WHAT DO CRITICAL CARE NURSES PERCEIVE AS BARRIERS TO MENTORSHIP WITHIN THE CRITICAL CARE ENVIRONMENT?

By

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ABSTRACT

Objective: The aim of this study is to establish what nurses working within a critical care environment at a tertiary level hospital in New Zealand perceive as barriers to mentorship.

Background: Traditionally the critical care specialty has enjoyed the luxury of employing nurses with a depth of experience in critical care. The growth of this specialty combined with a nursing shortage impacting on all areas of nursing has seen the employment of inexperienced nurses into the critical care environment. The literature discusses the importance of mentorship to nursing as a tool in creating supportive environments for professional and personal growth, as well as assisting the novice nurse move towards expertise within their chosen field. A literature review undertaken revealed a number of perceived barriers to mentorship in acute environments. However there is a paucity of research seeking what critical care nurses perceive to be barriers to mentorship within the critical care environment at a local level, within New Zealand.

Design: This thesis seeks to describe the perceptions and experiences of a sample of nurses working in a critical care tertiary referral center in New Zealand engaged in mentorship of new staff and/or student nurses. This descriptive study utilizing a survey method seeks to answer the research question; ‘what do critical care nurses perceive as barriers to mentorship within the critical care environment’?

Results: Descriptive statistical and content data analysis has identified key barriers in four main areas which are ‘the impact that clinical workload has on the provision of mentorship’, the barrier of what is perceived to be appropriate ‘acknowledgement of the mentorship role’, the barrier that ‘assessment of new and student nurses’ presents to mentors, as well as the ‘training and knowledge opportunities for mentors’ in relation to mentorship within the clinical setting.

Conclusions: Valuable insights have been gained through this study, allowing recommendations to be made for the future support of nurses undertaking the role of mentorship within the critical care environment. Supporting nurses balancing an often complex clinical workload with mentoring responsibilities is required to promote and support positive mentoring relationships to occur. Acknowledgement
of the mentorship role undertaken by nurses within the area was perceived to be important to participants. Further clarification of the ‘tangible’ acknowledgement available for nurse mentors from the organization is recommended to contribute to nurses feeling acknowledged for the role they undertake. Understanding and completing assessment requirements for both the student and novice nurse in critical care was found to be the most difficult aspect of mentorship for participants. A lack of clarity in terminology between such roles as mentor and preceptor appears to contribute to this finding. Robust training and support is required for nurses mentoring students within the clinical setting, particularly in regards to assessment requirements. This training and support is also required for nurses expected to undertake skills assessment of the novice nurse within this area. Opportunities for nurse mentors within the area to access training and knowledge must be encouraged and taken up wherever possible.

Relevance to practice: By providing useful data for nursing leaders about barriers to mentorship within the specialty of critical care, support may be given to developing successful mentoring relationships that contribute to nursing expertise. Developing a skilled workforce may increase staff retention and help meet the future challenges within healthcare.

Keywords: Mentorship, barriers, critical care, descriptive survey method.
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CHAPTER ONE: INTRODUCTION AND BACKGROUND

I have been a Registered Nurse for twenty years, and have worked within the specialty of critical care for 15 of these. I have had some wonderful opportunities and very rewarding experiences within my chosen career. I still clearly recall the day I started working in critical care, how nervous I was to be in this new environment, that at the time seemed overwhelming to me. I also recall the nurse that was assigned to work with me in those first few weeks of orientation, her experience, her calmness, and most of all how kind and supportive she was of me as I learned the skills required to care for the critically ill patient. After this initial orientation I was considered ready to ‘work on my own’, and was extremely nervous at this prospect. However I was not alone, as my nurse mentor was working in the bed space next door to me. She had her own patient to care for, but was also there to support me as I provided care for my patient. This support continued as I gained experience and took on new challenges, not only from the nurse who initially orientated me, but also from other nurses that I considered to be experts and looked up to. I count myself as fortunate to have worked alongside nurses who were so willing to share their wealth of knowledge and experience so that I could succeed. As a Nurse Educator I am involved in the support and learning of new and student nurses to the critical care environment. I want the same experiences for those nurses that I had when I was a new nurse to this environment. It is my experience that mentorship within critical care is becoming increasing challenging for nurses to provide, with some of the reasons for this being that the environment of critical care is becoming more complex, with increased patient acuity and the increasing use of technology.

A literature review undertaken has highlighted barriers to mentorship for nurses including, the complexity of the critical care environment, the organizational culture within critical care, the acknowledgement, or remuneration for mentoring, and the time needed. Other barriers of relevance identified were the preparation, support and training opportunities for nurse mentors in the clinical setting, and the support available from training institutions for clinicians who mentor pre-registration students. There appears to be merit in examining this
topic at a local level in order to clarify what is happening for a group of nurses working at a tertiary level critical care unit in New Zealand. It is here that I embarked on my research journey.

This chapter will begin by outlining the purpose of the research, with a brief explanation of the methodology that will be used to answer the research question. The study setting will be described, and background topics that have shaped this research discussed. The researcher’s position and significance of this study will be highlighted, along with an outline of the thesis content.

**The research question**

This thesis seeks to answer the question: What do critical care nurses perceive as barriers to mentorship within the critical care environment?

**Purpose of the research**

The purpose of this study is to identify and describe the perceptions of a sample of critical care nurses working within a tertiary level critical care unit\(^1\) in Christchurch, New Zealand regarding the barriers in providing mentorship to both student and qualified nurses new to critical care. This will entail examining nurses’ experiences of mentorship, and their motivation and confidence to undertake this role. In addition, the barriers that exist for nurses relating to mentorship will be described. The description of such barriers and the factors that contribute to them will allow the researcher to draw conclusions about possible recommendations to overcome or lessen the impact that they have within the critical care environment. Ultimately it is hoped that this research will support nurses being able to deliver effective mentorship within their workplace.

**Methodology**

This study utilizes a descriptive research design method, to answer the research question. The use of a descriptive approach is appropriate for this study as little is known about the topic of enquiry, with the aim being to establish an

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\(^1\) A critical care unit capable of providing comprehensive critical care including complex multisystem life support for an indefinite period.
initial exploration and understanding of the phenomenon (Burns & Grove, 2007; Taylor, Kermode, & Roberts, 2007).

The focus of the method is to solicit attitudinal information, with descriptive information gathered in order to contextualise the data and provide demographic information. This enables an accurate account of the mentorship situation for the nurses in the study setting to be described and new information to be identified in order to facilitate its understanding (Burns & Grove, 2007). Quantitative data will be analysed using descriptive statistics, and the qualitative data obtained from the open-ended questions will be analysed using content analysis. It is anticipated that the use of a mix of closed and open-ended questions will allow for a richer and more informative description of nurses responses.

**Study setting**

The setting for this study is the critical care department at a tertiary level centre in New Zealand. The department employs approximately one hundred registered nurses with a senior nursing team and management structure that includes a unit nurse manager, six full-time equivalent associate clinical nurse managers and two nurse educators. It meets the College of Intensive Care Medicine ([CICM] (2011), minimum standards for intensive care units in regards to the resources required within an Australasian intensive care department providing tertiary services.

Currently the department is undergoing expansion that will see its existing 15 resourced critical care beds increase to 18 in 2012, with a staged expansion to 24 resourced beds over the next two years. The long-term facilities plan at this hospital includes the provision of 48 critical care beds by 2020 to meet the expected population demand for critical care services within the Canterbury region.

With this increase in critical care beds comes an increased requirement for nursing staff to provide a ratio of 1:1 nursing for the critically ill patient and a 2:1 ratio for the patient requiring high dependency care. These numbers are consistent with the position statements on intensive care nurse staffing of both the Australian College of Critical Care Nurses ([ACCCN], 2003), and the Critical Care Nurses Section ([CCNS], 2005). It is estimated that for every additional bed resource, five full-time equivalent
nurses are required. This recruitment is ongoing and within the last 24 months, (January 2010 to January 2012), 49 nurses have been employed in the department. Figure one shows the level of experience of nurses employed over this period.

![Experience of nurses employed graph]

**Figure one:** Number and experience of nurses employed from 1/1/10 to 1/1/12.

The department also provides clinical placement for year three transition to practice students undertaking the local Bachelor of Nursing program. Eight such students have had clinical placements within the unit in the past two years. Other commitments include the support of nurses working outside of the tertiary centre who request access to the department to gain clinical experience in such modalities as ventilation. The department has seen four of these nurses in the past two years who worked alongside a registered nurse in the department for a period of approximately two weeks.

**The role of mentorship in nursing**

Authors have described the concept of mentorship as being derived from Greek mythology, in particular, Homer’s *Odyssey*, where the Greek poet Homer,

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2 A student nurse undertaking their final clinical placement prior to applying to the Nursing Council of New Zealand for registration as a Registered nurse.
wrote about the wise mentor who was assigned to protect the king’s son in his absence. The mentor’s job was both to raise the son, and prepare him for the responsibilities that he would assume (Block, Claffey, Korow, & McCaffrey, 2005; Grossman, 2007; McKinley, 2004). Thus, mentoring as a concept is not new. During the middle ages, mentorship was also practiced in the form of apprenticeships (Block et al., 2005). Although the term mentoring has existed for years in many professions, its definition continues to change and evolve (Ehrich, Tennent, & Hansford, 2002). There has been an increased interest in mentoring as a means of developing various professions over the past 30 years with research conducted on the subject both in nursing and other disciplines. Mentorship has been routinely utilized by the business world and other professions such as medicine, law and academia, to nurture and develop new professionals. Indeed, studies and experience within the business and education arena have greatly influenced the way that nursing has viewed and used mentorship (Grossman, 2007). With the dominant role of nursing staff being clinical, nurses are routinely relied upon to support, supervise and teach both novice and student nurses within the practice setting. This mentorship within nursing is reflective of that within many practice-based professions (Andrews & Wallis, 1999; Wolak, McCann & Madigan, 2009). Therefore mentorship has an important role within nursing practice, and practice development.

Mentoring in nursing can be traced back to Florence Nightingale who was known to have had more than one mentor, and who in turn mentored others (Hurst & Koplin-Baucum, 2003). Nursing theorist Patricia Benner proposed the ‘novice to expert’ theory which asserts that professional development occurs in distinct stages and is best able to progress when the nurse is within a supportive environment that promotes his or her growth (Benner, 1984). This ‘novice to expert’ framework remains in use in many areas of nursing today. Within the past 10 years the literature portrays the importance that mentorship plays in nursing. Mentorship is seen as a reliable tool in creating a supportive environment for nurses, allowing for professional and personal growth, and assisting the novice nurse to move towards expertise within their chosen specialty (Bally, 2007; Block et al., 2005; Duffy, Docherty, Cardnuff, White, Winters, & Greig 2000; Ihlenfeld,
The phenomenon of horizontal violence towards novice nurses within all specialties of nursing has also received attention in the literature, with it often being referred to in terms of ‘nurses eating their young’. This concept describes nurses who destroy new nurses through their lack of support or by verbal abuse (Bally, 2007; Grossman, 2007; McKinley, 2004; Rowe & Sherlock, 2005). Establishing mentoring relationships amongst staff is suggested as a way to foster an environment that is supportive of such novice nurses, allowing them to grow and succeed as experts within the specialty and to retain them within the area (Bally, 2007; Grossman, 2007; Ihlenfeld, 2005; Kanaskie, 2006; McKinley, 2004). A broad definition of how mentoring fits within the nursing profession is provided by Grossman, (2007):

Mentoring in nursing encompasses a guided, nonevaluated experience, formal or informal, assigned over a mutually agreed -on period of time that empowers the mentor and mentee to develop personally and professionally within the auspices of a caring, collaborative, and respectful environment (p.2).

Mentorship in critical care

Within New Zealand the provision of intensive and high dependency care has traditionally been incorporated under the concept of critical care, with critical care nursing defined as the provision of nursing care for patients and their families within critical care, intensive care, a high dependency unit or a combined intensive, high dependency and coronary care unit (CCNS, 2009). It is recognized that due to the increasing complexity of patients within the hospital environment critically ill patients may be seen outside of these areas, however for the purpose of this thesis the terms critical care, critical care specialty and critical care nursing will be taken to fit within the definition provided by the CCNS.

Traditionally the critical care specialty has enjoyed the luxury of a high proportion of experienced nurses. However in today’s environment it is not unusual for nurses commencing employment within acute care environments, including critical
care to have no experience of the specialty. With the current international nursing shortage affecting all areas of nursing, including critical care, difficulty in recruiting experienced nurses has led to the employment of inexperienced nurses into the specialty (Ihlenfeld, 2005; McGrath, 2009). Newly graduated registered nurses are also seen as an option to fill vacancies within this specialty, and pre-registration student nurses may be found gaining experience through placements within the critical care environment. This has created a ‘grow your own’ philosophy and perhaps has put more focus on mentorship as a way of achieving this.

Inexperienced critical care nurses are confronted with a variety of complex situations and conditions, many of which they may be seeing for the first time. These nurses may feel unsure, and it is up to the preceptor to assist new nurses to gain confidence, whilst carefully monitoring their actions (Dracup & Bryan-Brown, 2004). However it is not only within this initial stage when preceptorship or orientation occurs that new nurses require this support. A study by Reising (2002), that explored the early socialization of new critical care nurses found that when these nurses moved through their orientation to a stage when they had less support from their preceptors, they often felt overwhelmed. It is at this point; when the orientation and preceptorship ends that the nurse may feel at their most vulnerable and may be at risk of leaving the critical care area (Ihlenfeld, 2005; Reisling, 2002).

Anecdotal evidence obtained from personal experience within the study setting indicates that the nurse new to critical care appears to take up to nine months to function at a level in which less support is required. This support enabling the novice to carry out the role on a day-to-day basis may take the form of supervision, new skills training, or regular nurse educator input. Even after nine months it is considered that the growth of the novice within the specialty is only just beginning. Although the novices initial weeks within the speciality are commonly referred to as ‘preceptorship’ locally, with the preceptor focusing on the skills and abilities of the new nurse, the element of mentorship is also present. McKinley (2004) describes mentorship as preceptorship that also provides the human connection, in which the relationship formed between the experienced and novice nurse is what allows the transfer of knowledge. From this, one could conclude that preceptorship relationships would be unsuccessful without mentorship also being present. This appears to be the case within
the study setting with an informal mentoring relationship developing within the context of an arranged preceptorship for the purpose of orientation to the area.

It appears that the terms preceptorship and mentorship are used interchangeably within nursing to describe the pairing of the novice or student nurse with the experienced nurse (Firtko, Stewart, & Knox, 2005; Myrick, Caplan, Smitten, & Rusk, 2011). This presents a challenge when studying the barriers to mentorship within this setting and within nursing in general due to the lack of clarity around definitions such as preceptor, mentor, coach, supervisor and registered nurse (RN) buddy. This is not a new problem and has been recognised by many authors who have explored the topic (Andrews & Wallis, 1999; Block et al., 2005; Faron & Poetler, 2007; Firtko et al., 2005, Grossman, 2007; Hall, 1997; Kaviani & Stillwell, 2000; McKinley, 2004; Mills, Francis, & Bonner, 2005; Myrick et al., 2011; Neary, 2000; Walker, Cooke, & McAllister, 2008). Therefore for the purpose of this study, the participants were provided with definitions from Latham, Hogan and Ringl (2008), of the terms preceptor and mentor to assist them in clarifying the terms when reflecting on their experiences (see table one).

**Table 1: Definition of Mentor and Preceptor**

<table>
<thead>
<tr>
<th><strong>Mentor</strong></th>
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<tr>
<td>A mentor is defined as a supportive, facilitative partner who works with a mentee in an evolving learning relationship that is focused on meeting mentee learning goals to foster professional growth. To maximize this relationship, mentors use self-reflection and self-awareness to grow and develop, as well as to model self-directed learning (Latham et al., 2008, p.35).</td>
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<tr>
<th><strong>Preceptor</strong></th>
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<td>A preceptor is defined as a person who demonstrates a high level of knowledge, clinical proficiency, and professionalism, and who serves as a clinical resource to and evaluator of new employees in a clinical care setting, with direct oversight of the preceptees’s clinical care (Latham et al., 2008, p. 35).</td>
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Impact of the global nursing shortage

It is well documented that there is a global shortage of nurses. In the United States, this shortage is expected to increase over the next twenty years as the population continues to grow and as age and medical technologies advance (United States Department of Health and Human Services, 2007). An International Council of Nurses’ [ICN] report (2004), confirmed that the increasing demand for nurses was not being met by the supply in both developed and undeveloped countries. It appears that nursing recruitment and retention are serious issues, and turnover rates, which give a clear indication of retention difficulties, are significant in countries such as the United Kingdom and the United States (ICN, 2005). The Australian Health Workforce Advisory Committee ([AHWAC], 2002), confirms this international shortage listing a shortfall of 537 critical care nurses in Australia in 2002, which it attributes to an aging workforce and a lack of replacement of retiring nurses by younger nurses. This report examined the critical care nursing workforce in Australia, made forecasts through to 2011, with predictions of nursing shortages in specialist areas including critical care. This shortage is likely to be exacerbated by the increasing demand for critical care services in the future, as a result of population growth and aging, as well as an increased throughput of patients in critical care services due to technological advances. The picture in New Zealand is similar with the Department of Labor ([DOL], 2005) reporting a difficulty in filling vacancies for registered nurses. This report suggested there was not a shortfall of registered nurses, but rather a lack of nurses actively employed in nursing or midwifery in this country. Budd, Warino and Patton (2004) offer clarification, suggesting that the current shortage appears to be not only related to nurses leaving the profession due to retirement, but also due to the stressful nature and physical demands of the job. Literature discusses the shortage of nurses in relation to retention within a volatile healthcare climate. Stress, lack of autonomy, burnout, frustration, lack of support and recognition, job dissatisfaction, increasing workloads and decreasing resources are all aspects that have been identified as being significant factors in nurses’ decisions to leave positions, or even the profession (Aiken, Clarke, Sloan, Sochalski & Silber, 2002; Block et al., 2005; DOL, 2005; McKinley, 2004;
Hensinger, Minerath, Parry & Robertson, 2004; Lynn & Redman, 2005; Wolak et al., 2009). These nursing shortages impact upon healthcare outcomes through reduced access to wards and departments, as well as a lower quality of care and productivity (ICN, 2005).

The critical care environment is not sheltered from the nursing shortage or the challenges of recruitment and retention. Indeed, some argue that the intense and stressful nature of critical care nursing may lead to frustration and burnout at very high rates (Race & Skees, 2010). More specifically workplace issues such as tensions and decreased job satisfaction were identified in a study by Conway and McMillian (2002), of workplace culture in an Australian intensive care unit. The cost of replacing a specialist nurse is said to be approximately $64,000 USD, with the cost of recruitment, orientation, preceptoring, and the loss of experience that the critical care nurse brings to the bedside included in this figure (Barton, Gowdy, & Hawthorne, 2005; Faron & Poelter, 2007; ICN, 2005; McKinley, 2004). Furthermore, Aiken et al. (2002) discussed a relationship between patient complications, mortality rates and the number of experienced nurses staffing acute hospitals. Therefore, it seems the shortage of experienced nurses may carry more than just a financial burden, potentially having greater consequences for patients. It is important therefore that hospitals identify and manage situations that contribute to poor job satisfaction and high nursing turnover (Aiken et al., 2002; Conway & McMillan, 2002).

Within the literature, mentorship appears to be a tool that plays a significant role in increasing recruitment and decreasing nursing turnover in critical care, and other areas (Buffum & Brandon, 2009; McGrath, 2009; Thomason, 2006). Barton et al. (2005) proposed that mentorship programs are a valuable resource in decreasing nurse turnover rate. They recommended that as the nursing shortage persists, steps taken towards recruitment and retention such as implementation of mentoring programs would increase job satisfaction and result in a higher level of quality care for patients. This was found to be the case in the study by Almada, Carafoli, Flattery, French and McNamara (2004), of new graduate nurses. They report a 29% (n=40) increase in retention associated with
the support and mentorship gained through a hospital-based preceptorship program. Hensinger, et al. (2004) also discuss the more stable staffing and decreased recruitment and orientation costs as a result of investing in preceptor development. Hurst and Koplin-Baucum (2003) described the development of a mentorship program at their hospital focusing on areas with the greatest registered nurse shortage, namely medical-surgical and critical care. This initiative was undertaken in response to a national nursing shortage in the United States. After one year a three point one percent decrease in nursing turnover was seen.

The literature is consistent regarding the value of mentoring within the nursing and critical care environments. Authors suggest it can play a key role in the development of novice nurses in the area, and in the recruitment and retention of staff. However, there is a paucity of research in New Zealand in regards to the barriers that nurses may face in providing mentorship within the critical care environment. Thus, it is timely to explore the perceptions of critical care nurses regarding barriers they may be experiencing whilst balancing their clinical responsibilities with the mentorship role. Increased understanding of this area has the potential to improve workforce stability within this setting in an ever changing and demanding healthcare environment.

**Researcher position**

The researcher for this study is a registered nurse who has worked in the critical care specialty for the past fifteen years. During this time senior nursing positions held by the researcher within the specialty have included a clinical leadership position, and the position of nurse educator for the past five years. Interest in this topic was generated from the researcher’s involvement in the orientation of new nurses to the area, with the aim of achieving successful learning and integration into the specialty for the novice nurse. The importance of not only a robust orientation program for the new nurse entering critical care, but also the role that mentoring relationships play in the professional growth of the novice nurse, and ultimately the care of patients is recognized. At a time of increased expansion within the study setting, it seemed vital that this topic be explored further in order to support mentorship within this environment. The clear
themes identified within the literature about the barriers to mentorship in critical care, have led the researcher to believe that formal exploration and description of what is happening for a group of critical care nurses in New Zealand is warranted. This will provide an opportunity for the study area to reflect on its mentorship practices. It will also provide necessary evidence to support any recommendations to minimize these barriers and therefore contribute to healthy mentorship practices within this setting.

**Significance of the study**

This study offers new knowledge to add to the much-reported topic of mentorship in nursing practice. It identifies the barriers that present themselves to one specific group of critical care nurses in relation to mentorship within their practice environment. It is hoped that the findings of this study will support nurses in the future in regards to mentorship practices. The nature of this study is new to New Zealand, with other studies undertaken in this country investigating the nature of relationships of New Zealand nurses (Hall, 1997, 1998), or evaluation of the preceptor role (Kaviani & Stillwell, 2000). Only two international studies reviewed were related specifically to the critical care area (Hurley & Snowden, 2008; Wolak et al., 2009). Other studies (Nettleton & Bray, 2008; Rosser et al., 2004; Watson, 2000) had some generalizability as their focus was causes of stress and support required within mentoring, but these studies were focused on the wider nursing arena. A study by Heale et al., (2009) whose aim it was to identify facilitators and barriers to the role of a mentor in the clinical setting provided a comprehensive examination of the topic, but also had limited generalizability as its sample contained only 20% \((n = 22)\) of nurses. Beyond the widely documented subject of mentorship in nursing, with the value of mentorship programs and mentor preparation, this study will present another side to mentorship, namely, the barriers to it within a critical care setting in New Zealand.
Chapter one introduces the thesis and provides an overview of the study by identifying the topic of enquiry, research questions, and study aims. Background information regarding mentorship in both nursing and critical care, and the role it plays in recruitment and retention is provided in order to highlight the importance of the topic and justify the undertaking of this study.

Chapter two presents a review of relevant literature pertaining to the barriers to mentorship in nursing practice. Analysis of existing knowledge and evidence serves to inform the study’s focus and design of the questionnaire for this study. Literature reviewed highlights such issues as the complexity of the critical care environment, the organizational culture within critical care, remuneration for mentoring and time needed to mentor. The literature also discusses the preparation and support for mentors in the clinical setting, with focus on the importance of training opportunities.

Chapter three provides a detailed description of the study methodology, with the rationale for the research design, methodological selection, implementation strategies, as well as outlining ethical considerations. The study population, sample, data collection, and data analysis methods are described in order that the reader may appreciate the intricacies of study design and the potential for research findings.

Chapter four presents the results of quantitative and qualitative data analysis using descriptive statistics and content analysis. Key findings include the impact that clinical workload has on mentorship within this environment, with time and the complex patient presenting as key factors in this. What is perceived as appropriate remuneration for undertaking a mentorship role was highlighted in this study, as was the barrier that assessment presented to nurses working with both new and student nurses. The uptake of training and knowledge enhancing opportunities, related to mentorship was also identified as a barrier to nurses undertaking mentorship within the study setting.

Chapter five examines and discusses the findings of the study in relation to the clinical setting, data interpretation and within the context of the literature reviewed. Contributing factors to the barriers to mentorship perceived by nurses
in this study and possible explanations for these are presented. The limitations and strengths of the study are identified in this chapter.

Chapter six presents recommendations made in relation to the key findings of the study that would improve mentorship practices within the critical care setting. Suggestions for future research on this topic are made and plans for the dissemination of this study’s findings outlined. Thesis format and referencing are in accordance with the American Psychological Association ([APA], 2010) format and style guidelines.

**Summary**

This chapter has introduced the thesis and provides an overview of the study by identifying the topic of enquiry, research question and study aims. Discussion regarding mentorship and the role it plays in nursing, and its place within the critical care context have been presented along with the researchers position to give the reader background knowledge of the study. An overview of the global nursing shortage has been presented to highlight the importance of investigating and improving any contributing factors to this, with mentorship seen as a valuable tool in this process. The next chapter reviews, outlines and discusses the relevant literature concerning the barriers to mentorship within acute care environments, including critical care.
CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

Despite a plethora of studies focusing on mentoring and its nature and application within clinical practice and academic settings, limited attention has been paid to the barriers that exist to mentorship within acute care environments. This chapter presents a critique and summary of the literature relevant to mentorship within the critical care specialty and the barriers that have been found to impact on it within this environment. Whilst critical care is the specialty area of interest in this study, the literature search identified few relevant articles specifically focused on this setting. Therefore, literature commenting on mentorship within other acute settings such as cardiothoracic intensive care, high dependency wards, and specialty areas such as palliative care were also reviewed and included if they were deemed to offer knowledge relevant to this topic. The literature addresses challenges faced within acute settings in regards to the mentorship of student nurses, new graduate nurses, and novice nurses. It was deemed appropriate to incorporate these studies into this literature review as the study site is involved in the mentorship of student nurses, new graduate nurses, and nurses who, although may have a depth of experience in other nursing specialties are new to the critical care area.

A literature search of the topic was undertaken using the following electronic databases: CINAHL (Cumulative Index to Nursing and Allied Health Literature); MEDLINE (Pubmed); Ovid; ProQuest; and Science Direct. The search terms used included a combination of keywords such as nurses, mentorship, mentor, critical care, intensive care, acute care, and barriers. Boolean logic was applied to combine the key terms and language was restricted to English for ease of reading and interpretation of information. This led to a small number of pertinent articles related to the topic. The reference lists of these published articles were then used to identify a further range of literature which was obtained on the topic with saturation seen of informative articles early on. Although publication dates were not restricted, articles within the last decade were considered to be most relevant to the current mentoring climate. Articles and publications prior to 2000 were included if they appeared
consistently within the more recent articles reference lists as well as inclusion of other seminal texts such as Benner (1984), and Grossman (2007), that had relevance to the topic.

All of the articles initially found were assessed using The Joanna Briggs Institute assessment tools (2003), to aid with determination of their credibility. Key articles were discussed further with my supervisors and in total, three authors were contacted directly to gain more information about the research process used and request access to their studies questionnaire. Keeping a database was invaluable as it allowed all articles obtained to be grouped according to their focus. This assisted with the synthesis of findings or viewpoints leading to the identification of themes within the literature that became apparent as reading continued. These broad themes were color coded and refined as the analysis of literature progressed.

An integrative review of relevant literature has revealed barriers relating to mentorship in acute care environments. These barriers are categorized under two broad categories. The first being ‘the critical care environment’ with a number of distinct areas or themes relating to this category. These are ‘the complex environment of critical care’, ‘organizational culture within critical care’, ‘remuneration for the mentorship role’ and ‘available time to mentor in the clinical setting’. The second broad category identified was ‘the preparation and support that mentors receive’ with themes related to this category being ‘preparation for the mentorship role’ and ‘support from training institutions’. This review chapter is presented in accordance with these distinct areas or themes, exploring them fully and outlining reported strategies in the literature for addressing the challenges relating to them. The close examination of these issues has served to inform the questionnaire for this study.

**The complex environment of critical care**

The literature related to mentoring in acute care environments acknowledges that the critical care environment is a complex one. There are “daily challenges that face critical care nurses, working as they do in an emotionally charged, fast paced, highly technological environment to deliver
care across a whole spectrum of activities of living to some of the hospitals most dependent patients” (Hurley & Snowden, 2008, p. 270). Critical care nursing it seems is one of the most stressful specialties in the nursing profession. Nurses are constantly faced with the daily challenge of providing care in a setting characterized by increased patient acuity, heavy workloads, inadequate staffing and fewer resources, which are described as leading to low morale, frustration, and burnout at very high rates (Bally, 2007; Heale et al., 2009; Race & Skees, 2010). The nature of the work environment appears to be contributing to the nursing shortage being faced, with nurses working within these acute care environments often feeling overwhelmed and unsafe within the clinical setting (Bureaus, Staiger & Auerbach, 2000). Yet these demands seem to be increasing related to natural attrition with staff moving out of the acute areas, falling ill, retiring, and resigning (Hurley & Snowden; Satterly, 2003).

A connection is seen between mentoring relationships and job satisfaction, with mentoring programs explored as one method of creating environments that promote staff retention. (Egan & Song, 2008; Kanaskie, 2006). Indeed, high quality effective mentorship is recognized as a valuable tool in addressing issues such as recruitment and retention of nurses as well as assisting new nurses gain confidence, grow quickly within the critical care unit, and improve their sense of job satisfaction (Firtko et al., 2005; Ihlenfeld, 2005). However the availability of mentoring opportunities may be impacted on by the shortage of nurses available, with common barriers to mentorship listed as a lack of resources, and balancing multiple roles and priorities (Heale et al., 2009; Firtko et al., 2005).

It is suggested that before an organization tries to create a culture of mentoring there must first be an understanding of the challenges nurses face on a day-to-day basis. There must also be a willingness to facilitate change in order to improve nurses’ work environment so that a culture of mentoring can be supported (Bally, 2007; Race & Skees, 2010).

**Organizational culture within critical care**

Organizational culture may be defined as the values and norms that are shared by people and groups in an organization. This controls the way that they
may interact with each other and with stakeholders outside of the organization (Hill & Jones 2008). Factors contributing to a healthy organizational culture within acute nursing environments are described as the provision of opportunities for autonomous clinical practice, participative decision making, being valued and supported in their role by peers, physicians and management, along with opportunities for professional development (Bally, 2007; Grossman, 2009; Wolak et al., 2009).

The American Association of Critical Care Nurses ([AACN], 2005), Standards for establishing and sustaining healthy work environments focuses on six areas that are mandatory if a safe and healthy work environment is to exist in hospitals. These are communication, collaboration, decision making, adequate staffing, recognition, and leadership. Kanter’s theory of organizational empowerment, as cited in Wolak et al. (2009) offers a framework for creating meaningful work environments. Kanter suggests that situational aspects of the workplace influence employee attitudes and behaviors. Various tools are described that enable employees to accomplish their work in meaningful ways: access to information, support, resources, and the opportunity to learn. It was noted that employees with access to these power tools experienced greater job satisfaction and commitment to the organization. The study by Wolak et al. (2009) of perceptions within a mentorship programme used a sample population that included nurses working within a cardiothoracic unit. These researchers found support and knowledge to be one of the main themes related to Kanters theory. Furthermore, Grossman’s (2009) study of students and nurse leaders’ perceptions of mentoring identified that organizational culture was a significant factor in making the relationship successful.

It therefore appears that mentoring not only flourishes in environments with healthy organizational cultures, but may also contribute to a healthy organizational culture by enabling nurses to attain job satisfaction. Both Wolak et al. (2009) and Grossman (2009) concluded that for mentors a feeling of organizational respect stemmed from formal recognition of their advanced practice as clinical leaders and experts. This enabled them to feel empowered.

There appears to be relatively few studies of job satisfaction associated
with mentoring, however Allen, Eby, Poteet, Lentz, and Lima (2004), identified ten mentoring studies that included job satisfaction as a dependent variable. These studies identified a positive relationship between mentoring relationships and job satisfaction. The environment, or organizational culture of the critical care unit appears to have an influence on the success of mentoring relationships. Mentoring programs are identified as a tool to provide a means to develop talent, shorten the learning curve, enhance team performance, as well as increase employee satisfaction (Allen et al., 2004; Bally, 2007; Grossman, 2009). Furthermore, mentoring will exist in an environment that is non-judgmental, nurturing, and supportive of staff as they develop new skills within a climate of reflection, openness, and communication. This will enable them to feel accepted and valued as a staff member, enhancing their sense of belonging in the clinical setting. It is this underlying philosophy that seems to improve recruitment and retention of staff and foster a collegial and respectful unit culture (Grossman, 2009; Kanaskie, 2006; Levett-Jones, Fahy, Parsons, & Mitchell, 2006; Race & Skees, 2010).

The literature highlights the importance of supportive leadership in the empowerment of nurses to encouraging professional development, increased job satisfaction, and morale (AACN, 2005; Bally, 2007; Grossman, 2009; Wolak et al., 2009). Grossman (2007) suggested that leaders should take on responsibility for maintaining these standards. Nevertheless, it is recognized that creating an environment that supports a ‘culture of mentorship’ presents challenges for nursing departments as not all levels of nursing may understand these unique challenges specific to the nurses’ role (Kanaskie, 2006; Race & Skees, 2010). However Bally (2007), suggests that by encouraging all nurses within the work environment to understand and utilize mentoring, this may be a way for nurse managers to communicate the values and goals that are associated with it.

**Remuneration for the mentorship role**

Much has been discussed in the literature about what mentoring offers to health organizations, with one of the most valuable benefits being the recruitment and retention of a skilled workforce. The level of remuneration
appropriate for the mentoring role that nurses undertake seems less clear.

Discussion has focused on the intangible rewards that come with mentoring, as well as what tangible rewards could be offered to nurses for the mentorship that they give to the novice nurse within the critical care environment. The rewards for the mentor in undertaking this role are often unseen, and include such intangible factors as the personal satisfaction that comes from seeing a mentee progress, or the mentor’s own development of teaching and learning skills (Andrews & Wallis, 1999). It appears that many nurses see their role as mentors as ‘paying back’ the nurse who, in the past helped them to grow in critical care nursing. The mentor’s satisfaction comes from helping and observing a less experienced colleague begin a new career path or reach a desired goal. This may be referred to as the ‘reciprocity’ in mentorship. Nurses who like to mentor feel the satisfaction of helping another and therefore mentoring for these nurses appears to offer its own intangible reward (Ihlenfeld, 2005; Kanaskie, 2006; Wolak et al., 2009). This is supported by a study undertaken by Wolak et al. (2009), which concluded that cardiothoracic intensive care nurses, through mentoring, felt a sense of contribution both to the mentee and to the clinical area. Participants in this study also described their mentoring experience as having a positive affect on their own practice. A similar conclusion was also reached in a study by Myall, Levett-Jones, and Lathlean (2008), who examined the experiences of nursing students and their practice mentors in the United Kingdom. The provision of clinical support to students was described by mentors as assisting them to keep up to date with their own clinical skills and knowledge. A large number of participants in this study (85%, n =108) indicated the experience to be rewarding, and described feeling ‘proud’ as they watched the student develop skills and knowledge.

Within the last decade the requirement for critical care areas to mentor both student and new graduate nurses, has greatly increased due the current nursing shortage that has affected all areas of nursing (Ihlenfeld, 2005). According to Heale et al. (2009), and Nettleton and Bray (2008), the clinical mentor role is not commonly associated with monetary remuneration, protected time, additional status, or any other form of compensation for the expert
practitioners who take on this role. Nettleton and Bray (2008), asked mentors how their role was recognized within their workplace, with almost half of nurse respondents (41%, n = 45) stating they gained minimal recognition or reward for the role, and that the role was seen as part of their job. Only a few respondents felt that the responsibility of mentoring awarded any status (12%, n = 13) or recognition (8%, n = 9). However in the study conducted by Heale et al. (2009) to identify facilitators and barriers to the role of mentor in the clinical setting it was found that compensation was seen as a support for the mentor role. The authors of this study concluded that clinical workplaces may not be willing or able to provide extra time or compensation to clinical mentors, and this may be why some organizations are finding it difficult to retain clinical mentors.

Ihlenfeld (2005) suggested that when mentors provide mentorship for nursing students, this role should be recognized in tangible ways. Bally (2007), agreed, and it is suggested such things as shift differentials, hospital paid conference attendance, and scheduling flexibility may be a way for nursing management to show the mentor that they are of value to the novice nurse and the healthcare environment (Bally, 2007; Ihlenfeld, 2005). Of interest, the Nursing Council of New Zealand ([NCNZ], 2001), strategic review of undergraduate nursing education, makes the recommendation that:

Education and service providers work together to establish a strategy for provision of incentives for clinical preceptors in all settings. Where possible clinicians should be accorded appropriate honorary status by the education provider as recognition of their role and contribution to the undergraduate programme (p.90).

Available time to mentor in the clinical setting

The additional time required for a successful mentoring relationship when added to an already busy clinical schedule presents a further obstacle to the use of mentorship in the clinical setting (Nettleton & Bray, 2008; Theobold & Mitchell, 2002). However, despite the current environment of nurse shortages it is still important to take the time to mentor and assist novice nurses to gain confidence and grow quickly within the critical care unit (Ihlenfeld, 2005;
A study conducted by Hurley and Snowden (2008) that examined the barriers to nurses performing the mentor role in three critical care wards found that 23.7% (n=31) of nurses perceived the lack of time due to clinical workload as being a significant barrier for them to mentoring. Further barriers identified in this study included administrative responsibilities that competed with the mentor role and what the authors termed as ‘mentor overload’ at having to supervise and assess learners on every shift. A study by Nettleton and Bray (2008) that examined what could improve the mentoring process for nurses had similar findings, with 39% (n=43) of nurses describing the lack of time as a leading factor for improvement. Of the nurse mentees in this study, 26% (n=45) also listed time as an important factor. In the same study, mentors described how due to increasing workloads and challenges to their time, mentoring was often denigrated due to other commitments. Nettleton and Bray (2008) suggested that in an already over burdened clinical environment conflicts that prevail in mentorship schemes may be exacerbated. They draw attention to the United Kingdoms Nursing and Midwifery Council ([NMC], 2010) standards for support, learning and assessment in practice. These standards call for significant support for protected time for mentors thus, allowing them to function adequately in their role. A study by Watson (2000), agreed with these findings with 40% (n =30) of participants stating that the time they spent with students they were mentoring conflicted with care delivery. In the same sample 43% of participants felt that they were unable to give enough time to their students due to clinical demand. A study by Myall et al. (2008) also found that 68% (n=86) of mentors to nursing students reported constraints on their role in mentoring students. These constraints included an increased workload and lack of time to carry out the role. A qualitative study reported by Chow and Suen (2001), explored student nurses’ perceptions and experiences. This study found that most of the students had a concern that their mentors might encounter conflict in their dual roles as a mentor and as a member of the ward team due to the mentors having a full patient load and at the same time, mentoring duties to fulfill. Heale et al., (2009) also identified lack of time and lack of resources to be
a barrier to the role of mentor. This study examining facilitators and barriers to
the role of mentor in the clinical setting, involved a variety of health disciplines
within its sample, with 19.5% (n=22) of these being nurses. Furthermore a
literature review by Andrews and Wallis (1999) identified no less than five
studies in which the findings demonstrated that despite mentorship being seen as
a positive activity, there were difficulties relating to role conflict and a lack of
time to achieve optimum mentor supervision.

The amount of time a mentor has to spend with a student, or mentee is
shown to be influenced by a number of factors, including workload, and staff
shortages (Edmond 2001; Mitchell, 2003). The literature reviewed is clear that
finding time to mentor within the clinical setting presented a barrier to nurses.

Preparation for the mentorship role

The inexperienced nurse in critical care is confronted with complex
situations, and conditions, which they may be seeing for the first time.
Preceptors are tasked with giving new nurses confidence, whilst carefully
monitoring their actions (Dracup & Bryan-Brown, 2004). Mentors to nurses
beginning their careers in critical care should be experienced critical care nurses
who are able to share not only their clinical knowledge and expertise, but also
impart knowledge on all aspects of the staff nurse job related to the nursing
specialty (Ihlenfeld, 2005; Kanaskie, 2006). The understanding of what makes
an expert nurse has been utilized in developing preceptor roles in the intensive
care in order to pass on this experiential knowledge to new nurses within this
specialty (Dracup & Bryan-Brown, 2004). However, the literature suggests that
attributes of effective mentors and/or preceptors within the critical care
environment need to go beyond experience and encompass the knowledge and
skills that are required in the mentor role (Dracup & Bryan-Brown; Jackson,
2001). Such attributes may include not only a depth of experience within the
specialty but also the ability to listen and communicate effectively, the ability to
cope with stress and conflicting priorities, and the ability to come up with
creative responses to clinical and organizational challenges that may arise
(Kanaskie, 2006; Jackson, 2001; Dracup & Bryan-Brown, 2004). Thomason
(2006) suggests that the development and empowerment of the preceptor nurse with such factors as a knowledge of adult learning principles, the ability to assess learning needs and styles, and adapt teaching strategies, the ability to provide feedback, a realization of the importance of socialization, the ability to set weekly goals and the ability to evaluate skills and competency, were all important in improving orientation processes. However, a study by Chow and Suen (2001) found no relationship between undergraduate student nurses’ rating of their clinical mentor, and the mentor having completed mentorship training, suggesting that perhaps some of the skills required come naturally.

The literature reviewed appears to promote the importance of training opportunities for mentors with much emphasis being placed on the clinical mentor to the pre-registration nursing student. It has been demonstrated that mentor preparation is directly related to improved reliability in the assessment of students, (Watson, 2004). In the United Kingdom, the NMC (2010) standards to support learning and assessment in practice requires mentors to nursing students to have completed a NMC approved mentor preparation program and reiterates the requirement for an annual update of knowledge and skills related to mentoring in practice. The NCNZ (2001) strategic review of undergraduate education recommends that education providers establish programs to prepare clinicians for their role with student nurses. The plan discusses the supervision of students by facilitators, although clinically competent nurses are not always prepared for the facilitation role. More recently, the NCNZ Education program standards for the Registered Nurse scope of practice (2010) state that the undergraduate student “must be under the supervision of a registered nurse who is well prepared for their teaching role” (p.12). Indeed nurses’ obligations are recognized within the NCNZ (2007) Competencies for Registered Nurses that state the registered nurse “provides guidance and support to those entering as students, beginning practitioners and those who are transferring to a new clinical area” (p.29). However, there appears to be no recommendation from the NCNZ currently about how the registered nurse (RN) is to be prepared for their teaching role with novice or student nurses. This appears to be within the
domain of local District Health Boards (DHB) most of whom have preceptorship programmes established within their organizations (New Zealand Nurse Educators preceptorship subgroup, 2010).

Several studies have indicated that there is not always the availability or opportunity for nurses to attend mentorship courses or updates. In a study conducted by Hurley and Snowden (2008) that examined barriers to nurses performing the mentor role in three critical care wards, a lack of training was identified by 10% (n=13) of participants, with 14.5% (n=19) identifying a lack of opportunity for mentors to update their knowledge and skills of supervision and assessment. Although these are not large numbers of staff, this issue has also been identified by a number of other studies, with Heale et al. (2009) identifying a theme of inadequate orientation to the role of mentor in the clinical setting. In the same study, formal preparation and orientation to the mentor’s role were identified as being a support to clinical mentorship. This study explored the experiences of a range of health care professionals, with 19.5% (n = 22) of them being registered nurses. Of interest the results between the various professional groups were very similar. Nettleton and Bray (2008) examined what would improve the mentoring process for both students and mentors, with training and updates for mentors identified as being important by the participants (17% n =19).

A study by Watson (2000) looked at the nature of support that was required by mentors to enable them to perform their duties to both students and patients within their care. This researcher found that 48% of mentors surveyed had undergone mentor preparation. In contrast, a study by Duffy et al. (2000) found that 68% of participants had not attended a mentorship study day in the past decade. Both Duffy et al., and Watson’s studies concluded that gaining study time to attend such training at times, presented a challenge for the subjects. Reasons such as not being informed that the study days were taking place, clinical commitment, low staffing levels and a lack of opportunity were listed by the participants in the study by Duffy et al. Yet, this study found that mentors who had attended a recent mentorship study day felt an increased level of confidence in various aspects of

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3 There are 21 DHBs in New Zealand, all of which are responsible for funding and providing health and disability services for a given geographic location.
the mentorship role. Johns (2005) suggests that despite standards developed by the NMC being clear on the importance of mentor preparation programs, many trusts failed to recognize mentorship as a priority investment, making it difficult for mentors to undertake mentorship training and updates. Bally (2007), suggested that to achieve the intellectual stimulation of mentors, continuous mentoring education and training opportunities should be integrated into the work environment thus, allowing an increased general awareness of mentorship within that setting.

**Support from training institutions**

A further theme occurring in the literature is the support available from training institutions to clinicians who mentor pre-registration students. The mentoring of pre-registration nursing students has become accepted practice since the introduction of Project 2000 in the United Kingdom (Bray & Nettleton, 2007; Duffy et al., 2000; Nettleton & Bray, 2008). This has also been the case in New Zealand since the early nineties when the final hospital school of nursing closed. By then comprehensive nursing education programs were well established within tertiary institutions (NCNZ, strategic review of undergraduate nursing education, 2001). This appears to have led to a fundamental change in what the traditional role of a mentor has meant, with it being widely accepted that nursing mentors also perform the role of assessor to nursing students, and some authors have indicated that this has led to role confusion for clinical mentors (Andrews & Wallis, 1999; Bray & Nettleton, 2007; Duffy et al., 2000; Grossman, 2007; Ihlenfeld, 2005; Neary, 2000; Nettleton & Bray, 2008). The level of support needed for clinical nurses who are expected to mentor pre-registration nursing students, as well assess them for competency to practice has been widely discussed in the literature.

The review of literature by Duffy et al. (2000), found that mentors were in many cases not well prepared for their role with nursing students. Their study that surveyed a sample of 150 nurse mentors achieved a response rate of 47%. The results showed that support from managers and academic staff appeared problematic. Sixty-eight percent of mentors indicated that current mentor
support did not meet their individual requirements, listing the need to have more support in regards to students’ assessment documentation. One participant in this study stated that they felt “students were put into ward areas and the sole responsibility appeared to be with the mentor” (p. 37). The conclusion of this study was that clinical tutors needed to be seen in clinical areas more frequently, with clear communication links between practice placement areas and training organizations. Watson (2000), in examining the support that mentors receive in the clinical setting found an association between the clinical mentor feeling supported and the frequency of visits from the training institution’s link lecturer. In the same study, a question asking the participants to comment on the assessment documentation associated with the assessment of students, indicated more positive responses from participants who had undertaken a training course related to teaching and assessing in the clinical setting. Similarly, a study by Hurley and Snowden (2008) showed that 17.6% (n = 23) of nurses found that a lack of familiarity with programs of study was a barrier to the mentor role, with 16% (n = 21) indicating a lack of familiarity with the documentation as being a barrier.

It appears that some confusion exists in regards to the place that assessment has within the mentorship role. Bray and Nettleton, (2007) examined this role confusion and found that nurse mentors did express a conflict with their dual role as assessor and mentor, with 14% (n = 15) identifying the role of assessor as being the most difficult to fulfill. Of the 110 nurses surveyed, the role of ‘teacher’ and ‘supporter’ were perceived by the mentors to be the most important role, with 20% (n=22) selecting ‘teacher’ and 19% (n=21) selecting ‘supporter’. The role of ‘assessor’ was chosen by 5% (n=6) of participants as the most important role to fulfill. In the same study clarity of the mentorship role appeared divided, with 40% of nurse mentors stating they were very clear regarding the nature of their role, and 46% identifying that they were unsure, unclear, or very unclear about the expectations of them as a mentor. Nettleton and Bray (2008) further reported a lack of support perceived by mentors from educational facilities to carry out their role effectively within clinical practice. They discussed that the dual role of mentor and assessor is contrary to the values
and principles of traditional models of mentorship and may well require separation as a means of reducing the conflicts within the supportive role of the mentor. This was also addressed by Ihlenfeld (2005) who discussed the hiring of new graduate nurses into the critical care unit, and suggested that the mentorship of new nurses should begin at a point when they have been orientated and assessed as safe to practice already. This is when mentorship is of most importance, not so much when they are being assessed for the various practical skills that they need to acquire for the critical care environment. Wolak et al. (2009) researched the experiences of mentors and mentees within a structured mentorship programme within a cardiothoracic intensive care unit. In this study the sample was different in that it did not include pre-registration nursing students, but newly graduated nurses. Although the sample was small, just eleven nurses (six mentors and five mentees), the inclusion criteria was that the mentors and mentees needed to be paired for at least ten months prior to the study. This appeared to produce a positive result in regards to the experiences of both parties involved, and raised questions about whether the burden of being an assessor whilst in the mentor role detracted from the mentor/ mentee relationship. However Heale et al. (2009) found that mentors (19.5% of whom were nurses) across the disciplines were usually confident with 46.7% always confident in understanding expectations of the educational program and practice environment. This raises questions about whether allied health professionals feel more supported within their roles than nurses do. This study did not break the responses into the various disciplines, so this could not be assessed further.

Summary

A review of relevant literature has identified a number of key issues or themes related to the barriers that exist to mentorship within acute and critical care environments. The results of this review have led the writer to conclude that the subject is worthy of further enquiry. The findings within this literature review have contributed to the development of the questionnaire for this study, with the aim of establishing whether similar barriers exist within a sample of nurses working within a critical care environment in New Zealand.
It is acknowledged within the literature that critical care is one of the more stressful of nursing specialties, with nurses caring for some of the hospitals most acutely unwell patients. There are increasing demands within the health system including limited resources, heavy workloads and the recruitment and retention of nurses. Evidence suggests that effective mentoring relationships may contribute to job satisfaction and could affect issues such as recruitment and retention (Firtko et al., 2005; Allen et al., 2004). The fact that mentoring relationships play such a valuable role in the healthcare system should be of critical importance to nurse leaders in today’s healthcare environment, when the nursing workforce shortage is creating challenges relating to the staffing of critical care units with a level of expertise that can offer patients a high and safe standard of nursing care.

A consideration that organizational culture plays a role in supporting a mentoring culture came through in studies by Grossman, (2009), Heale et al. (2009), Hurley and Snowden, (2008), Nettleton and Bray, (2008), and Wolak et al. (2009). Expert opinions offered by Bally (2007), and Kanaskie (2006), also suggest that nurse leaders should be aware that organizational culture is likely to impact on the quality and effectiveness of mentorship programs within high acuity areas.

The literature supports that the remuneration that nurses receive for the role they take in mentoring the new nurse or student nurse is mostly intangible (Andrews & Wallis, 1999; Ihlenfeld, 2005; Myall et al., 2008; Kanaskie, 2006; Wolak et al., 2009). However there is a suggestion that tangible compensation may support the mentor role (Heale et al., 2009), although no studies have directly examined the critical care environment in regards to tangible compensation. With the requirement of nurses to mentor pre-registration nursing students as part of their training, it would be of interest to examine if clinical nurses perceive that they should be recognized for this role in more tangible ways. Bally (2007), and Ihlenfeld (2005), have suggested that clinical mentors should receive some form tangible recognition, as this may be a way to show the mentor that they are valued.

There was overwhelming agreement in the studies reviewed that the
time available for staff to mentor combined with other clinical demands placed on them was an issue, and presented an obstacle to mentoring in the clinical setting (Chow & Suen, 2001; Heale et al., 2009; Nettleton & Bray, 2008; Theobold & Mitchell, 2002; Watson, 2000). This was also a theme picked up by Andrews and Wallis (1999) in their literature review on the topic. However, as not all of these studies are directly related to the critical care environment, it can only be assumed that the availability of time is also an issue for mentors working within this environment.

This review has highlighted that nurses considered to be expert clinicians, still perceive that they have a lack of knowledge and preparation to undertake the mentorship role. Studies have reported barriers to attending mentorship training, including the inability to attend due to workplace demands, and the inadequacy of programs of education relating to this topic (Bray & Nettleton, 2008; Duffy et al., 2000; Heale et al., 2009; Hurley & Snowden, 2008). All of the studies reviewed are from the United Kingdom apart from two that are of North American origin. There appears to be a strong emphasis on the attainment of a course as laid down in the UMC’s standards to support learning and assessment in practice (2010). Although an emphasis on this type of preparation is also present in the NCNZ education program standards for the RN scope of practice, (2010), it appears to be less clear in regards to the type of preparation for the mentor role that could be offered to nurse mentors. It is of interest to examine if similar difficulties in regarding the preparation of mentors for their role exist with a critical care environment in New Zealand.

Closely linked to the preparation of nurse mentors is the support that they receive in carrying out their role. Much of the literature discussed the challenge, and often the role confusion that nurses are faced with in mentoring the pre-registration nursing student (Andrews & Wallis, 1999; Bray & Nettleton, 2007; Duffy et al., 2000; Grossman, 2007; Ihlenfeld, 2005; Neary, 2000; Nettleton & Bray, 2008). There is a need for robust support from training institutions for the nurse who is at the bedside with the student nurse, expected to not only mentor but also assess the student nurse for competency. This appears to have created a whole new challenge to the mentoring role within the
nursing domain.

The limitation of this literature review is the relatively small number of studies directly related to mentoring in the critical care environment and in particular no studies were identified that examined the New Zealand context. The nature and extent of issues associated with mentoring and their impact on nursing practice in the New Zealand critical care context are worthy of more formal exploration.

Without credible evidence to accurately present the situation for this particular group of nurses, it would be difficult to justify the provision of more resources and support for mentorship within this area. The purpose of improving nurse mentoring is to improve patient care (Grossman, 2009), and therefore nurses are in a valuable position to offer an understanding and perspective on this topic.

The following chapter presents and discusses the research methodology used to explore and describe what one group of nurses working within a critical care department in New Zealand perceive as barriers to mentorship within the critical care environment.
CHAPTER THREE: METHODOLOGY

Introduction

This chapter will present the research design and methodology used to answer the question: what do critical care nurses perceive as barriers to mentorship within the critical care environment? Whilst a review of the literature has highlighted a number of themes related to the barriers to mentorship that are experienced by nurses within acute areas, there is a paucity of evidence relating specifically to nurses working in critical care. There appears to be a lack of studies within the New Zealand environment examining mentoring practices overall and yet anecdotal comments suggest that the topic is one of importance and at times frustration for the nurses in clinical practice within this specialty.

A descriptive research design, utilizing survey method was employed to answer the research question. This involved the collection of nurses’ perceptions of what they perceive to be barriers to mentorship within their work setting. This approach allowed the researcher to collect information from a number of participants in their natural setting to explore, describe and provide an accurate portrayal of a situation or particular phenomena (Burns & Grove, 2011; Polit & Beck, 2010). The survey was administered in the form of a mail-out, self-administered questionnaire as this was deemed to be an efficient and cost effective method of inviting a random sample of the study population to participate in this research.

The questionnaire utilized both quantitative and qualitative questions to allow the collection of both a wide range and depth of information from the respondents. The information gathered from the open-ended questions assisted in providing context and enhanced the closed questions that were used, to gain an accurate understanding of nurses’ perceptions of barriers to providing mentorship within the critical care setting. This combined approach to data collection required a dual approach to data analysis, with both descriptive statistics and content analysis being used to analyze the data. Both of these methods of analysis fit within the conceptual framework of descriptive research (Polit & Beck, 2010).
Research design

Descriptive research using survey method.

Descriptive research designs, such as surveys are often utilized when little is known about a phenomenon. They enable researchers to gain an accurate understanding of persons, groups, or situations in which the phenomena occurs in order to describe what exists (Burns & Grove, 2011; Jirojwong, Johnson & Welch, 2011; Polit & Beck, 2010). Thus, surveys can be used to provide a clearer understanding of the phenomenon as well as identifying possible causal factors that may contribute to it. A descriptive design was deemed to be appropriate to answer the research question as it allowed the collection of data that described respondents’ perceptions of barriers to mentorship within the critical care environment.

The use of survey as a method of data collection may involve a number of ways of collecting data including interviews, observations, or questionnaires (De Vaus, 2002; Jirojwong et al., 2011). However, all of these approaches are characterized by a structured or systematic approach to data collection (De Vaus, 2002). It is not uncommon to see questionnaires used as the chosen data collection method in nursing and midwifery research, as this enables gathering of demographic data as well as the measurement of knowledge, behaviors and perceptions from the respondents (Burns & Grove, 2011; Jirojwong et al., 2011). With the aim of collecting data to allow a broader description of the situation for the nurse participants it was determined that the use of a carefully designed questionnaire for data collection was appropriate.

An alternative method considered to collect data for this study was that of focus group interviews with a usual group size of between five to ten persons (Jirojwong et al., 2011; Polit & Beck, 2010). A group interview may have had the advantage of generating a greater depth of data, with a group facilitator able to clarify responses and collect non-verbal data. However disadvantages such as the possibility that not every member of the group would feel comfortable sharing their experiences within a group, and the fact that the researcher was a senior staff member within the study area, may have limited the dialogue. A focus group would only represent a small sample of the population and therefore limit the
generalizability of the findings. It was felt that a broader description from a larger sample was required in order to comprehensively answer the research question.

**Questionnaire as a data collection method.**

The use of a mail-out questionnaire has the advantage of gathering large amounts of structured data at low cost (Jirojwong et al., 2011), and was also a way that allowed the respondents to complete the questionnaire at their convenience. The advantage of using a mail-out questionnaire over interviews is that it avoids the possibility of interviewer-induced bias that could occur in interviews (Burns & Grove, 2011; Polit & Beck, 2010). Questionnaire use also enabled respondents to remain anonymous, which was conducive to the expression of more open and candid responses on the subject and to encourage participation (Jirojwong et al., 2011; Polit & Beck, 2010; Taylor et al., 2007). The protection of participant’s anonymity was felt to be important for this study to encourage honest and open representation of the nurses’ perspectives and feelings about what they believe presented as barriers to mentorship within their workplace. This was particularly important given the researcher’s senior position within the study setting, which could have been perceived as a power imbalance to some participants and have influenced participation as a result.

A common problem with mail out surveys can be low response rates, with these often reported to be small (25%-50%). A response rate of lower than 50% is considered to put the study’s representativeness in doubt (Burns & Grove, 2011; Jirojwong, et al., 2011). Therefore it was important for the researcher to make every effort possible with questionnaire design and administration with the aim to enhance respondents’ participation. This will be further expanded on throughout this chapter.

**Questionnaire design**

**Questionnaire development**

Questionnaire design is an important part of the survey research process. Without a well-designed questionnaire in which the research problem, concepts and data analysis have been taken into consideration, the data required to answer
the research question may not be obtained (De Vaus, 2002; Pallant, 2010). A questionnaire needs to have clear and relevant questions in order to obtain the information necessary (De Vaus, 2002). This was important for this study, as it was not possible to go back to the respondents to seek clarification. Utilizing a typical descriptive design approach allowed the researcher to clearly identify the phenomenon of interest, this being what nurses perceive to be the barriers to mentorship within the critical care environment. This approach allowed identification of the variables within the phenomenon by means of a review of relevant literature and arranging the themes that were evident into variables. These could then be measured in order to describe and interpret what was happening, and therefore answer the research question (Burns & Grove, 2011).

In considering the design and content of the questionnaire for this study, effort was initially put into identifying and accessing any pre-existing questionnaires from the literature that demonstrated reliability and validity, and that were applicable to this research (Taylor et al., 2007). Reliability refers to the consistency of the responses obtained from a questionnaire, meaning that if the same respondent was given the questionnaire on more than one occasion the questions would be answered in the same way (Burns & Grove, 2011; De Vaus, 2002). Validity refers to the questionnaire or instrument measuring what we think it does for the phenomena and population being studied (Burns & Grove, 2011; De Vaus, 2002). Therefore to be granted access to a suitable questionnaire could have eased the burden of questionnaire design and piloting to achieve an appropriate research tool.

Communication occurred with two of three authors that were contacted, with these authors agreeing to make their questionnaires available. However on review of the completed questionnaires provided it became apparent that these would have required considerable adaptation to meet the specific intention of this study. This would have changed their original content and structure, thereby affecting the reliability and validity of these tools. A section of the questionnaire provided by Heale et al. (2009) was able to be adapted with the author’s permission in relation to the questions asked about the participants’ confidence in undertaking the mentor role. Having reviewed the available existing tools, it was
determined that there was no current survey that addressed the specific areas of interest. As a result the questionnaire utilized for this study was developed and piloted by the author.

**Questionnaire content**

Considerable attention was given to the development of the questionnaire for this study. It was recognized that the questionnaire’s design and content would be integral in identifying and exploring participants perceptions. The questions were developed from themes that became apparent by undertaking a literature review, as well as anecdotal comments from the study area on the topic. Several drafts of the questionnaire were produced and refined in response to suggestions from the writer’s supervisors, a biostatistician who looked at the analysis possibilities of the questionnaire, as well as feedback received from the pilot test undertaken. Attention was paid to principles of question design when refining the questionnaire, such as its potential to offer reliability and validity. Attention was also given to providing response categories that gave the respondents sufficient alternatives thus avoiding low variance within the sample as a result of poor question design. Low variance may appear in a sample being studied if there is true homogeneity, however it can also appear if the question design leaves the respondents with a limited range of response alternatives to the questions that they are being asked (De Vaus, 2002). It was tempting for the researcher to include more questions than were required in the questionnaire, as well as questions that on reflection were of interest value about the population being studied rather than being relevant to the information needed to answer the research question. This would have would have risked making the questionnaire too long with longer questionnaires associated with lower response rates (De Vaus, 2002 & Jirojwong et al., 2011). Therefore careful consideration was given to inclusion of questions, their length, simplicity, and clarity to create unambiguous and clear questions that could be understood by the population being studied (De Vaus, 2002; Jirojwong et al., 2011; & Polit & Beck, 2010). This process continued with feedback from the writer’s supervisor and from pilot testing being incorporated into the final document.
**Closed and open-ended questions**

The 40 item self-administered questionnaire (see Appendix B), utilized both closed and open-ended questions to collect the data needed to address the research question. Closed questions were used for the majority of the questionnaire with these utilizing numerical rating scales, checklists, binary, and multi choice formats. Closed questions are considered an advantage if the questionnaire is long and self-administered as it maintains respondent interest (De Vaus, 2002). Another advantage of closed questions is that they are easier to code, therefore making analysis easier (De Vaus, 2002; Taylor et al., 2007). The majority of the questions requiring a numerical rating scale utilized a five point Likert scale. The Likert scale was seen as a clear and uniform way to measure the participants’ attitude, agreement or disagreement (Burns & Grove, 2011). This therefore allowed comparisons to be made between the participants and limited irrelevant answers.

Consideration was given to the development of question response options for these closed questions in relation to their exhaustiveness and exclusiveness, with the use of the additional category of ‘other’ on nine occasions throughout the questionnaire. This allowed the participants to add their own answer if the question response options were not exhaustive (De Vaus, 2002; Jjirowong et al., 2011). Checklist questions were used on five occasions (Q. 2, Q. 3, Q. 17, Q. 18, Q 27) when respondents were asked to rank any of the set of items provided that they felt applied to them. This was deemed appropriate when, by allowing only one response, may have limited the information able to be collected. Exclusiveness was demonstrated with the questions of binary format that allowed for only one answer to the question, i.e. those questions that asked for a yes/no response and in other questions of multi choice format that asked respondents to nominate ‘most important’ or ‘most difficult’ in their answers to response alternatives. Eleven of the 37 closed questions had an open-ended component that invited comment or clarification to the closed response. This allowed nurses the opportunity to describe their perceptions relating to the question and allowed their answers to be put into context. Although the closed questions served to gather a
wide range of information, there is a risk that these gather more superficial data and therefore two open-ended questions (Q.38, Q.39), together with additional space at the end of the questionnaire for any further comments were included. This was designed to compliment the closed questions and to add depth to the data by giving the respondents the opportunity to explain their perceptions in their own language (Polit & Beck, 2010). The combination of closed and open-ended questions was thought to be appropriate for this study based on the limited knowledge currently about the topic of inquiry.

**Questionnaire layout**

The first section of the questionnaire (Q.1 –Q.8) sought demographic information/participant characteristics first, in order to describe the study sample. These questions sought information on participants’ age; ethnicity, questions concerning nursing education and experience, as well as a question about the participants work hours (full time equivalent [FTE] status). It was hoped that questions relating to age and ethnicity would not be seen as too sensitive by the participants, or be seen as a threat to anonymity, with age bands rather than specific ages utilized to limit recognition. Asking about the participants work hours offered the possibility for comparison to the known demographics of the study population. This may overcome the question of how well the data obtained from the respondents represents the study population, as if the respondents work hours are demographically similar to the sample population, one can draw the conclusion that their responses to other questions are more likely to be representative (Burns & Grove, 2011; Taylor et al., 2007).

Question nine asked participants if they had been involved in the mentorship of a new or student nurse to the critical care area in the past five years. This was a simple yes/no question that served to direct the respondent to continue

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4 The total number of paid hours during a week worked by a part-time or full-time employee. The ratio units are FTE units or equivalent employees working full-time. For example one FTE is equivalent to one employee working full-time.
onto the main questionnaire (if they answered yes), or direct them to question 40, at the end of the questionnaire (if they answered no). It was felt that the chosen timeframe of five years would allow an adequate number of nurses to participate in the study if they chose to, and encourage them to focus on more recent experiences. Question 40 asked participants who had not been involved in mentorship in the critical care environment if they would like to be involved in the future. This was a simple yes/no question, but an open question was attached to the yes response asking how the participants’ workplace may help them to become involved in mentorship within the department. This question (Q. 40) was deemed to be of value, as it collected information from nurses who would have otherwise not have answered the main questionnaire about their perceptions of the assistance required to become involved in mentorship. The principle of beneficence requires that the research being undertaken should produce benefits for the participants or society (Polit & Beck, 2010). Asking participants what assistance they perceived was needed to become involved in mentorship may support the nurses and study setting in the future by providing knowledge about the support those new or returning to the mentorship role may require.

The main questionnaire then followed a logical sequence in which the questions relating to each topic were grouped together with a descriptive statement to alert the participant to the change in topic. By grouping the questions together logically, giving attention to the questionnaire’s layout and format, and giving clear instructions on completing the questions, it was hoped that participation would be encouraged (Jirojwong et al., 2011).

Pilot test

A pilot test is considered a critical part of questionnaire development and a way to examine a questionnaire’s reliability and validity. It allows feedback to be sought on factors such as the questionnaire’s clarity and can be used to refine the study’s methodology (Burns & Grove, 2011; Jirojwong et al., 2011). The pilot test for this study was conducted with a sample of six nurses from the study area, with two of these being senior nurses, two being experienced critical care nurses who held a qualification in critical care, and two who did not have qualifications in
critical care. These nurses were selected to represent the diversity of the study population.

The pilot test participants were asked to answer the draft questionnaire as well as comment on it and the accompanying information sheet with regards to clarity of the language used, its layout, the length of time it took to answer the questionnaire, and any suggestions for improvement. The researcher was able to examine the participants’ answers to gain insight into the questionnaire’s ability to achieve reliable and valid responses. Overall, the feedback from the pilot group was positive, with helpful suggestions made to improve layout and clarity. One participant pointed out some repetition in the questions, so this was corrected. The feedback on the length of time it took the participants to answer the questionnaire was helpful, and this was then included on the information sheet (see Appendix A) for participants.

Following alterations made after the pilot test, a biostatistician was consulted for advice on question content and structure, with minor changes made to help with data analysis. The researcher’s supervisor also reviewed the proposed questionnaire and information sheet making suggestions to further simplify the layout in order to make it more attractive to the study sample. The final documents were prepared in response to the feedback received from all of these sources.

**Ethical considerations**

The key ethical principles of respect for persons, beneficence, justice, and integrity guided the actions of the researcher in this study (Burns & Grove, 2011; Polit & Beck, 2010; Rischbieth & Blythe, 2005). Respect for the participants was maintained through the provision of a detailed information sheet outlining the study, the rights of the participants, and strategies for maintaining their anonymity and confidentiality (see Appendix A). It was clearly recognized in all communications with the study population that their participation in this study was purely voluntary, and that they had the right to ask questions, refuse to answer some questions, and to withdraw from the study at anytime. It is rare for researchers to obtain informed consent when the primary form of data collection
is through self-administered questionnaires, as the participants’ completion and return of the questionnaire allows the researcher to assume implied consent (Burns & Grove, 2011; Polit & Beck, 2010). Therefore implied consent for this study was assumed by the participants’ return of the questionnaire. The information sheet provided to the sample population served to inform the participants that their completion and return of the questionnaire would indicate their consent to participate in the study.

The principle of beneficence requires researchers to minimize harm to participants and maximize the benefits. It is intended that human research should produce benefits for the participants themselves, and/or society as a whole (Burns & Grove, 2011; Polit & Beck, 2010). The researcher believes that the findings of this research will benefit nurses undertaking the mentorship role within the critical care environment by providing an insight into barriers that exist, and minimizing or overcoming these barriers where possible. This may allow the support of professional growth and knowledge on mentorship practices within this setting, which will ultimately benefit patients. Although there were no foreseeable negative effects on the study participants, it was recognized that the questions would require reflection on both positive and negative aspects of the mentorship role. This may have raised issues for the participants and this was acknowledged on the information sheet with suggestions provided as to where the nurses could seek free professional advice and support.

The principle of justice, which denotes the research participants, rights to fair and equal treatment (Burns & Grove, 2011; Polit & Beck, 2010;) was upheld in the study by undertaking a random selection of the study population. This allowed no preference to be shown to any particular individual, culture, or stratum therefore allowing each nurse within the study population an equal and independent chance of being selected for this study. Participants were also assured that any data they provided on the questionnaire would be kept in the strictest confidence, being viewed only by the researcher and her supervisors. Respect for the study area was considered, with approval sought from the nurse manager to undertake the research with collaboration in regards to timing of questionnaire
distribution. This ensured that the population was not overburdened with other research requests at the time.

**Cultural considerations**

New Zealand’s partnership with Māori under the treaty of Waitangi was recognized in undertaking this research. Māori too, access critical care services within New Zealand, and are part of the nursing workforce. As such, they are also stakeholders with an interest in identifying how improved recruitment and retention of nurses through mentorship may meet future challenges in healthcare. The research manager for Māori at the University of Otago was consulted for guidance on honoring the participation, partnership, and protection of Māori. It was suggested that ethnicity data should be collected in this study, and question two on the questionnaire undertook to do this.

**Ethical approval**

This study received ethical approval from the Upper South A Regional Ethics committee on 7th April 2011 (see Appendix C). Consultation was also undertaken with the nurse manager and clinical director at the study site who gave approval for this study to be undertaken.

**Study population and sample**

The target population and inclusion criteria for this study was RNs permanently employed in nursing positions in the Department of Intensive Care at Christchurch hospital (n = 103). Nurses who were casually employed or those that were not in clinical nursing positions did not meet inclusion criteria (n= 10). These nurses rarely work at the bedside where the opportunity of providing mentorship to new nurses or student nurses exists. Data from these nurses were unlikely to accurately reflect the perceptions of the permanently employed nurses and potentially could affect the accuracy of the study’s results. Therefore, the target population for this study comprised 91% of the nursing workforce in the practice area.
After discussion with a biostatistician and the researcher’s supervisor it was decided to take a sample from the population in recognition that the open-ended questions (Q. 38, Q.39) and those that had an open-ended component to them (11 in total) would require content analysis which, depending on the amount of data collected had the potential to be very time-consuming. Determination of an appropriate sample size took into account the ability of the sample size to help answer the research question. The sample needed to be large enough to generalize the findings from the sample group to that in the total population with a high degree of confidence, but also small enough to allow analysis given the limited resources of time, money and personnel available (Jirojwong et al., 2011). A sample size of fifty was chosen for this study. Representativeness was also a goal in ensuring that the sample selected, and the total population were in many ways alike as possible in order to generalize the findings to the wider population and to avoid a sampling bias. This was partially overcome by examining the samples representativeness to the population in terms of the FTE status. By comparing the FTE to that of the total population, this was seen as a way to overcome the question of representativeness. If the respondents are demographically similar to the study population, responses to other questions are also more likely to be representative (Burns & Grove, 2011; Taylor et al., 2007).

Simple random sampling was used to obtain a sample from the population. Random sampling is a probability sampling approach that also increases the representativeness of the sample as it allows each person within a population to have the opportunity to be selected for the sample (Burns & Grove, 2011; Jirojwong et al., 2011). This required the researcher to establish a sampling frame by identifying each person in the population. This was achieved by obtaining a list of all permanently employed nurses within the study area from the nursing roster. The assistance of the biostatistician was sought, who used a computer program to provide a random ordering list of all the names in the sampling frame. This then allowed the first fifty nurses on the randomized list to be invited to participate in the study. Identification of the first fifty nurses on the list was achieved independently of the researcher by forwarding the list to the ward clerk who distributed the questionnaires to the first fifty names on the randomized list. This
included the ward clerk identifying nurses who were on leave from work during the study period and mailing them the questionnaire so that they would have the opportunity to participate.

The nurses receiving the questionnaire were given a month to return it following distribution. Of the fifty questionnaires distributed ($n = 50$), 38 completed questionnaires were returned. This represents a 76% response rate, and is considered a high response rate for a questionnaire (Burns & Grove, 2011).

**Incentives**

A commonly reported limitation of questionnaires are their low response rates, with a response rate lower than 50% putting the representativeness of the sample, the validity and reliability of the data, and the ability to generalize findings to other populations in question (Burns & Grove, 2011; Jirojwong et al., 2011; Taylor et al., 2007). The provision of an incentive to participate may be used as a strategy to enhance questionnaire returns (De Vaus, 2002; Taylor et al., 2007). Although the researcher did not feel strongly that an incentive would add to the questionnaire return rate, a incentive was offered to all the nurses who were in the sample regardless of whether they participated or not. The researcher wanted to recognize the time and reflection it would take to participate in the study by completing the questionnaire. The incentive that was offered was a chance to win a $50 voucher from a local University bookshop. The ward clerk made this draw at the time of distributing the questionnaires, and the voucher placed in the winning envelope. Other strategies used to enhance the response rate included a detailed information sheet, assurances of anonymity and confidentiality, and minimization of participant burden by providing a way for convenient questionnaire return at no expense to the participant.

**Data collection procedures**

*Introducing the study*

The study was introduced to the practice area two weeks prior to the questionnaire distribution. It was important to find an appropriate method to reach the target study group, in order to maximize the response rate (Jirojwong et al.,
Introducing the study involved placing an excerpt in the fortnightly newsletter distributed to the entire staff including nurses, health care assistants, medical staff, and technologists. This excerpt was a brief outline of the study’s purpose, who was undertaking the study, and participation details. A poster was also placed on the education board and staff room door in the practice area to further raise the profile of this study. On the same week that the questionnaires were distributed to the study’s sample, another excerpt was placed in the staff newsletter to highlight to staff that the questionnaire had been distributed. It was hoped that this would encourage staff to check their internal mail slots and therefore encourage participation.

**Questionnaire administration**

A self-administered questionnaire was seen as an economical and time-effective approach to distribute the questionnaire to the study sample \( n = 50 \) within a large department (Polit & Beck, 2010). Questionnaire distribution was conducted independently of the researcher to honor the researchers commitment to preserve participants’ anonymity. It was important to the researcher that the nurses did not feel obliged or coerced to participate. Blank prepacked envelopes that contained the information sheet (see Appendix A) and the questionnaire (see Appendix B) were supplied to the ward clerk. Also supplied was a set of sticky labels with pre-printed names of the entire eligible population. This allowed the ward clerk to place the appropriate names on the envelopes according to the first fifty names on the random ordering list provided by the biostatistician. The ward clerk then placed the envelopes in the nurses’ internal mail slot. For nurses on leave at the time of questionnaire distribution, a postage-paid return addressed envelope was included for convenient return to the ward clerk. If questionnaires were returned by post, the unit clerk agreed to assume responsibility for placing the questionnaire in the nominated locked box within the study area. Thus, there would be no distinction made between questionnaires that were returned by post and those placed directly in the locked box. The questionnaires’ return date was four weeks following distribution. Reminder notices of the return date were placed in the communication book. In addition posters reminding nurses of the
return date were placed on the education board and staffroom door a fortnight after distribution and one week prior to the questionnaire return date. It was recognized that the nurses in the practice area had many competing priorities at work and away from work, so these reminders were seen as a reasonable way to keep the profile of the study up, without being intrusive.

**Questionnaire returns**

*Collection, handling, and preparation for data analysis*

A clearly labeled blue locked box for the return of the questionnaires was placed in the study area’s staff tearoom. This box was one that was familiar to staff as it is used periodically in the area for the return of confidential information. The tearoom was chosen as it was accessible to all staff and is the place where the shift handover occurs allowing all nurses to see the box at some point during the study and be reminded to return their questionnaires. The tearoom was also seen as a discrete place for the questionnaire return as opposed to the busy clinical area of the department.

The researcher was the only person who held a key to the box, which was checked and emptied once a day. The returned questionnaires \((n = 38)\) were photocopied once to safeguard against disaster, with the original kept in a locked filing cabinet on site, and the photocopy secured off site. At this time the returned questionnaires were numbered one to 38 for ease of coding and to ensure that they were kept in the correct order. The questionnaire data are kept in strict confidence, with access restricted to the researcher and supervisors. The questionnaires and the photocopies will be kept securely for five years (July, 2017), at which time they will be destroyed.

**Data analysis**

The data collected through the questionnaire required organization, examination, and presentation. The collection of both quantitative and qualitative data through closed and open-ended questions necessitated a dual approach to data analysis. Descriptive statistics and content analysis were utilized to analyze the data.
Descriptive statistics

Descriptive statistics may be used in any study in which the data is numerical (Burns & Grove, 2011). Simple descriptive statistics were used to analyze the data from the closed questions in order to identify, summarize, and describe the patterns in the responses. The first step in data analysis was the development of a codebook to allow the responses to the information generated from each respondent to be assigned a numerical code. This enabled the data to be entered into a software program to be statistically analyzed (Pallant, 2010). A dataset was created using a Microsoft® Office Excel software program. This programme was chosen for its ease and availability of use. The data entered were checked on three occasions by the researcher against the original data on the questionnaires to ensure the accuracy of its transcription. Any missing data were identified and acknowledged within the dataset. Statistical advice was sought at this time to advise on options for analysis of the data from the closed questions. The statistician was supplied with a blank questionnaire and a copy of the dataset for this purpose.

The possibility of undertaking some correlational analyses to identify if relationships existed between variables was explored at this time with a parametric test such as the Pearson product-moment correlation (Burns & Grove, 2011). However, the sample size of 38 was deemed too small to provide creditable results in relation to such a test. A conclusion was drawn at this time that the robust analysis and reporting of simple statistics alongside content analysis would provide the results to answer the research question.

Frequency distributions were calculated with \( n \) representing the number of responses and percentages (\%). This allowed numerical order to be obtained for the data and made interpretation and presentation possible. Tables and bar graphs for selected frequency distributions were used to present results clearly. In order to analyze the respondents’ satisfaction with their work environment, and the confidence in undertaking the mentorship role, averages using mean (\( \bar{x} \)) were calculated for the Likert scales responses from all participants pertaining to questions 10 -15, and 22 -26 (see appendix B), with a total mean (\( \bar{x} \)) and standard
deviation (SD) obtained for each group. The mean, a commonly used measure of central tendency provided a way to make a concise statement about the nature of the data. Standard deviation (S.D) was used as a measure of how the scores in the sample are dispersed around the mean (Burns & Grove, 2011, Niles, 2012, p.2). Calculation of the S.D allows insight into the degree of error that can result if mean alone was used to interpret the data. One S.D from the mean accounts for 68% of the sample in a normal curve, two S.D accounting for approximately 95% of the sample and three S.D accounting for 99% of the sample (Burns & Grove; Niles, 2012, p.2).

**Validity of quantitative data**

The criteria for evaluating the credibility and dependability of findings arising from quantitative data are in its internal and external validity. Internal validity refers to the extent to which the findings of a study have measured what was intended. Factors such as changes related to the research participants or environment, instrumentation, and selection bias can threaten internal validity (Jirojwong et al., 2011; & Taylor et al., 2007). While there were no issues relating to these factors during the study, with random sampling undertaken, it is acknowledged that a larger random sample may have increased the number of participants taking part in the study.

External validity refers to the extent to which the results of the study can be applied to wider populations and locations (Jirojwong et al., 2011; & Taylor et al., 2007). The generalizability of this study is limited due to the research taking place at one site in New Zealand. However, representativeness has been addressed with the collection of respondent work hours (FTE), which allowed comparison of the known work hours of the study population.

**Content analysis**

Content analysis is a thematic method of analyzing written, verbal, or visual data allowing interpretation to various depths. It is an approach that has a long history of use in nursing and education (Elo & Kyngäs, 2008; Graneheim & Lundman, 2004). Content analysis was chosen as a tool to analyze the qualitative
responses in this study in order to draw conclusions from the data as to its context. This provided insight into the phenomenon being studied and allowed the development of categories to describe what is happening in relation to nurses’ perceptions of the barriers to mentorship within critical care.

In undertaking the content analysis for this study, a conceptual model presented by Elo and Kyngäs (2008) was followed in order to provide a clear format of the analysis undertaken (see Appendix D). An inductive approach for analysis was chosen in which conclusions are drawn from the data, allowing categories to be derived (Braun & Clark, 2006; Elo & Kyngäs, 2008; Polit & Beck, 2006). This approach is recommended if there is not a lot of knowledge of the phenomenon being studied, as was the case with this topic. At the beginning of the analysis, the researcher chose to code the data using both manifest and latent coding techniques to enhance the validity and strength of the content analysis for this study. Manifest coding records the visible content in text, such as the frequency that a word, action, or phase may appear. This is seen as a highly reliable form of coding as the word, phase, or action is either there or it is not. However it does not allow the meaning of the data to be explored, as the same word, phase or action can have different meanings depending on its context. Latent coding looks for the meaning or theme of the content in the text and the researchers interpretation of this (Graneheim & Lundman, 2004). Although the reliability of latent coding depends on the coder’s ability to interpret its social meaning accurately, its validity can be high as it considers the meaning and context of words, phases and actions (Graneheim & Lundman). Manifest coding was used to first identify the frequency of words or phases in the participants’ responses to individual questions. Latent coding was used to identify the context and meaning of the text.

In preparation for content analysis the responses for each question were transcribed word for word into a table with a separate table for each question. The methodical reading and re-reading of the responses to each question was undertaken allowing the researcher to become familiar and immersed with the data (Elo & Kyngäs, 2008).
Coding involved identifying words and phases that were appearing in the text, with notes and phrases written in the margin of the table as they were identified. These notes and phases were then written into another table with broad categories generated at this stage. As the data was re-read and examined, some categories were combined and new categories were generated to describe the themes that were emerging across the entire text. Some questions generated only two themes, whilst others generated up to eight themes. The use of frequencies provided an interpretation of the importance of the theme for both individual respondents and across the study sample.

**Rigor of qualitative data**

The rigor and trustworthiness of the qualitative findings of this study may be assessed by its credibility, fittingness, auditability, and confirmability (Taylor et al., 2007). Credibility refers to the extent that the respondents and others within the discipline recognize the research findings as being similar to their own viewpoints. It was not possible to contact the respondents in this study to verify the findings of content analysis due to this study’s anonymous nature. It is intended that the presentation of this study’s findings within the study setting will provide an opportunity for informal feedback as to its credibility. Fittingness refers to the extent that the study’s findings may fit into other settings, outside the study setting (Taylor et al.,). Although representativeness of the sample was addressed with participants’ work hours compared to that of the study population and the random selection of the sample, this study was undertaken at one center in New Zealand, therefore, its fittingness to other settings is not proven.

Auditability examines the soundness and consistency of a study’s research process (Taylor et al., 2007), with the term ‘trustworthiness’ in relation to qualitative inquiry seen as important in adding to the credibility of a study (Jirojjwong et al., 2011; Elo & Kyngäs, 2008). To achieve trustworthiness, the analysis process with results should be described in detail to give the reader a clear understanding of how the analysis was carried out. This involves providing a detailed decision trail, or audit trail for data analysis which others could replicate.
and achieve comparable conclusions (Elo & Kyngäs, 2008; Jirojwong et al., 2011 & Taylor et al., 2007).

The trustworthiness for this study is established through the author’s use of a comprehensive audit trail that includes the participants’ original data and extensive notes in relation to tables and codes. The process of content analysis for this study has been described in detail, with full explanations of the themes provided in the results chapter of this thesis. Authentic citations have been used to increase the trustworthiness of the research and give the reader an understanding of the data from which the themes were formulated. Care was taken not to identify the participants in any way (Elo & Kyngäs, 2008). The researcher’s supervisor also reviewed the data with subsequent discussion and reflection on its content, leading to a consensus interpretation. The researcher maintained impartiality throughout the study, by reflecting on her own views prior to and during the study, and maintaining contact with her supervisor.

Confirmability requires that the study’s findings reflect the implementation of credibility, fittingness and auditability (Taylor et al., 2007), which have been described in relation to this study.

**Summary**

This chapter has detailed the methodological approach taken in order to answer the research question. Explanation and rationale of the research design including questionnaire development, sampling process, and implementation strategies have been presented in order that the reader may critique the study’s ability to produce reliable findings. Ethical and cultural considerations, and the implementation of these within this study have been discussed. The approach taken to quantitative and qualitative data analyses has been described in detail with the issues of validity and trustworthiness discussed in reference to this study.

The following chapter presents the results of data analysis undertaken in order to quantify responses and identify key issues that have been highlighted in respect to what critical care nurses perceive to be barriers to mentorship within the critical care setting.
CHAPTER FOUR: RESULTS

Introduction

This chapter presents the results of data analysis undertaken in accordance with the research question and aims of the study. By analyzing the questionnaire data using descriptive statistics and content analysis, specific issues that nurses perceived to be barriers in providing mentorship in the critical care environment were identified.

Thirty-eight of the 50 nurses within the sample (76%) consented to participate in this study by the completion and return of the 40-item self-administered questionnaire. This included demographic questions, and questions pertaining to the work environment, experiences of mentorship, and confidence in undertaking the mentor role. In addition, respondents were questioned as to what they viewed as the most challenging, and the most rewarding aspects of mentorship. The results are presented numerically in accordance with the questionnaire format (see Appendix B). Simple descriptive statistical analysis has provided the frequency of responses pertaining to specific issues, with the rounding of percentages to within one decimal point maintained throughout. Qualitative results are presented alongside statistics where respondents provided comment allowing for the additional description of their perceptions, and content analysis where data gathered allowed (Q. 19, 20, 21, 33, 37, 38, & 39). To support the themes established through content analysis verbatim statements have been used for some question results.

Results

Q.1 -2. Age and ethnic group

Every age band was represented within the study sample (Q.1). The predominant ethnicity reported (Q.2) was New Zealand European (63.2%, n=24), followed by ‘other’ (31.6%, n=12), with 5.3% (n=2) identifying themselves as belonging to both New Zealand European and Maori ethnic groups (see table 2). The ‘other’ ethnic groups included within the sample were made up of British, South African, European, German, Danish, as well as Dutch and Spanish American.
Table 2: Age and Ethnicity of participants (Q.1-2)

<table>
<thead>
<tr>
<th>Q. 1. Age</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29 years</td>
<td>7</td>
<td>8.4%</td>
</tr>
<tr>
<td>30-39 years</td>
<td>18</td>
<td>47.4%</td>
</tr>
<tr>
<td>40-49 years</td>
<td>9</td>
<td>23.7%</td>
</tr>
<tr>
<td>50-59 years</td>
<td>3</td>
<td>7.9%</td>
</tr>
<tr>
<td>60+ years</td>
<td>1</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q.2. Ethnicity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZ European</td>
<td>24</td>
<td>63.2%</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>31.6%</td>
</tr>
<tr>
<td>NZ European and Maori</td>
<td>2</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Note. NZ =New Zealand.

**Q. 3-7. Qualifications and experience**

Respondents were asked to identify their nursing qualifications (Q.3). This allowed respondents to select single or multiple qualifications. Over half of the respondents (57.9%, n=22) listed themselves as holding a Bachelor of Nursing Degree, with 23.7% (n=9) holding a Nursing Diploma, 10.5% (n=4) a Nursing Certificate, and 7.9% (n=3) not answering this question.

Almost half of respondents (47.3%, n=18) ticked further categories in relation to the nursing qualifications they held with 18.4% (n=7) holding a Post Graduate Diploma, 15.8% (n=6) a Postgraduate Certificate, and 13.2% (n=5) a Graduate Certificate. No respondents indicated that they held a Master of Nursing Degree, or a PhD.

Almost two-thirds of respondents (68.4%, n=26) had undertaken their pre-registration nursing education in New Zealand (Q.4), with 31.6% (n=12) undertaking their education elsewhere, 13.1% (n=5) in the United Kingdom, 5.2% (n=2) in South Africa, 5.2% (n=2) in Australia, 2.6% (n=1) in Zimbabwe, 2.6% (n=1) in Germany, and 2.6% (n=1) in Denmark.

Well over 50% of the nurses in this study reported holding a qualification in critical care (Q.5), with 73.7% (n=28) having completed a critical care course. Respondents were asked to specify the type of critical
care qualification they held and the responses were separated into either Graduate or Post Graduate level, with 53.2% \( (n=20) \) of respondents holding a Graduate level qualification in critical care, 13.2% \( (n=5) \) holding a Post Graduate qualification in critical care and 10.5% \( (n=4) \) not stating which type of qualification they held.

Respondents were asked to indicate the number of years that they had worked as a registered nurse (Q.6), and the number of years that they had worked in critical care (Q.7). These results are shown in table 3.

Table 3: Years worked as a RN and years worked in critical care (Q.6-7).

<table>
<thead>
<tr>
<th>Q. 6. Years worked as an RN</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>1-2 years</td>
<td>1</td>
<td>2.6%</td>
</tr>
<tr>
<td>3-5 years</td>
<td>2</td>
<td>5.3%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>12</td>
<td>31.6%</td>
</tr>
<tr>
<td>11-15 years</td>
<td>8</td>
<td>21.1%</td>
</tr>
<tr>
<td>&gt; 16 years</td>
<td>15</td>
<td>39.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q. 7. Years worked in critical care</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>1-2 years</td>
<td>7</td>
<td>18.4%</td>
</tr>
<tr>
<td>3-5 years</td>
<td>12</td>
<td>31.6%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>7</td>
<td>18.4%</td>
</tr>
<tr>
<td>11-15 years</td>
<td>5</td>
<td>13.2%</td>
</tr>
<tr>
<td>&gt; 16 years</td>
<td>7</td>
<td>18.4%</td>
</tr>
</tbody>
</table>

Note. RN = Registered Nurse.

The collection of demographic data (Q. 8) concerning a respondent’s FTE status has enabled comparison of the study sample with the known hours of employment within the study population. Comparison revealed that all groups had been represented within the study sample, although nurses working 0.8-1.0 FTE were slightly over represented, 0.5-0.7FTE under represented and those working less than 0.5 FTE are well represented (see figure 2).
Every respondent indicated that they had been involved in the mentorship of a nurse or student nurse within the past five years (Q.9). Having answered yes to this question the respondents were encouraged to continue on with the questionnaire.

**The critical care work environment**

The respondents’ perception of their work environment was explored in questions 10-16, with the responses to these questions reported individually below and summarized in table 4.

**Q.10. The opportunity for autonomous clinical practice**

When asked if their work setting provided opportunities for autonomous clinical practice, over half of the respondents (52.6%, $n=20$) selected that they ‘sometimes’ had this opportunity, 31.6% ($n=12$) selected they ‘often’ had this opportunity, 7.9% ($n=3$) selected they ‘very often’ had this opportunity, 7.9% ($n=3$) selected they ‘rarely’ had this opportunity, and no respondents selected they ‘never’ had this opportunity (see table 4). Seven (18.4%) respondents provided additional comments relating to this question. Three comments described the

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*Figure 2:* Comparison of FTE status for RN’s in the study population and study sample (Q.8).
opportunities for autonomous practice arising from within their work environment. Autonomy was achieved most frequently through the use of nursing clinical pathways and procedures, the nurse’s own experience in critical care or through being supported by senior nurses to care for a more complex patient, thus gaining this experience. Three comments were in relation to ‘team effort’, with autonomy being achieved by working closely with the medical team to agreed parameters of care that nurses were then able to adjust in their care of the patient.

A lack of autonomy was described within the work setting with three comments that indicated, although nurses carry out a vast majority of the care, this care is mostly directed from a medical perspective. One respondent stated, “nurses qualified in critical care should have more autonomy that they are given”.

As illustrated in table 4, the results from this question suggest that just over half of the respondents believed that the work setting provided them with opportunities for autonomous clinical practice ‘sometimes’, and just over 30% felt this was the case ‘often’. There was an indication from a small number of participants (n = 3) that there was a lack of autonomy for nurses within the work environment.

Q.11. Opportunity to contribute to change/projects in the clinical setting

The focus of this question was to elicit the respondents’ perceptions of opportunities to contribute to changes or projects occurring within the clinical area. The majority (47.4%, n=18) of nurses selected that they ‘often’ had the opportunity to contribute, 39.5% (n=15) selected ‘sometimes’, 7.9% (n=3) selected ‘very often’, 5.3% (n=2) selected ‘rarely’, and no respondents selected that they ‘never’ had the opportunity to contribute to changes or projects occurring within their work setting (see table 4).

Eight (21.1%) respondents provided additional comments relating to this question with seven identifying that their contribution was sought in relation to the evaluation of new equipment in the clinical area, or by being involved in research trials (n=2). Within these seven comments, two respondents stated that although they were asked to give feedback on various equipment items frequently, they were unsure of the impact that their opinions had on the decision making
processes at a management level. The opportunity to review and develop nursing protocols was commented on by one respondent as a way of contributing to changes within the work environment. As illustrated in table 4, the results from this question suggest that the majority of nurses perceived that they ‘often’ have the opportunity to contribute to changes or projects occurring within the work setting, and these were described by those commenting to be mainly relating to the evaluation of new equipment within the clinical area.

Q.12. Learning and educational opportunities.

When asked if their work setting provided them with ongoing learning and educational opportunities, the majority of respondents (68.4%, n=26) selected that opportunities were provided ‘often’, 15.8% (n=6) selected ‘very often’, 13.2% (n=5) selected ‘sometimes’, 2.6% (n=1) selected rarely’, with no respondents selecting that they ‘never’ had this opportunity (see table 4).


The respondents’ perception of the resources (equipment) and staffing (nursing and allied) available to them on a ‘typical shift’ was sought in questions 13 and 14. In response to having adequate resources (Q.13), half of respondents (50%, n=19) selected there was ‘often’ adequate resources within the work environment, 29% (n=11) selected ‘very often’, 21.1% (n=8) selected ‘sometimes’, and no respondents selected ‘rarely’ or ‘never’ in relation to this question (see table 4). The responses to having adequate staff (Q.14) were similar with 50% of respondents (n=19) selecting that there was ‘very often’ adequate staffing within the work environment, 39.5% (n=15) selecting ‘very often’, 7.9% (n=3) selecting sometimes, 2.6% selecting ‘rarely’, with no respondents selecting ‘never’ (see table 4). This suggests that the majority of respondents perceive that there was ‘often’ or ‘very often’ adequate resources and staff within the work environment to support them in caring for their patient.
When asked if they considered the collegial relationships within their work environment to be satisfactory, 47.4% (n=18) of respondents selected they were ‘very often’ satisfactory, 39.5% (n=15) selected ‘often’, 13.2% (n=5) selected ‘sometimes’, with no respondents selecting ‘rarely’ or ‘never’ in response to this question (see table 4). This indicates that the majority of respondents perceive that their collegial relationships are ‘often’ of ‘very often’ satisfactory.

Table 4: Likert scale responses for work environment (Q.10-15).

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Q.10) Opportunities for autonomous clinical practice</td>
<td>0.0%</td>
<td>7.9%</td>
<td>52.6%</td>
<td>31.6%</td>
<td>7.9%</td>
</tr>
<tr>
<td>(Q.11) Opportunity to contribute to changes or projects</td>
<td>0.0%</td>
<td>5.3%</td>
<td>39.5%</td>
<td>47.4%</td>
<td>7.9%</td>
</tr>
<tr>
<td>(Q.12) Ongoing learning and educational opportunities</td>
<td>0.0%</td>
<td>2.6%</td>
<td>13.2%</td>
<td>68.4%</td>
<td>15.8%</td>
</tr>
<tr>
<td>(Q.13) Adequate resources within the work environment</td>
<td>0.0%</td>
<td>0.0%</td>
<td>21.1%</td>
<td>50.0%</td>
<td>29%</td>
</tr>
<tr>
<td>(Q.14) Adequate staff within the work environment</td>
<td>0.0%</td>
<td>2.6%</td>
<td>7.9%</td>
<td>50.0%</td>
<td>39.5%</td>
</tr>
<tr>
<td>(Q.15) Satisfactory collegial relationships within the work environment</td>
<td>0.0%</td>
<td>0.0%</td>
<td>13.2%</td>
<td>39.5%</td>
<td>47.4%</td>
</tr>
</tbody>
</table>

Note. Bold indicates majority answers.

The five Likert scale questions (Q.10-15) were analyzed further, with the mean score for these question responses calculated for each individual respondent. This was possible as the scale and coding (1= ‘never’, 2= ‘rarely’, 3= ‘sometimes’, 4= ‘often’, 5= ‘very often’) was the same for each of these questions, therefore all items had the same meaning. This then allowed the mean and standard deviation ($\bar{x} = 3.94 \approx 4$, $S.D = 0.42$) for all respondents to be
calculated to gain insight into how this group of nurses rated their work environment overall. A mean $\bar{x}$ of 3.94 ($\approx 4$) signifies that respondents found their work environment to ‘often’ be satisfactory. A standard deviation of 0.42 indicated that 68% of the respondents in this study rated their work environment as ‘often’ (3.52$\approx 4$) satisfactory.

**Q.16. Job satisfaction**

All, but one respondent indicated that they were currently satisfied in their job with 97.3% ($n=37$) selecting ‘yes’ for this question. This appears to be supported by the summative mean scores for Q. 10-15. Four respondents chose to comment on what they would change in their current job to make it more satisfying. Two stated ‘more opportunity’ in regards to career advancement within the clinical setting and the chance to undertake further formal education. One respondent saw more feedback as something that would improve their job satisfaction, with “less shift work” stated by another respondent. Whilst some respondents have made suggestions on how their job satisfaction could be improved, the results overwhelmingly indicate a high level of satisfaction amongst those nurses represented in the sample.

**Experiences of mentorship**

The following section (Q. 17-21) sought to explore respondents’ experiences of mentorship. Frequency and percentage distributions are presented alongside themes that have emerged through content analysis of descriptive statements for questions 17, 18, 19, 20, and 21, which sought further comment.

**Q.17. Nurses mentored in critical care.**

This question sought to answer the types of nurses that respondents had mentored within critical care (see figure 3). The majority (94.7%, $n=36$) of respondents had mentored a new staff member in critical care, 76.3% ($n=29$) had mentored a student nurse in critical care, and just under half of the nurses (42.1%, $n=16$) had mentored a new graduate within this environment. Seven nurses (18.4%) had the opportunity to mentor a nurse undertaking a return to nursing program
and 23.7% (n=9) stated they had mentored other disciplines within this environment, seven of these being midwives gaining acute care experience, and two from a provincial hospital gaining ventilation experience. The high number of positive responses to this question indicating that nurses had mentored a variety of learners within the environment serves to add weight and validity to the subsequent questions.

![Nurses mentored in critical care](image)

**Figure 3:** Nurses mentored in critical care by respondents (Q.17).

**Q.18. Motivation to provide mentorship**

Nurses were asked what they considered to be their motivation for providing mentorship, with the invitation to select as many options that applied to them. The option of selecting ‘other’ was also provided. These responses are presented in table 5.

<table>
<thead>
<tr>
<th>Optional response</th>
<th>(n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy the mentorship role</td>
<td>32</td>
<td>84.2%</td>
</tr>
<tr>
<td>It’s a requirement of my job description</td>
<td>24</td>
<td>63.2%</td>
</tr>
<tr>
<td>I had a good mentor when I was new to this job</td>
<td>22</td>
<td>57.9%</td>
</tr>
<tr>
<td>To fulfil PDRP requirements</td>
<td>20</td>
<td>52.6%</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>21.1%</td>
</tr>
<tr>
<td>I didn’t feel I had a choice to mentor a new staff member/student nurse or not</td>
<td>4</td>
<td>10.5%</td>
</tr>
</tbody>
</table>
Of the eight respondents (21.1%) whom selected ‘other’ in their responses to this question two respondents commented that mentoring provided them with the motivation to keep their knowledge up to date. One respondent saw mentoring as a way of putting their philosophy of nursing into practice. Three respondents described their motivation to provide a positive experience for the mentee, with comments by two of the three pertaining to having an unpleasant experience with a mentor when they were new and not wanting new staff or students to have a negative experience. Having a lot of previous experience was a reason given to mentor by one respondent, with another stating that they had new motivation since the introduction of PDRP.

The results of this question suggests that nurses are motivated to provide mentorship for a variety of reasons, with the majority of nurses indicating that their motivation comes from enjoying the mentorship role.

Q.19. Clinical workload and mentoring responsibilities

This question asked whether clinical workload ever impacted on respondents’ mentoring responsibilities, with 65.8% (n=25) of respondents selecting ‘sometimes’, 13.2% (n=5) ‘often’, 2.6% (n=1)‘very often’, and 18.4% (n=7) stating rarely. The option that clinical workload ‘never’ impacted on their mentoring responsibilities was not selected by any respondents.

A clearer understanding was gained from content analysis of respondents (71.1%, n=27) descriptions of how they perceived their mentoring responsibilities were affected by their clinical workload. Analysis of these open text responses produced several sub-categories which were further categorized into three themes: ‘the complex patient’, ‘the patient as the priority’, and ‘the nature of the critical care environment’ (see figure 4), providing a picture of how these nurses perceived that their clinical workload impacted on their mentoring responsibilities. In relation to the first qualitative theme, titled ‘the complex patient’, respondents highlighted the importance of patient allocation for the mentor and his or her mentee. Twenty-two respondents commented on the negative impact that having a particularly busy or unstable patient had on their
ability to teach or support the mentee in their learning, with learning time being lost due to patient care workload. Examples of comments made included “when with a critically ill patient, you sometimes have not got time to explain things fully as you are doing them, especially when there is so much happening in the bed space”, and “It depends a lot on the patient you have, if you have a particularly busy/unstable patient there is not always time to go through things slowly, to explain, to take the time with the student or new nurse”. The word ‘time’ was counted in the text on 16 occasions when respondents were describing caring for a complex patient whilst undertaking mentoring responsibilities. Nine nurses commented that this was particularly difficult if the mentee was very new to the area, with little prior experience or knowledge, or if they were a student nurse as “they often don’t know enough yet to be able to help effectively”. Within this theme, seven respondents described that having a complex patient while undertaking mentoring increased their overall workload, was stressful and ultimately decreased the quality of mentorship.

The second theme identified was one in which the respondents described ‘the patient as the priority’, with seven respondents directly stating the patient “is always the priority”. Respondent comments referred to their primary responsibility being to the care of the patient, and if the patient was unstable this would negatively impact on mentoring responsibilities. Statements such as “If mentoring, and assigned a particularly sick or busy patient it can impinge on your quality of mentorship as the patient care comes first” being typical of the comments made by these seven respondents.

A disparate theme was identified with two respondents commenting on the busy environment of critical care as being part of the mentoring process in learning the skills to adapt workload to the available time. One respondent stated, “I look at this as part of the mentoring process, sometimes work is like that, and you have to learn to adapt the workload to your time and resource restraints”. There were only two comments of this nature and since they did not fit into any of the other themes that emerged, the researcher deemed it important to create a third theme of ‘the nature of the critical care’, that encompassed these comments.

Over half the respondents (57.9%, n=22) selected ‘yes’ to the question that asked if the role they play in mentorship was acknowledged within their work environment, with 36.8% (n=14) selecting ‘no’ to this question. Two (5.3%) respondents did not select ‘yes’ or ‘no’ to this question, instead writing ‘unsure’.

Respondents who selected ‘yes’ for this question were asked for further comment, with 18 (50%) choosing to do so. Content analysis identified two themes that emerged from these additional comments. These themes were labeled ‘intangible acknowledgement’ and ‘tangible acknowledgement’. Examples of intangible acknowledgement were described by thirteen respondents and related to the recognition, mostly verbal, that came from senior nurses within the work environment in relation to the role of mentorship the nurses were undertaking. Additionally, two respondents described the support from other nursing colleagues to ‘provide learning opportunities’ as they arose, for the mentee.

Also mentioned, to a lesser extent (n=4) was the acknowledgement that came from the mentee, when they expressed their ‘gratefulness’ for the extra time taken by the respondent to mentor.
The second theme appeared was that of ‘tangible acknowledgement’. Nine respondents commented on this with eight comments describing the recognition they received within the Professional Development and Recognition Program (PDRP) framework\(^5\) for the role they played in the teaching and skill development of colleagues. The respondent’s role as a mentor was used to support their application to achieve ‘Proficient’ or ‘Expert’ level on this framework. Recognition of practicing at a Proficient or Expert level within the PDRP carries a financial incentive, as well as other opportunities such as support for funding and study leave in undertaking post graduate education. One remaining respondent commented that their work environment recognized them in such ways as funding to attend conferences and career advancement within the clinical area.

**Q.21. Remuneration for the mentor role**

Sixteen (42.1\%) respondents selected ‘yes’ when asked if they thought they should receive additional remuneration for undertaking the mentorship role, with 21 (55.3\%) selecting ‘no’ to this question, and one respondent stating they were unsure.

Respondents were asked to indicate the type of remuneration they considered to be appropriate. Twenty respondents (52.6\%) commented on this with two themes appearing from the content analysis of the descriptive statements; these were labeled ‘tangible remuneration’ and ‘remuneration is inappropriate’. Money was referred to as being an appropriate tangible remuneration by nine respondents, with words or phases such as ‘money’, ‘extra pay’, and ‘small lump sum’ appearing in the analyzed text. Time off, in the form of a day in lieu was also seen by five respondents as being an appropriate remuneration. Both money and time off was noted as being an acknowledgement of the extra responsibility and stress that came with the mentorship role. There was some comparison drawn between the nurses’ role of mentorship and a teachers’ role (\(n=4\)), with the word ‘teacher’ appearing in the text of each comment relating to this. Examples of these comments being “teachers are paid

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\(^5\) This framework provides RNs a pathway to demonstrate continued competence to practice to the NZNC, as well as providing a pathway to develop and recognize expertise of nurses in clinical practice (NZNC, 2008).
for mentoring”, and “teachers receive money for having students”. No respondent commented that PDRP was a form of remuneration that they saw as appropriate, despite this being recognized by nearly half of the respondents in the last question (Q.20) as being a way that they are recognized currently for the role they play in mentorship.

A second theme of ‘remuneration is inappropriate’ emerged with five respondents commenting that remuneration in the form of a financial incentive would be inappropriate. Commons terms and statements included “mentoring is a privilege”, “those only interested in money may be attracted to mentoring leading to a fall in teaching standards”, and “maybe some form of remuneration, other than money”. Within this group, suggestions were also made (n=2) about supernumerary time with the mentee being a way of acknowledging the role and the time needed for preparation.

Confidence in undertaking the mentorship role

The respondents’ confidence in undertaking the role of mentor was explored in questions 22-26, with the responses to these questions being reported individually below and summarized in table 6.

Q.22. Demonstrating current knowledge of clinical practice

When asked to indicate their confidence in demonstrating their current knowledge of clinical practice within their specialty area, the majority (73.7%, n=28) of respondents selected they were ‘usually confident’ in this area, 15.8% (n= 6) selected ‘always confident’, 10.5% (n= 4) selected ‘partly confident’, and no respondents selected ‘not at all confident’, or ‘not applicable’ (see table 6).
Q.23. Identifying the learning needs of the mentee

Confidence of the respondents to identify the learning needs of the mentee was high, with 81.6% \((n=31)\) selecting they were ‘usually confident’, 7.9% \((n=3)\) ‘always confident’, 10.5% \((n=4)\) ‘partly confident’, and no respondents selected they were ‘not at all confident’, or that the question was ‘not applicable’ to them (see table 6).

Q.24. Understanding the expectations of competency assessments

Respondents indicated less confidence than in previous questions regarding their understanding of the expectations of competency assessments to be undertaken, with 50% \((n=19)\) selecting they were ‘usually confident’, 10.5% \((n=4)\) ‘always confident’, 31.6% \((n=12)\) ‘partly confident’ and 5.3% \((n=2)\) ‘not at all confident’. No respondents selected ‘not applicable’ and one respondent did not answer this question (see table 6).


The response outcomes for this question that asked about confidence in assessing the mentee’s performance based on competency assessments were similar to those for question 24, with 50% \((n=19)\) of respondents selecting ‘usually confident’, 15.8% \((n=6)\) ‘always confident’, 29% \((n=11)\) ‘partly confident’, 5.3% \((n=2)\) ‘not at all confident, and no respondent selecting that this question was ‘not applicable’ (see table 6).

Q.26. Consulting a resource person

Respondents’ confidence in their ability to seek assistance from an appropriate resource person if challenges arose was high with over half (57.9%, \(n=22)\) selecting ‘always confident’, 31.6% \((n=12)\) ‘usually confident’, 7.9% \((n=3)\) ‘partly confident, and 2.6% \((n=1)\) selected ‘not at all confident’, and no respondent selecting that this question was ‘not applicable’ (see table 6).
Table 6: Likert scale responses for confidence in mentoring (Q.22-26).

<table>
<thead>
<tr>
<th>How confident are you that you can:</th>
<th>NA</th>
<th>Not at all confident</th>
<th>Partly confident</th>
<th>Usually confident</th>
<th>Always confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Q.22) Demonstrate current knowledge of clinical practice?</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>10.5% (4)</td>
<td>73.7% (28)</td>
<td>15.8% (6)</td>
</tr>
<tr>
<td>(Q.23) Identify learning needs of the mentee?</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>10.5% (4)</td>
<td>81.6% (31)</td>
<td>7.9% (3)</td>
</tr>
<tr>
<td>(Q.24) Understand expectations of competency assessments?</td>
<td>0.0% (0)</td>
<td>5.3% (2)</td>
<td>31.6% (12)</td>
<td>50% (19)</td>
<td>10.5% (4)</td>
</tr>
<tr>
<td>(Q.25) Assess mentees performance based on competency assessments?</td>
<td>0.0% (0)</td>
<td>5.3% (2)</td>
<td>29% (11)</td>
<td>50% (19)</td>
<td>15.8% (6)</td>
</tr>
<tr>
<td>(Q.26) Consult resource persons for assistance?</td>
<td>0.0% (0)</td>
<td>2.6% (1)</td>
<td>7.9% (3)</td>
<td>31.6% (12)</td>
<td>57.9% (22)</td>
</tr>
</tbody>
</table>

Note. One respondent did not provide an answer to Q. 24.

The five Likert scale questions (Q. 22-26) were analyzed further, with the mean score for these question responses calculated for each individual respondent. This was possible as the scale and coding (1 = ‘not applicable’, 2 = ‘not at all confident’, 3 = ‘partly confident’, 4 = ‘usually confident’, and 5 = ‘always confident’) was the same for each of these questions, therefore all items had the same meaning. This then allowed the mean and standard deviation ($\bar{x} = 3.98 \approx 4$, S.D = 0.44) for all respondents to be calculated to gain insight into how this group of nurses rated their confidence in undertaking the mentor role overall. A mean score ($\bar{x}$) of 3.98 ($\approx 4$) signified that respondents were ‘usually confident’ in undertaking the mentorship role. A standard deviation of 0.44 indicates that 68% of the respondents in this study would rate themselves as being ‘usually confident’ in undertaking the mentor role.
Q.27. Barriers to mentorship in the work environment

This question provided a list of some of the potential barriers within the work environment that had been identified from literature review. Respondents were invited to select those barriers in the list that they identified with. The option of describing ‘other’ was also provided. These responses are presented in table 7.

Table 7: Barriers to the mentor role in the work environment (Q.27)

<table>
<thead>
<tr>
<th>Optional response</th>
<th>(n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time because of clinical workload</td>
<td>30</td>
<td>80%</td>
</tr>
<tr>
<td>Lack of familiarity with the assessments required</td>
<td>19</td>
<td>50%</td>
</tr>
<tr>
<td>Lack of familiarity with the documentation required</td>
<td>19</td>
<td>50%</td>
</tr>
<tr>
<td>Lack of training in preceptorship and/or mentorship</td>
<td>18</td>
<td>47.4%</td>
</tr>
<tr>
<td>Lack of opportunity to update knowledge of mentorship/preceptorship</td>
<td>11</td>
<td>29%</td>
</tr>
<tr>
<td>Lack of familiarity with systems for training and assessment in your workplace</td>
<td>8</td>
<td>21.1%</td>
</tr>
<tr>
<td>Lack of confidence in ability to assess a mentee's competency</td>
<td>6</td>
<td>15.8%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>15.8%</td>
</tr>
<tr>
<td>Lack of confidence in ability to supervise a mentee</td>
<td>5</td>
<td>13.2%</td>
</tr>
<tr>
<td>Lack of confidence in own skills and knowledge in the area</td>
<td>5</td>
<td>13.2%</td>
</tr>
<tr>
<td>Lack of motivation to be involved in mentorship/preceptorship</td>
<td>3</td>
<td>7.9%</td>
</tr>
<tr>
<td>Lack of confidence in interpersonal skills</td>
<td>2</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Respondents who selected ‘other’ provided further details of the barriers in their comments. Three comments related to the mentorship of student nurses, specifically the assessments and documentation requirements for students, with one respondent stating that a “lack of contact with the students’ tutors” was an issue for them. Another respondent stated that the only reason that they were comfortable with the expectations involved in mentoring students was because they also had experience of working within the Bachelor of Nursing curriculum program. Two respondents made comments relating to ‘time’ with the mentee. One of these comments was in respect to the need for supernumerary time to allow the paperwork relating to assessments to be discussed between the mentor and mentee, away from the bedside. Another comment related to when the workplace is busy the mentee was often used as an “extra pair of hands” with this
seen to detract from the mentoring relationship. One respondent reported that not being asked to mentor often was itself a barrier to the role.

**Q. 28 -29. Mentorship/Preceptorship training**

Respondents were asked if they had the opportunity to undertake any formal mentorship or preceptorship training (Q. 28), with 57.9% \( (n=22) \) selecting ‘yes’ and 42.1% \( (n=16) \) selecting ‘no’. Of those who had undertaken training \( (n=22) \), 21 had undertaken training in New Zealand. Fourteen respondents described the training they had undertaken as hospital based study days, with the term ‘preceptorship used by six of these respondents. Six respondents described more formal training through courses taken at a college of education \( (n=4) \) and two others listed an Introduction to Clinical Teaching course run at a tertiary education institution as their mentorship training. The one respondent who reported undertaking their training in the United Kingdom described this as “mentorship training undertaken in the UK”. It was noted that three of the 22 respondents made reference in their comments to the fact that the training they had undertaken had been ‘many years ago’, with one respondent’s course being undertaken more than a decade ago. The year that the courses were undertaken was not asked, so this could not be assessed further.

When asked if they were aware of the preceptorship/mentor training offered at their institution (Q. 29), 57.9% \( (n=22) \) of respondents selected ‘yes’ and 42.1% \( (n=16) \) selected ‘no’ to this question.

**Q. 30-33. Mentorship of new staff in critical care**

Questions 30-33 sought to gain an understanding of respondents’ experiences of mentoring new staff members within the critical care environment.

**Q. 30. The most important role to fulfill – new staff member**

Respondents were asked to select the role they perceived to be ‘the most important’ to fulfill when mentoring a new staff member. Two respondents selected more than one role, making a total of five additional responses. These have been included within the frequency results shown here. The roles of
‘supporter’ and ‘role model’ were seen as equally important by respondents, with 41.9% (n=18) selecting ‘supporter’ as being the most important role and 41.9% (n=18) selecting ‘role model’. Three respondents (7%) selected ‘teacher’, 4.7% (n=2) selected ‘coach’, 2.3% (n=1) selected ‘supervisor’, and one respondent (2.3%) chose ‘other’, specifying the role of ‘facilitator’ as being the most important to fulfill when mentoring a new staff member. No respondents selected ‘assessor’ as the most important role (see figure 5).

**Q.31. The most difficult role to fulfill – new staff member**

Respondents were then asked to select from the same list as in Q. 30, the role they perceived to be the ‘most difficult’ to fulfill when mentoring a new staff member. Over half (52.6%, n=20) of the respondents selected ‘assessor’ from this list. The role of ‘teacher’ was selected by 13.2% (n=5) of respondents, with the same number (13.2%, n=5) selecting ‘supervisor’. One respondent commented that they had chosen ‘supervisor’ as the most difficult role to fulfill as the word ‘supervisor’ “suggested an unequal power base in the relationship”. ‘Role model’ was selected by 10.6% (n=4) of respondents, with 5.3% (n=2) selecting ‘coach’, 2.6% (n=1) selected ‘other’. The respondent who selected ‘other’ provided additional detail and described the difficulty of encouraging new staff to establish what they viewed as ‘good working habits’ when other ‘role models’ in the unit were not displaying what this respondent considered to be the necessary professionalism. One respondent did not answer this question and no one chose ‘supporter’ as in answer to this question (see figure 6).

**Q. 32. Expectations of the mentorship role – new staff member**

Well over half (65.8%, n=25) of respondents selected that they were ‘clear’ regarding the expectations of their role as mentor to the new nurse in critical care, 29% (n=11) selected ‘very clear’, 5.3% (n=2) selected ‘unclear’, and no respondents selected ‘very unclear’. One respondent chose to provide detail as to why they were ‘unclear’ and expressed concern about their responsibility in assessing a new nurse’s ability to practice safely within the environment at the end of the orientation period.
Q. 33. Support available – new staff member

Twenty-nine nurses (76.3%) selected ‘yes’ to the question asking if there was adequate support when mentoring a new nurse to the critical care environment, with 23.7% (n=9) selecting ‘no’ to this question.

Further detail was provided by nine respondents in respect to the support they perceived to be necessary when they were mentoring new nurses, with four themes emerging from content analysis of the comments provided. ‘Patient allocation’ appeared as a theme with three respondents making reference to patient allocation not always being appropriate, and one respondent suggesting that they would like to be involved in patient allocation decisions when they are working with a mentee. ‘More training’ was suggested by two respondents, and time appeared in the text in the context of statements by two respondents about the ‘supernumerary time’ they felt was needed in order to adequately support the mentoring relationship, such as time away from the clinical area to allow feedback to occur between the mentor and mentee, and regular time allocated for the mentor to seek feedback and support from the nurse educator or senior nurses in regards to a mentee’s progress. A fourth theme was labeled ‘support systems’ as the comments made by five respondents were interpreted to mean that the respondents were asking for more contact with those persons they saw as being integral to the mentoring process. The title nurse educator was mentioned three times in the comments, with one respondent stating, “more contact with the nurse educators and other nurses mentoring the new nurse”. One respondent stated that “with the new graduate nurse I was very supported, but not with the new staff nurse”.

Q. 34-37. Mentorship of student nurses in critical care

Questions 34-37 sought to gain an understanding of respondents’ experiences of mentoring student nurses within the critical care environment.
**Q.34. The most important role to fulfill – student nurse**

Respondents were asked to select, (as for Q. 30) the role they perceived to be ‘the most important’ to fulfill when mentoring the student nurse from a list of options. Two respondents chose more than one role, making a total of five extra responses for this question. These have been included with the frequency results shown here. The role of ‘teacher’ rated highly with 38.6% \( (n=17) \) of respondents selecting this role as the most important, closely followed by ‘role model’ with 34.1% \( (n=15) \) of responses. The roles of ‘supporter’, ‘assessor’, and ‘supervisor’ were evenly selected, with 6.82% \( (n=3) \) selecting each of these roles. One respondent selected ‘coach’, and one respondent selected ‘other’, specifying the role of ‘facilitator’ as being the most important in relation to the student nurse. One respondent did not answer this question (see figure 5).

**Q.35. The most difficult role to fulfill – student nurse**

Respondents were then asked to select the role they perceived to be the ‘most difficult’ to fulfill when mentoring a student nurse from the same list of options as for Q. 31. Two respondents selected more than one role, and two respondents \( (5.1\%) \) did not answer this question. Almost half of respondents \( (48.7\%, \ n=19) \) indicated the role of ‘assessor’ to be the most difficult to fulfill, 15.4% \( (n=6) \) selected ‘supervisor’, 10.3% \( (n=4) \) selected ‘teacher’, 7.7% \( (n=3) \) selected ‘supporter’ 5.1% \( (n=2) \) selected ‘coach’, and one respondent \( (2.6\%) \) selected ‘role model’. Two respondents \( (5.1\%) \) selected ‘other’, both of whom indicated that giving ‘constructive criticism’ was a role they found the ‘most difficult’ (see figure 6).
Figure 5: Roles selected by respondents as the most important to fulfill for a new staff member and student nurse (Q.30 & 34).

Figure 6: Roles selected by respondents as the most difficult to fulfill for a new staff member and student nurse (Q.31 & 35)

Q. 36. Expectations of the mentorship role – student nurse

In response to this Likert scale question regarding the expectations of their role as mentor to the student nurse in critical care, half of the respondents (50%, n=19) selected ‘clear’, 15.8% (n=6) selected ‘very clear’, nine (23.7%) selected
‘unclear’, and 7.9% \( (n=3) \) selected ‘very unclear’. One respondent did not answer this question.

Five respondents chose to provide details about why they were unclear, with four describing their difficulty in knowing what to expect from the students in relation to what they were able to do, what type of skills they should encourage and what it was that the student was required to achieve whilst on placement. These factors made assessment difficult. One respondent stated that they felt strongly that “student nurses should not gain their experience in an ICU, start with the basics in a ward setting”.

**Q.37. Support available – student nurse**

Twenty-three nurses (60.5%) selected ‘yes’ to the question that there was adequate support when mentoring a student nurse in the critical care environment, and 34.2% \( (n=13) \) of respondents selected ‘no’. Two respondents did not answer this question.

Thirteen respondents provided further detail on the support they perceived was required when mentoring student nurses within critical care. Three themes emerged from content analysis of the descriptive statements made by respondents. ‘*More contact with clinical tutors*’ was perceived by nurses \( (n=6) \) as a way to provide more support, with examples of phases and statements including: “having the tutors present more often in order to discuss issues and expectations” and “I think the tutors should be a bit more present than what they are, if you had problems this could be an issue”. ‘*Access to more information*’ in relation to knowing what the expectations should be of student nurses on placement in the critical care environment was highlighted \( (n=3) \), with statements such as “ensuring all staff are aware of the student nurses’ role”, and “there is limited information on the expectations for student nurses in the critical care environment” were amongst those made. There was also a request by one respondent for a formal course on mentoring to be provided. The word ‘time’ appeared twice within the open text comments in relation to the suggestion that more ‘*supernumerary time*’, or non-clinical time was necessary to complete assessments, discuss important points and undertake reflection. Reference was
made to the difficulty in providing mentorship when caring for a very unwell patient.

**Q.38. The most challenging aspects of mentorship**

This open-ended question invited responses concerning what respondents perceived to be the most challenging aspects of mentorship. Thirty-seven respondents (97.4%) provided comments with some identifying several challenges. Through content analysis of the descriptive statements, several themes emerged (see figure 7). Seventeen respondents identified that ‘time’ was a challenging aspect of mentorship. The words “time”, “timeframe” or “time constraints” appeared twenty-four times within the text, and was mentioned by 18 different respondents. The context of these words for sixteen of the respondents were in relation to the time required to adequately mentor the new or student nurse at the bedside. Statements such as “time for explanations at the bedside can be brief, students learn what/how to do something, but not why and when”, and “having the chance to go over things properly, a chance to sit down and go over procedures etc, it can be difficult in the clinical environment”, as well as “time I suppose, as sometimes I would like to ‘freeze-frame’ and go over something, but too busy, not the right time, or the shift ends and everyone keen to go home”. Non-clinical time away from the clinical area was suggested by four of the sixteen respondents as a way to allow for the time that was required to complete assessments and assist reflection. Three respondents referred to “lack of time” or “time constraints due to workload” or a “really sick patient”.

Of the 37 responses to this question, nine made comment about the difficulty of balancing caring for ‘the complex patient’ and mentoring responsibilities, with phrases such as ‘complex patient’, ‘many needs of the patient’ and ‘a very unstable patient’ occurring throughout the text. These phrases appeared in sentences that spoke of the difficulty experienced in addressing the many needs of the patient at the same time as addressing the needs of the student. Examples of comments by respondents included “balancing the many needs of the patient with the competing and many needs of the student, both deserve top quality”, and “at times when the patient is complex and requiring a lot of input, I
find it difficult to do justice in meeting students needs for input, time, and reflection.”

A ‘lack of confidence’ in the respondents’ own knowledge emerged as a theme, with this being commented on by nine respondents. Seven such statements related to the respondent’s lack of confidence in their own clinical knowledge, and two of these statements related to their lack of confidence in their mentoring skills.

Six of the 37 respondents comments described ‘assessing the mentee’ as a challenging aspect for them, with the word ‘assessment’ appearing in the text five times. Such comments as “lack of familiarity with assessments”, and “adequately documenting the progress of students, or concerns within the assessment paperwork provided” served to add context to this theme. It was unclear if these responses were solely relating to the assessment of student nurses as the term ‘student’ was only mentioned once within the text of these assessment related comments. However, it is not common practice for registered nurses’ to assess each other in relation to competency to practice.

‘Giving feedback’ to a mentee was perceived by six respondents as challenging with respect to their concerns about giving feedback without discouraging the mentee. Typical statements included “being able to highlight areas of concern without offending the mentee”, and “providing constructive feedback in a non-threatening way, not scaring them”. ‘The over confident mentee’ also emerged as a theme, with six respondents commenting on the challenge of supporting a nurse or student nurse when they perceived a discrepancy between the mentee’s knowledge and their confidence in the critical care setting.

Other smaller themes are recognized as a result of the content analysis of the descriptive statements, and were ‘stepping back’ and allowing the mentee to initiate patient cares (n=2), dealing with conflict, or not ‘clicking’ with the mentee (n=2) which was termed ‘mentor/mentee mismatch’, ‘mentor fatigue’, with two respondents commenting on feeling a twelve hour shift was too long to provide mentorship over, and difficulty ‘maintaining the mentor/mentee relationship’ (n=2) in respect to not always working with the mentee, or being able to maintain
the relationship after the initial preceptorship period was over. One respondent commented on experiencing ‘cultural difficulties’ with nurses from different countries, and this was recognized as a theme on its own. This theme was distinctive, and did not fit into any other established theme, but since it was interpreted to be a significant challenge to this respondent, it was recognized and reported within this result section.

**Figure 7**: The most challenging aspects of mentorship for respondents (Q. 38).

**Q.39. Rewarding aspects of mentorship**

This open-ended question invited respondents to comment on what they perceived to be the most rewarding aspects of mentorship. Thirty-seven nurses (97.4%) provided responses, with some identifying multiple aspects. Content analysis of descriptive statements identified six main themes that appeared within the responses provided (see figure 8).

A theme of ‘watching the mentee grow’ appeared with 22 respondents commenting on the sense of pride, contribution or satisfaction they felt in watching the mentee’s practice develop and seeing them succeed within the clinical environment. Words such as ‘watching’, ‘observing’ and ‘seeing’ appeared 27 times within the text, and comments such as “watching the
development of the mentee with pride”, and “observing the development and being part of it” add context to this theme.

Of the 37 respondents, 15 also commented that mentoring provided them with a way to contribute to critical care nursing as a specialty and to retain nurses within this specialty, with a theme ‘contributing to the specialty’ emerging here. Examples of comments made included “to see growth in the student, new grad, and new employees nursing in the critical care environment”, and “teaching and supporting staff, and seeing them grow in the specialty”.

A rewarding aspect of mentorship was described by 13 respondents in regard to what they saw as ‘increased mentee confidence’, with seven respondents describing the new knowledge and skills that the mentees were developing. Comments such as “seeing the student or RN applying their new knowledge to practice and watching their confidence grow”, and “seeing the new staff members confidence as they develop their skills” are such examples.

‘Increased mentor motivation’ emerged as a theme, with eight respondents describing a motivation to keep their own practice up to date, and two respondents also reflecting that they also learnt something from the staff they were mentoring. This was seen as a positive aspect of working with a mentee, with comments such as “makes me hit the books and increases my clinical knowledge”, as well as “you cannot teach without learning something so contributes to my personal development” and “encourages you to keep your own practice up to date”.

‘Positive feedback’ from the mentee was described as being rewarding for five respondents with comments including “receiving positive feedback from the student” as well as indirect feedback such as “seeing enthusiasm, and interest to learn” and “explaining a difficult concept and getting the correct feedback to know that they fully understand”.

The theme of ‘being a role model’ for the mentee was present within four respondent’s descriptions, with two describing more fully that they saw mentoring as an opportunity to “model best practice”, and “role modeling a high standard of care”.
Figure 8: The most rewarding aspects of mentorship for respondents (Q.39).

Q.40 Being involved in mentorship

This question asked respondents who had not been involved in mentorship in the critical care environment, if they would like to become involved in the future. Suggestions as to how the clinical area could assist them to become involved were also invited. Although all 38 respondents participating in this study had been involved in the mentorship of a nurse or student nurse in the past five years (Q.9), five respondents selected ‘yes’ to this question. Two respondents suggested more education within the clinical setting, and two stated they would like to be more involved in mentorship in the future.

Additional comments

Eight respondents (21.1%) provided additional comments in the allocated space at the end of the questionnaire. Six of the eight respondents provided suggestions as to how the process of mentoring could be improved in the clinical setting. Two respondents suggested how a more in-depth and longer-term mentor/mentee relationship could occur, with one suggestion being that the mentor could be more involved with the professional development of the mentee by being present at the performance reviews carried out by senior nurses within
the department, enabling greater insight by the mentor into the mentee’s long term goals. Another suggestion was that mentees be given the opportunity to work with a more experienced nurse, not just when they are new to the environment, but at times when there was a clinical learning opportunity that would allow them to expand their knowledge and skills. Another respondent commented that there was an “ongoing collective responsibility” to role model to the mentee and give feedback to them in relation to practice, and that this is not the mentor’s role alone. Another respondent made a suggestion that mentors should have adequate clinical experience themselves before becoming a mentor. Further suggestions were made regarding the need for non-clinical time to be available for the mentor and mentee in order for the program to work, and a need for the mentor to be involved in patient allocation when they are working with the mentee.

The remaining two respondents provided their own views, with one respondent suggesting that student and new graduate nurses should obtain their practical skills within a ward setting as opposed to the critical care environment, and the other respondent commenting that they found mentoring a mutual learning experience.

**Summary**

This chapter has presented the results obtained from the research data using descriptive statistics and content analysis and is reported in a question by question manner. Demographic characteristics of the respondents regarding their work hours (FTE) indicate that the sample appears to be representative of the study population. A satisfactory spread of age, ethnicity, and experience appears to be present within the sample population.

Data pertaining to the work environment (Q 10-16) suggest that respondents are ‘often’ satisfied within their work environment. Data pertaining to the confidence in undertaking the mentorship role (Q 22-26) suggest that respondents are ‘usually confident’ in this area. This is significant for other analysis as it may minimize the risk that negative responses are secondary to the work environment or a lack of confidence affecting mentorship relationships.
Key issues highlighted from analysis relating to respondents’ perception of barriers to mentorship within the critical care environment include ‘the impact that clinical workload has on mentorship within this environment, with the lack of time and the complex patient presenting as key factors. A lack of clarity regarding appropriate ‘acknowledgement’, particularly in relation to remuneration for undertaking a mentorship role has been identified in this study. The barrier that ‘assessment’ presents to nurses undertaking mentorship of new and student nurses within the environment, and the ‘training and knowledge’ requirements in relation to this role have also been identified. The following chapter will provide a detailed interpretation of these results, and discuss the key issues identified in the context of what is already known in the field.
CHAPTER FIVE: DISCUSSION

Introduction

The aim of this study was to describe a group of nurses’ perceptions of the barriers that exist for them to mentorship within the critical care environment. Mentorship within nursing is seen as a significant tool to create supportive environments that allow for professional and personal growth, assisting the novice nurse move towards expertise. When critical care units experience increased recruitment of nurses, many of whom are new to the specialty or even new to nursing, mentorship is seen as a fundamental practice to assist these nurses to succeed and retain them within the specialty. Therefore the recognition of perceived barriers to providing mentorship is important in ensuring a successful and ongoing ‘culture’ of mentorship.

Analysis of quantitative and qualitative data collected from 38 nurses within one critical care unit has enabled the identification of four key findings related the barriers to mentorship within this clinical setting. These are ‘the impact that clinical workload has on the provision of mentorship’, in particular the difficulty critical care nurses experience in caring for the complex patient while also mentoring a new or student nurse, with lack of time to do both clearly described by participants. Other findings included an apparent lack of clarity around ‘acknowledgement of the mentorship role’ within this clinical setting, particularly in relation to the remuneration that nurses receive for undertaking this role. The ‘assessment of new and student nurses’ is perceived to be the most difficult aspect of the mentorship role for nurses suggesting the need for greater support in relation to combining elements of formal assessment with traditional mentoring responsibilities. This research appears has further highlighted the confusion that exists within nursing surrounding the terminology used to describe the relationship between an experienced and novice nurse in order to facilitate the transfer of knowledge. With terms such as preceptor and mentor commonly used interchangeably, it is possible that the mentor to the novice or student nurse may not see assessment as part of their role. It also appears that ‘training and knowledge opportunities’ related to mentorship have either not been taken up, or their availability not recognized by a large number of participants in this study.
Other significant findings included participants’ perceptions that they were ‘often’ satisfied in their work environment and ‘usually confident’ in providing mentorship. A majority of participants indicated that they enjoyed providing mentorship in this setting.

This chapter provides a synthesis and interpretation of this study’s results. What is known about the study sample characteristics is placed in context with the wider New Zealand RN population. Discussion of the researcher’s interpretation of the data concerning findings relating to participants’ perception of their work environment, confidence and motivation in undertaking the mentorship role are presented. Key findings are considered in relation to relevant literature, with contributing factors and implications for clinical practice discussed.

**Sample characteristics**

Analysis of the demographic data collected has demonstrated that a variety of age, ethnic groups and nursing experience were represented within the study sample. This reflects the overall diversity of the study population. Although this study took place at one center in New Zealand, comparison with data from the NCNZ (2011) report on New Zealand’s nursing workforce, allows comparison with the wider New Zealand nursing population.

Within this sample of critical care nurses nearly half selected the age band of 30-39 years, with the next highest percentage being between 40-49 years. The NCNZ, (2011) lists the average age of RNs within New Zealand as 45 years, however, the setting with the highest percentage of RNs aged less than 40 years is that of acute District Health Boards (DHB). A report compiled by the Health Workforce Information Programme ([HWIP], 2010) on the critical care nursing workforce in New Zealand identifies that those working in critical care areas are typically younger than the average within the nursing workforce. This may explain the lower than average age of nearly half the nurses within this study.

Within the study sample the percentage of participants who identified as New Zealand European is similar to that of RNs in general working within New Zealand. New Zealand Māori were under represented in this study with 5.3% identifying themselves as New Zealand European and Māori compared to the 7%
of RNs in New Zealand who identify as New Zealand Māori NCNZ, 2011). However the NCNZ data indicates that the practice areas with the highest proportion of nurses identifying as NZ Māori are Primary health care and community mental health.

Nearly 70% of nurses within the sample had undertaken their pre registration nursing training in New Zealand, with a similar percentage of 75 listed within the NCNZ, (2011) data. Respondents holding a Bachelor Degree in Nursing were well represented by almost 60% of the sample, compared with 30% listed by the NCNZ. The reasons for this higher representation are unknown, but could potentially be accounted for by the younger age group found in this study, suggesting they were likely to have entered nursing since the early 1990s when degree level preparation was required.

The study sample included over 90% of nurses with six or more years experience as an RN, suggesting an experienced workforce. There was a more diverse spread of years reported when identifying the years working within a critical care environment. Overall, the nursing workforce appeared to be experienced in nursing, but with varying levels of critical care experience.

A large number of nurses within the sample (73.7% n=28) hold a qualification in critical care. This meets both the Australian College of Critical Care Nurses ([ACCCN], 2003) and the Critical Care Nurses Section ([CCNS], 2005) recommendations. These state that Intensive Care units should have a minimum of 50% of nurses with a critical care qualification, with an optimum percentage of nurses with a critical care qualification considered to be 75%. This could be linked to the high level of confidence reported by respondents in undertaking the mentor role in this study, particularly in relation to demonstrating current knowledge of clinical practice.

**The work environment, confidence and motivation to undertake the mentorship role**

Participants indicated that they found their work environment to ‘often’ be satisfactory based on the calculation of the mean scores and standard deviation for the questions relating to work environment. Participants’ responses to questions
relating to work environment have indicated that a high level of job satisfaction exists within the study setting. The literature reviewed suggests that a healthy work environment, or organizational culture within acute nursing environments leads to greater job satisfaction with this in turn appearing to positively influence the success of mentoring relationships (Bally, 2007; Grossman, 2009; Wolak et al., 2009). Therefore it could be assumed that the perceptions described by the nurses participating in this study, are less likely to be influenced by experiences of a poor working environment, or culture.

In interpreting the responses to the individual questions related to work environment, it was noted that a larger number of participants indicated that they were ‘sometimes’ provided with opportunities for autonomous clinical practice, or opportunities to contribute to changes or projects within their work environment, as opposed to more positive responses given to other questions in this section. This provides insight to where improvements within this work environment could be focused in the future. The work environment, or organizational culture does not appear to present as a barrier to mentorship within this clinical setting.

Data analysis of questions related to confidence in undertaking the mentorship role indicated that participants were ‘usually confident’ in undertaking this role. A large number (73.7%) of participants felt ‘usually confident’ in demonstrating current knowledge of clinical practice. The same percentage (73.7%) of nurses who reported holding a critical care qualification strongly suggests that the two are related. From this, it could be assumed that the perceptions related to confidence described by the nurses participating in this study, are less likely to be influenced by a lack of confidence relating to mentorship.

However only half of the participants indicated that they were ‘usually confident’ in understanding the expectations associated with competency assessments, and in their ability to assess a mentee’s performance based on these. This suggests that, although nurses with experience and qualifications within the critical care specialty may be confident in aspects of the mentorship role relating to clinical practice, this may not be the case in relation to other aspects of this role, such as assessment. Heale et al. (2009) had similar findings when examining
the confidence of clinical mentors, and suggested that mentor confidence is not related to the mentors’ individual clinical experience but to the process of educating them for the role. This was also recognized by Dracup and Brown (2004), and Jackson (2001), who suggested that the attributes of effective mentors and/or preceptors need to go beyond clinical experience and encompass the knowledge and skill required for the mentor role. These responses have partly contributed to the interpretation that assessment as well as training and knowledge opportunities present a barrier to nurses undertaking mentorship in this environment, and will be discussed further within this chapter.

A large number of participants (84%) indicated their motivation to undertake the mentor role was because they enjoyed this role. Over half of participants also indicated that their motivation came from recognition that providing mentorship was an expectation within their job description. Indeed the NCNZ (2007), competencies for the RN scope of practice indicate that contribution to the support, direction, and teaching of colleagues by sharing knowledge with others is key in enhancing and maintaining professional development. Some participants’ personal experiences as a mentee appeared to influence their perception of the importance of providing a friendly face to the new comer. The experience of having poor mentorship was discussed by a small number of participants reflecting what is reported in the literature as the concept of ‘nurses eating their young’. This is associated with a lack of support shown to novice nurses, often in combination with acts of horizontal violence towards them (Bally, 2007; Graham, Hall & Sigurdson, 2008; Grossman, 2007; McKinley, 2004; Rowe & Sherlock, 2005). It is suggested that the establishment of mentoring programs may assist in creating work cultures that are supportive of new nurses (Bally, 2007; McKinley, 2004).

The impact of clinical workload on the provision of mentorship.

Direct patient care of the most seriously ill, complex patient is the role of a critical care nurse. This involves supporting and maintaining the patient’s physiological stability, adapting to their changing condition and responding to their unique needs, and the needs of their significant others (Nolan & Murphy,
Indeed, the environment of critical care is one in which nurses are confronted with the challenges that come with complex patient care within an emotionally charged, fast-paced and highly technological environment (Bally, 2007; Hurley & Snowden, 2008).

A lack of time due to clinical workload was highlighted by a majority of participants in their responses to several questions throughout the survey questionnaire as being a barrier to mentorship. Content analysis of participants' responses has indicated that the lack of time described is most often linked to the combination of caring for a particularly complex or unstable patient while also mentoring a new or student nurse. This is perceived by the nurses to negatively impact on the quality of mentorship they can deliver. Furthermore, with a number of participants stating that their primary responsibility is the care of their patient, this research suggests that mentorship of new and student nurses’ may be negatively impacted upon by the very nature of the critical care environment. The combination of the complex patient and mentoring present a barrier for nurses delivering mentorship within this setting.

It is acknowledged in the literature that clinical workload presents an obstacle to successful mentoring relationships within acute settings relating to the ‘lack of time’ for mentorship due to the priorities of care delivery (Andrews & Wallis, 1999; Chow & Suen, 2001; Edmond, 2001; Heale et al., 2009; Hurley & Snowden, 2008; Mitchell, 2003; Myall et al., 2008; Nettleton & Bray, 2008; Theobold & Mitchell, 2002; Watson, 2000). However, in this study nurse participants clearly described the ‘lack of time’ as being closely linked to the combination of the complex patient and mentoring responsibilities, rather than a variety of other priorities within the clinical setting. This highlights a barrier that may be unique to areas that care for critically ill patients, and possibly needs to be a consideration when mentoring within such environments.

The orientation and mentorship of less experienced nursing staff and student nurses in critical care is a reality in the current healthcare environment. The clinical setting in which this study was undertaken regularly employs nurses with little or no critical care experience. The value of learning within the clinical environment for novice and student nurses is recognized, with the experienced
critical care nurse able to share their clinical expertise and knowledge in this setting (Grossman, 2009; Ihlenfeld, 2005; Simmons, 2002; Wolak et al., 2009). With a shortage of experienced critical care nurses, perhaps more than ever the importance of offering the student nurse a positive clinical placement within critical care settings is appreciated by nursing management responsible for recruitment. It is likely that a newly graduated nurse will seek employment in an environment where they have had a rewarding clinical experience. Anecdotally this has been the case within the clinical setting in which this study took place.

A disparate theme appearing from the analysis of two participants’ responses described the nature of the critical care environment as being a positive part of the mentoring process, in that the mentee is learning about adapting their care to the workload, provided a different perspective. It is noted that the two participants had over ten years of critical care experience, so perhaps felt very comfortable with adjusting their care to the changing needs of the patient and mentee. The value of the novice learning alongside the experienced critical care nurse is clear. If we are to create an environment of learning for new and student nurses, one that involves the learning of why, not just how, finding a balance between the complex patient and a positive clinical learning environment is necessary.

Although the value of clinical learning at the bedside is recognized, time away from the clinical bedside, (also termed supernumerary or non-clinical time by participants) was suggested by a small number of participants’. This was in respect to the allocation of supernumerary time to accommodate the need for preparation, undertaking documentation and assessment requirements for students, as well as allowing reflection and feedback to occur between the mentor and mentee away from the distraction of the clinical bedside. Currently supernumerary time in the form of development days is recognized nationally through the Nursing Entry to Practice Program (NETP)

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6 A national programme for RN nursing graduates to support their first year of practice, with the aim of providing a well-supported, safe, clinical learning environment, promoting further learning and professional development, as part of building a sustainable pathway for the New Zealand registered nurse workforce into the future. (CDHB, 2011).
for two eight hour days to be allocated for the new graduate nurse and their preceptor in the first year of practice. The intention of this is to support the new graduate to reflect with their preceptor on practice, to set goals and complete assessments (Canterbury District Health Board [CDHB], 2011). This is in addition to the 12 funded study days that also occur for the new graduate within the NETP program. However this allocated time is not something that is readily available for nurses who are new to the critical care setting, or student nurses and their mentors. With the study data indicating that clinical workload relating to the complex patient impacts negatively on mentoring responsibilities, it would seem that creating time away from the bedside would assist aspects of the mentoring relationship. This could serve to partly address the ‘lack of time’ for mentoring due to clinical workload that was perceived by participants in this study.

This research indicates that the combination of mentoring a new or student nurse and caring for a complex patient within a critical care setting may impact negatively on the quality of mentorship that can be delivered. Therefore addressing ways of supporting mentorship at the bedside where clinical learning can occur whilst continuing to ensure the patient takes priority is key. Such strategies as the mentors’ involvement in patient allocation, the role of clinical support in this setting and the provision of supernumerary time will be addressed within the recommendations section of this thesis.

Acknowledgement of the mentorship role

Over half of the participants in this study indicated that they were acknowledged for the role they played in mentorship in intangible ways, such as verbal acknowledgement from senior nurses and acknowledgement from the mentee. Rewarding aspects of the role were also described as the sense of pride and satisfaction that the mentor felt in watching the mentee grow in confidence within the clinical environment. Mentorship was seen by some as a way to contribute to the critical care specialty, as well as motivating some mentors to keep their own knowledge up to date. Such descriptions of intangible acknowledgment are similar to those described in the literature (Andrews &
Wallis, 1999; Ihlenfeld, 2005; Kanaskie, 2006; Wolak et al., 2009; & Myall et al., 2008), indicating that the participants in this study have similar perceptions to those within other acute care settings. Ihlenfeld (2005), in particular suggests that many nurses see their role of mentor as paying back the nurse who, in the past helped them grow in intensive care nursing. This appears to be relevant in this study with nearly 60% of nurses indicating that having had a good mentor when they were new to critical care was a motivator for them to provide mentorship. Therefore, it appears that supporting nurses to develop and grow into the mentorship role to a point that they can be part of positive mentoring experiences may assist with the motivation of nurses in the future to undertake this role. It appears that the intangible rewards that come with mentoring, although less obvious, are regarded as significant for this group of nurses. Therefore any chances to acknowledge and support the role of mentorship within the clinical environment should be taken.

A small number of nurses described what the author has termed ‘tangible acknowledgement’ by identifying the recognition they receive within the PDRP framework, and over half of participants indicated that their motivation to provide mentorship was ‘to fulfill PDRP requirements’. This is achieved through submission of a practice portfolio within the nurses’ organization. Recognition of their contribution to nursing and quality patient outcomes, such as evidence of the role they take in the teaching and skill development of colleagues supports a nurse’s application to achieve proficient or expert level within this framework (NCNZ, 2008). Achieving proficient or expert level on this framework carries a financial remuneration of $2500 per annum for proficient and $4000 per annum for expert, as well as a paid day off each year for proficient and two days for expert, in recognition of the time required for nurses to maintain their PDRP portfolios (New Zealand Nurses Organization DHB/NZNO Nursing and Midwifery Multi-Employer Collective agreement [MECA] 7, 2010; NCNZ, 2008). This is certainly tangible recognition by the organization of the role nurses

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7 The District Health Boards (DHB)/New Zealand Nurses Organisation (NZNO) Nursing and Midwifery Multi-Employer Collective agreement (MECA) is a partnership agreement between New Zealand’s DHB’s and NZNO, to progress the interest and issues of the nursing and midwifery workforce.
take in mentorship. However, there appeared to be a lack of recognition or awareness of this by a number of nurse participants in this study. Although nurses recognized their mentorship role was acknowledged within the PDRP process, they did not necessarily see the remuneration resulting from successful completion of PDRP as being linked to the individual component of the process. When nurses were asked if they should receive additional remuneration for the mentor role they undertake, over 40% indicated that they thought they should, with money or time off being suggested. It appears that despite the organization recognizing nurses’ contribution via the PDRP, this relationship was not recognized as such by some of the nurses in this study. A possible explanation for this could be that the question was misunderstood, or perhaps the requirement to apply for recognition on the PDRP via preparation of a portfolio means nurses do not link the remuneration from the PDRP to the mentoring role they undertake. Another explanation could be that the wording within the PDRP document does not mention the term mentorship, although preceptorship is a term used (CDHB, 2010). This document also does not refer to interaction with the student nurse, instead using the term ‘colleagues’ and this could indicate that the nurses have not linked the role they carry out with students as being recognized within this framework. The current description of evidence to be presented within the PDRP document to attain the proficient level is for “evidence of teaching/ preceptoring or supporting skill development of colleagues” (CDHB, 2010, p.8), and for the expert level, “evidence of describing and reflecting on responsibility or learning and/or development of colleagues” (CDHB, 2010, p.8).

A small number of participants made comparison to the education sector, where teachers are paid for the teaching they provide for students. This comparison may have emerged in relation to the finding that over 30% of participants selected the role of ‘teacher’ as being the most important role to fulfill when mentoring a student nurse. This was also a finding in Bray and Nettletons’ (2008) study and suggests that some participants perceived their role with the student nurse as being that of a teacher. However teachers are registered as such by their fulfillment of requirements with the New Zealand Teachers Council, with no such requirement for nurse mentors in this country.
The findings of this research indicate that there is a lack of recognition by a number of nurse participants as to how the mentorship role is acknowledged in tangible ways within the organization. This could present a barrier to carrying out the role of mentorship, particularly if RN mentors do not perceive they are being remunerated appropriately for this role. Indeed, the literature reviewed discusses this as a barrier within clinical workplaces which may not be willing, or able to provide extra time or compensation to clinical mentors, suggesting this is why some organizations may find it difficult to retain clinical mentors (Bally, 2007; Heale et al., 2009; Ihlenfeld, 2005). Therefore clarification is required by the clinical setting, or perhaps at a wider organizational level about the tangible acknowledgement that is offered and how it is offered to nurses who provide mentorship.

Assessment as a barrier to mentorship

A lack of familiarity with assessments and documentation was found to present a barrier to mentoring by half of the participants in this study. Participants (52.6%, n=20) indicated the role of assessor to be the most difficult to fulfill when mentoring a new staff member. A similar number of participants (48.7%, n=19) selected the role of assessor as the most difficult to fulfill when mentoring a student nurse.

The finding that assessment was the most difficult role to fulfill in relation to the mentorship of the new nurse was unexpected, and not previously identified in the literature as presenting a barrier to nurses mentoring other nurses within acute clinical settings. The assessment of RNs by RNs is not common practice within New Zealand, however it appears that nurses may feel responsible for assessing new nurses’ competency to practice in this clinical setting. The new nurse, although new to the area and requiring support in learning new skills and knowledge, has already been deemed competent to practice by the NCNZ.

Contributing factors to this finding may be the current expectation within the study setting that nurses assist the mentee in completion of their initial ‘orientation and competency manual’ over a year long period. This requires various skills to be ‘signed off’ by both the mentor and mentee as they are
acquired. It is possible that nurses’ may view this expectation as a requirement for them to ‘assess’ the mentee as competent to practice in this area rather than the facilitation of learning for the mentee in regards to certain clinical skills or knowledge. The task of signing off skills for the mentee may not fit within their perceptions of what their role is with the new nurse. Indeed a large number of participants selected the roles of ‘supporter’ and role model’ as the most important to fulfill when mentoring new staff to critical care.

This finding appears to highlight confusion for nurses about their role as mentor to the new nurse and their responsibilities of competency assessment within this setting. A confusion of terminology, particularly in relation to that of preceptorship and mentorship may offer an explanation to this finding. This confusion of terminology to describe the pairing of the novice nurse with the experienced nurse is well reported in the literature (Firtko et al, 2005; Myrick et al., 2011), so not unique to this setting. It is recognised that part of the preceptors role is that of an evaluator of new employees within a clinical setting, with the evaluator role not a focus in descriptions of the mentorship role (Buffum & Brandon, 2009; Latham et al., 2008). This confusion may be compounded with the term mentor commonly used in the literature to describe nurses who mentor the student nurse within the clinical environment, with assessment of clinical competency being part of this role. Clarity of these terms in clinical practice would seem important to assist nurses in understanding their responsibilities in relation to mentoring the new nurse and may support the attainment of appropriate training to undertake the role. If mentors to the novice nurse are to undertake competency assessment as appears to be happening within this study setting currently, then access to education covering fundamental topics of adult education principles and assessment and feedback techniques would seem important. Principles of adult learning already underlie the mentoring relationship (Wong & Premkumar, 2007), and therefore knowledge of these for the mentor could be assumed as key for this role in clinical practice, regardless of if assessment is an expectation or not.

This finding also poses the question of who is responsible for signing off competency assessments skills for the new nurse within specialty areas such as
critical care? Is this responsibility better placed with a senior nurse, such as a nurse educator, or a clinical nurse manager? Perhaps within settings such as critical care, where attainment of the skills required for the role are multiple and take longer than an initial orientation period of six to eight weeks to achieve, a clear guideline of who is responsible for signing off clinical competency assessments is required. The mentee, as an adult learner is responsible for working with an RN mentor in the attainment of these skills, however it could be that the role of competency assessment is counter productive to the mentoring relationship, even presenting a barrier to it. The sign off of clinical competency may be better placed outside the mentoring relationship allowing the mentor and mentee to focus collaboratively on attainment and knowledge of skills within the environment, but not assessment of them.

However, in relation to the placement of student nurses in the clinical setting it is common for the RN mentors of student nurses to also perform the role of assessor. This has been well reported and discussed in the literature since nursing programs of study were established within training institutions (Bray & Nettleton, 2007; Duffy et al., 2000; Nettleton & Bray, 2008). This is also an expectation within the study setting, with the mentor to the nursing student responsible for approval of the indicators on the student’s formative and summative clinical assessment forms, and agreement that these indicators have been met on completion of the student’s placement in the area (Christchurch Polytechnic Institute of Technology ([CPIT], 2011). Although this document outlines the education institutes clinical lecturer’s role in supporting this process, the findings of this research indicate that nurses are struggling with the assessment aspect of mentoring student nurses. Study data show that almost half of participants chose the role of assessor as the most difficult to fulfill in relation to the nursing student, with over 30% stating they were ‘unclear’ or ‘very unclear’ in regards to their role of mentor to nursing students. Contributing factors described suggest that confusion exists for some nurses in regards to the skills and expectations for student nurses on placement in this area, with this making assessment difficult.
It is possible that assessment does not fit within the nurse participants’ perceptions of what the traditional role of the mentor is, with ‘teacher’ and ‘role model’ regarded as the most important role to fulfill when mentoring a student nurse by participants. This has certainly been raised within the literature (Andrews & Wallis, 1999; Bray & Nettleton, 2007; Duffy et al., 2000; Grossman, 2007; Ihlenfeld, 2005; Neary, 2000; & Nettelton & Bray, 2008), with Bray and Nettleton’s, 2007 study also finding the roles of teacher and role model to rate highly by nurse mentors to student nurses.

With assessment part of the RN’s role when they are working with student nurses it is important to explore ways to support nurses with this responsibility. Several suggestions were offered by participants about the support they perceived was required when mentoring students in critical care. These being more contact with the clinical lecturer from the training institution, access to more information about the expectations of students’ within the setting, and the allocation of supernumerary time for the mentor and mentee to undertake reflection and discussion around the assessment component of the student’s placement. These suggestions will be explored further within the recommendations section of this thesis.

Training and knowledge opportunities

Although nearly 60% of respondents indicated they had had the opportunity to undertake formal mentorship or preceptorship training, a lack of training was identified as a barrier to mentorship by almost half (47.4%) of participants in this study. Twenty-nine percent indicated a lack of opportunity to update their knowledge of mentorship/preceptorship as a barrier. It is possible that this lack of training, or updates, is a contributing factor to other barriers selected by participants, such as lack of familiarity with assessments, documentation and systems for training and assessment in the workplace. Comments from some participants about available support when mentoring new staff or student nurses, also include suggestions for more training and information about the role. With a number of participants indicating a lack of opportunity to update their knowledge of mentorship and/or preceptorship, it appears that both awareness and access of
these courses may be problematic. It could be that mentorship/preceptorship training is not seen as a priority by either staff or management, given the many competing educational requirements within this setting. Access to such training was also found to be a barrier to mentorship in other studies (Duffy, 2000; & Hurley & Snowden, 2008). With over 40% of nurse participants in this study indicating that they were not aware of mentorship/ preceptorship training offered at their institution, it may be more likely that the availability of these courses is not well known amongst nurses working within this critical care setting. With these issues highlighted it appears that increasing the profile of available training, and encouraging the uptake of such training for all nurses undertaking mentoring in this environment is of importance.

Such courses should encompass and build on principles of clinical teaching of peers, adult learning, assessment and documentation, as well as interpersonal skills. Most DHB’s within New Zealand have such programs offered within their organizations, with a generic National Framework for Nursing Preceptorship Program developed by a subgroup of New Zealand Nurse Educators [NZNE], incorporating these principles (NZNE preceptorship subgroup, 2010). Confusion may arise however, with the title of such courses in New Zealand predominately utilizing the term ‘preceptorship’. This may cause nurse mentors to under appreciate the value of such knowledge for them, this being the difficulty with interchangeable use of terms such as preceptorship and mentorship in clinical practice.

Furthermore, some of the challenging aspects of mentorship described by participants in this study, such as giving feedback, working with what was described as the ‘overconfident mentee’, as well as managing personality conflicts, may be addressed by attendance at such training. Formal mentorship training to address these learning needs is supported by other authors (Dracup & Bryan-Brown, 2004; Jackson, 2001; Kanaskie, 2006 & Thomason, 2006). Indeed, Health Workforce New Zealand ([HWNZ], 2012) guidelines pertaining to the nursing entry to practice program, outline the need for preceptors to new graduate nurses to have successfully completed a preceptor-training programme. However the findings of this study indicate that all nurses undertaking a role in either the
preceptorship or mentorship of the novice nurse in critical care, including student nurses, should have the opportunity to attend such training.

**Limitations of this study**

The main limitation of this study is the ability to generalize its findings and practice implications outside of the study setting due to the small sample size and single location of this study. However, information gained through this study contributes to what little is known about the barriers to mentorship within a critical care environment, so in this respect the study has met its aim. Furthermore, should other critical care settings in New Zealand wish to gather similar data for their environments the questionnaire could be replicated in other critical care settings adding validity to it.

While the use of random sampling as a method to increase the likelihood of the sample being representative of the target population is a strength of the study, this did limit the number of nurses invited to participate. The use of convenience sampling may have yielded a higher number of participants, however the response rate of 76% for this study is considered high in respect to questionnaires. Therefore the findings are reflective of the perceptions of nurses’ in the study area at the time the research was undertaken.

Although a large amount of qualitative data was generated from open-ended questions, an alternative method to collect data, such as focus group interviews may have obtained richer qualitative data and allowed for clarification of responses where deemed appropriate. This may have been particularly helpful in clarifying participants’ responses to questions regarding assessment of new nurses, as well as clarifying further the roles of preceptor and mentor for the purpose of this study. However, as this study’s focus was to establish baseline knowledge of nurses’ perceptions to barriers to mentorship within a critical care environment, it therefore required information from a larger number of participants than a focus group could offer.

This research has allowed the perceptions of a sample of nurses’ working within a tertiary level critical care setting in New Zealand to be described in relation to the research question. This has allowed barriers to be identified, and
recommendations to support the practice of mentorship in this setting to be put
forward; therefore this research has achieved its aim.

Summary

This chapter has discussed the key findings in relation to the study context
and existing knowledge of the barriers to mentorship in critical care nursing,
whilst considering the limitations of this research. Key issues of ‘the impact that
clinical workload has on the provision of mentorship’, ‘acknowledgement of the
mentorship role’, ‘assessment of new and student nurses’ and ‘training and
knowledge opportunities for mentors’ have been found to be significant for this
group of nurses. Contributing factors have been discussed and potential strategies
to be identified to minimize or overcome these barriers.

The following chapter presents recommendations to address these barriers
and improve the process for nurses mentoring within the critical care setting,
taking into account current practice and recommended practice standards
established. In conclusion, suggestions for future research and how this study’s
findings will be disseminated are also outlined.
CHAPTER SIX: RECOMMENDATIONS AND CONCLUSION

This chapter will present the recommendations derived from the study’s four key findings relating to the barriers to mentorship within this clinical setting. These are ‘the impact that clinical workload has on the provision of mentorship’, ‘acknowledgement of the mentorship role’, ‘assessment of new and student nurses’, and ‘training and knowledge opportunities for mentors’. Specific recommendations are made to overcome or minimize the identified barriers with rationale and practice implications considered. Future research possibilities are discussed, and plans for dissemination of this study’s findings outlined.

**Patient allocation**

Consideration should be given that patient allocation, often made by the senior nurse on duty is made in conjunction with the mentor to the new or student nurse. The impact that clinical workload has on mentoring responsibilities particularly the combination of the complex patient and the provision of mentorship could be partially addressed by this recommendation. The mentor, having worked alongside the mentee, is in the position of knowing what stage the mentee is at in relation to their skills and confidence within the setting. This allows clearer recognition of which clinical experiences may be of benefit to the mentee, assisting with the allocation of a clinical assignment that supports learning to occur at the bedside. Furthermore, this may also be a way of acknowledging and valuing mentorship within the clinical setting, adding to the intangible forms of acknowledgement described by nurses in relation to the mentoring role they undertake. Bally (2007), Grossman (2009), and Wolak et al. (2009) recommended participative decision making as one way of promoting a healthy organizational culture. The involvement of the mentor in patient allocation decisions possibly presents a way to promote this.

It is recognized, however that the involvement of the mentor in patient allocation would not always guarantee a clinical assignment that is appropriate for the mentor and their mentee. This is the very nature of critical care, in which patient acuity is high and stability may be variable. However, it may provide a
way to support mentoring in this environment as well as valuing mentorship within critical care settings.

**The role of clinical support**

This study identified that the combination of caring for the complex patient and mentoring, presents a barrier to nurses in delivering mentorship at the bedside. This highlights a barrier that may not be unique to this study setting alone, but to any areas where critically ill, complex patients are cared for. A solution is required to support valuable learning experiences to occur within critical care settings. Developing a clinical role that supports mentorship to occur at the bedside, is a recommendation from this study.

The setting for this study meets the College of Intensive Care Medicine [CICM] minimum standards for intensive care units in regards to the resources required within an Australian intensive care department providing tertiary services (CICM, 2011), as well as staffing standards recommended in position statements on intensive care unit nursing staffing of both the CCNS (2005), and the ACCCN (2003). Such documents do not take into account the increasing numbers of novice nurses entering critical care settings who require mentorship at the bedside. Literature has recognized that an international nursing shortage affecting all areas of nursing including critical care, has led to difficulty in recruiting experienced nurses and the subsequent employment of inexperienced nurses into this specialty (Ihlenfeld, 2005; McGrath, 2009).

Within the study setting, the responsibility for co-ordination and supervision of the clinical area, as well as support for clinical nurses providing care to the patient has traditionally been part of the role of the Associate Clinical Nurse Manager (ACNM)\(^8\). However with the staged expansion of this critical care setting underway this has seen the ACNM’s role increasingly focused on operational duties. The setting within which this study took place also utilizes ACCESS nurses in addition to bedside nurses as recommended in the position statements on intensive care nursing staffing of the CCNS, (2005), and ACCCN

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\(^8\) A recognized senior nurse title within New Zealand tertiary hospitals for a nurse who undertakes a team leader role within acute care settings, such as critical care, neonatal intensive care, and emergency departments.
(2003). The ACCESS role is outlined in these statements as providing Assistance to staff to carry out patient care within the clinical area, Coordination, Contingency (for admissions and staff sickness) Education, Supervision and Support. In reality, the ACCESS nurses role within the study setting is absorbed in assisting with basic patient cares, providing release for meal breaks for nurses and in the admission of either acute or elective patients, leaving little or no time for supervision, education and support of staff. Thus, while in principle such roles present an opportunity to support staff development, the constraints of practice may limit their utility.

A report prepared by the Health Workforce Information Programme (2010), projects that the demand for critical care nurses will begin to outstrip supply by 2014, due to the increased demand for critical care services related to an aging population within New Zealand. This suggests that most critical care services within New Zealand will be faced with supporting increased numbers of novice nurses’ within the specialty. Therefore, establishing a specialist role such as a clinical support nurse (CSN) or clinical coach role that can support mentorship at the bedside may assist with the challenges faced within this specialty in the future. It is essential that any such role has dedicated, ring-fenced time to spend on the educational and mentoring elements, given the needs for additional staff within the area.

As a way to recognize the decreasing skill mix associated with increasing numbers of novice nurses entering the critical care setting, two tertiary intensive care units within New Zealand have already implemented a clinical support nurse (CSN) role. This role entails an intensive care nurse recognized for their expertise, utilizing their advanced knowledge and skills to provide clinical support with the aim of ensuring patients receive high quality care within a safe clinical environment (Grannetia & James, 2008). The establishment of such a role within the clinical area may not only address these gaps of supervision, education, and support, but could assist in addressing the ‘lack of time’ described by participants when they are providing care for the complex patient as well as mentoring. The presence of another expert nurse in the bed space to carry out essential tasks that are required when a patient becomes unstable, would possibly allow for a more
controlled environment, where the patient remains the priority, but where clinical learning can continue to take place. Such support could allow the mentee to continue to take part in clinical practice with the mentor able to supervise. Often, when lack of time is an issue, the mentor is unable to provide adequate supervision to the mentee, with this being described by the participants in this study. This means the mentee often becomes an observer only, which while still offering learning opportunities, does not allow for clinical skill development and integration into the work environment.

It is recognized that in today’s healthcare environment, finding the extra resource to support a role such as that of a CSN presents a barrier to its establishment. However if we are to recognize the value of mentoring in developing novice nurses, therefore shortening the learning curve, enhancing team performance and thus patient care, then finding a way to support mentorship in critical care environments is imperative. This requires the support of senior decisions makers to be successful. This too is recognized within the international literature (Allen et al., 2004; Bally, 2007).

One means of developing a CSN role within critical care settings which may not have the resource required to create a new or senior nursing roles may be by increasing the number of ACCESS staff available. This could allow the resource of one ACCESS nurse to be dedicated to a CSN role. This would seem justified according to the ACCCN, 2003, and CCNS, 2005 position statements that suggest that the ratio of ACCESS nurses required depend on the average skill level and qualification of the total team. Although gauging the ‘average’ skill mix within critical care settings may be difficult on a day to day basis, the number of nurses with a critical care qualification and the number of novice nurses entering the area could be used as indicators. Although the critical care setting within which this study took place was found to have over 70% of nurses with a critical care qualification, it was also found to have had 34 novice nurses enter the specialty within the past two years, with seven of these being new graduate nurses. This could serve to justify the allocation of an extra ACCESS nurse to undertake a CSN role with a focus on supporting the mentorship process of novice nurses within the area. Furthermore the ACCCN (2003), and CCNS (2005) staffing
standards suggest that clinical settings with 50-75% of nurses holding a critical care qualification should allocate an ACCESS nurse for every six patients per shift. With the average number of patients in a twenty-four hour period within this setting increasing alongside the availability of more resourced beds, it would seem that the allocation of three ACCESS nurses could be justified. If this extra role was to be protected within the setting as a CSN role, this may assist in some way with easing the burden of balancing clinical workload with mentoring responsibilities. It could also present a way to recognize the experience and knowledge of expert nurses within critical care by giving them a chance to contribute to practice in the clinical setting, offering the possibility of ensuring their continued job satisfaction within the area.

Supernumerary time

Currently the value of supernumerary time for the new graduate nurse and the nurse mentoring them in practice is recognized nationally within the NETP program (Health Workforce New Zealand, 2012). With the difficulties of undertaking mentorship responsibilities at the clinical bedside evident, the allocation of supernumerary time for mentors to both new and student nurses is recommended. This could allow the mentor and mentee to spend time away from the bedside, reflecting on clinical practice, giving feedback, covering orientation skills acquisition sign off for new nurses, as well as assessment documentation in relation to student nurses. The provision of protected time is supported by the United Kingdom’s NMC Standards for supporting learning and assessment in practice (NMC, 2010), reflect that there is significant support for protected time for mentors to function adequately in their role. It is recognized that the acute nature of critical care environments may themselves present a barrier to the planned allocation of supernumerary time. It is possible that this time could be found within the early stages of the mentoring partnership when the new nurse is not allocated a patient load, and therefore cover for the nurse mentor’s patient load would be the only consideration. This is where the recommendation of a role to support mentoring such as a CSN within critical care settings could also be of value. The development of a CSN role could include covering the clinical
workload of the mentor in order to facilitate this suggested supernumerary time. This time may be enough for the nurse and his or her mentee to have a break together, to reflect on practice, or it could support a longer period of time to fulfill more formal requirements of the role, such as goal setting and feedback opportunities.

In relation to the nurse mentors role with student nurses, releasing the mentor from the bedside to meet with the clinical tutor and student to facilitate assessment and feedback would support this process. Depending on the number of student nurses that a specialty area may have on placement at any one time, this could be achievable, and potentially enhance students’ placements within critical care settings.

**Summary of recommendations related to**

*‘the impact that clinical workload has on the provision of mentorship’*

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse mentors, in conjunction with the senior nurse, are involved in patient allocation to identify the most appropriate balance of clinical learning opportunity for the mentee and standard of care for the patient.</td>
</tr>
<tr>
<td>Establishment of a formalised clinical support nurse (CSN) role. This extra resource should be dedicated to providing support for nurses caring for the complex patient whilst undertaking mentoring responsibilities.</td>
</tr>
<tr>
<td>The allocation of supernumerary time for new and student nurses and their mentor to allow time for formal mentoring responsibilities to occur away from the clinical area.</td>
</tr>
</tbody>
</table>

**Acknowledgement of the mentorship role**

This research has found that both tangible and intangible acknowledgement for the role of mentorship was perceived to be important for nurse participants in this study. Although the intangible or rewarding aspects of mentoring described by participants, such as watching the mentee grow in confidence are perhaps inherent within this role, and not open to influence, other aspects such as verbal acknowledgment from senior nurses should continue and possibly be formalized. This could be achieved by the mentors’ involvement in patient allocation as recommended, but also by keeping the profile of mentorship
high within the clinical area. Bally (2007), suggested initiatives such as establishing regular meetings that include all parties that are involved in mentorship should be established within acute care settings. The formation of a special interest group made up of nurses who have an interest in mentorship could acknowledge and support mentorship within the clinical setting. It is envisioned that such a group would operate with similar concepts as other interest groups that can be found within critical care settings, such a peer support and bereavement teams. These groups bring nurses together who share a common interest in an aspect of nursing practice, offering opportunities for reflection, peer support, shared experiences, continuing education, and debriefing. Such an initiative could further acknowledge and support the practice of mentorship not only within critical care, but all areas of nursing.

Clarification of how the mentorship role is acknowledged in tangible ways within an organization is recommended as a result of these research findings. Possible solutions could be further clarification of terminology within the PDRP document, to encompass both the terms of preceptorship and mentorship. Inclusion of the student nurse within this document, alongside statements about skill development of colleagues may help to clarify that the mentorship of student nurses is also acknowledged within this framework. It is possible that these changes may need to take place at national level, with leadership from the NCNZ, who have the responsibility to approve PDRP programs across health organizations within New Zealand. Currently, few PDRP programs incorporate the term mentorship, or student nurse within their outline when referring to the skill development of colleagues. Education of key resource staff, such as nurse educators, senior nurses, and a number of PDRP experienced staff nurses within clinical settings about the tangible recognition for mentorship available through this framework would allow this information to be shared with nurses. This could serve to highlight the way in which many healthcare organizations in New Zealand acknowledge nurses for their role in mentorship and/or preceptorship.
Summary of recommendations related to
‘Acknowledgement of the mentorship role’.

- Continued acknowledgement of mentorship in the clinical setting with the establishment of regular meetings involving all parties involved in mentorship.
- Formation of a special interest group made up of nurses with an interest in mentorship.
- Clarification within the Professional Development and Recognition Program (PDRP) to incorporate the terms ‘mentorship’ and ‘student nurse’ in order to recognize the nurses’ role in these aspects of skill development of their colleagues.
- Education of key resource staff to highlight the ‘tangible’ recognition available through the PDRP for the mentorship nurses undertake within the clinical setting.

Support from training institutions for mentors to student nurses.

Understanding and completing assessments in relation to mentoring student nurses was identified as a barrier. Suggestions to address this included increased contact with clinical lecturers from the training institution and provision of more information about the expectations of students within the critical care setting.

The suggestion of more contact with clinical lecturers from the training institution is not unique to this study, with the literature reviewed also identifying this as a recommendation (Duffy et al., 2000; Hurley & Snowden, 2008; Nettleton & Bray, 2008; Watson; 2000). Potential responses include the opportunity for communication sessions held within the work environment by representatives of the educational institutions. It is important to establish collaborative relationships between those supporting clinical mentors in the practice setting, such as nurse educators and academically based clinical lecturers. Increased opportunity and access between the nurse mentor and clinical lecturer could allow the mentor to address any questions or concerns in a timely manner. This facilitates a mutually supportive, beneficial relationship to form between the mentor, lecturer and student.
There are limitations on the number of hours that academic clinical lecturers can spend with student nurses within the clinical area, with these typically decreasing as students approach their final transition to practice placement towards the end of their training. This is a deliberate process to allow the student to align him or herself with the RN role as they approach the completion of their education programme (R. Whittle, personal communication, May 28, 2012).

Another option that may be appropriate in specialist areas is that of a Dedicated Education Unit (DEU)\(^9\) model. This allows for more ‘on-site’ support to occur from an academic lecturer nurse (ALN), and funding for the allocation and some supernumerary time for a Clinical Liaison Nurse (CLN) from the practice area. Student clinical assessment is undertaken by the CLN and ALN with staff input (Canterbury District Health Board [CDHB], & Christchurch Polytechnic Institute of Technology [CPIT], 2007). This could offer nurse mentors in clinical settings support with the assessment role they undertake with students, with this cited as the most difficult role to fulfill by participants in this study. However one limitation with such models is the expectation that the clinical area operating a DEU takes on a greater number of student nurses. This combined with the increased recruitment of novice nurses to this specialty setting may limit learning opportunities for all parties.

Therefore a special interest group similar to that recommended for nurses with an interest in mentorship could also be developed with the focus being the student nurse within critical care. This may be a way of providing support and recognition for the role of mentoring student nurses within such specialist settings. However, consideration would need to be given to the size, resources and expectations of each critical care setting. Within the study setting, only four pre-registration students per year undertake a clinical placement. It would seem unrealistic to keep all nurses up to date within the area and provide opportunities for them to work with students on a regular basis.

The opportunity for nurses to attend focused clinical teaching courses in relation to mentoring a student nurse should also be an aim in settings that mentor

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\(^9\) A Dedicated Education Unit (DEU) is a practice area dedicated to supporting undergraduate nursing students on clinical placement, through the establishment of collegial relationships between student nurses, DEU staff; and clinical lecturers (CDHB & CPIT, 2007).
student nurses. Such courses are offered through some tertiary institutions and are
tailored to address the specific needs of student nurses within clinical settings.
This is a valuable resource that should be recognized and utilized. It may be
unrealistic for a clinical setting to fund such education leave for all nurses
working in a mentorship role, but could be considered for those with a specific
interest in mentoring student nurses. Such educational opportunities are supported
by other authors who stress the importance of training opportunities for mentors,
in particular those providing mentorship to the pre registration nursing student as
a way to improve reliability in the assessment of students (Finnerty et al., 2006;
the need for nurses to be prepared for their role with student nurses, as do the
NCNZ (2010) Education program standards for the registered nurse scope of
practice. These documents provide further support for this recommendation.

**Clarification of terminology within nursing**

This research has highlighted the confusion that exists within nursing
surrounding the terminology used to describe the relationship between an experienced
and novice nurse in order to facilitate the transfer of knowledge. Terms such as
preceptorship and mentorship are commonly used interchangeably within nursing with
this potentially causing confusion amongst nurses working with new or student nurses
in the clinical setting. This finding is not new, and has been reported by many authors
exploring the topic (Andrews & Wallis, 1999; Block et al., 2005; Faron & Poetler,
2007; Firtko et al., 2005; Grossman, 2007; Hall, 1997; Kaviani & Stillwell, 2000;
McKinley, 2004; Mills et el., 2005; Myrick et al., 2011; Neary, 2000; Walker et al,
2008).

This lack of clarity in terminology may have partly contributed to the finding
that assessment was considered the most difficult role for mentors to new nurses to
fulfil, as they may not see this as part of the mentorship role, but belonging to the
preceptorship role. This may have implications in that mentors are not undertaking
training that would support them in their role. Much of the training covering topics
such as adult teaching principles, assessment and feedback is titled as ‘Preceptor
training’ in New Zealand, but called Mentorship training in other countries, such as the United Kingdom.

It appears that the roles of mentor and preceptor are intertwined within this setting, with this likely due to the extended period of time that it takes a nurse new to critical care to feel comfortable with the knowledge and skills required to work with confidence within this setting. This is why mentorship within acute care settings such as critical care, are so valuable. This was also found to be significant in a study by Reisling (2002), which concluded that it was after preceptorship ended, was when the novice nurse in critical care felt at their most vulnerable. Therefore the importance of not only preceptorship, but also the mentoring relationship that continues after the ‘official’ orientation period ends is recognized in this setting. After all, mentorship, as described by McKinley (2004), is preceptorship that also provides the human connection, in which the relationship formed between the experienced and novice nurse is what allows the transfer of knowledge. Therefore, if mentors to novice nurses are expected to be involved in the competency assessment of nurses relating to skill acquisition and knowledge within this speciality, it is recommended that appropriate training be available on such topics as competency assessment and feedback.

Clarification of the actual role nurses are undertaking in regards to assessment of novice nurses in speciality settings such critical care.

Another consideration should be the support within clinical practice that is offered to nurses undertaking skills assessment of novice nurses. It may be more appropriate that a senior nurse such as a nurse educator or charge nurse work alongside the mentor and mentee to provide support in this process, to facilitate and promote the completion of skills sign-off with the novice nurse. This may allow the nurse mentor to focus on imparting the knowledge and skills required to work within the clinical area, rather than assessment of them.

Including formal assessment within the mentoring relationship between a novice nurse and an experienced one in this setting could potentially limit the formation of a relationship that supports open, reflection to grow and develop.
Summary of recommendations related to
‘Assessment of new and student nurses’

- Ongoing liaison with tertiary institutions to continue initiatives to support mentors of student nurses.
- Consideration is given to the model of a Dedicated Education Unit (DEU) within critical care in the future.
- Formation of a special interest group focusing on the mentorship of student nurses within the critical care setting.
- Support for attendance at focused clinical teaching courses for nurses involved in the mentorship of student nurses within the clinical setting.
- Clarification of terminology within nursing, particularly in relation to the terms preceptorship and mentorship allowing for appropriate training and responsibilities relating to these roles to be undertaken.
- Support for mentors undertaking skills assessment of novice nurses within the critical care specialty, in the form of a senior nurse responsible to facilitate skills ‘sign-off’.
- Consideration of the role that formal assessment should have in mentoring relationships.

Training and knowledge opportunities for mentors.

With a lack of training in mentorship or preceptorship identified as a barrier by almost half the nurses in this study, increasing the profile of available training, and encouraging the uptake of such training is recommended. The DHBs /NZNO Nursing and Midwifery Multi-employer Collective agreement [MECA] (NZNO, 2010), is clear regarding the responsibility of the employer to support opportunities for the development of knowledge and skills, which will benefit the patient, organization and workforce. This agreement promotes professional development leave of up to 32 hours per annum for full-time employees pro rated to no less than eight hours per calendar year for part-time employees. Therefore training opportunities for mentors could be encouraged and supported through this process. These should include opportunities to attend local organizational preceptor/mentorship training and/or a focused clinical teaching course at the local tertiary institute related to students. The profile of such study days should be increased within the clinical setting, such as highlighting them on the education board, and within staff notices. It is possible with the development of special
interest groups within this specialty setting, that this will further assist with increasing the profile and attendance at such courses. Gaining senior nursing support for staff attendance at such training days is fundamental. Senior nurses responsible for performance development appraisals of staff, encouraging and supporting nurses to set attending these study days as a goal, could achieve this.

**Summary of recommendations related to**

*‘training and knowledge opportunities for mentors’.*

- Increase the profile of training opportunities for mentors.
- Senior nursing support to promote the professional development of nurses within the area of mentorship by attendance at organizational and/or tertiary institute study days.

**Future research**

This being a single- small-scale study has the potential to be undertaken on a larger more inclusive scale, possibly including all critical care settings within New Zealand. This would enable comparison of this study’s findings with the larger population of nurses working in critical care.

The interchangeable use of the terms preceptorship and mentorship used within the study area, and reported in the literature presented a challenge when studying this topic. Therefore the clarification of terms in future studies would need to be a consideration, as they were within this study. Possibly the inclusion of qualitative interviews and focus groups would allow these terms to be defined more clearly, as well as offer the potential for richer data to be gathered on the topic.

The inclusion of questions relating to the work environment, confidence and motivation in undertaking mentorship were valuable in gaining participants perception to these topics. The positive nature of participants’ responses in relation to these questions have indicated that these were not barriers to mentorship in this study. However further studies undertaken on the topic may
serve to clarify this further. Therefore these questions should remain if this questionnaire is utilized in the future.

The researcher is aware that as this study was conducted to obtain the perception of mentors within the critical care environment, the perceptions of mentees have not been examined. This could offer a possibility for further research on this topic to gain a greater understanding and comparison of the barriers to mentorship for both the mentor and mentee in critical care.

**Dissemination of findings**

The findings from this research will be presented to the nurses and the senior nursing team working within critical care where this study took place. An abstract for presentation will submitted to the Australian and New Zealand Scientific Society, (ANZICS) with the intention of presenting these findings to other critical care nursing colleagues within Australasia. Articles emerging out of this research will be submitted for publication in appropriate nursing journals.

**Conclusion**

Although this research is not without its limitations, knowledge has been gained about the perceptions of a group of nurses working in critical care regarding the barriers to providing mentorship in this environment. This has allowed findings based on this research to be examined and recommendations put forward to support and improve mentorship practices.

Nurses do have the power to make a difference, not only in the care of the critically ill patient and their family, but also in the provision of mentorship to the novice nurse in this setting. The support of professional growth of nurses through mentorship will contribute to the provision of expert nursing care to patients in the future.

This research journey has been significant for me personally and professionally. Not only has it provided much learning and discovery of research processes, it has yielded findings that the researcher believes will improve an area of nursing practice.
REFERENCES


Christchurch Polytechnic Institute of Technology School of Nursing and Human Services. (2011). *Bachelor of Nursing Transition to Registered Nurse practice BNTR701*.


Grannetia, J., & James, R. (2008, October). *Bridging the gap from novice to*
expert: implementation of a clinical support nurse role in the intensive care unit. Poster session presented at the Australian and New Zealand Intensive Care Society Asia Pacific Critical Care Conference, Sydney, Australia,


doi: 10.1097/CNQ.0b013e3181d91475


APPENDICES

APPENDIX A: Participant information letter

Information sheet
What do Critical Care Nurses perceive as barriers to mentorship within the critical care environment?

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9th May 2011

Dear Colleague,

You are invited to take part in this study exploring what critical care nurses perceive to be possible barriers to mentorship/preceptorship within the critical care environment. This research project is being undertaken by myself to fulfil the requirements of a Masters of Health Science (Nursing) programme.

About the questionnaire

The aims of this questionnaire are to obtain your views and perceptions, as well as highlight any specific issues you may have experienced related to the mentorship/preceptorship that you have provided to the new nurse starting in critical care, and/or to the nursing student. This will entail identifying and exploring any issues that exist for you related to mentorship/preceptorship, identifying factors that contribute to such issues, and establishing their impact on satisfaction levels in relation to the role of mentor, as well as their satisfaction within the workplace.

There is a paucity of literature about the barriers to mentorship that may exist within the critical care environment. Most of the literature comes out of the United States or the United Kingdom.
By providing useful data for nursing leaders about potential barriers to mentorship within the speciality of critical care, support may be given to overcome these barriers in order to develop successful mentoring relationships. Mentorship can assist novice nurses within this speciality move towards expert practice.

The terms mentorship and preceptorship may be used interchangeably within the literature and for the purpose of this research if you are more familiar with the term preceptorship, it should not hinder you in answering this questionnaire. Below are two definitions of preceptor and mentor. These roles have many similarities and the nurse who takes on the role of preceptor also acts as the mentor to that new staff member or student nurse during the term of their preceptorship. Sometimes the mentoring relationship may continue past the allocated preceptorship period. This research aims to explore your perception of the barriers that may exist for you to providing mentorship within the environment of critical care.

**Definition of a Mentor:**

A mentor may be defined as a supportive, facilitative partner who works with a mentee in an evolving learning relationship that is focused on meeting mentee learning goals to foster professional growth, (Latham, Hogan & Ringl, 2008).

**Definition of a Preceptor:**

A preceptor is defined as a person who demonstrates a high level of knowledge, clinical proficiency, and professionalism, and who serves as a clinical resource to and evaluator of new employees in a clinical care setting, with direct oversight of the preceptees’s clinical care, (Latham, Hogan & Ringl, 2008).

**Who can take part in the questionnaire?**

You are part of a random sample of fifty nurses that has been selected from all the registered nurses permanently employed in the Department of Intensive Care at Christchurch Hospital. The aim of using a random selection is to capture a fair representation of the staff and their perspectives on this topic. The process of identifying eligible participants has been done independent of myself, with the ward clerk distributing the questionnaires.

*Note if you have not taken part in the mentorship of nurses within this department; please still take part in this questionnaire, as there are some questions relating to you.

**How to participate**

*If you choose to participate, please complete and return the questionnaire to the labelled and locked “blue box” located in the departments staff tearoom by June 10th 2011*

For those staff currently on leave, this envelope has been posted to you so you may have an opportunity to participate. This process has also been done independent of myself with your Nurse Manager identifying that you are on leave and forwarding the necessary details to the ward clerk. A postage paid envelope has been included for your convenience.
You do not need to answer all the questions to participate. Where possible, please elaborate on your views/comments on the subject in order to quantify your responses and provide further enriching information to the questionnaire results. You may use additional pieces of paper if there is not enough space. All individuals who receive this invitation will be automatically entered into a draw to receive a $50 voucher redeemable from the University bookshop – Good Luck!

**Anonymity and confidentiality**

This questionnaire is anonymous and confidential. Access to the data collected will be limited to myself and my two supervisors only. The returned questionnaires are required to be kept for five years in locked storage, after which time they will be destroyed. The reason that the questionnaire is coded, with a number on the top left hand corner is to allow analysis of the data and for the prize draw for the University bookshop voucher to be carried out. This will be carried out independently of myself.

**Participation and consent**

Your participation in this questionnaire is entirely voluntary. You do not have to answer all the questions to participate. Informed consent is assumed by the completion and return of the questionnaire.

**What are the benefits of participating in this questionnaire?**

This is a time for you to reflect on your experiences and practices as you undertake mentorship of staff within the department. It is an opportunity for you to express your views and experiences in a formal, collective, anonymous and confidential way. The results from the data collected will provide valuable information and insight about the experiences of nurses to the wider nursing community. This may help to inform current and future practice in regard to the mentorship of nurses within critical care.

**What are the risks of participating in this questionnaire?**

The reflective nature of this questionnaire may raise issues for you associated with your workplace experiences. In order to resolve these you may wish to discuss them with a colleague or a member of the senior team. Alternatively you could seek advice and support from the hospital – based Employee Assistance Programme (EAP) Ph 366 4586.

**Questionnaire results**

An executive summary of the results and recommendations will be provided to the Christchurch Hospital Department of Nursing and Nurse Manager of the Intensive Care Department. For nursing staff, a summary will be placed in the staff memo folder. There will also be an opportunity to attend an on-site presentation for more detailed results and an opportunity for discussion. It is anticipated that the results from this study may be disseminated in the form of professional seminars, conference presentations, and/or publication.
Statement of approval.

This study has been given approval by the Upper South A Regional Ethics Committee.
This research project has been approved by the board of studies at Otago University.
The Intensive Care Department’s Nurse Manager has given permission for this research project to be carried out.

I realise that your time is valuable and I would greatly appreciate it if you could take the estimated thirty minutes to complete this questionnaire. I thank-you in advance for your support and contribution, and look forward to sharing the results of this questionnaire with you in the future.

Please feel free to contact me at anytime if you have any questions about this research project.

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Mobile: 021416096
Principal Investigator  Primary Supervisor
APPENDIX B: Questionnaire

Questionnaire
What do Critical Care nurses perceive as barriers to mentorship within the Critical Care environment?

To participate in this questionnaire, please complete and return it to the labelled ‘blue box’ in the staff tearoom by June 10th 2011.

The following questions are asked for demographic purposes only. Please indicate your answers by ticking the most appropriate box:

1. How old are you?
   - 20-29
   - 30-39
   - 40-49
   - 50-59
   - 60+

2. To which ethnic group(s) do you belong? (Tick each category that applies to you)
   - NZ European
   - Tongan
   - Māori
   - Niuean
   - Samoan
   - Chinese
   - Cook Island Māori
   - Indian
   - Other (such as Dutch, Japanese, Tokelauan.) Please state: …………………………….

3. What nursing qualification do you hold? (Tick each category that applies to you)
   - Nursing Certificate
   - Post Graduate Certificate
   - Nursing Diploma
   - Post Graduate Diploma
   - Bachelor of Nursing Degree
   - Masters in Nursing
   - Graduate Certificate
   - PhD
   - Other (please state) ………………..

4. Was your pre registration nursing education undertaken in New Zealand?
   - Yes
   - No
   - If no, please state where your pre registration nursing education was undertaken:
     ……………………………………………………………………………………………

5. Do you have any qualifications specifically in Critical Care/Intensive Care Nursing?
   - Yes
   - No
   - If yes, please specify ………………………………………………………………..

6. In total, how many years have you been working as a registered nurse?
   - < 1 Year
   - 1-2 years
   - 3-5 years
   - 6-10 years
   - 11-15 years
   - >16 years
7. In total how many years have you been working in critical care?
   - < 1 Year
   - 1-2 years
   - 3-5 years
   - 6-10 years
   - 11-15 years
   - >16 years

8. What is your current full time equivalent (FTE) status?
   - <0.5 FTE
   - 0.5-0.7 FTE
   - 0.8-1.0 FTE

9. Have you been involved in the mentorship of a nurse or student nurse who is new to the critical care environment in the past 5 years?
   - Yes
   - No
   If yes, please continue with the questionnaire from question 10.
   If no, please go to question 40.

This section asks you questions about your work environment.
Please tick the box that best represents your response to the following questions:

10. Does your work setting provide you with opportunities for autonomous clinical practice?
    - Never
    - Rarely
    - Sometimes
    - Yes, often
    - Yes, very often
    Please add any comments.

11. Do you have the opportunity to contribute to changes or projects occurring within your work setting on a regular basis? (e.g. evaluation of trial equipment)
    - Never
    - Rarely
    - Sometimes
    - Yes, often
    - Yes, very often
    Please add any comments.
12. Does your work setting provide you with ongoing learning and educational opportunities?
   - Never
   - Rarely
   - Sometimes
   - Yes, often
   - Yes, very often

13. On a ‘typical’ shift, are there adequate resources (i.e. equipment) within your work environment to assist you in caring for your patient?
   - Never
   - Rarely
   - Sometimes
   - Yes, often
   - Yes, very often

14. On a “typical” shift, are there adequate staff (nursing and allied) available within your work environment to support you in caring for the critically ill patient?
   - Never
   - Rarely
   - Sometimes
   - Yes, often
   - Yes, very often

15. Do you believe that the collegial relationships you have within your work environment are satisfactory?
   - Never
   - Rarely
   - Sometimes
   - Yes, often
   - Yes, very often

16. Are you satisfied in your job at this present time?
   - Yes
   - No
   If No, what would you change in your current job to make it more satisfying?

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This section asks you questions about your experiences of mentorship.

17. Which nurses have you mentored within critical care? (tick all that apply)
   - New staff member
   - New graduate nurse
   - Student nurse
   - Return to nursing program
   - Other, please state ………………………..

18. What do you consider to be your motivation to provide mentorship? (tick all that apply)
   - It’s a requirement of my job description
   - To fulfil PDRP (Professional Recognition and Development Programme requirements
   - I enjoy the mentorship role
   - I had a good mentor when I was new to this job
   - I didn’t feel I had a choice to mentor a new staff member/student nurse or not
   - Other, please specify ………………………………………………………………….

19. Does your clinical workload ever impact on your mentoring responsibilities?
   - Never
   - Rarely
   - Sometimes
   - Yes, often
   - Yes, very often
   - If yes, please specify how your mentoring responsibilities are affected.
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………

20. Is the role that you play in mentorship acknowledged within your work environment?
   - Yes
   - No
   - If yes, please specify how it is acknowledged
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………

21. Do you think that you should receive additional remuneration for the mentor role you undertake?
   - Yes
   - No
   - If yes, what type of remuneration would you see as appropriate?
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………
     ……………………………………………………………………………………………………………
This section asks about your confidence in undertaking the Mentor role
(The following questions have been adapted from Heale, 2009)

Please consider your mentor experiences and tick the most appropriate box according to the scale below. The term “mentee” refers to whoever has been mentored by you, i.e. new nurse or student nurse.

<table>
<thead>
<tr>
<th>Not applicable</th>
<th>(you believe the behavior is not relevant to your role)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all confident</td>
<td>(you believe you cannot complete the behavior)</td>
</tr>
<tr>
<td>Partly confident</td>
<td>(you believe you might be able to complete the behavior)</td>
</tr>
<tr>
<td>Usually confident</td>
<td>(you believe you are generally able to complete the behavior)</td>
</tr>
<tr>
<td>Always confident</td>
<td>(you strongly believe that you can complete the behavior)</td>
</tr>
</tbody>
</table>

22. How confident are you that you can demonstrate current knowledge of clinical practice in your specialty area?
   - Not applicable
   - Not at all confident
   - Partly confident
   - Usually confident
   - Always confident

23. How confident are you that you can identify the learning needs of the mentee?
   - Not applicable
   - Not at all confident
   - Partly confident
   - Usually confident
   - Always confident

24. How confident are you that you can understand the expectations of the competency assessments to be undertaken?
   - Not applicable
   - Not at all confident
   - Partly confident
   - Usually confident
   - Always confident

25. How confident are you that you can assess the mentee’s performance based on competency assessments?
   - Not applicable
   - Not at all confident
   - Partly confident
   - Usually confident
   - Always confident

26. How confident are you that you can consult appropriate resource persons for assistance when challenges arise?
   - Not applicable
   - Not at all confident
   - Partly confident
   - Usually confident
   - Always confident
27. What do you identify as potential barriers to mentorship within your work environment? (tick all boxes that apply)
   - Lack of time because of clinical workload
   - Lack of familiarity with the assessments required
   - Lack of familiarity with the documentation required
   - Lack of opportunity to update your knowledge of mentorship/preceptorship
   - Lack of training in preceptorship and/or mentorship.
   - Lack of familiarity with systems for training and assessment in your workplace
   - Lack of confidence in your ability to assess a mentee’s competency
   - Lack of confidence in your ability to supervise a mentee
   - Lack of confidence in your interpersonal skills
   - Lack of motivation to be involved in mentorship/preceptorship
   - Lack of confidence in your own skills and knowledge in the area
   - Other (please state)

28. Have you had the opportunity to undertake any formal mentorship or preceptorship training?
   - Yes
   - No
   If yes, what type of training/education and where was this undertaken?

29. Are you aware of the preceptor/mentor training offered at your institution?
   - Yes
   - No

**Mentorship of new staff members**
The following questions relate to the mentorship you provide to new staff members in Intensive care:

30. Please select from the following list the most important role in your view that you as a mentor fulfill for the new staff member:
   - Teacher
   - Supporter
   - Role model
   - Assessor
   - Supervisor
   - Coach
   - Other, please specify …………………………………………………………………………………

31. From the list provided in the previous question, please indicate the role that you find the most difficult to fulfill when mentoring a new staff member:
   - Teacher
   - Supporter
   - Role model
   - Assessor
   - Supervisor
   - Coach
   - Other, please specify …………………………………………………………………………………
32. How clear are you in regards to the expectations of your role as a mentor to the new nurse in critical care?
   - Very unclear
   - Unclear
   - Clear
   - Very clear
   If unclear, please specify what you are unclear about
   ........................................................................................................................................
   ........................................................................................................................................

33. Do you think that there is adequate support for you when you are mentoring new nurses within the critical care environment?
   - Yes
   - No
   If no, please specify how you would like to see this changed.
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................

**Mentorship of student nurses**

The following questions relate to the mentorship you provide to the student nurse in Critical care:

34. Please select from the following list the **most important role** in your view that you as a mentor fulfill for the student nurse.
   - Teacher
   - Supporter
   - Role model
   - Assessor
   - Supervisor
   - Coach
   - Other, please specify ...........................................................

35. From the list provided in the previous question, please indicate the role that you find **most difficult** to fulfill when mentoring a student nurse?
   - Teacher
   - Supporter
   - Role model
   - Assessor
   - Supervisor
   - Coach
   - Other, please specify ...........................................................

36. How clear are you in regards to the expectations of your role as a mentor to the student nurse in critical care?
   - Very unclear
   - Unclear
   - Clear
   - Very clear
   If unclear, please specify what you are unclear about
   ........................................................................................................................................
37. Do you think that there is adequate support for you when you are mentoring student nurses?
   Yes
   No
   If no, please specify how you would like to see this changed.

38. Overall, what are the most challenging aspects of mentorship for you? Please specify.

39. Overall, what are the most rewarding aspects of mentorship for you? Please specify.

40. If you have not been involved in mentorship in the critical care environment, would you like to be involved in the future?
   Yes
   No
   If yes, please state how this department may assist you to become involved in the mentorship of new staff or student nurses in the future.

Additional space for any further comments.

Thank you for taking time to participate in this study.

Germaine Sandford
Principal Investigator.
APPENDIX C: Ethics approval

7 April 2011

Ms Germaine Sandford
Canterbury District Health Board
P O Box 35 390
Shirley
Christchurch 8640

Dear Germaine Sandford

Ethics ref: URA/11/EXP/012 (please quote in all correspondence)
Study title: What do Critical Care nurses perceive as barriers to mentorship within the critical care environment?
Investigators: G Sandford.

The above study has been given ethical approval by the Chairperson of the Upper South A Regional Ethics Committee.

Approved Documents
Information sheet dated April 2011
Questionnaire dated March 2011

Final Report
The study is approved until 30 April 2012. A final report is required at the end of the study and a report form to assist with this is available at http://www.newhealth.govt.nz/ethicscommittees. If the study will not be completed as advised, please forward a report form and an application for extension of ethical approval one month before the above date.

Amendments
It is also a condition of approval that the Committee is advised if the study does not commence, or is altered in any way, including all documentation eg advertisements, letters to prospective participants.

Please quote the above ethics committee reference number in all correspondence. It should be noted that Ethics Committee approval does not imply any resource commitment or administrative facilitation by any healthcare provider within whose facility the research is to be carried out. The organisation may specify their own processes regarding notification or approval.

Yours sincerely

Alieke Dierckx
Administrator
Upper South A Regional Ethics Committee
Uppersoutha_ethicscommittee@moh.govt.nz
APPENDIX D: Content Analysis Model

Figure 1 Preparation, organizing and resulting phases in the content analysis process.