse preceptors ranked the statement “*Establish communication between students, CNM, CPC and link lecturer*” as the 3rd least agreed with preceptor responsibility, with a mean score of 3.96 (SD=0.86). This differs from Omer, Suliman and Moola (2016)’s findings in which this responsibility was not ranked in the lowest 5 preceptor responsibilities according to the importance scale and the frequency scale. Interestingly, this responsibility was not identified in the findings of two research studies conducted in Ireland (McCarthy and Murphy, 2010; Murphy, 2015). Rather, both studies emphasized that support from link lecturers, CPCs and CNMs was important for their role as a preceptor (McCarthy and Murphy, 2010; Murphy, 2015). This is in accordance with the QCLE (NMBI, 2015) whose guidelines require Link lecturers, CPCs, and CNMs support, guide and facilitate preceptors for their role. Their findings are widely supported by literature outside of Ireland (Öhrling and Hallberg, 2000; Carlson, Wann-Hansson and Pilhammar, 2008; O’Brien, et al., 2014). For instance, O’Brien, et al.

(2014) reported that preceptors with access to a university facilitator scored higher in their preceptor role compared with preceptors without access to a university facilitator.

5.3 Preceptors' Socio-demographic Profiles and Perceptions of their Role and Responsibilities

In this section, each of the socio-demographic variables is discussed with respect to the literature.

Gender

This is discussed first in the finding chapter that nurse preceptors were predominantly female. This corresponds with the statistics provided by Central Statistics Office (2016) which show that 91.8% nurses are female in Ireland. The literature also reflects the fact that preceptors are dominantly female (Rogan, 2009; McCarthy and Murphy, 2010; O'Brien, et al., 2014; Omer, Suliman and Moola, 2016; Giroto, et al., 2019). This study found that there is no relationship between the respondents' gender and their perceived role as a preceptor. This is supported by Tuomikoski, et al. (2018)'s study, as how preceptors perceived their role as a preceptor was not influenced by their gender. This study found that ranking of a preceptor's responsibilities were strongly correlated and statistically significant ($p < 0.01$) between male and female preceptors. This was not examined in the literature found.

Formal Preceptor Training/Preparation

This study found that most of the preceptors had undertaken “Formal preceptor training/preparation”. The relationship between a preceptor’s perceived role and formal preceptor training/preparation was clinically and statistically significant ($p = .004$). There was statistical significance and a strong correlation of both groups’ ranking of a preceptor’s responsibilities ($p < .01$).

In McCarthy and Murphy (2010)’s study, most of the nurse preceptors in Ireland had completed formal preceptor training. Tuomikoski, et al. (2018b) found that it was statistically significant that the preceptors who had completed preceptor education had a higher perception of their role than those who had not completed preceptor education. Chigavazira, et al. (2018) reported that the preceptors who had undertaken training demonstrated significantly higher clinical knowledge and skills than those who had not. Similarly, preceptors in Zhao, Watson and Chen (2018)’s study indicated that the mean score of a preceptor’s role was higher for those who had undertaken preceptor training than those who had not undertaking training. Furthermore, Ferreira, Dantas and Valente (2018) emphasized that continuing education was imperative for a nurse’s professional training as it determined a nurse’s responsibility and commitment to the education and training of a further professional generation. Furthermore, the Nurse Registration Programmes Standards and Requirements (NMBI, 2016, p. 127) requires that

“Preceptors/registered nurses, who support students, have completed a teaching and assessing course approved by the NMBI to enable them support, guide and assess students’ learning and competence development”.

However, O'Brien, et al. (2014) discovered that there was no difference in a preceptor's perceived role between nurse preceptors with and without preceptor preparation. Only one study reported that a "*preceptor education course*" was the least important of all 24 preceptor responsibilities (Smith, Swain and Penprase 2011). For the preceptors who reported not undertaking formal preceptor training or preparation, the literature proposed that they found it difficult to get an opportunity to attend preceptor training (Chan, et al., 2019), which Murphy (2015) contributed to time constraints. The literature therefore supports the findings of this study as preceptor training had a positive impact on a preceptor's role.

Years of Work Experience

This study found that respondents had a higher perception of their role of a preceptor that corresponds with their increased years of work experience, however, while this was clinically significant, it was not statistically significant. Both Chigavazira, et al. (2018) and Tuomikoski, et al. (2018) reported that a preceptor's years of work experience had no significant impact on their perceived role as a preceptor. Rogan (2009) discovered that preceptors who had 10 years and less work experience ranked their preceptor role and responsibilities differently from those who had over 10 years of work experience.

Years of Preceptorship Experience

This study found that respondents had a higher perception of their role of a preceptor that corresponds with their increased years of preceptorship experience, however, while this was clinically significant, it was not statistically significant. Only the nurse

preceptors in Carlson, Wann-Hansson and Pilhammar (2008)'s qualitative study reported that previous preceptoring experience had a positive impact on their role performance as a preceptor.

Age Group

This study found that respondents had a higher perception of their role of a preceptor that corresponds with their increased age, however, while this was clinically significant, it was not statistically significant. This is supported by O'Brien, et al. (2014) and Tuomikoski, et al. (2018) who found that a preceptor's perceived role was not influenced by their age.

Education Level

This study found that most of the preceptors had a Degree level of nurse education. It also found that education levels for those with Diplomas, Degrees, and Master's Degrees had no significant impact on a preceptor's perceived role. The literature reflects the fact that the most common level of nurse education is a Degree (Rogan, 2009; Hsu, et al., 2014; O'Brien, et al., 2014). O'Brien, et al. (2014)'s study also found that a preceptor's role was not influenced by their educational level.

Work Area

This study found that most of the preceptors worked in Acute hospital settings. The differences in how they perceived their preceptor role according to the health care settings they worked in was clinically and statistically significant ($p = .002$).

The literature supports these findings. Heffernan, et al. (2008) reported that preceptors in mental health nursing ranked much higher in the domains of “*demonstration of preceptor characteristics*”, “*specific knowledge demonstrated by preceptors*” and “*specific skills demonstrated by preceptors*” than preceptors in general nursing. Rogan (2009) discovered that nurse preceptors from three health care settings, medical-surgical, postpartum, and labour and delivery room, had different opinions on what were the essential preceptor role and responsibilities. Rylance, et al. (2017, p. 407) reported that “*keep them up-to-date with their own knowledge and also facilitated practice reflection*” was perceived to be a preceptor’s responsibility by mental health nurses, general nurses, and intellectual disability nurses, but not by paediatric nurses. Murphy (2015) confirmed there was a difference in a preceptor’s perception of their role depending on the health care settings they work in. The working environment of their health care settings might contribute to this, which included the elements of time, management, training, staff, CPCs and link Lecturers (Murphy, 2015). This is also supported by a variety of literature (Nunez, et al., 2017; Rylance, et al., 2017; Anderson, Moxham and Broadbent, 2018; Ferreira, Dantas and Valente, 2018).

However, one study reported contrary findings. O’Brien, et al. (2014) identified that there was no difference in a preceptor’s perception of their role according to their

primary specialities, which includes medical, surgical, midwifery, and rehab/disability. Further, there was no difference in a preceptor's perception of their role between those working in rural settings and metropolitan facilities (O'Brien, et al., 2014).

Employer

The findings of this study indicated that most of the preceptors worked in the Public Sector. The respondents employed in the Private Sector had a higher perception of their role of a preceptor than those employed in the Public Sector, however, this was not statistically significant. There was a statistical significance and a strong correlation of both groups' ranking of a preceptor's responsibilities ($p < .01$). Unfortunately, no literature was found that identified a difference in a preceptor's perception of their role and responsibilities according to their employer.

Chapter Six – Conclusion

Introduction

The conclusion of this research study is presented in this chapter.

6.1 Significant Findings of this Research Study

The background to this research highlighted that there was no agreement of the role and the responsibilities of a preceptor. Therefore, this dichotomy in how the role and responsibilities is perceived remained a constant challenge for nurse preceptors and student nurses.

This research study bridges the gap of what was not addressed or explored in the literature. A review of the literature sourced no study conducted in Ireland that examined preceptors' perceptions of their role and responsibilities using a quantitative approach. A review of the literature sourced no study conducted in a setting outside of acute hospitals in Ireland. Furthermore, the relationship between preceptors' socio-demographic variables and their role and responsibilities of a preceptor had never been explored in Ireland, and was only examined in a limited number of research studies outside of Ireland (n=4).

In Chapter 2 of this research study, a review of the empirical literature on the role and responsibilities were presented. Overall, nurse preceptors strongly agreed with their role and responsibilities as a preceptor. However, nurse preceptors prioritized their role

and responsibilities differently, and they had both positive and negative perceptions of their implementation of a preceptor's role and responsibilities. This demonstrated that there was no consensus among nurse preceptors' samples as regards what constitutes the role and responsibilities of a preceptor.

In Chapter 3 of the research study, a detailed description of the research methodology was presented. The aim, objectives and hypotheses were outlined. A correlational, quantitative descriptive design was applied using the modified PRRA (Omer, Suliman and Moola, 2016) to investigate nurse preceptors' perceptions of their role and responsibilities in the South West of Ireland. Details of data collection and analysis procedures were explained.

The findings in Chapter 4 support the premise that there is a relationship between a preceptor's socio-demographic variables and their perceived role and responsibilities as a preceptor. The majority of the respondents were female who had completed a formal preceptor training programme, were aged 49 years and under, had a Degree level of nurse education, worked in the Acute hospital settings, and were employed in the Public Sector. The findings concluded that nurse preceptors in the South West of Ireland had a high perception of their role and responsibilities as a preceptor. Nurse preceptors ranked the four roles of a preceptor from the highest to the lowest mean score as; a Protector, an Evaluator, a Facilitator and an Educator. This indicates that nurse preceptors had a higher perception of their Protector role than their Educator Role. There was a statistically significant relationship between the nurse preceptors' socio-demographic variables "Formal preceptor training/preparation" and "Work area" and their perceived role as a preceptor. There was a statistically significant relationship between the nurse

preceptors' socio-demographic variables "Gender", "Formal Preceptor training/preparation", and "Employer", and their ranking of a preceptor responsibilities.

Chapter 5 discussed the findings and made comparisons with published literature. Nurse preceptors in the South West of Ireland demonstrated a high perception of their role and responsibilities which was in line with the literature. However, how nurse preceptors ranked their role and responsibilities was representative of nurse preceptors' perceptions from an Irish perspective. The results of this research also indicated new findings of a statistically significant relationship between socio-demographic variables and preceptors' perceived role and responsibilities. This is deemed to be valuable as it contributes to the empirical evidence on nurse preceptors.

6.2 Implications of this Study

The modified PRRA (Omer, Suliman and Moola, 2016) is an appropriate tool to examine a preceptor's perceived role and responsibilities. The PRRA has been previously assessed for construct and content validity. The modified PRRA utilized in this research study was validated by a panel of nursing experts and the statistician. The internal consistency of the PRRA was calculated using Cronbach's alpha, resulting an overall value of 0.96. Therefore, the modified PRRA is a valid and reliable tool for examining a preceptor's role and responsibilities.

The findings indicate differences and similarities when comparing the findings of Omer, Suliman and Moola (2016)'s study in Saudi Arabia (n=149) and the findings of this

research study in the South West of Ireland (n=380). This may be due to a difference in the nurse education and nursing culture in which the study was conducted.

Nurse management supports preceptors by facilitating their work with student nurses during clinical practice. This will enhance the nurse preceptors' performance in the role as an educator, which includes assessing nurse students' needs, communicating with students in their progress, providing opportunities to learn, and transferring knowledge.

It is necessary to encourage preceptors to undertake formal preceptor training or preparation with the provision of time and opportunity to do so by the clinical nursing managers and educational institutes. Formal preceptor training plays a significant role in a preceptor's perceived role as a preceptor. The findings of this research study indicate that preceptor training needs to promote a preceptor's role as an Educator. Although preceptors are guided by a student nurse's workbook for facilitating their learning, it is necessary for them to enhance their ability to plan and implement learning objectives based on a student nurse's individual needs. A preceptor needs to develop their own skills and knowledge as an educator. For example, they need to adopt teaching strategies when preceptoring; this includes critical thinking, reflective practice and the ability to critique knowledge constructively. This can also be achieved through formal preceptor training or preparation.

6.3 Recommendations for Further Study

Although the learning objectives are met in this research study, the findings of this research study raise the question of why some preceptor roles and responsibilities are

ranked lower than others. Therefore, it is important to conduct a qualitative study to explore the reasons for such through semi-structured focus group interviews.

To further investigate why preceptors' perception of their role and responsibilities are ranked differently across health care settings through a qualitative study using semi-structured focus group interviews.

To undertake a national evaluation of the Preceptor programmes from the perspective of key stakeholders, i.e. student nurses and preceptors, in order to provide programmes that meet the aims of the stakeholder.

6.4 Limitations of the Study

Boswell and Cannon (2014) point out that every study has its limitations. In this research study three limitations were identified.

Although the sample size (n=380) is satisfactory, the generalizability of the study may be limited as a result of only including nurse preceptors in the South West of Ireland attached to only one institution. Therefore, applying the modified PRRA to health care services in other regions of Ireland is recommended.

The convenience sample, which was utilized for data collection in this research study, may hinder the generalizability of the findings to other groups (Boswell and Cannon, 2014). Parahoo (2014) explains that convenience sampling is a self-selected approach

allowing people to take part in a study voluntarily, therefore, validity of the data may become questionable.

The questionnaire distributed was of a double-sided design in a booklet format. This design led to 8 questionnaires being returned with missing data as the respondents failed to complete the reverse side of the questionnaire. Therefore, a questionnaire with a double-sided design should not be adopted in the future to minimize the possibility of questionnaires being returned with missing data.

Conclusion

This chapter draws a conclusion of this research study. It explains the rationales of why this research was conducted in light of the literature reviewed. This was followed by the presentation of a summary of the main findings of each chapter. The registered nurses and midwives in the South West of Ireland reported a high perception of their role and responsibilities as a preceptor. Findings reported a statistically significant relationship between the respondents' perceived role and socio-demographic variables of "Formal preceptor training/preparation" and "Work Area". Therefore it is important that formal preceptor training continues to be supported by the employer and implemented for all registered nurses and midwives to enhance their overall understanding of a preceptor's role and responsibilities. The provision of specific knowledge and skills required for preceptoring in the specific 'work area' needs to be included as a component of preceptorship education. These findings will inform the Nursing and Midwifery Board of Ireland in developing a national guideline to prepare preceptors for their role and responsibilities. Preceptor programmes should be developed based on these guidelines

to enhance understanding of the role and responsibilities of a preceptor. Notably, the study found that the modified PRRA was a reliable and valid tool for examining a preceptor's role and responsibilities. The new findings that emerged from this research study will contribute to the empirical evidence regarding nurse preceptors' role and responsibilities. Although the aim and objectives of this research study are met, some questions are raised from the findings of this study, therefore further studies are recommended to answer these questions. Finally, limitations of this research study are illustrated in this chapter.

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Appendices

Appendix A Search Word Strategy

Topic	Preceptor's perception of their role and responsibilities when preceptoring undergraduate nursing students.	
Search strategy	P	Nurse preceptor OR Staff Nurse OR Registered Nurse OR Professional Nurse OR Nursing Mentor OR Clinical Supervisor
		AND
	P	Preceptorship OR Mentorship OR Preceptor Programme OR Preceptor Training OR Preceptor Preparation OR Education Preparation
		AND
	P	Nursing Student OR Graduate nurse OR New Hire OR Preceptee
		AND
	I	Roles OR Responsibilities OR Functions OR Preceptoring OR Precepting OR clinical learning OR Clinical Practice OR Nursing education OR Clinical teaching
		AND
	C	Perceptions OR Evaluation OR Experience OR Understanding OR Knowledge OR Meaning OR Assessment OR View
O		
Tip	When searching, search each component of the PICO individually (combing synonyms with "OR") and then combine the relevant aspect of the PICO using "AND"	
Inclusion criteria	Years between 2000 and 2018, English language, Full text	

Appendix B Search Strategy and Results

Resource/ Database		Most relevant MeSH/Subject Headings & Search strategies	Number of Hits/ Number of hits with inclusion criteria (years, English and full text)
CINAHL (ITT)		S1 Nurse preceptor OR Staff Nurse OR Registered Nurse OR Professional Nurse OR Nursing Mentor OR Clinical Supervisor	141,145/39,307
		S2 Preceptorship OR Mentorship OR Preceptor Programme OR Preceptor Training OR Preceptor Preparation OR Education Preparation	26,375/3891
		S3 Nursing Student OR Graduate nurse OR New Hire OR Preceptee	64,589/15,689
		S4 Roles OR Responsibilities OR Functions OR Preceptoring OR Precepting OR clinical learning OR Clinical Practice OR Nursing education OR Clinical teaching	701,074/183,465
		S5 = Perceptions OR Evaluation OR Experience OR Understanding OR Knowledge OR Meaning OR Assessment OR View	1,551,324/413,886
		S6 = S1 and S5 and S6	35,491/7245
		S7 = S1 and S3 and S4 and S5	7,894/1370
		S8= S1 and S2 and S3 and S4 and S5	1,937/355

Appendix C Quantitative Research Studies (n=9)

Instrument	Author	Sample	Domains	Items	Psychometric indices
The Preparation of Nurses Who Precept BSN students (Alspach, 2005)	Rogan (2009)	N=75	Essential Useful Not needed	33 items	Nil
Nursing Times Survey online (Gainbury 2010)	Mead, Hopkins and Wilson (2011)	N=96	Yes,no Yes, no, unsure A 5-point Likert scale (Never, rare, occasionally, often and all the time).	9 questions	Nil
Characteristics of Effective Clinical Instructors (Katz, 1984)	Smith, Swan and Penprase (2011)	N=95	5-point Likert scale Level of importance	24 items	Test-retest procedure 0.66 mean interrater reliability coefficient
Clinical Teaching Competence Inventory (CTCI) Based on Sonthisombat's model (2008)	Hsu et al. (2014)	N=389	5-point Likert scale level of improvement	31 items 4 themes	Exploratory factor analysis (Principal axis factoring extraction method) Cronbach's alpha 0.82-0.87
Clinical Preceptor Experience Evaluation Tool (CPEET) by O'Brien and Bremmer (2008)	O'Brien, et al. (2014)	N=337	7-point Likert scale Level of agreement	39 items 4 subthemes 17 items in role domain	Construct Content Validated Internal consistency value for reliability
Preceptor Roles and Responsibilities (Boyer, 2008)	Omer, Suliman and Moola (2016)	N=149	4-point Likert scale Importance scale Frequency to attendance scale	4 roles 43 responsibilities	Content Construct Validated Internal consistency Cronbach's alpha
Clinical Self-Assessment Tool (CSAT) (Health Workforce Australia, 2014)	Chigavazira, et al. (2018)	N=229	5-point Likert scale	3 factors 30 items knowledge 30 items skills	Content validity Exploratory factor analysis Internal consistency Cronbach's alpha
Mentors' Competence Instrument (Tuomikoski, et al., 2018a)	Tuomikoski, et al. (2018b)	N=576	4-point Likert scale	63 items 10 subthemes	Content validity Construct validity EFA Internal consistency Cronbach's alpha
The Mentors' Behavior Scale (MBS)	Zhao, Watson and Chen (2018)	N=871	5-point Likert scale	12 items 3 subthemes	Content validity Exploratory factor analysis Internal consistency Cronbach's alpha

The role and responsibilities of the preceptor.

YOUR VOICE IS IMPORTANT

My name is Jia O’Connell and I am undertaking a Masters in Nursing at the Institute of Technology Tralee, under the supervision of Dr. Catrina Heffernan and Dr. Elizabeth Heffernan. I am very interested in getting your views on the role and responsibilities of the preceptor. Please read the information leaflet which has more details about this study.

**Please read the information leaflet overleaf
before completing the questionnaire**

Information leaflet

Dear Registered Nurse/Midwife,

The aim of the study:

The aim of this descriptive study is to investigate preceptor's perception of the role and responsibilities of the preceptor.

Rationale:

As a preceptor, you play a significant role in helping nursing students achieving clinical competence in practice. I would like to hear your voice and to know what you perceive as your role and responsibilities. I would really appreciate if you could please give some of your time to complete this questionnaire. This questionnaire is confidential and anonymous.

Method/Data collection:

The attached questionnaire contains 2 sections which I am asking you to complete please.
Section 1: Demographic details about yourself such as age, gender, status, etc.
Section 2: 43-item instrument that measures your perception of your role and responsibilities.

Who can participate in this study?

Any registered nurse/midwife preceptor who has completed a preceptorship preparation programme and works in a clinical site linked to Institute of Technology Tralee (ITT) can complete the questionnaire.

What are the benefits for Participants?

In completion of this questionnaire, your opinion regarding a preceptor's role and responsibilities will be heard. This will influence the development of a national guideline on

a preceptor's role and responsibilities. It will, in turn, benefit yourself and other nursing preceptors in clarifying the role and responsibilities when precepting undergraduate nursing students.

What are the risks for Participants?

The risks if any are considered minimal and I want to reassure you that this questionnaire is anonymous (nurses cannot be identified) and for research purposes only. Participation in this study is on a voluntary basis and there will be no inducements or implications in participating or not participating. It is important for participants to know that I am not seeking written consent and that completion of the questionnaire will be considered as implying consent.

How long will it take to complete the questionnaire?

Completion of the questionnaire should take no longer than 10 minutes approximately.

How will I be able to access the findings of the study?

Please contact me at any time for a report or summary of the findings.

What do I do now?

If, after reading the information, you are willing to participate please complete the attached questionnaire and return it to the research collection box in the ward.

What if I make an error when completing the questions and/or I wish to change my choice?

If you make an error, please put a line through the error and initial. Continue as per instructions.

If you require any other information, please do not hesitate to contact me via telephone or email anytime.

Thank you for taking the time to read this information and I hope that you can help me with this study.

Yours sincerely,
Jia O' Connell



Complete the questions in the pages that follow and submit to: The 'RESEARCH COLLECTION BOX' in your ward/unit.

Section 1

In this section please answer the following questions about yourself and your job. Please complete this section by ticking the correct box.

1. Gender: Female Male

2. Formal preceptor training/preparation Yes No

3. Years of work experience: _____ years

4. Years of preceptorship experience: _____ years

5. Age group:

- Less than 23 years
- 23-25 years
- 26-29 years
- 30-39 years
- 40-49 years
- 50 years and over

7. Work Area:

- Acute (hospital sector)
- Continuing Care (community, rehabilitation)
- Maternity Services
- Mental Health Services
- Primary Care (e.g. GP practice, public health nursing)

6. Education level:

- Certificate
- Diploma
- Degree
- Master
- PhD

8. Employer:

- Health Service Executive(HSE)
- Private Sector

Section 2

In this section there are 43 statements regarding a preceptor's role and responsibilities. Please complete this section by reading each one and circling the number that best reflects your opinion on it.

Protector: protect the safety of both patient and students adverse outcomes	Strongly Disagree	Disagree	Neural	Agree	Strongly Agree
1.Protects patients from healthcare errors	1	2	3	4	5
2.Protects students from making errors that might threaten self/others	1	2	3	4	5
3.Protects students from adverse behaviours of others, e.g. patient, health care workers	1	2	3	4	5
4.Ensures safe learning environment for students to learn and practice in	1	2	3	4	5
5.Considers hospital policies and procedures when delegating	1	2	3	4	5
6.Supports developing skills while ensuring safe practice	1	2	3	4	5
7.Protects nursing profession/registration	1	2	3	4	5
8.Ensures adherence to hospital policies and procedures (standard of practice)	1	2	3	4	5
9.Acts as advocate for students	1	2	3	4	5

Evaluator: gather evidence of safe and effective nursing practice at the level of competence	Strongly Disagree	Disagree	Neural	Agree	Strongly Agree
10.Collects evidence of competence level of students through observation of clinical practice	1	2	3	4	5
11.Evaluates adherence to policies and procedures (standard of practice)	1	2	3	4	5
12.Recognizes competence limitation in self	1	2	3	4	5
13.Discusses performance issues/concerns with Clinical Nursing Manager(CNM)/ Clinical Practice Coordinator (CPC)/Link lecturer	1	2	3	4	5
14.Documents observation of competence, or lack thereof	1	2	3	4	5
15.Identifies delegation and/or accountability concerns	1	2	3	4	5
16.Works within hospital policies and procedures as an evaluator	1	2	3	4	5

Educator: provides instruction and support	Strongly Disagree	Disagree	Neural	Agree	Strongly Agree
17.Assesses learning needs	1	2	3	4	5
18.Plans learning activities collaboratively	1	2	3	4	5
19.Implements an effective learning plan	1	2	3	4	5
20.Communicates with students in their progression	1	2	3	4	5
21.Provides opportunities for learning	1	2	3	4	5
22.Customizes a clinical coaching plan for specific learning needs	1	2	3	4	5
23.Develops the competence of students	1	2	3	4	5
24.Develops critical thinking skills in students	1	2	3	4	5
25.Constructively critiques knowledge	1	2	3	4	5
26.Ensures progression of student as per Benner model, which is "Novice, Advanced beginner, competent, proficient, Expert"	1	2	3	4	5

Facilitator: act as role model, socializer and team leader	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
27.Acts as example for professional role performance	1	2	3	4	5
28.Serves as an exemplar of “how to access to evidence”	1	2	3	4	5
29.Adhere to standard of practice	1	2	3	4	5
30.Models professional behaviour	1	2	3	4	5
31.Models clinical judgment	1	2	3	4	5
32.Recognizes own limitations	1	2	3	4	5
33.Role-models self-care and resilience as a nursing profession	1	2	3	4	5
34.Gives constructive feedback	1	2	3	4	5
35.Resolves conflicts/issues as they arise	1	2	3	4	5
36.Helps students settle into new environment	1	2	3	4	5
37.Introduces students to team and other staff	1	2	3	4	5
38.Understand/support social needs of students	1	2	3	4	5
39.Supports adjustment to all the new elements that students face within their transition	1	2	3	4	5
40.Foster integration into work culture	1	2	3	4	5
41.Establishes communication between students, CNM, CPC and Link lecturer	1	2	3	4	5
42.Works to ensure colleague support for students	1	2	3	4	5
43.Ensures support of colleagues for socialization and orientation process	1	2	3	4	5

Many thanks for completing the questionnaire.

**Before you submit this questionnaire,
Please make sure that you have completed the following:**

1. Section 1 (Questions 1 - 8)

2. Section 2 (Questions 1 - 43)

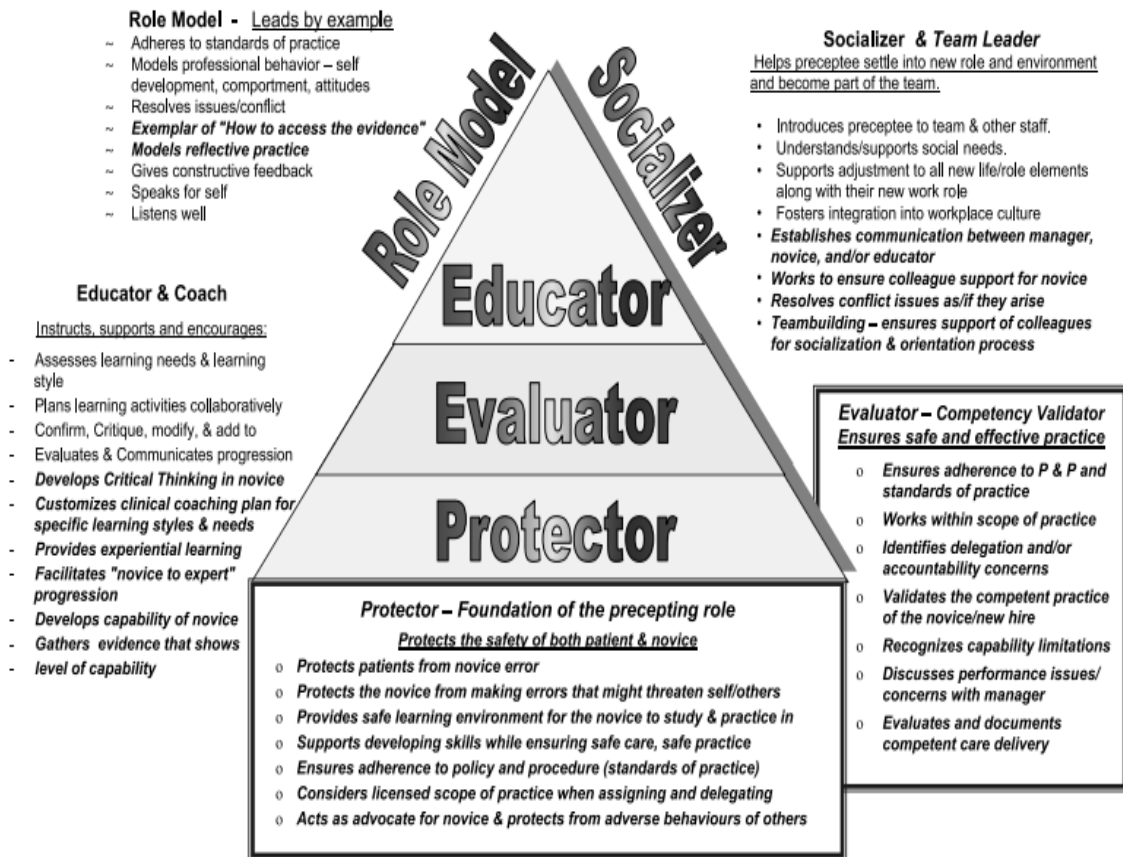
Submit to the 'RESEARCH COLLECTION BOX' in your ward/unit.

Thank you very much for taking the time to complete and submit this questionnaire.



Jia O'Connell


Appendix E A Practical Model of Preceptor Roles and Responsibilities by Boyer S.


(2008)



Appendix F Permission Granted for Using of the PRRA Tool


Reply to All Forward Delete Spam   Actions

Read More 

 **Re: Kindly request the questionnaire regarding your research study** 5 December, 2018 09:40

From: Wafika suliman

To: Jia OConnell

 Roles and Respo...rse Preceptors.pdf (230.3 KB) [Preview](#) | [Download](#) | [Briefcase](#) | [Remove](#)

Dear Jia,

I am writing to congratulate you on being ambitious in pursuing your post-graduate education. You have my permission to use the tool which I have sent to you in my previous e-mail. Attached the published article titled "Roles and responsibilities of nurse preceptors: Perception of preceptors and preceptees" based upon your request.

Regards,

Wafika Suliman/Thaher BSN, MSN, PhD
Professor: Nursing Management
Dean: Faculty of Science, and Faculty of Allied Medical Sciences
Isra University, Amman-Jordan
Office Number: 2681
Mobile #: +796454955

Evaluation of the Pilot Study

PLEASE READ AND ANSWER ALL THE QUESTIONS (BELOW)

Please complete all the questions to assist in evaluating the Pilot Study:

1. **Please record the time taken below to complete the questionnaire:**

Minutes	Seconds

2. **Is the information (sheet) for participant(s) regarding the study? (Please circle):**

(a) Is it clear (Do you understand it)? Yes No

If **No**, please make comments below:

(b) Is it relevant? Yes No

If **No**, please make comments below:

(c) Is there any further information required? Yes No

If **Yes**, please make suggestions below:

3. **In the main questionnaire in relation to the headings? (Please circle):**

(a) Are all the headings clear (Do you understand them)? Yes

No

If **No**, please note the page number(s) of the heading(s) and make comments below:

(b) Are all the headings relevant? Yes

No

If **No**, please note the page number(s) of the heading(s) and make comments below:

(c) Did any of the headings require 2nd/ 3rd readings? Yes

No

If **Yes**, please note the page number(s) of the heading(s) and make comments below:

(d) Are any of the headings long/ difficult Yes

No

If **Yes**, please note the page number(s) of the heading(s) and make comments below:

(e) Are any of the headings ambiguous or have a double meaning? Yes

No

If **Yes**, please note the page number(s) of the heading(s) and make comments below:

(f) Did any of the headings cause you irritation/ emotional distress (deal with sensitive issues) / confusion? Yes

No

If **Yes**, please note the page number(s) of the heading(s) and make comments below:

(g) Are there any potential for bias in the headings? Yes

No

If **Yes**, please note the page number(s) of the heading(s) and make comments below:

4. In the main questionnaire in relations to the statements? (Please circle):

(a) Are all the statements clear (Do you understand them)? Yes

No

If **No**, please note the statement(s) and make comments below:

(b) Are all the statements relevant? Yes

No

If **No**, please note the statement(s) and make comments below:

(c) Did any of the statements requiring 2nd/ 3rd readings? Yes

No

If **Yes**, please note the statement(s) and make comments below:

(d) Are any of the statements long/ difficult? Yes

No

If **Yes**, please note the statement(s) and make comments below:

(e) Are any of the statements ambiguous or have a double meaning? Yes

No

If **Yes**, please note the statement(s) and make comments below:

**(f) Did any of the statements cause you irritation/ emotional distress
(deal with sensitive issues) / confusion?** Yes

No

If **Yes**, please note the statement(s) and make comments below:

(g) Are the rating scales for each statement appropriate? Yes

No

If **No**, please note the statement(s) and make comments below:

(h) Are there any potential for bias in the statements? Yes

No

If **Yes**, please note the statement(s) and make comments:

5. In relation to the questionnaire as a whole? (Please circle):

(a) Did the format of the questionnaire seem appropriate? Yes

No

If **No**, please make comments below:

(b) **Did the order of the statements in the questionnaire seem logical?** Yes

No

If **No**, please make comments below:

(c) **Did the questionnaire seem to be complex?** Yes

No

If **Yes**, please make comments below:

(d) **Did the questionnaire seem to be repetitive?** Yes

No

If **Yes**, please make comments below:

(e) **Did the questionnaire seem to be long?** Yes

No

If **Yes**, please make comments below:

(f) **Was the questionnaire easy to complete?** Yes

No

If **No**, please make comments below:

(g) **Do you think that there should be any additional statements added or removed from the questionnaire?** Yes

No

If **Yes**, please note the statement(s) and make comments below:

(h) **Do you think the questionnaire has merit?** Yes

No

If **No**, please make comments below:

(i) **Would you recommend this questionnaire to other participants?** Yes

No

If **No**, please make comments below:

(j) **Do you like the colour design of the questionnaire?** Yes

No

If **No**, Please make comments below:

6. Are there any other comments or suggestions you would like to make? Yes

No

If **Yes**, please make comments or suggestions below:

Appendix H Sample Size Determinations

The screenshot shows the G*Power 3.1.9.4 software interface. The window title is "G*Power 3.1.9.4". The menu bar includes "File", "Edit", "View", "Tests", "Calculator", and "Help".

Test family: t tests

Statistical test: Means: Difference between two independent means (two groups)

Type of power analysis: A priori: Compute required sample size - given α , power, and effect size

Input Parameters:

Determine =>	Tail(s)	Two
	Effect size d	0.4
	α err prob	0.05
	Power ($1 - \beta$ err prob)	0.8
	Allocation ratio N2/N1	1

Output Parameters:

Noncentrality parameter δ	2.8284271
Critical t	1.9720175
Df	198
Sample size group 1	100
Sample size group 2	100
Total sample size	200
Actual power	0.8036475

Buttons at the bottom: "X-Y plot for a range of values" and "Calculate".

Appendix I Ethical Approval from the Institute Research Ethics Committee

Institiúid Teicneolaíochta Trá Lí

INSTITUTE OF TECHNOLOGY TRALEE



Institute Research Ethics Committee (IREC)

10/05/2019

Dr Catrina Heffernan
Department of Nursing and Healthcare Sciences
Institute of Technology, Tralee, Co. Kerry

Dr Heffernan,

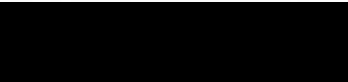

Re: The Preceptors' Perceptions of their Role and Responsibilities

Thank you for your application for ethical approval in respect of the above project. I also note additional correspondence confirming access approval from the relevant Directors of Nursing within HSE sites, and their acceptance of ethical review by the Institute. The project has been reviewed in accordance with the Institute's Research Ethics Policy. I can confirm your project has been granted ethical approval as a Minimal Risk project subject to the following conditions of approval:

1. There is an opportunity for participants to give explicit consent in the opening sections of the questionnaire.
2. The research is undertaken in accordance with Institute's Research Ethics Policy.
3. If there is any planned substantive change in the research protocol, this detail is submitted to the Research Ethics Committee for review in advance.
4. If any ethical difficulties arise in the course of your project these are reported to the Research Ethics Committee.

I wish you well with your research.

Sincerely,


Dr Anne-Marie Greaney
Chair of Institute Research Ethics Committee (IREC)
Institute of Technology, Tralee
Phone: 
e-mail: irec@ittralee.ie

cc Dr Jackie Gallagher (IREC)

15th April 2019

Dr Catrina Heffernan
Department of Nursing and Healthcare Sciences
Institute of Technology Tralee
Tralee
Co. Kerry

**Ref: Preceptors' Perceptions of their Role and Responsibilities
when Preceptoring Undergraduate BSc Student Nurses.**

Dear Dr Heffernan

Thank you for your research application for the above mentioned project. The Chairperson of the Subcommittee of the Clinical Ethics Committee of the Bon Secours Health System approves of your study subject to permission from the Hospital Management.

The Subcommittee of the Clinical Ethics Committee notes that this study already has ethical approval from the Research Ethics Committee of the Institute of Technology Tralee.

The Subcommittee of the Clinical Ethics Committee of the Bon Secours Health System has reviewed and approved the following documents:

- Bon Secours Ethics Application Form
- Participant Information Leaflet
- Participant Consent Form
- Data Protection Impact Assessment Form
- CV of Dr Catrina Heffernan
- Insurance Indemnity
- Ethical Approval from the Institute of Technology Tralee
- Questionnaire

The Subcommittee of the Clinical Ethics Committee of the Bon Secours Health System notes that the co-investigators in this study will be:

- Ms Jia O' Connell -- Registered nurse
- Dr Elizabeth Heffernan -- Director of Nurse Education

On the 25th May 2018 GDPR come into force throughout the European Union. It has a significant impact on how research is conducted. The Irish Government's Data Protection Act (2018) was enacted on the 24th of May 2018 and the Department of Health on the 8th August 2018 issued Regulations specifically focused on the conducting of Research.

It is important to note that the Subcommittee of the Clinical Ethics Committee of the Bon Secours Health System has only reviewed your application from an ethical perspective.

Compliance with Data Protection Legislation is the responsibility of the PI Controller/Data Controllers and DPO.

The Subcommittee of the Clinical Ethics Committee of the Bon Secours Health System also requests that you seek its permission for the publication of any results, which directly refer to the Bon Secours Health System.

The Subcommittee of the Clinical Ethics Committee wishes you well in your research and hopes that it will contribute to patient centred care.

Yours sincerely



Prof David Smith
Ethics Consultant

Sr Mary Leamy
Chairperson

c.c.	Mr T.J. O'Connor	--	Hospital Manager
	Ms Siobhan Dowling	--	Director of Nursing
	Ms Breda Doyle	--	Quality and Risk Manager
	Mr Owen McCarthy	--	Mission Coordinator

Appendix K Descriptive Statistics on 43 Statements that represent a Preceptor's Responsibilities

Descriptive Statistics on 43 Statements that represent a preceptor's responsibilities					
	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
6 Supports developing skills while ensuring safe practice	380	4.48	.569	-.972	.125
27 Act as example for professional role performance	380	4.42	.600	-.640	.125
30 Models professional behaviour	380	4.41	.595	-.824	.125
29 Adhere to standard of practice	380	4.39	.587	-.684	.125
4 Ensures safe learning environment for students to learn and practice in	380	4.39	.709	-1.348	.125
32 Recognizes own limitations	380	4.38	.590	-.666	.125
2 Protects students from making errors that might threaten self/others	380	4.37	.753	-1.402	.125
20 Communicates with students in their progression	380	4.36	.576	-.398	.125
36 Helps students settle into new environment	380	4.36	.677	-1.100	.125
31 Models clinical judgement	380	4.35	.647	-.899	.125
21 Provides opportunities for learning	380	4.34	.627	-.793	.125
37 Introduces students to team and other staff	380	4.33	.763	-1.543	.125
34 Gives constructive feedback	380	4.31	.570	-.282	.125
9 Acts as advocate for students	380	4.30	.779	-1.090	.125
16 Works within hospital policies and procedures as an evaluator	380	4.30	.604	-.687	.125
5 Considers hospital policies and procedures when delegating	380	4.30	.733	-.980	.125
8 Ensures adherence to hospital policies and procedures (standard of practice)	380	4.29	.768	-.997	.125
13 Discusses performance issues/concerns with Clinical Nursing Manager (CNM)/Clinical Practice Coordinator (CPC)/Link lecturer	380	4.25	.699	-1.039	.125
7 Protects nursing profession/registration	380	4.24	.877	-1.270	.125
33 Role-models self-care and resilience as a nursing professional	380	4.23	.679	-.873	.125
17 Assesses learning needs	380	4.22	.674	-.912	.125

10 Collects evidence of competence level of students through observation of clinical practice	380	4.21	.669	-.914	.125
1 Protects patients from health care errors	380	4.21	.823	-1.059	.125
12 Recognizes competence limitation in self	380	4.20	.687	-.772	.125
23 Develops the competence of students	380	4.17	.634	-.401	.125
26 Ensures progression of student as per Competence Assessment workbooks (Year 1 to 4)	380	4.17	.735	-1.033	.125
14 Documents observation of competence, or lack thereof	380	4.16	.730	-.876	.125
15 Identifies delegation and/or accountability concerns	380	4.16	.677	-.917	.125
35 Resolves conflicts/issues as they arise	380	4.14	.672	-.599	.125
11 Evaluates adherence to policies and procedures (standard of practice)	380	4.14	.710	-.794	.125
42 Works to ensure colleague support for students	380	4.10	.688	-.666	.125
24 Develops critical thinking skills in students	380	4.08	.733	-.851	.125
18 Plans learning activities collaboratively	380	4.06	.773	-.936	.125
3 Protects students from adverse behaviours of others, e.g. patient, health care workers	380	4.06	.891	-.879	.125
39 Supports adjustment to all the new elements that students face within their transition	380	4.05	.741	-.784	.125
43 Ensures support of colleagues for socialization and orientation process	380	4.04	.730	-.845	.125
25 Constructively critiques knowledge	380	4.03	.722	-.639	.125
40 Foster integration into work culture	380	4.02	.726	-.855	.125
19 Implements an effective learning plan	380	4.01	.807	-.871	.125
28 Serves as an exemplar of "how to access evidence"	380	3.97	.754	-.504	.125
41 Establish communication between students, CNM, CPC and link lecturer	380	3.96	.862	-.948	.125
38 Understand/support social need of students for example mature students with family commitments	380	3.90	.982	-.896	.125
22 Customizes a clinical coaching plan for specific learning needs	380	3.79	.917	-.485	.125