

**EMERGENCY NURSES' PERCEPTIONS
OF THE IMPACT OF
POSTGRADUATE EDUCATION
ON THEIR PRACTICE IN
NEW ZEALAND**

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ABSTRACT

BACKGROUND: Emergency nursing is a specialty concerned with the care of people of all ages, with either perceived or actual unwellness presenting to the emergency department (ED) for assessment, resuscitation, investigation, treatment and review of their illness or injury. Emergency nurses apply specialty knowledge and expertise in the provision, delivery and evaluation of emergency nursing care. Over recent decades social, political and professional changes have affected nursing care delivery and nursing education. In particular the 21st century has witnessed the development of state funded postgraduate nursing education programmes, developing nurses specialty or advanced nursing knowledge, quality patient/client care and nursing practice within the tertiary education system.

AIM: The aim of this study is to investigate emergency nurses' perceptions of the impact of postgraduate education on their practice in New Zealand (NZ).

METHODS: This study utilises critical social theory as the overarching framework, informed by the writing of Jürgen Habermas (b.1929-). It is the three phases of Habermas's practical intent of critical social theory; namely enlightenment, empowerment and emancipation, that this study is concerned with. This descriptive research study employs both quantitative and qualitative methods and is therefore known as mixed-methods research. Data collection took place over 12 weeks, from August to November 2006, using a survey questionnaire obtained with permission from Ms Dianne Pelletier, Sydney, Australia. The sample included 105 emergency nurses from District Health Board (DHB) emergency departments in NZ, 10 respondents from this sample self-selected to be interviewed by telephone. Ethical approval for this study was obtained from the University of Otago Ethics Committee for research involving human participants. Data was analysed using the Statistical Package for Social Sciences (SPSS).

RESULTS: Two main themes arose from the thematic analysis; these being positive and negative, these themes were further divided into 10 sub-themes. The results indicate that postgraduate study (PGS) has increased nurses' perception of their knowledge; leadership and understanding on the quality of patient care delivered, increased their academic and research skills and increased their confidence/self-esteem and recognition by their colleagues

and team. Therefore the majority of respondents perceive postgraduate education has been an instrument of liberation and a process of empowerment and emancipation. A smaller percentage of respondents perceived that PGS had no effect on various aspects of patient care and another significantly smaller percentage of respondents reported negative results from PGS. This research identified similarities between this study and that of Pelletier and colleagues' (2003; , 2005; , 1998a; , 1998b) Australian study.

CONCLUSION: This study adds to the existing literature on postgraduate studies undertaken by nurses. No known study has previously investigated solely emergency nurses' perceptions of the effects of PGS, either nationally or internationally. The results of this study offer enlightening information regarding emergency nurses' perceptions of their PGS within NZ and offers a platform from which other studies may be undertaken. It also has the potential to inform nurses contemplating PGS and educators facilitating these programmes, as well as provide implications for policy development by the Nursing Council of NZ, NZ Universities, DHBs and the Ministry of Health.

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LIST OF ABBREVIATIONS

ABG	Arterial Blood Gas
ACNP	Acute Care Nurse Practitioner
ANP	Advanced Nursing Practice
APN.....	Advanced Practice Nursing
CNM.....	Charge Nurse Manager
CNSs	Clinical Nurse Specialists
CTA.....	Clinical Training Agency
DHBs.....	District Health Boards
EAG.....	Expert Advisory Group
ECG.....	Electrocardiograms
ED	Emergency Department
ENP	Emergency Nurse Practitioner
GCS	Glasgow Coma Scale
HFA.....	Health Funding Authority
ICU	Intensive Care Unit
ICN.....	International Council of Nurses
MoH	Ministry of Health
NCNZ.....	Nursing Council of New Zealand
NC	Nurse Consultant
NE	Nurse Educator
NP	Nurse Practitioner
NS.....	Nurse Specialist
NQF.....	National Qualification Framework
NZ	New Zealand
PDRP.....	Professional Development and Recognition Programme
PGS	Postgraduate Study
PhD.....	Doctoral Degree
Q.....	Question
RNs.....	Registered Nurses
SPSS	Statistical Package for Social Sciences
UK.....	United Kingdom
USA.....	United States of America

CHAPTER ONE: INTRODUCTION

Emergency nursing is a specialty in which nurses care for people of all ages and populations at the front line in the emergency or critical phase of their illness or injury. Furthermore emergency nurses are knowledgeable and skilled at discerning life-threatening conditions, prioritising the urgency of care, initiating and effectively managing resuscitation and other treatments. New Zealand (NZ) emergency nurses work within a complex health care environment and culture situated at the front door of hospitals, facing challenges everyday within a changing clinical environment. These nurses apply specialty knowledge and expertise when caring for patients that are undiagnosed or require assessment and further interventions (College of Emergency Nurses New Zealand, 2008; Emergency Nurses Association, 1999; Emergency Nursing World, n.d.; MacPhail, 2003). Education of emergency nurses is vital, ensuring they have the critical skills and knowledge to deliver quality nursing within this challenging environment.

Throughout the decades since Florence Nightingale (1820-1910) first established formal education for nurses in London during the late 19th and early 20th centuries, nursing has depended on theoretical knowledge to underpin clinical practice (Chinn & Kramer, 1999; Meleis, 1997; Nightingale, 1969). The nature of this knowledge has evolved and nurses now possess specific areas of expertise and knowledge to assist with caring for their patients. In practice this expertise and knowledge comprises clinical judgements derived from specialized skills, theory, knowledge, ethics, laws, principles and intuition (Hendricks, Mooney, Crosby, & Forrester, 1996a, 1996b; Reilly & Oermann, 1992).

Over recent decades social, political and professional changes have impacted on health care delivery and education, initiating opportunities for nurses to expand and advance their practice (Hodson, 1998; O'Shea, 2003). Nursing education in NZ and globally has seen nursing move from an apprentice-style hospital based programme of nurse training to the higher-level education sector. Higher-level education calls for nursing education to be

positioned within the tertiary system.¹ According to Smith (1978), “Facilities for advanced basic and post-basic nursing education within tertiary institutions are becoming increasingly commonplace throughout the world” (p. 219). Smith envisaged in the late 1970s that tertiary-level education for nurses would improve both the quality of nursing care and the standing of the nursing profession. Positioning nursing education within the tertiary-level education sector is a significant step in advancing nursing knowledge (Pearson, 2005; Usher, 2006) promoting nursing’s development and progress as a profession (Whyte, Lugton, & Fawcett, 2000).

Postgraduate² nursing education is growing rapidly in NZ and the effects of this education on students, their patients, their employers, the funding authorities and clinical practice has not been widely researched. International studies have been undertaken on the benefits and barriers to postgraduate education for registered nurses (RNs), however no research focusing specifically on the effects on emergency nursing has been published in NZ. The findings from this study may have implications for policy development around postgraduate education within NZ by the Nursing Council of New Zealand (NCNZ),³ NZ Universities, District Health Boards (DHBs)⁴ and the Ministry of Health (MoH).⁵

PERSONAL BACKGROUND

I have been working in the area of emergency nursing for 14 years and commenced postgraduate education in 2001, along with one colleague from our provincial town. This was a new journey, an unknown pathway which none of our colleagues had travelled

¹ Tertiary education is defined as a non-compulsory, formal education, following successful completion of a secondary education, provided by a specialist institution, normally a college, polytechnic or university (Campbell & Rozsnyai, 2002; Harvey, 2004).

² Postgraduate refers to a tertiary-level course of a higher level than a primary degree (Higher Education Authority, 2004).

³ NCNZ is the regulatory authority for nurses in NZ with legislative functions under the Health Practitioners Competency Assurance Act (2003). It governs the practice of nurses by setting and monitoring standards of registration ensuring safe and competent care is delivered to the general public of NZ.

⁴ DHBs are NZ organizations responsible for providing and ensuring the population of a specific geographical area receive Government funded health and disability support services. There are 21 DHBs in NZ and they have existed since January 1st 2001, following the NZ Public Health and Disability Act 2000 (Ministry of Health, 2007).

⁵ The NZ MoH, Manatu Hauora, is the NZ Government’s principal agent and advisor on health and disability.

previously. During this journey, I became aware that some emergency nursing colleagues held little enthusiasm to embark on a postgraduate education pathway to enlighten their thinking. As I reflected, this thinking led to further curiosity and I started asking questions to try and gain a better understanding of what was underpinning such reluctance. I commenced a part time position as a Clinical Lecturer on a postgraduate programme and it was during this time that I observed other nurses studying at a postgraduate level were not only advancing their knowledge but also gaining promotion. Following a period of creative questioning and discussion with lecturers, I found myself reflecting and questioning; what was the potential of postgraduate qualifications? This then became the impetus for the study.

1.1 AIM OF THE STUDY

The aim of this research study is to investigate emergency nurses' perceptions⁶ of the impact of postgraduate education on their practice in NZ.

1.2 STRUCTURE OF THE THESIS

The following chapters explore more fully the context, method and findings of this study. The first of these chapters (Chapter two) provides the background for this thesis. It commences with the 'Ministerial Taskforce On Nursing' in the late 20th century and it's recommendations to advance the scope of nursing practice in NZ. It describes advanced nursing practice (ANP) and in particular that of emergency nursing and provides the general development and context for this current study.

Chapter three presents an overview of the literature underpinning this research thesis and includes literature on teaching and learning, postgraduate education and scholarship, particularly relating to Ernest Boyer's model of scholarship reconsidered. A review of relevant national and international literature on postgraduate education and emergency nursing is discussed including Dianne Pelletier and colleagues' research in this field in

⁶ Perception is defined as " The conscious recognition and interpretation of sensory stimuli that serve as a basis for understanding, learning and knowing or for motivating a particular action or reaction...the result or product of the act of perceiving" (Harris, Nagy, & Vardaxis, 2006, p. 1316).

Australia, whose work informs the data collection of the thesis (Pelletier, Donoghue, & Duffield, 2003, 2005; Pelletier, Donoghue, Duffield, & Adams, 1998a, 1998b).

Chapter four describes the theoretical perspective of this study, the methodological approach and the methods employed in the collection and analysis of data. The theoretical perspective draws upon critical social theory, specifically the philosopher and socialist Jürgen Habermas's work (b.1929-). While the approach is largely descriptive the study employs both quantitative and qualitative data collection methods; therefore the study is mixed-methods research.

Chapter five presents the results and analysis of the study, including a description of the statistical data from the questionnaire survey in the form of graphs and charts. Data from key themes are analysed.

Chapter six discusses the key results of this descriptive research study. Habermas's three phases that create the practical intent of critical social theory will provide the overarching framework for the discussion. Furthermore the potential limitations and strengths of the study are presented.

Finally chapter seven concludes the study by summarizing the significant points and proposes recommendations for the future.

CHAPTER TWO: BACKGROUND

“University education is more liberal and theoretical, whereas education at the (undergraduate)⁷ diploma or certificate level is more closely related to the application of knowledge to a special field” (Carpenter, 1971, p. 27).

2.1 INTRODUCTION

State funded postgraduate nursing education is very much a recent development in NZ and has grown since its inception a decade ago. Chapter two is presented in two sections. The first section will focus on ANP which is explored within the NZ context, commencing with the Ministerial Taskforce On Nursing (1998) that opened a new way forward for nursing in NZ. The second section describes the literature relating to the emergency and trauma postgraduate certificate.

2.2 ADVANCED NURSING PRACTICE

2.2.1 MINISTERIAL TASKFORCE ON NURSING 1998

The Ministerial Taskforce On Nursing (1998) was the first major and significant review of nursing in NZ for more than 15 years. It followed a response from nurses and nursing organizations that expressed their concern to parliament regarding obstacles preventing the nursing profession from realising its full potential in health service delivery. The Taskforce was established by the Honourable Bill English, Minister of Health, in February 1998 and detailed recommendations that would expand the scope of nursing practice, education and research. It sought to introduce the Nurse Practitioner (NP) role, enabling nursing to develop

⁷ Undergraduate refers to a tertiary-level course which leads to a baccalaureate or primary degree or a diploma (Higher Education Authority, 2004).

and become "...a more responsive, innovative, effective, efficient, accessible and collaborative health care service for New Zealanders" (p.8), thereby building a pathway at a higher level for nurses wanting to further their careers through nursing and develop the advanced nurse and nurse specialist (NS) roles. The Taskforce believed that these nurses would make a significant contribution to the patient journey and experience, improving outcomes for patients due to the nurses' increased knowledge and their ability to lead and coordinate care across the hospital and community interfaces. Recommendations included changes in policy and funding to support nurse-led services. Limitations of the Nurses Act (1977) were identified, amendments were required to give enforcement powers to the NCNZ to develop and formulate competency-based practising certificates and postgraduate education frameworks, including competencies of advanced and specialist nursing practice (Ministerial Taskforce On Nursing, 1998).

2.2.2 ANP DEFINITION

While the concept of ANP is still relatively new in NZ, the literature is often unclear on this, frequently referring to ANP as an umbrella term encompassing both ANP and/or Advanced Practice Nursing (APN) (Donnelly, 2003; Hanson & Hamric, 2003; Hodson, 1998; Jacobs, 2000, 2003; Litchfield, 1998; Mick & Ackerman, 2000; Oberle & Allen, 2001; Richardson, 2002; Sutton & Smith, 1995; Wilson-Barnett, Barriball, Reynolds, Jowett, & Rylie, 2000). There does however seem to be consistency within the literature, that the scope of ANP is distinguished by the advanced nurse's autonomy to expand the boundaries⁸ of traditional nursing practice (Canadian Nurses Association, 2002; Donnelly, 2003; Higgins, 2003; MacDonald, Herbert, & Thibeault, 2006; New Zealand Nurses Organization, 2005; Norris & Melby, 2006; Nursing Council of New Zealand, 2001; Schober, 2006; United Kingdom Central Council for Nursing Midwifery and Health Visiting, 1994). The International Council of Nurses (ICN) has developed the following definition, nurturing unity around this emerging role,

⁸ Expand the boundaries refers to the development of new practice knowledge, skills and overlapping of traditional boundaries with other professions including the medical profession. This is discussed in more depth in the literature review chapter three.

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

The meaning of ANP was debated vigorously in NZ during the late 1990s, resulting in the NCNZ publishing the *Framework for Post-Registration Nursing Practice Education*, providing RNs with the structure for programme development and delivery from the first year of practice post-registration, through to ANP education at a postgraduate-level (Nursing Council of New Zealand, 1999, 2001). The framework is referenced to the Canadian Nurses Association and the ICN along with NZ authors, however it does not appear to have taken advantage of any other international literature for its development. Postgraduate nursing programmes are required to inform and advance nursing practice by meeting the required standards and competencies for specialty and ANP.⁹ Spence (2004a) claims that NZ has restricted the potential of ANP by means of its register and list of competencies. ANP involves applying highly developed clinical skills and judgement acquired through education and experience, utilizing the experience and research of the nursing profession (Nursing Council of New Zealand, 2001). The NP role in NZ is differentiated through legislative and title protection mechanisms (New Zealand Government, 2003; Nursing Council of New Zealand, 2001). Development in advanced practice roles is now starting to emerge with debate outlining similarities and differences in NS, Nurse Consultant (NC) and NP roles (Bryant-Lukosius & DiCenso, 2004; Bryant-Lukosius, DiCenso, Browne, & Pinelli, 2004; Gardner, Chang, & Duffield, 2007; Hanson & Hamric, 2003).

2.2.3 NZ TRENDS

NZ authors are adding their discussion and debate to the literature on ANP (Jacobs, 2000, 2003; Litchfield, 1998; Miles, 2005; Richardson, 2002; Ross, 1999; Spence, 2004a, 2004b). National standards and competencies underpin postgraduate programmes and assessment of

⁹ Refer to Appendix 1 for copy of Competencies for Specialty Nursing Practice and Competencies for Advanced Nursing Practice Programmes (with/without nurse Prescribing).

application for NP registration (Nursing Council of New Zealand, 2001, 2002). ANP is developing in NZ and a recommendation from the Report of the Ministerial Taskforce was that the Health Funding Authority (HFA) fund and support nurse-led services (Ministerial Taskforce On Nursing, 1998). Thus opening an opportunity for ANP expansion and change, for example nurse-led services (Wood & Giddings, 2006). A 'Nurse-Led Minor Injuries Service' at Auckland Emergency Department (ED) and other nurse-led initiatives, for example, services such as 'Nurse Track'¹⁰ at Hutt Valley Health Hospital have been developed (Davies, 2003). Davies (2003) described the four nurses involved in the 'Nurse Track Service' as being Clinical Nurse Specialists (CNSs). They are required to be on the Professional Development and Recognition Programme (PDRP)¹¹ at level three or four¹² and have had extra training to take on the responsibilities. There was no discussion about postgraduate-level academic qualifications being a requirement. A recent nurse-led patient-centred initiative in Christchurch Hospital's ED is a 'meet and greet' service established to provide improved integration of community nursing services within the ED (Griffiths, Bartley, & Drummond, 2007). Other more general ED nurse-led patient-centred initiatives include nurses initiating radiology, pathology investigations, assessment and fast tracking of patients to inpatient areas, septic patient work ups, wound management, initiation of medications other than analgesics (Cashin et al., 2007; Fry & Jones, 2005; Salter, 2005).

O'Connor (2007) reported that Mark Jones (MoH, Chief Nurse)¹³ believes that in NZ if you want to become an advanced or specialist nurse, the only pathway forward is that of a NP of which he described the scope as being too narrow. His presentation, to mark International Nurses Day has initiated further discussion on ANP when talking with nurses in Nelson.

¹⁰ Nurse Track is a service provided with designated nurses who assess, treat, refer if appropriate, discharge and arrange follow-up for minor presentations, including Accident Compensation Accredited documentation, in the ED at Hutt Valley Health Hospital (Davies, 2003).

¹¹ PDRP is a national framework to enable nurses and midwives practice to be rewarded and recognised. These programmes support innovation, reflect contemporary practice and are competency based (National Nursing Organisation New Zealand, 2004 updated December 2005).

¹² PDRP levels include: Level 1 is Graduate RN; Level 2 is Competent RN; Level 3 is Proficient RN and Level 4 is Expert RN (National Nursing Organisation New Zealand, 2004 updated December 2005).

¹³ Mark Jones role as Chief Nurse to the MoH, is to provide advice to Government on the effective utilisation of nursing, to benefit the health of all New Zealanders.

ANP remains an emerging and developing role both internationally and in NZ. Debate and discussion continues as to its definition and place in NZ nursing.

The next section will focus specifically on ED nursing.

2.3 EMERGENCY NURSING AND EDUCATION IN NZ

2.3.1 HISTORY

During the late 1990s, the MoH documents, the Hospital Services Plan (aimed to secure better hospital services into the future) and the Rural Health Policy (aimed to meet the needs of rural communities) were released, signalling the Government's commitment to improved care and service for New Zealanders who were unwell or injured (Ministry of Health, 1998, 1999b). Initiatives to improve timely access to hospital included the MoH's (1999a) report Roadside to Bedside-A clinically Integrated Acute Management System for New Zealanders. This significant report identified a number of areas requiring workforce development, such as first contact care and education of the nation's emergency nursing workforce.

Furthermore it stated, "Health professionals need to have appropriate training in emergency treatment at all levels of clinical education" (p. 11). This report resulted in support from the Clinical Training Agency (CTA) offering funding on a pilot basis in 2001 to a limited number of training programmes; to enable RNs to prepare for more specialist and advancing roles in emergency care (Clinical Training Agency, 2000; Ministry of Health, 2000). The programmes took the form of two postgraduate papers leading to the completion of a postgraduate certificate in emergency and trauma nursing. These two papers are equivalent to one quarter of a Master's programme.

2.3.2 POSTGRADUATE EDUCATION AND FUNDING FOR EMERGENCY NURSING IN NZ

Significant health reforms took place in NZ between 1991 and 1993, which resulted in government funding for professional education being split between Vote Health and Vote Education in 1995. Vote Health via the CTA was responsible for funding post-entry and postgraduate programmes. Criteria for postgraduate programmes were developed in response to Government strategies, which required a clinical component of greater than 30 percent that fitted with the MoH priorities. Emergency nursing was identified as one of the MoH

priorities for funding (Expert Advisory Group on Post-Entry Clinical Nurse Training Programmes, 2004) in keeping with the Ministerial Taskforce on Nursing (1998) which had identified that a major barrier to postgraduate nursing education was inadequate funding for nurses. Emergency and trauma postgraduate programmes were offered through Universities in NZ. Two were funded by the MoH via CTA at level 800¹⁴ on the National Qualifications Framework (NQF) and included the University of Victoria in 2000 (MacGeorge, 2007) and the University of Otago in 2001 (University of Otago Centre for Postgraduate Nursing Studies Christchurch School of Medicine and Health Sciences, 2001).

The Tertiary Education Advisory Commission Te Ako Pae Tawhiti was established by the NZ government in April 2000, to formulate a long-term strategic direction for tertiary education in NZ. The overall aim was to produce the skills, knowledge and innovation to transform the NZ economy, promote social and cultural development and meet the constantly changing requirements of national and international labour markets, thus making NZ a world-leading knowledge society. Priorities included improved quality learning and higher participation rates, improved access by building stronger bridges into tertiary-level education, enhanced higher-level research quality, capacity and linkages to industry and the wider community. Nursing education at tertiary-level is expected to contribute to and be measured against these goals (Tertiary Education Advisory Commission Te Ako Pae Tawhiti, 2001).

The Expert Advisory Group (EAG) on Post-Entry Clinical Nurse Training Programmes (2004) recommended that the MoH fund all postgraduate nursing education programmes, therefore improving access and quality learning for RNs. During 2006 the EAG reviewed the distribution of funding, consolidating CTA funds into one funding model. From 2007 the 21 DHBs have been responsible for administering CTA nursing education funds. CTA's vision is to work in partnership with each DHB to deliver a transparent and consistent model of funding for RNs to develop and advance their clinical practice towards NS or NP roles, resulting in improved health outcomes for New Zealanders (Expert Advisory Group, 2006). This is most likely to result in greater numbers of RNs accessing postgraduate education,

¹⁴ Level 800 clinical education programmes prepare registered nurses to practice at an advancing level by providing advanced knowledge and competence, which are applied and aligned to clinical practice.

therefore building a critical mass of excellence within specific fields of interest like emergency nursing with advanced nurses working collaboratively, implementing change and enhancing the patient journey and outcomes. With postgraduate funding now managed by individual DHBs, the administrators of this nursing education funding will require an understanding of the learning environment and systems in tertiary-level education. The researcher believes these administrators will be required to take on a new role collectively, to lead and actively negotiate with CTA, informing them of the unique requirements of nursing education for the future. This is a three-way relationship between the CTA, DHBs and education providers.

2.3.3 EMERGENCY AND TRAUMA POSTGRADUATE CERTIFICATE

The Training Specification For Advanced Emergency Nursing, which was in place from 2001-2006 aimed to prepare experienced RNs in ANP and acute emergency/trauma nursing practice and theoretical knowledge, while meeting the competencies for Specialty Nursing Practice or ANP as set out by NCNZ (Clinical Training Agency, 2000). The emergency nursing programme recognised that some trainee nurses would be operating at a relatively advanced level and all nurses brought with them a foundation of knowledge and skills that this programme was designed to build upon. The majority of participants in this current research study will have completed this programme within the training specifications discussed above.

2.3.3.1 Description of training

The training programme content was a tapestry of knowledge organized around meeting Specialty Nursing Practice Programme Standards and Competencies or Advanced Nursing Practice Programme Standards and Competencies and was required to:

- ❑ be vocational
- ❑ be substantially clinical
- ❑ be equivalent to not less than six months, or more than one year full-time equivalent in length
- ❑ lead to a nationally recognized nursing qualification, which would typically be a Postgraduate Certificate
- ❑ offer both theory and at least 30 percent clinical experience and enable trainees to develop their knowledge, skills and practice in the speciality of emergency nursing

- ❑ acknowledge the cultural characteristics of NZ society that influence planning and delivery of emergency nursing services
- ❑ prepare nurse practitioners to care for the critically ill with complex needs and to develop the knowledge base required for advanced nursing practice
- ❑ have a detailed documented curriculum that outlines the purpose, outcomes, content and process, assessment criteria, and assessment methods (Clinical Training Agency, 2000, p. 2).

2.3.3.2 Learning environment

The learning environment was expected to offer a theoretical knowledge base with an application to clinical practice. The programme included formal teaching, access to resources and a clinical component/placement. The formal or theoretical teaching programme was required to contribute to recognised standards of practice for emergency nursing and the NCNZ Framework for Post-Registration Nursing Education. It was expected to link with, relate and integrate into the clinical work environment, including understanding of current NZ legislation. Access to resources included library facilities, clinical experience, release time and forums that provided interaction with other appropriate health professionals (Clinical Training Agency, 2000; Nursing Council of New Zealand, 1999, 2001).

The clinical component focus was to expand on the nurses clinically based skills and the application of theoretical knowledge learned from the formal teaching programme. The clinical placement was to include an environment offering different learning opportunities for the purpose of expanding and gaining the appropriate experience and ensuring clinical experience focused on achieving the programme outcomes (Clinical Training Agency, 2000; Nursing Council of New Zealand, 1999, 2001). Research supports external clinical placements (Rassool & Oyefeso, 2007).

2.3.3.3 Emergency nurse qualifications

A survey of educational qualifications was undertaken by NCNZ during the year 2000. Surveys were sent to 45,752 NZ RNs and midwives, 31,801 RNs responded, a response rate of 70 percent. Of the 31,801 respondents, 1306 were living overseas; indicating that the response rate for those currently practising in NZ was 71 percent. Out of 748 ED nursing respondents, 135 nurses held a Bachelor of Nursing degree either initially or post-registration and two nurses identified as having a Master's Degree. There were no

respondents identified having a Doctoral Degree (PhD) (Nursing Council of New Zealand, 2000). This document did not include the numbers of RNs with a postgraduate certificate or diploma. In September 2006, NCNZ records stated that 1886 nurses identified as working in emergency and trauma departments within a DHB hospital. Three hundred and five nurses identified that they had postgraduate qualifications limited to postgraduate certificate, postgraduate diploma, Master's and a PhD. Some nurses reported having more than one qualification (Adamson, 2007). Therefore within a six-year period, the rate of postgraduate education would appear to have increased greatly. The current study's inquiry will attempt to reach as many of these emergency nurses with postgraduate qualifications as possible.

2.4 SUMMARY

Chapter two has provided the background to the study, reflecting back over the development of ANP in NZ. Emergency nursing and education is discussed including the NZ training specifications for advanced emergency nursing and funding for postgraduate nursing education. This background therefore sets the scene for the literature review, which follows in chapter three.

CHAPTER THREE: LITERATURE REVIEW

3.1 INTRODUCTION

This chapter provides a selected review of the literature on tertiary-level nursing education and is presented in four sections. The first section will focus on pedagogy¹⁵ and andragogy,¹⁶ providing a background to teaching and learning. This is followed by an overview of adult learning theory and discussion of how individuals learn through critical thinking and reflection.

The second section focuses on nursing scholarship and in particular Ernest Boyer's work (1928-1995). An educationalist from the United States of America (USA), his groundbreaking study; *Scholarship Reconsidered: Priorities of the Professoriate*, which include the scholarship of discovery, integration, application and teaching.

Section three explores literature relating to tertiary-level education and is divided into two parts. Part one introduces Dianne Pelletier, Judith Donoghue, Christine Duffield and Anne Adams' educational research and a 10-year longitudinal study at a University in Sydney, Australia, which is closely related to this current study. Part two introduces other national and international literature pertaining to postgraduate study (PGS) and its effect on practice.

The last section provides an overview of the blurring of professional boundaries in ANP. All of which has relevance to understanding this study and the way forward for advanced clinical practice.

¹⁵ Pedagogy is defined as the teaching of children (Freshwater & Maslin-Prothero, 2005).

¹⁶ Andragogy is defined as the teaching of adults (Freshwater & Maslin-Prothero, 2005).

3.2 EDUCATION

This section provides a background to teaching and learning by briefly discussing the differences between pedagogy and andragogy and the influence of andragogical models on nursing education. Adult learning theory is introduced followed by a discussion on how nurses develop and link their knowledge to clinical practice through critical thinking and reflection.

3.2.1 PEDAGOGICAL AND ANDRAGOGICAL MODELS OF EDUCATION

There have been ambiguities around the meaning of pedagogy, which has resulted in an emergence of educational literature on andragogy as being the art and science of teaching adults. The terms pedagogy and andragogy focus on who is being taught, however pedagogy is largely referred to as teaching, instructing and learning, and the way knowledge is communicated (Breunig, 2005; Freshwater & Maslin-Prothero, 2005; Gore, 1993; Knowles, 1973; Nash, 2003), with its roots in positivistic and phenomenological philosophy (Gore, 1993; Lont, 1995). Pedagogy is based on assumptions of teaching and learning evolving from cathedral and monastic boys schools in Europe between the seventh and twelfth centuries, which gives the teacher full responsibility for learning, a teacher-directed education in which the learner has a submissive role (Knowles, Holton, & Swanson, 2005). The term andragogy originated in the writing of a German grammar teacher named Alexander Kapp in 1833. Kapp's use of andragogy was opposed by a German philosopher and subsequently fell into disuse for nearly 100 years (Van Enckevort, cited in Knowles, Holton, & Swanson, 2005). Pedagogy remained the common term for teaching through this time.

Malcolm Knowles has shaped andragogy in the USA over 30 years, from the late 1960s, as the art and science of assisting adults to learn and in 1989 described it as an emergent theory providing a framework on how adults learn. Knowles's writings contrasted pedagogy with andragogy. Traditionally, didactic methods¹⁷ of teaching have dominated nurse training and education (O'Shea, 2003) however, individuals and society can no longer rely on education that solely transmits knowledge, individuals must themselves develop a capacity to change,

¹⁷ Didactic is teaching by imparting or transmitting knowledge and instruction (Essid, 2008).

to initiate their learning and create a new culture (Knowles, 1962). Knowles's education model focused on the learners as self-directed and autonomous with the role of the teacher as a facilitator rather than a director (Knowles, Holton, & Swanson, 2005). He has been influential in the advancement of adult learning and has developed and expanded the usefulness of the andragogical model over time. Knowles's education theory has been accepted and promoted in education and nursing internationally (Darbyshire, 1993; Hoff, 1995). The move in nursing education from the apprentice-style hospital based training programme to the use of adult learning theory witnessed a change in educational philosophy, promoting learning by inquiry rather than the transmission of knowledge.

3.2.1.1 *Adult learning theory*

The principles of adult learning theory are applied to all aspects of the emergency nursing programme (Clinical Training Agency, 2000). These include the adult learner as being, autonomous and self-directing, as having an ability to use their experience-based insights and viewpoints as a learning resource, a readiness and motivation to learn and an orientation to learning that is relevant and problem based (Burton, 2000; French & Cross, 1992; Hoff, 1995; Knowles, Holton, & Swanson, 2005; Wilkinson, 2004).

Carr and Kemmis (1986) identified that a more critical approach to learning was beginning to emerge in the 1980s. Darbyshire (1993) disagreed with the andragogy theory; he believed nursing education in the United Kingdom (UK) accepted andragogy uncritically, which in his view was divisive and fragmented. Gore (1993) argued strongly in her work *The Struggle for Pedagogies* that pedagogy is much broader and includes both instruction and social vision. Gore focused her discussion on the process of knowledge production, the "how" questions which involved an analytical method of teaching and learning that draws attention to the broader political underpinnings of power and knowledge. Her study focused on the discourses of critical pedagogy and discourses of feminist pedagogy in teacher education (ibid). Darbyshire (1993) supports critical pedagogy as involved with the critique of the lived social and political world to initiate change. The ability of the student to make the required transition, a qualitative shift in thinking and learning at a deeper level of engagement is through critical thinking (Wilkinson, 2004).

3.2.1.2 Critical thinking

Theories of critical thinking can be traced back to the fifth-century Athenian, Socrates (469-399 B.C.E.) who probed and questioned people searching for critical meaning (Daly, 1998; Schmidt Bunkers, 2004; Staib, 2003; Van de Weyer, 1997). Critical thinking is purposeful thinking (Daly, 1998) and requires a sound knowledge base. It is defined as a complex cognitive process of higher-level thinking and application to decision making in practice, unmasking discrepancies in practice (Bittner & Tobin, 1998; Ford & Profetto-McGrath, 1994; Settersten & Lauver, 2004; Seymour, Kinn, & Sutherland, 2003). Knowledge and action are dialectically linked through critical thinking (Ford & Profetto-McGrath, 1994). Habermas (1971) identified three areas of human interests (technical, practical and emancipatory) that generate sound knowledge or cognitive orientations.¹⁸ Critical examination of practice through systematic reflective analysis leads towards emancipatory knowledge which supports nurses to free themselves from ideological restrictions and view the real situation (Habermas, 1974). However, Gerrish, Ashworth and McManus (2000) in their UK study, identified some dilemmas of Master's level nurse education, one being critical thinking. Their findings identified that critical thinking was restricted and conservative in its use. There are various published models of critical thinking available in the literature (Chambers, 1999; Ford & Profetto-McGrath, 1994; French & Cross, 1992; Kim, 1999). These models are designed to help nurses to be reflective and critical, examining strengths and weaknesses within their practice. However the literature linking critical thinking with practice outcomes is limited and further research is required in this area. One of the central concepts fundamental to critical thinking is that of reflection.

3.2.1.3 Reflection

The process of reflection has been used by clinical teachers in education to facilitate and examine understanding of the self and to encourage critical thinking (Hyrkas, Tarkka, & Paunonen-Llmonen, 2001; Kim, 1999; Scanlan, Care, & Udod, 2002; Scanlan & Chernomas, 1997). Reflection may occur in different ways and for different purposes and if learning is to develop from practice then reflection is pivotal (Benner, 1984). It would appear that there is a lack of common meaning for reflection in the literature (Atkins & Murphy, 1993; Ford &

¹⁸ Jürgen Habermas and critical social theory is discussed in greater depth in chapter four.

Profetto-McGrath, 1994; Scanlan, Care, & Udod, 2002; Scanlan & Chernomas, 1997). Donald Schön a well-known scholar and theorist brought reflection into the centre of an understanding. He identified *reflection in action* and *reflection on action*; *reflection in action* as happening during practice, working with uncertainty, instability and uniqueness, and *reflection on action* as occurring following action, details are recalled and analysed, building new understandings to inform actions in practice (Schön, 1987). The ability to suspend the action and reflect on it is an important learning process for nurses when applying critical reasoning to nursing practice issues and decisions.

A qualitative study in the UK by Glaze (2001), investigated the reflective experiences of fourteen ANPs as part of a Master's programme. The majority of participants perceived positive outcomes; they reported themselves as having experienced a process of transformation and liberation. Some participants reported increased confidence and assertiveness and others took reflective practice to another level of politicisation and empowerment (ibid). The benefits of reflection for professional nursing practice, combined with the development of advanced nursing roles have impacted on curricula development in NZ, with a paradigm shift from traditional behaviourist models to qualitative emancipatory models (Glaze, 2001; Ministerial Taskforce On Nursing, 1998; Pierson, 1998; Teekman, 2000). However, some would argue that these concepts are difficult to achieve in practice (Glaze, 2002; Teekman, 2000) and are not widely used (Timmins, 2006). The effect of reflection and critical thinking on practice has not been well evaluated (Giro, 2000; Tanner, 2007; Timmins, 2006). Critical reasoning and reflection on nursing practice is a requirement of postgraduate education in NZ (Nursing Council of New Zealand, 2001).

With postgraduate nursing education enhancing nurses' knowledge and clinical practice within the university system, alongside other professionals, this enables nursing to have an increasing knowledgeable voice within academia and therefore parity with other professions. Watson (2006) argues that postgraduate nursing education develops RNs from competent nurses to capable nurses. Capability is a higher order of thinking and achievement and through the application of critical thinking, knowledge, skills and experience, supporting RNs to become capable of leading appropriately in unexpected and unfamiliar environments (ibid). The following discussion will focus on scholarly nursing at this academic level.

3.3 SCHOLARLY NURSING

Postgraduate (Level 800) clinical education programmes in NZ teach and guide nurses to develop their clinical practice at an advanced level, with a strong commitment to improving patient care through education, research, practice development and consultancy. Programmes include critical, reflective and analytical thinking, culturally safe practice, high levels of communication, advanced clinical skills and quality health outcomes (Expert Advisory Group on Post-Entry Clinical Nurse Training Programmes, 2004). Standards and competencies for advanced nursing programmes are documented in the 'Framework' document (Nursing Council of New Zealand, 2001).

According to Boyer (1990) it is higher education's quest to build bridges across the disciplines and connect academia to the larger world. The transfer of nursing to the tertiary-level education sector and the growth of nursing as an academic discipline has led to the development of nurse scholars who have been greatly influenced over the years by the critical social theorists and educationalists (Roberts, 1995).

3.3.1 SCHOLARSHIP

The traditional hallmarks of scholarship are embedded in antiquity, emerging from the Greek philosopher Plato, with Socrates as his teacher. During the Middle Ages young scholars were taught, mentored and counselled by wise and experienced masters, passing knowledge from one generation to another. Then during the early Renaissance period in Europe, universities began to be established offering teachings in classics, philosophy and logic. Following this, the Enlightenment era discovered new ways of thinking, challenging traditional ways of being, knowledge development and scholarship (Kitson, 2006). By the late nineteenth century, the advancement of knowledge emerged in the form of research and took a firm root in USA tertiary-level education (Boyer, 1990). The post-World War Two era was a time of expansion for tertiary-level education, referred to as an 'academic revolution' with diversification and growth (Ward, 2003).

A clinical scholar is one who develops new insights into clinical practice through integration and synthesis of knowledge underpinned by theory, research and observation, enhancing the well-being of their patients through improved practice (Roberts, 1995). Meleis (1992) views the nurse scholar as one with a sense of history, philosophical understanding, vision and a passion for excellence, theoretically orientated and with a lifelong commitment to the

development of knowledge. Emden (1995) in her phenomenological inquiry into the lives of four different scholars in Australia,¹⁹ uncovered that being a scholar was a very personal experience, there is no one particular pathway; however, multiplicity and diversity were common themes of their pursuits (ibid).

Scholarship in nursing is not easily defined, one may think of nursing scholars as Florence Nightingale, Virginia Henderson and Patricia Benner, to name but a few (Pape, 2000). The American Association of Colleges of Nursing (1999) define scholarship as the activities that methodically develop the theoretical, research and practice of nursing through critical inquiry that is creative and important to nursing and is able to be acknowledged, replicated and peer-reviewed. Roberts' (1995) view is similar and he acknowledges that considerable resources are required to support this scholarly nurse. Thompson (1987) views critical scholarship as a way of life, an investigative, systematic, intellectual or methodological approach to nursing phenomena and a way of thinking. Worrall-Carter (1995) describes scholarship purely as the gaining of knowledge through study. Pape (2000) agrees scholarship is the dedication to increasing one's knowledge. In contrast Roberts (1995) reports higher levels of scholarship are not achieved until the doctoral level, as that is when complete mastery of a subject is demonstrated. From this discussion scholarship has a strong affiliation to academia and a real challenge in the 21st century will be attracting nurses into academia and to become scholars. No counter-views of scholarship in nursing were located. Kitson (2006) agrees that strong scholarship is integral to improved patient outcomes, furthermore energy must be directed toward the political and business acumen to integrate and develop academic and practice infrastructures for nursing scholarship to grow.

Among most authors, the dominant view of a scholar is that of a researcher with publication being the measurement by which scholarly activity is evaluated (Boyer, 1990; Braxton, Luckey, & Helland, 2002; Riley & Omery, 1996; Worrall-Carter, 1995), however Boyer's work challenged this traditional view and attempted to redefine scholarship by providing a broader and more effective meaning and embracing practice.

¹⁹ Two of these scholars were professors in nursing, one was a senior lecturer within a Department of Women's Studies and the fourth an associate professor within a School of Education and all with Doctorate degrees (Emden, 1995).

3.3.2 ERNEST BOYER (1928-1995)

Boyer was an influential American academic with astute political skills whose leadership and vision helped shape the education process in the USA, which included the concept of scholarly nursing (Pape, 2000; The Carnegie Foundation For The Advancement Of Teaching, 1996). Boyer's wife was a nurse (Pape, 2000) which gave him insight and familiarity with which he gained unrestrained admiration for nursing (Boyer, 1996). Nursing in the USA and other nursing programmes adopted Boyer's scholarship model because of its applicability to excellence in nursing and nursing education (American Association of Colleges of Nursing, 1999; Pape, 2000; University of Otago Centre for Postgraduate Nursing Studies Christchurch School of Medicine and Health Sciences, 2006). Furthermore, it has been widely adopted internally by a majority of academic education reform organizations in higher education (Braxton, Luckey, & Helland, 2002; Burgener, 2001; Burrage, Shattell, & Habermann, 2005).

Boyer (1990) challenged all disciplines to broaden their vision of scholarship beyond that of teaching, service and research, to embrace the full scope of academic work and to include a broader and more efficacious meaning. This 1990 groundbreaking study; *Scholarship Reconsidered: Priorities of the Professoriate*, published by The Carnegie Foundation, initiated further debate about scholarship and tertiary education.

Theory surely leads to practice. But practice also leads to theory. And teaching, at its best, shapes both research and practice. ... Surely, scholarship means engaging in original research. But the work of the scholar also means stepping back from one's investigation, looking for connections, building bridges between theory and practice, and communicating one's knowledge effectively to students (Boyer, 1990, p. 16)

The work of the professoriate involved four separate but overlapping functions. These being: the scholarship of discovery; the scholarship of integration; the scholarship of application; and the scholarship of teaching. Boyer's four categories of scholarship ascribe scholarly legitimacy to academia, expanding beyond discovery of new knowledge. Knowledge is not developed through a linear process but one that moves back and forth from practice to theory, shaped by teaching, stepping back and reflecting critically (Boyer, 1990).

3.3.2.1 *The scholarship of discovery*

Boyer's scholarship of discovery is the investigative, beginning, creation and advancement of new and unique knowledge predominantly through research. It is the testing and generation of theory, methodological studies, philosophical investigation and analysis, embracing other disciplines in the process. Research is innermost to the work of higher learning (American Association of Colleges of Nursing, 1999; Boyer, 1990, 1996; Braxton, Luckey, & Helland, 2002; Pape, 2000; Worrall-Carter, 1995).

...the probing mind of the researcher is an incalculably vital asset to the academy and the world. Scholarly investigation, in all the disciplines, is at the very heart of academic life, and the pursuit of knowledge must be assiduously cultivated and defended (Boyer, 1990, p. 18).

Boyer (1990) saw this as a process of intellectual excitement, passion and enthusiasm, therefore avoiding stagnation and contributing to one's profession. Discovery enhances the individual's quest for new knowledge, an ongoing alertness to learn and question, adding to the body of knowledge through presentation and publication.

3.3.2.2 *The scholarship of integration*

By integration, Boyer (1990) means developing links and connections across disciplines, placing the specialties in a larger context. As this begins with undertaking research, integration is closely related to discovery, overlapping neighbouring areas. It is through discovering relationships and patterns, (Boyer, 1990, 1996), integrating ideas and connecting thought into action, that synthesising the knowledge of the discipline takes place (Braxton, Luckey, & Helland, 2002). Kitson (2006) describes this as learning from various different disciplines, interdisciplinary collaboration, identifying best practices from different countries and organizations. The scholarship of integration also links to interpretation. Moreover theories and discoveries in one area may through communication, reflection and critical analysis from other disciplines, assist with new questions, new insights and new knowledge, offering a 'bigger picture' and new paradigms (American Association of Colleges of Nursing, 1999; Boyer, 1990). According to Roberts (1995) this includes discussion on nursing theory, philosophy, research methodology, law, ethics, politics, education, professional issues, evidence-based practice and education.

3.3.2.3 The scholarship of application (Practice)

The scholarship of discovery and integration of knowledge are linked and reflect the investigative and synthesis of academia. The third and critical category of the scholarship of application of knowledge, means moving from theory to practice and back from practice to theory again. This third category tests the discoveries of research and integration in the laboratory of real clinical life and delivery of nursing service, improving the intellectual insights (American Association of Colleges of Nursing, 1999; Boyer, 1990, 1996) and determining the usefulness of research findings to clinical practice. Furthermore, the outcomes of academic activity should benefit or improve patient care. The components of the scholarship of practice include the development of clinical knowledge, professional development, the application of technical or research skills, service and the application to practice (American Association of Colleges of Nursing, 1999).

3.3.2.4 The scholarship of teaching

The scholarship of teaching provides for the continuity of knowledge where teaching educates and inspires future scholars (Boyer, 1990). Andragogical procedures must be planned examined and relate to the subject being taught. Teaching not only transmits knowledge from professor to student, but also transforms it and extends it as well. Teachers facilitate and stimulate active learning; they encourage critical and reflective thinking and engagement in life-long learning and scholarship. Teaching is at the very heart of academic endeavour, to improve andragogical practices (Braxton, Luckey, & Helland, 2002) and build bridges between theory and practice (Boyer, 1990).

3.3.2.5 Scholarship reconsidered

Boyer's paradigm of scholarship describes how scholarship should be performed. However, it was not until 2002 that this topic was evaluated in terms of how college and university faculty members engage with his work (Braxton, Luckey, & Helland, 2002). Braxton et al., (2002) found that Boyer's paradigm had been institutionalised to some degree and furthermore the scholarship of teaching had received the most attention. One explanation was that it was possibly more provocative than the other three domains (ibid). Glanville and Houde (2004) concluded that the scholarship of teaching was vague and ambiguous; the connection in meaning between excellent teaching and the scholarship of teaching was not defined or easily interpreted. The opportunity to further debate and discuss Boyer's scholarship of teaching has resulted in different perspectives being developed (ibid).

Scholarship will thrive in an environment where discussion, debate and understanding is nurtured and developed, and is free from constraints. Nursing is promoting scholarship by embracing and expanding education at a university and postgraduate level. Creating an environment supportive of academia, with sufficient resources, will therefore assist to develop a critical mass of scholars, confident to engage in debate and educate the next generation of scholars. Boyer's model of scholarship will be applied within the discussion of the current research study in chapter six.

3.4 THE IMPACT OF TERTIARY EDUCATION ON CLINICAL PRACTICE

This section begins to apply the above notions and definitions of higher learning and scholarship to postgraduate education of nurses in NZ today. Continuing nursing education at tertiary-level is expected to lead towards consistent quality patient and client care and nursing practice with improved outcomes (Nursing Council of New Zealand, 2001). A Victoria University of Wellington Clinical Master's student states,

Ongoing study is a big part of being an effective nurse. Professionally, my study has improved my confidence and helped me to integrate theoretical ideas into practice. It has made me a more constructive and critical thinker, and I really enjoy spending time and sharing learning experiences with other motivated nurses from a range of practice areas. I've also discovered that I can translate my learning into my clinical setting, and that's important! (Victoria University Of Wellington, 2008, p. 9).

One may ask does tertiary-level education enhance the quality of patient care that is provided by RNs with postgraduate qualifications? A review of the available literature and research identified some studies with this ongoing theme (Armstrong & Adam, 2002; Chaboyer, Dunn, Theobald, Aitken, & Perrott, 2001; Cragg & Andrusyszyn, 2004; Pelletier, Donoghue, & Duffield, 2003, 2005; Pelletier, Donoghue, Duffield, & Adams, 1998a, 1998b; Pelletier et al., 1994; Spence, 2004a, 2004b; Spencer, 2006; Whyte, Lugton, & Fawcett, 2000). The most valuable and relevant papers to the current study, is from Pelletier and colleagues' Australian longitudinal study, due to the similarities as a neighbouring country in the southern hemisphere with a similar culture. The purpose of their study was to determine the

perceived impact of PGS on nurses' personal and professional development, from which there have been four publications. Pelletier's study is examined in some depth below.

3.4.1 PART 1: PELLETIER AND COLLEAGUES' (1998a, 1998b, 2003, 2005) RESEARCH STUDY

This research involved a 10-year longitudinal study of RNs who had completed a postgraduate diploma (two years part time) or Master of Nursing (three years part time) programme at a University in Sydney,²⁰ Australia. A pilot study²¹ was undertaken in 1991 on the basis of which the initial questionnaire was revised (Pelletier et al., 1994).²² Questionnaire B²³ was a variation of the original survey tool piloted, revised and used in the first survey.²⁴ The longitudinal study invited as participants, students completing a variety of postgraduate nursing courses, each year from 1992 to 1996. Each of the five cohorts was followed up every two years for six years post graduation via survey questionnaire; therefore each participant was surveyed on four occasions.²⁵ Students undertaking a Master of Nursing by research thesis were excluded from this study, no explanation for this decision was documented.²⁶ The graduating students were invited to complete the first questionnaire (A) in their final two weeks of their last semester. Participating graduates were then sent a

²⁰ Pelletier and colleagues' were all members of staff at the Faculty of Nursing, University of Technology, Sydney, Australia.

²¹ The pilot study in 1991 utilized a convenience sample, these students were completing a two-year (part-time) postgraduate diploma, with a response rate of 72 percent (Pelletier et al., 1994).

²² According to Pelletier, Donoghue, Duffield and Adams (1998a) the initial questionnaire used in the pilot study was revised from 43 questions to 55 questions.

²³ Questionnaire B was revised to include 70 questions. Questionnaire B eventually became the only questionnaire and this was confirmed with Dianne Pelletier by email.

²⁴ Pelletier's questionnaire (B), has been obtained with permission and used in this current research study. Results between the two studies will be discussed in chapter six. An example includes the difference from the Australian respondents' results and the NZ respondents' results registering 'no effect' from PGS.

²⁵ It could be argued that Pelletier and colleagues' study was not a longitudinal method of sampling. A longitudinal method collects data from the same group of people over an extended period of time (Davidson & Tolich, 2003). A repeated method of sampling may be a more accurate description of this sample. A repeated method is when two or more groups are measured several times (Polit & Beck, 2006).

²⁶ Email discussion with Dianne Pelletier identified that these students undertaking a Master of Nursing by research thesis, were studying for a different purpose and were on different patterns of attendance.

questionnaire every second year on three occasions (questionnaires B, C and D).²⁷

Questionnaires were returned by mail. A number of respondents were interviewed one year following graduation, as a validation measure, however this number and detail are not well documented. Publications from this study include the perceived impact of PGS on nurses' professional development, career movements and future plans initially following graduation (Pelletier, Donoghue, Duffield, & Adams, 1998a, 1998b), the perceived impact of their PGS on the care they deliver (Pelletier, Donoghue, & Duffield, 2003) and the development of an understanding of the workforce (Pelletier, Donoghue, & Duffield, 2005).

The demographic characteristics of the respondents remained consistent throughout the five years. The age of respondents ranged from 21 years to 58 years, with a mean age of 35 years. The majority of respondents were female (93.0%), employed full-time and in the public health sector, with RNs making up to 73 percent of student intake in 1996 (Pelletier, Donoghue, Duffield, & Adams, 1998a).

Four hundred and three respondents completed questionnaire A during the years 1992-1996, reporting the impact of PGS on employment and career paths of nurses, with a response rate of 51.4 percent. The findings identified that over 80 percent of respondents believed that undertaking PGS was a step toward obtaining another position. On average two fifths of respondents (40.0%) changed positions during their studies; with over half of the respondents (57.4%) reporting this move as upward. Over four fifths of respondents (83.4%) reported that PGS had facilitated their success in changing position, with over two fifths of respondents (42.0%) reporting a salary increase. Respondents rated the attainment of work satisfaction as the most significant overall rationale for changing jobs, with career advancement rating second. Over three quarters of respondents (77.0%) reported they intended to remain in nursing for the next five years, however this number reduced to under half (47.8%) when asked whether they intended to stay in nursing for the next ten years. One theme, which emerged from the qualitative interviews and identified by the authors was frustration at the lack of career opportunities for nurses and the understanding that there were greater financial opportunities outside of the nursing profession. This theme was discussed in

²⁷ Questionnaires B, C and D referred to are subsets of the original questionnaire tool piloted and revised.

light of the social and economic climate in health at the time²⁸ (Pelletier, Donoghue, Duffield, & Adams, 1998a).

A second paper published by the same authors using the data collected from questionnaire A, reported the effects of PGS on the nurses' perceptions of their personal and professional development. Nearly three quarters of respondents (70.0%) reported that their self-esteem had increased. Over three fifths of respondents (64.0%) in the first cohort reported that their ability to carry out their work role had also increased however this increased further to over four-fifths (81.0%) in the fifth cohort. Respondents reported lower percentages for effects on job satisfaction, ranging from 48 percent in the first cohort, increasing to 69 percent in the fifth and final cohort. Respondents were asked to rate the two most important effects of PGS on their professional life. Respondents reported that gaining a wider knowledge base was of highest importance, followed by broadening their outlook and increasing their insight into nursing theory and practice. Interestingly, increased interest in further study received the lowest ranking. Regarding professional writing, less than one tenth of respondents (9.0%) submitted a journal article for the first time, however over one tenth of respondents (13.0%) reported presenting at a conference for the first time. This number increased again with almost one fifth of respondents (18.0%) participating in research for the first time. Of importance were those respondents who reported no perceived influence from PGS or that PGS had influenced them negatively. Twelve percent of respondents in the first four cohorts reported that PGS had a negative effect on their self-esteem. Eleven percent of respondents consistently reported that PGS had no effect on their ability to carry out their work role. Almost two fifths of respondents (38.6%) reported no effect, or a negative effect of PGS on job satisfaction. On average 16 percent of respondents experienced a negative impact from PGS (Pelletier, Donoghue, Duffield, & Adams, 1998b).

²⁸ The social and economic climate in Australia at this time observed a decrease in nursing morale as the nursing workload increased by 30 percent and nurses left the profession in large numbers. A review of specialist nursing positions eg the CNS was taking place and impacted on nurses career plans (Pelletier, Donoghue, Duffield, & Adams, 1998a).

Pelletier, Donoghue and Duffield (2003) reported on the findings from the second questionnaire (B).²⁹ With a retention rate of 236 respondents (58.0%), participants were asked to report on their perception of the impact their PGS had on the listed items of behaviour³⁰ using a 7-point Likert scale. The authors identified that PGS had a significantly positive impact on over 20 percent of respondents. Fifty percent or more of all the respondents reported that PGS had slightly increased their behaviour. Furthermore, of importance is the number of respondents who reported 'no effect' from PGS on 17 (this number was calculated when 20 percent or more of respondents reported 'no effect' from PGS) of the 37 items impacting on the quality of patient care. Pelletier and colleagues' concluded that students may not appreciate the learning that comes from PGS as it is incremental and that there is a strong possibility that PGS may not be detailed and explicit enough to create and deliver the required outcomes. Pelletier and colleagues' believe this is highlighted by the many nurse graduates that choose to leave nursing as they are not equipped with some of the core skills, for example, management and computing (Pelletier, Donoghue, & Duffield, 2003).

The results from questionnaire C were not published.³¹

Pelletier, Donoghue and Duffield (2005) reported on the findings from the final questionnaire (D) on respondents recent career moves, motivation, intentions and influencing factors six years following completion of their PGS (1998-2002). A small sample of 151 respondents (32.4%) remained; the results offer some insights. Over two fifths of respondents (43.8%) six years on from graduating, reported that they had changed position within the last two years. 'Seeking job satisfaction' was the stronger motivating factor followed closely by 'advancing their career' in the later cohorts. Moreover, approximately half of the respondents (50.0%) reported that their salary had dropped, or remained the same,

²⁹ The 37 items in questionnaire B were selected by Pelletier's research team from a questionnaire used by Duffield, Donoghue and Pelletier (1996) to study the role of Australian CNSs (Pelletier, Donoghue, & Duffield, 2003).

³⁰ Listed items of behaviour include time management skills, resources, motivation of patients, quality improvement and acting as a change agent; staff allocation, teaching and motivation. Communication and support with decision making for patients and their families; workload stress and autonomy for nurses; the legal implications of practice, the use of and ethics associated with computers in nursing practice.

³¹ This information was confirmed with Dianne Pelletier via email.

which was thought to result from respondents moving from shift work and penalty pay to balancing professional life and family. Respondents reported a high level (71.0%-100% for all cohorts) of personal significance with this change of position; with over half of respondents (50.0%-80.0% for all cohorts) reporting that they perceived their PGS qualification as having a moderate or high influence on this success. Career advancement was the more prominent reason to change position overall, with the exception of the 2002 cohort. Respondents rated their self-perception of self-esteem, ability to carry out their role and their job satisfaction. Results show that job satisfaction was rated generally the lowest. An ability to carry out their work role was consistently high, with self-esteem high but variable. Half, to two thirds of respondents' reported having 'sufficient' control over their career and future with less than half interested in further study. Almost three quarters of respondents (70.0%) reported that they gained recognition from others following PGS. On average over the five cohorts, job availability was reported as the most significant facilitator of their career advancement, followed closely by respondent's personal situation and PGS. The most significant factor reported as a barrier to career advancement was overwhelmingly their personal situation (ibid).

Pelletier and colleagues' questionnaire was not validated and participating numbers declined over the subsequent years. Retention is problematic and attrition is a known problem with longitudinal studies (Polit & Beck, 2006). However the study represents one University's response to the impact of PGS over time and provides convincing evidence of the impact PGS had on nurses' personal and professional development in a neighbouring country, with a similar culture. It is unique and provides comparability with this current study.

3.4.2 PART 2: RECENT LITERATURE WITH THIS ONGOING THEME

Other studies within the published literature from the UK, Canada, Australia and NZ, comparable to that of Pelletier and colleagues' have identified similar themes. However, it is only the southern hemisphere authors that have made reference to Pelletier's research (Chaboyer, Dunn, Theobald, Aitken, & Perrott, 2001; Spence, 2004b). The following discussion will introduce other national and international literature pertaining to PGS.

3.4.2.1 Postgraduate studies

Whyte, Lugton and Fawcett (2000), frequently cited authors in this field undertook a 10-year longitudinal study in Scotland, UK. One hundred and nine nurses, who graduated with a

Master's Degree from the University of Edinburgh, were surveyed by postal questionnaire, between 1986 and 1996 with an overall response rate of 66.9 percent. The graduates perceived that the attainment of a Master's degree opened up job opportunities; this qualification had been a contributing factor in their promotion, with 50 percent of graduates gaining promotion. The majority of respondents (92.0%) returned to nursing positions on completion of their Master's degree. Eighty nine percent of respondents identified that their study had relevance to their work. The greatest benefits cited by the respondents, was their increase in knowledge of academia and research. This gave the nurses the critical skills to appraise research and adopt a more in-depth approach to study and learning, which they could implement in practice. A sample of respondents reported that having time to read and reflect, without work pressures, enabled them to synthesise the information at a higher level. This is in contrast to the NZ scenario where students were required to be working in a full time position to receive full funding while studying (Clinical Training Agency, 2000, 2006). Other benefits included increasing confidence and leadership along with improved professional status. A few respondents identified that they most likely had a broader knowledge base, which assisted them in looking at the 'global picture of health care'. As the clinically based respondents in this study were a minority (13.0%), their perceptions of the effect of a Master's degree on clinical practice has not been widely investigated. The authors acknowledge that qualitative interviews would have provided more in-depth information strengthening this study. Moreover the authors conclude that Master's level education should become the gold standard for tertiary-level nursing practice (Whyte, Lugton, & Fawcett, 2000).

Chaboyer, Dunn, Theobald, Aitken, and Perrott (2001), investigated Australian critical care postgraduate nursing students' perceptions of undertaking tertiary-level education. Focus group interviews were conducted with 42 postgraduate certificate and diploma students' from eight universities. Participants' reported a deeper knowledge base, with increased clinical capabilities, enhanced synthesis and understanding of knowledge, therefore developing greater insight into the care they delivered. Furthermore, working in different ways improved the quality of care they delivered with increased confidence. Participants' perceived there would be financial benefits from increasing their qualifications, increased job security and travel opportunities. A heavy student workload was reported as a consistent theme across all the programmes. The findings from this study provide evidence on critical care specialty nursing education.

Another study of postgraduate certificate students in critical care nursing was undertaken by Armstrong and Adam (2002). This small-scale descriptive phenomenological study of twelve participants in Edinburgh, UK, used focus groups to ascertain the perceptions, lived experiences, values and feelings of this cohort of nurses. Participants reported that through postgraduate education they had increased their confidence; become more assertive and confident at taking on charge responsibilities, sharing their knowledge and leading discussions. Their increased confidence resulted in increased respect from their peers and many felt that senior staff and their peers used them as a resource. The participants developed a much wider view of the whole picture of critical care nursing and utilised evidence-based research within clinical practice. Opportunities for personal and professional development varied however, one respondent described it like “somebody has opened the window ...” (p. 172). All participants reported that their knowledge on management, leadership and teaching had developed; however some felt their clinical skills had not developed greatly. Frustrations were reported by a few as “You feel your wings are clipped” (p. 173). Nurses with high motivation and knowledge were unable to expand their role to make changes and move practice forward within the clinical area. A limitation with this study was that data was collected from one group of students only, with one of the researchers being the programme lecturer (Armstrong & Adam, 2002).

One qualitative, descriptive Canadian study undertaken by Cragg and Andrusyszyn (2004), used semi-structured taped face to face or telephone interviews with 22 graduates of Master’s in Nursing programmes from three Ontario Universities. The findings reported that all participants noted that they had changed positively as a result of completing a Master’s degree programme. Personal changes included greater self-confidence, credibility and enhanced critical thinking and problem solving. Other familiar themes were their increased breadth and depth of understanding on health care, policy issues and how the nursing profession fits within the bigger picture. Development of higher order skills in cognition, communication, relationships and research were reported. Interestingly, this study identified that participants who had completed a course-based Master’s degree rarely mentioned their skills as researchers, compared with thesis-based Master’s graduates. However, all participants valued the research process and integrated evidence-based research into their clinical practice. Participants felt significantly proud of the nursing profession and viewed their professional world differently following PGS. Employers and colleagues expected the participants to assume new roles and expanded opportunities were available. Although some participants did report that PGS had reenergized them, some identified experiencing

frustration and greater awareness of the deficiencies and attitudes within nursing. Generalizability of the results is limited due to the small sample size from three institutions in one province. However, the findings are reflective of similar professional attitudes and perceptions among the participants. Further research with more programmes over a wider geographical area is recommended (Cragg & Andrusyszyn, 2004).

The only NZ research with a focus on PGS was a North Island descriptive study by Spence (2004a; , 2004b). This qualitative study informed by hermeneutic philosophy, reported on the dimensions of postgraduate education's ability to advance nursing practice. Twelve RNs who had completed clinically focused postgraduate education, provided by North Island universities, and eight RNs who had employed or worked with these nurses participated. These nurses worked in areas of specialization, including emergency and were based in both urban and rural settings. Data was obtained by loosely structured interviews. The managers who were interviewed had observed improvement in documentation, increased autonomous practice and assessment, which had significant benefits to the organisation. The postgraduate participants reported that their knowledge, clinical skills and clinical judgement had developed and an increase in self-confidence followed. They also reported a change in thinking with more in-depth reflection; moreover their thinking was independent and structured. Research and evidence were now seen as an acceptable part of their clinical practice. These participants reported a growing confidence and authority to precept³² others, to work in supportive and different ways with less experienced nurses, to write submissions with sound rationale and review documents contributing their expertise in a broader context. They reported that they had developed and their practice had moved to a higher level. Spence (2004b) does identify however that PGS takes huge courage and commitment. The participants reported that they overcame the obstacles and constraining factors they faced and grew stronger, gaining strength through participation in PGS, therefore feeling empowered and more confident. The small sample size, along with hermeneutic analysis of the interview data, limits the application of the findings generally, yet the descriptive and open views of clinical practice provide insightful evidence of the benefits of PGS advancing ANP in NZ.

³² Precept refers to a skilled nurse who works together with a student or a new staff member, within the usual activities of the position, guiding, facilitating and supporting their orientation and learning (Robinson et al., 2008).

A small qualitative study using a phenomenological approach was undertaken in the East Midlands, UK, by Spencer (2006), utilising a non-probability convenience sample of 12 subjects for the semi-structured interviews. Results indicated that participants entered postgraduate education for personal (academic stimulation) and professional (pressures from the workplace, career progression) reasons. One participant reported boredom as a motivating rationale for commencing PGS. Half of the participants (50.0%) reported being more analytical, reflecting critically on their practice and challenging their own and others clinical and professional practice following PGS. Participants reported that managers were supportive of their study, both in the form of financial contribution and study leave. Conversely, medical colleagues were ambivalent and not that interested. Workplace constraints included pressures on work, study and personal time and participants became frustrated, study was compromised and therefore results were affected. Three quarters (75.0%) of participants reported that study had impacted on their family life; this was usually viewed negatively. Some participants questioned the relevance of postgraduate education for clinical practice, one reported that basic nursing skills are paramount and questioned if that required a higher degree. Limitations of this study include the small self-selected sample size and that data was collected from one programme only, however it does represent one postgraduate cohort on clinical practice (Spencer, 2006).

3.4.2.2 The impact of post-registration education

Interestingly other studies on post-registration,³³ not postgraduate courses, report similar results. A study by Wildman, Weale, Rodney and Pritchard (1999) to investigate the impact of a tertiary education programme (The Diploma in Professional Studies in Nursing) was undertaken at Coventry University in England, UK. Consistent themes included developing clinical practice through the use of evidence-based practice, increased questioning of practice and a wider knowledge base for practice. Other themes included increased confidence, challenging practice, improved teaching skills and a greater understanding of the patient's viewpoint. Wyatt (2007), in her study on oncology nurses in the UK reported on the

³³ Post-registration in this context refers to continuing nursing education including part-time diploma or degree programmes.

perceived effects of their post-registration³⁴ course on clinical practice. Participants reported a positive relationship between their study and practice, increased knowledge, confidence and awareness. Furthermore it was an increase in their communication skills and psychological support, which had the most positive effect on improved explanations and patient care.

Other studies with a combination of post-registration and postgraduate respondents have reported similar results. Johnson and Copnell's (2002)³⁵ study of paediatric nurses in Australia, reported an increased knowledge and ability to link theory to practice, perceived increase in employment opportunities, supportive clinical experience during the course and increased self-confidence. Hardwick and Jordan's (2002)³⁶ study in Wales, UK reported that most respondents (77.0%) used their graduate skills in clinical practice and many nurses acquired and now used research skills.

Although post-registration programmes are reporting similar findings to those studying at a postgraduate level, these relate more specifically to increasing clinical skills and knowledge. There is no reference to autonomous practice and assessment, reflection and critical thinking, the research process and the wider political view of nursing. Spence's (2004a) NZ study identified some key differences between competent nurse practice and ANP. Following PGS there was a shift in nurses thinking, they were critically and confidently questioning practice, assessment skills were enhanced, nurses were analysing research and other literature relating to practice. These advanced nurses were able to get to "that next notch" (p.53).

The following discussion will focus on the stressors involved with tertiary-level education and discuss a selection of the literature, which is predominantly from the UK.

³⁴ Debbie Wyatt was contacted by email and she confirmed that her study was post registration and therefore not resulting from a postgraduate programme.

³⁵ Sixty-three percent of the RNs who participated in this study did not possess a paediatric or related qualification.

³⁶ Respondents in this study were Bachelor and Masters' Degree graduates.

3.4.2.3 Stressors associated with tertiary-level education.

Postgraduate education offers nurses the opportunity to expand their skills, deepen and broaden their knowledge and apply to their every day practice. There is no compulsion to study at this level, with most of this study being completed in the nurse's own time, therefore there are stressors associated with this additional workload. Spence's (2004a; , 2004b) NZ study highlighted such constraints, including lack of time, cost, family commitments (children, husbands or partners, and ageing parents) and the lack of remuneration upon completion of study. Furthermore, support from managers, senior nurses and peers were variable. Other stressors included overcoming the initial fears of this level of study and building courage to manage it all.

Whyte, Lugton and Fawcett (2000), in Scotland, UK, identified stressors relating to PGS programme participation. These included the intensity of the study requirements, the required skills for producing and writing course papers and sitting examinations. Other stressors reported of equal consideration were separation from family, the juggling of family demands with work and course deadlines (ibid). Chaboyer, Dunn, Theobald, Aitken and Perrott (2001) study in Australia identified heavy student workloads and the personal stress associated with meeting study expectations while working supernumerary on their days off. Similarly, participants in Spencer's (2006) study in the East Midlands, UK, reported constraints on time and accepting lower marks because of balancing workloads. Seventy-five percent of participants reported that the programme had impacted negatively on their family. Other stressors and frustrations included the workplace, a perceived inability to implement change and a feeling of powerlessness to change practice (ibid). Cragg and Andrusyszyn (2004) reported graduates feeling disappointed, identifying that although they had acquired knowledge and their thinking had changed, they were still having to work within a system that had not. Spence's (2004b) study identified that workplaces had a tendency towards "oppressed group behaviour" (p. 24) so graduate nurses required significant courage to return to clinical areas and make a difference.

International studies particularly from the UK have reported similar stressors associated with post-registration programmes. A qualitative study by Dowswell, Hewison, and Hinds (1998),

of 29 participants³⁷ attending a post-registration degree programme in the UK aimed to explore and describe the effects on home life and work during this study. Most of the respondents were shift workers, completing the programme in their own time (equating to 12 hours per week) with little support from the management team. Twelve respondents described tension and stress associated with course participation. Moreover one third of respondents described changes in their role as a parent or spouse due to the course requirements. Time with family members was reduced, which lead to strain and tension in relationships, with many respondents describing changes in leisure activities. This study highlighted the personal cost of this programme on part-time, post-registration students as a new phenomenon.

A descriptive study by Timmins and Nicholl (2005) of 70 nursing students in Dublin, Ireland, explored stressors associated with RNs undertaking part-time degree programmes. The findings identify with the above studies. Participants ranked trying to balance their work commitments and the required study as the most stressful. Examinations were rated next, followed by the increased academic levels and workload requirements of assignment writing at a tertiary level. Evans, Brown, Timmins and Nicholl (2007) published another paper from the same study. The findings demonstrate that age had a negative correlation with process items identified with post-registration study. Five process³⁸ items caused moderate levels of stress amongst the participants. Participants in the 31 and older year age group appeared to be less susceptible to academic stressors. Limitations to this study include the small convenience sample and the self-reported questionnaire, which carries risks of data being reported in a socially desirable way (Burns & Grove, 2005; Polit, Beck, & Hungler, 2001).

Gould, Drey and Berridge's (2007) study in London, UK, explored nurses' experiences of continuing professional development in which respondents reported conflict with their home and domestic commitments, along with difficulty in achieving a desirable work-life balance. Arranging childcare and time required for travel to education venues was raised. However, the area of most concern was the personal time required to complete programme work,

³⁷ These 29 participants included nurses, midwives and allied professional staff.

³⁸ The five process items causing moderate stress related to personal time management, keeping up to date with the academic work load, academic expectations and writing, and allocating library time (Evans, Brown, Timmins, & Nicholl, 2007).

particularly when workloads were heavy, areas were understaffed and the pace of change was constant (Gould, Drey, & Berridge, 2007). For some the price of tertiary-level education is high although not necessarily in monetary terms (Timmins & Nicholl, 2005).

The next section will discuss the challenges postgraduate nurses face with the extension and blurring of their professional boundaries. The ANP programmes in NZ have offered an opportunity for nurses to challenge and expand the boundaries of their practice, leading the way forward for future practice (Nursing Council of New Zealand, 2001).

3.5 PROFESSIONAL BOUNDARIES

The changes in nursing education at postgraduate level along with ANP, which include the extension and development of nursing roles, have led to a blurring of the boundaries between health professional groups, particularly the roles of medical staff and nursing staff and at times can result in inter-professional conflict. The extension and development of ANP has initiated international debate. The professional boundary debate extends from nurses performing task-oriented roles through to nurses working within an advanced role to that of a NP.

3.5.1 ROLE EXTENSION

A small qualitative study by Bowler and Mallik (1998) in an adult Intensive Care Unit (ICU) of a large UK teaching hospital reported on issues surrounding role extension or expansion. The sample included five senior nurses and three consultant anaesthetists. Confusion encompassed the new roles, however extended roles were generally tasks previously performed by the medical staff, whereas expanded roles involved a general broadening of the nurses role by taking on new responsibilities. Educational support did not include postgraduate nursing qualifications. The nurses' care expeditiously led the treatment for patients, furthermore these roles did not appear to be advancing the nurses' practice and nurses appeared to be acting as medical substitutes. An Irish study by Griffin and Melby (2006) reported there was agreement for the nurses to request X-rays and to prescribe using protocols and evidence-based guidelines. Again educational support did not include postgraduate education although it was being recommended.

Other studies reported on nurses with advanced nursing roles were not restricted to physical or technical care. Two reflective observational studies in the UK, by Wilson-Barnett, Barriball, Reynolds, Jowett, and Rylie, (2000), examined nurses' practice development. These nurses with Master's level qualifications undertook direct patient care, underpinned by a holistic focus rather than technical skills focus and planned for certain interventions in collaboration with patients and their families. Undertaking diagnostic investigations, prescribed care and medications underpinned by hospital protocols were common practice. Initiating research, developing nurse-led care, developing protocols, initiating change, developing new services, reorganising service provision across disciplines, were an integral part of the role. Interestingly stressors included resentment by colleagues towards nurses in these advanced roles, in some situations it was the Charge Nurse Manager (CNM) who openly opposed the introduction of advanced roles, others included their medical colleagues. The findings are not generalizable due to the small sample and selection criteria, furthermore the results and nurses' in-depth perspectives add to the literature on ANP. These advanced nurses are working towards a nursing model as a distinct discipline, however they may have been operating within the boundaries of a medical model as well. In Snelgrove and Hughes' (2000) Welsh study, nurses made referrals and initiated tests following their own clinical assessment, however the diagnosis was made by the doctor. Some of these new roles would have traditionally been the responsibility of the medical staff.

3.5.2 DRIVERS AND DEVELOPMENTS

The policy and economic drivers underpinning advancing nursing roles include increasing numbers of patient presentations to an ED, patient expectations which are changing and employers drive for value for money policies (Cashin et al., 2007; Fry & Jones, 2005; Salter, 2005; Tye & Ross, 2000). Reduced medical staff are also impacting on this decision particularly in the UK (Snelgrove & Hughes, 2000). Studies have identified the requirement for a professional framework and an education programme to enable the successful development of ANP role. An Australian study undertaken by Martin and Considine (2005) found that by introducing an education programme prior to the implementation of an emergency nurse practitioner (ENP), the staff reported a statistically significant increased understanding of the requirements and functions of an ENP. Barton (2006) identified similar views following a qualitative, observational study in the UK of a cohort of nursing students, their medical mentors, education staff and senior academic personnel. The findings revealed the requirement for a professional framework to enable the successful development of the

ANP role. Barton, Thorne and Hoptroff (1999) refer to professional collaboration as key to the success of advanced nursing roles. Wiseman (2007) supports a similar perspective of governing bodies working together to develop a framework. Griffin and Melby (2006) support accredited and standardized education requirements.

3.5.3 DOCTOR-NURSE RELATIONSHIPS

Doctor-nurse relationships and blurring of boundaries have also been investigated. Snelgrove and Hughes' (2000) study investigated the changing nature of the doctor-nurse relationship in medical wards of three provincial general hospitals. The challenges with crossing of boundaries occurred with increased work pressures and in smaller specialized areas. Other findings included following the change of health policy resulting in reduced hours for junior doctors, this sometimes opened up the immediacy of the situation and opportunities for nurses to move across boundaries and into doctors' territory. As well as this, the role of patient advocacy was identified, particularly as nurses increased their willingness to challenge the decisions made by doctors. A qualitative study, undertaken in an ED in South Thames, UK, by Tye and Ross (2000), investigated the perceived benefits and constraints from a multidisciplinary perspective of providing an ENP service. Medical opposition was identified as a restraining force to role expansion, which did not enhance relationships with nurses, and participants identified the shifting boundaries between professional groups as a major focus. An Irish descriptive exploratory study by Norris and Melby (2006), set in two out of four health boards reported on the opinions of emergency doctors and nurses on the development of the acute care nurse practitioner (ACNP) service in ED. The principal theme identified from the data was inter-professional conflict, which is increased during times of stress; therefore concurring with Snelgrove and Hughes's (2000) study.

In general, nurses are making advances into traditional role boundaries in some areas (Snelgrove & Hughes, 2000) however some would argue a proportion of ANP time is undertaking work that is considered to be within the practice discipline of medicine (Hall & Stevens, 1995; Snelgrove & Hughes, 2000; Tye & Ross, 2000; Wiseman, 2007). Barton, Thorne and Hoptroff (1999) suggest that ANP is evolving from a unique blend of both nursing and medicine, creating a new type of health care professional. Tye and Ross (2000) report similar findings. The blurring of boundaries is enabling the advanced nurse greater work satisfaction, to bring about a quality improvement in the delivery of care by pushing the limits of their practice, enriching their job satisfaction. For this to be successful, an

atmosphere of multidisciplinary trust, respect and joint contributions of knowledge and skill need to be fostered (Norris & Melby, 2006). Castledine (2002) views ANP as adjusting and challenging the boundaries of nursing practice by taking a broad and diverse approach. In summary Castledine says ANP is about coordination, autonomy, nursing expertise and knowledge, along with the integration of education, research, management, leadership and consultation. Donnelly (2003) describes ANP as a venue to extend nursing's scope of practice to the outer edges, further developing professional nursing practice. In NZ we must reflect on both the benefits and the potential challenges this overseas research reveals regarding ANP. Postgraduate education, particularly as numbers increase will have an impact on evolving professional boundaries, as they continue to be challenged and expanded to develop future clinical practice and career structures for nurses within our EDs.

3.6 SUMMARY

This chapter has provided an overview of the current literature pertaining to PGS. It includes a background to education and teaching in terms of andragogy and pedagogy, adult learning, critical thinking and reflection on and in nursing practice. The literature on nursing scholarship is discussed and in particular that of Ernest Boyer and his study *Scholarship Reconsidered*. National and international literature on the effects of postgraduate education on nursing practice is debated including issues pertaining to the stressors affecting nurses while studying. Finally the blurring of professional boundaries through the introduction of ANP roles and models is considered. The following chapter will present the methodological approach used in the current research.

CHAPTER FOUR: METHODOLOGY, RESEARCH DESIGN AND METHODS

“Theory without research is mere speculation; research without theory is merely data collection” (Davidson & Tolich, 2003, p. 17).

4.1 INTRODUCTION

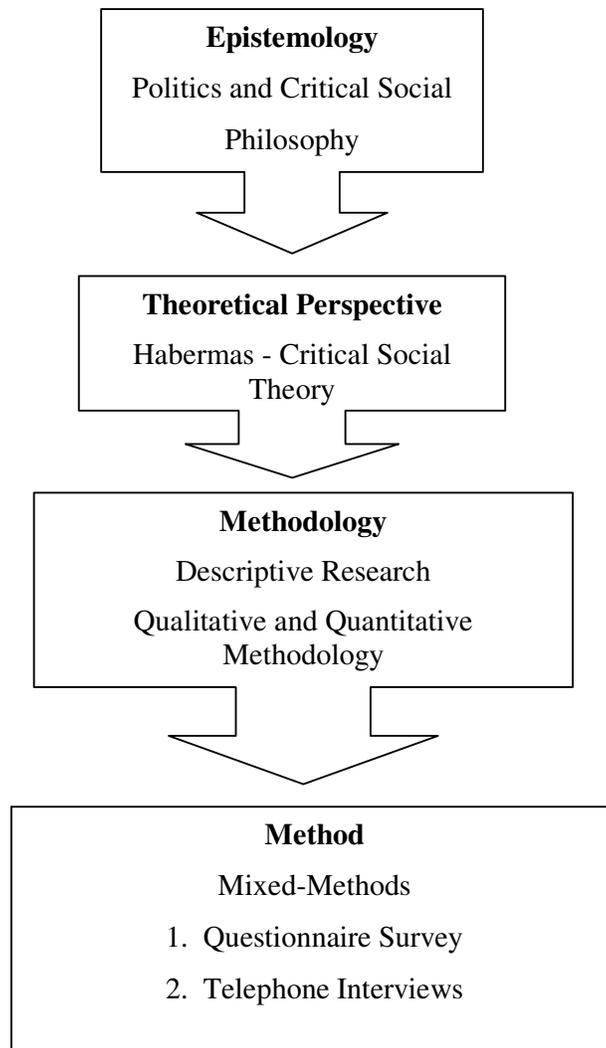
This chapter will describe the aim of this study and provide a rationale for the research process utilized. Critical social theory provides the overarching theoretical framework for this study. The epistemological basis of politics and critical social philosophy are traced back to Immanuel Kant (1724-1804), with the theoretical perspective underpinning this thesis informed by the writing of Jürgen Habermas (b.1929-). The methodology or design is descriptive research, employing both quantitative and qualitative methods. The method used in this thesis is known as mixed-methods research. Ethical principles and their application to the study will be discussed.

4.2 AIM OF THE STUDY

The overall aim of this social research study is to investigate emergency nurses’ perceptions of the impact of postgraduate education on their practice in NZ.

4.3 THE RESEARCH PROCESS

Quality social research is dependent on four elements: epistemology; a theoretical perspective; methodology and methods. These elements inform one another to guide the research process, thus being a systematic process of inquiry (Crotty, 1998; Porter, 1998), which according to Burns and Grove (2005) validates and refines existing knowledge and generates new knowledge (Figure 1).



(adapted from Crotty, 1998)

FIGURE 1: The four elements of the research process that inform this study.

The epistemological basis of politics and critical social theory are traced back to Immanuel Kant (1724-1804), an Enlightenment philosopher, founder of modern critical philosophy and pioneer of German Idealism (Porter, 1998). The theoretical perspective underpinning this thesis is critical social theory, which originated from the Frankfurt School³⁹ in 1923, and is articulated by philosopher and socialist Jürgen Habermas (b.1929-).

³⁹ A prominent group of scholars interested in social theory and interpreting the world evolved in the 1920s establishing the Institute of Social Research in 1923, known as the Frankfurt School (Crotty, 1998).

The methodology utilizes both quantitative and qualitative research methods to examine the topic of inquiry. These were combined within the conceptual framework of descriptive research to provide insight and knowledge into the perceptions of the cohort of nurses who are participants in the study.

4.3.1 EPISTEMOLOGY

4.3.1.1 Politics and Critical Social Philosophy

Philosophy is concerned with a search for explanations or meaning, stimulating and inspiring us to ask questions and seek the answers for ourselves. Socrates some 2400 years ago was committed to discovering the truth through debate and thought, questioning meaning to enlarge his own knowledge. Such thinking became known as Socratic dialogue (Knowles, Holton, & Swanson, 2005; Schmidt Bunkers, 2004; Van de Weyer, 1997).

The earliest identifiable reference to critical thought, as understood in contemporary terms, was made by Immanuel Kant (1724-1804), who argued that reason and knowledge could not be taken for granted, as this leads to superficiality. He believed that communication required a deeper, more critical engagement, questioning why we think and do what we do through examination of the conditions of experience and action. Georg Wilhelm Friedrich Hegel (1770-1831) challenged this view, maintaining that Kant's philosophy was wrong. Hegel argued that through human challenge, setbacks and struggles; self-knowledge evolved and assisted to expose the basic structures of reality, believing that the human spirit emerged from the constraints of ignorance to drive history forward. Another approach was argued by Karl Marx (1818-1883) who felt that if we are going to understand society we have to first look at the historical forms, class division and inequalities in labour. Kant, Hegel and Marx all sat on opposing sides of positivism. Positivism was the general philosophical position, which emerged as the leading intellectual force in Western thought during the mid nineteenth century, sometimes referred to as scientific ideology. These three philosophers, particularly Marx whose writings are grounded in an ideology of conflict between classes in understanding community and societal structures, have provided different philosophical ways of looking at modern thought and critical inquiry (Crotty, 1998; Denzin, 1978; Gore, 1993; Habermas, 1974; Kaplan, 1991; Maxwell, 1997; Miles, 2005; Patton, 2002; Porter, 1998). Ontology, politics and social philosophy involve the deeper questions in human action.

However, the 1960s saw a second generation of Continental social theorists emerging, such as Michel Foucault (1926-1984); Jürgen Habermas (b.1929-); and Jacques Derrida (1930-2004); along with Latin American philosophers such as Paulo Freire (1921-1997), among others (Crotty, 1998; Fay, 1987; Kincheloe & McLaren, 2005; Miles, 2005).

4.3.2 THEORETICAL PERSPECTIVE

4.3.2.1 Critical social theory

Critical social theory is interested in issues of politics, power and justice and the ways that society, education, religion, gender, race, sexuality, discourses, organizations and cultural situations interact to create a social system (Kincheloe & McLaren, 2005). It not only aims to study and understand society, it also aims to critique and change society, raising consciousness and affecting the balance of power in favour of those less powerful or oppressed (Patton, 2002). Critical theory is never stationary; it is continually evolving, changing and developing, particularly as society is challenged by new social problems, therefore permanent relationships between diverse social phenomena are unlikely. This thesis utilizes critical social theory informed by philosopher and socialist Jürgen Habermas as a lens or broad framework through which it's results will be analysed and discussed.

4.3.2.2 Jürgen Habermas

Habermas chose to revisit the Marxian origin of critical theory and he posited a distinction between the core of Marx's social theory of labour as instrumental action, concentrating on economic relations and social interaction as communicative action (Crotty, 1998; Habermas, 1971; Miles, 2005; Porter, 1998). For Habermas his emphasis on language, the ability to think and understand through communicative action was equally important (Habermas, 1984, 1987). "What raises out of nature is the only thing whose nature we can know: language. Through its structure, autonomy and responsibility are posited for us" (Habermas, 1971, p. 314).

Habermas combined instrumental action and communicative action along with the exercise of power and domination to underpin his now familiar typology of human knowledge (Crotty, 1998; Miles, 2005). Habermas has been a leading supporter of a practical social philosophy, which seeks to unite the objectivity of science and practical philosophy – praxis (Carr & Kemmis, 1986). Praxis, a key concept in emancipatory nursing has it links back to

the work of Aristotle; of actively doing rather than creating (Fay, 1987; Lockyer, 1988). Habermas (1971) in developing his theory of critical social science challenged the dominance of positivism, questioning science's belief of authority, suggesting that their usability was limited by demonstrating that science offers one form of knowledge only. He attempts to demonstrate how different kinds of knowledge are created by the human interests they serve and defines knowledge as the outcome of human activity that has been developed by natural needs and interests. "The only knowledge that can truly orient action is knowledge that frees itself from mere human interests and is based on Ideas-in other words, knowledge that has taken a theoretical attitude" (Habermas, 1971, p. 301). He refers to his theory of knowledge as a theory of "knowledge-constitutive interests" (Habermas, 1971, p. 134) and identified three categories of human knowledge, which he describes as technical, practical and emancipatory, based on primary cognitive interests. He maintains that each of these knowledge-constitutive interests take form in a particular social order, such as work, language and power and the knowledge that each interest generates gives rise to a different science (Carr & Kemmis, 1986; Habermas, 1971; Maxwell, 1997; Taylor, 2000; Wilson-Thomas, 1995). Habermas related technical interests to work, creating instrumental action which people control and manipulate in their environment, to generate empirical knowledge. Practical interests he related to language - human interaction or communicative interaction and emancipatory interests he related to power (Habermas, 1971).

The current study considers Habermas's third category, emancipatory interests as that with which critical social science is most concerned; it seeks to liberate people from constraints and oppression in society (Habermas, 1971). According to Fay (1987) enlightenment, empowerment and emancipation are the three phases that create the practical intent of critical social theory. The enlightenment phase is concerned with raising the consciousness of the oppressed and identifying the power interests⁴⁰ of individuals or between groups. Thinking and the process of discourse and self-reflection assists individuals to uncover information and gain knowledge of their situation of oppression, ignorance and inequality to develop their autonomy and reflective enlightenment (Clare, 2003; Fay, 1987; Habermas, 1971, 1974; Kincheloe & McLaren, 2005; Manias & Street, 2000).

⁴⁰ Power interests may include issues of education, religion, gender, race, sexuality, discourses, organizations and cultural effects.

Empowerment encourages individuals to participate in activities from which they grow and develop. In this context empowerment is essentially positive as it refers to solutions rather than problems. Empowerment is developed through the process of communication and education. Communication develops through reflection and dialogue, which is used to unite educative knowledge and interest through which understanding is achieved. Throughout this process of communication and education, self-knowledge and confidence develops in order to be freed from the constraining powers to challenge and make qualitative changes in life. Therefore liberating people from oppression, ignorance and inequalities of their social arrangements. In this context, power can be negative in terms of domination and constraint. Empowerment is about a process of engagement and respect for difference through dialogue that is open, respectful and free from constraining power, leading to the development of mutual understanding (Habermas, 1971, 1974; Kemmis & McTaggart, 2005; Kuokkanen & Leino-Kilpi, 2000; Manias & Street, 2000).

Emancipation is the goal of empowerment and involves the development of self-knowledge through a process of self-reflection. Self-reflection requires sound and reasonable reconstruction of thoughts and processes along with an ability to critically analyse the happenings of the day, unpacking unconscious thoughts into conscious reality and action therefore developing self-awareness in practice (Clare, 2003; Fay, 1987; Habermas, 1971). Self-reflection assists nurses to identify who they are by raising their consciousness, reflecting on their perceptions and questioning their values and assumptions. A sound and extensive knowledge base is required in critical action when addressing power difference (Timmins, 2006). Emancipation is gaining power over the forces and controls which shape our lives and work environments, recognizing and understanding aids and limitations through critical self reflection and praxis (French & Cross, 1992; Habermas, 1971, 1974).

When all three phases described above (enlightenment, empowerment and emancipation) are completed then according to Fay (1987) the practical goal is complete. In summary “The act of self-reflection that “changes a life” is a movement of emancipation” (Habermas, 1971, p. 212). Kincheloe and McLaren (2005) point out that no individual is ever totally emancipated from the socio-political context and one must be mindful of the possibilities of arrogance accompanying the process of emancipation. As individuals within their environment work through these phases to improve their situation, they are more likely to become empowered in their struggle for self-emancipation.

Critique of Habermas's theories focus on reflection and enlightenment that is orientated towards the individual, which is considered a weakness in its ability to effect mass social action (Fay, 1987). According to Carr and Kemmis (1986) Habermas did not provide a recipe on how to put his theory into practice. The most common criticism however, refers to critical social theory as utopian in character. That is that it may not relate to real life, or the real world and may lead towards frustration, disillusionment and potential oppression. For example a RN following PGS, with increased self-knowledge, leads a process of change within her/his workplace, to improve patient quality, however becomes unsuccessful in achieving this critical action due to the significant power dynamics in the workplace, following which the nurse may become disillusioned and dissatisfied in her/his struggle for self-emancipation. Through reflection and critique, theorising continues to contribute to the development of critical social science (Clare, 2003). As discussed earlier, critical theory is never stationary; Habermas's views are changing with time. Recent critical scholars have rejected Habermas's three phases of enlightenment, empowerment and emancipation, preferring to focus on identity and cultural aspects⁴¹ (Best & Kellner, 1991; Giroux, 1992, 1993; Jordan & Weedon, 1995; Mohanty, 1994; cited in Manias and Street, 2000).

Paulo Freire is discussed briefly below as Habermas shares similar understandings in critical social theory with Freire. Their philosophy is orientated towards emancipatory possibilities, challenging historical forms of domination, through reflection and critique to produce new patterns of action or praxis.

4.3.2.3 Paulo Freire (1921-1997)

Marxian praxis was developed further by Freire in the 1960s, who himself experienced the effects of poverty as a youth in Latin America and went on to devote his life to working with the poor. A Brazilian educationalist, he worked with the peasant peoples of northeast Brazil in the early 1960s. He launched literacy programmes and worked in the slums, engaging in dialogue, learning about the people's culture and language. He encouraged them to discuss these words in different ways and forms as a community, moving their thinking from a

⁴¹ Cultural aspects include "race, class, ethnicity, gender, sexual preferences, age and ability" (Manias & Street, 2000, p. 51).

position of ignorance and lethargy, empowering them in developing their literacy skills and increasing their critical awareness, uncovering ‘a collective will’ (Crotty, 1998; Freire, 1974; Maxwell, 1997). He identified the culture of silence or oppression and argued that a positive process of transformation takes place when one teaches for emancipation. It is through a process of enlightenment and empowerment that emancipation occurs. Freire (1974) points out that a critical consciousness allows, “...(people) to develop their power to perceive critically the way they exist in the world within which they find themselves; they come to see the world not as a static reality but as a reality in process, in transformation” (p. 70).

In summary, critical theory provides a framework – both an epistemology and theoretical perspective for approaching this research and evaluation, underpinned by an openly political praxis (connecting theory and action) to initiate possible change. This thesis will explore the respondents’ perceived effects of postgraduate education on the practice of this cohort of emergency nurses, their understandings and experiences. Critical theory will be integrated with the nurses’ quantitative data and qualitative dialogue, in a dialectical process of reflection, enlightenment, empowerment and emancipation, giving rich critical insight into this social group. Moreover envisioning new possibilities for raising consciousness and initiating change. The methodological approach provides the blue print for achieving the aim.

4.3.3 METHODOLOGICAL APPROACH

4.3.3.1 Descriptive research

Descriptive research is often used when little research has been undertaken in an area and deals with the question of what things are like, to increase one’s understanding of a phenomenon (Tarzian & Cohen, 2006). Burns and Grove (2005) state the purpose of descriptive research as “the exploration and description of phenomena in real-life situations” (p.44). It is an accurate description or explanation of characteristics of a particular person, situation or group and the frequency with which certain phenomena take place. The researcher investigates, observes, counts, describes and classifies the data (Gehlbach, 2006; Polit & Beck, 2006; Polit, Beck, & Hungler, 2001) resulting in discovering new meanings, unfolding what exists, determining the regularity with which something occurs and categorizing the information (Burns & Grove, 2005). According to Patton (2002) a significant methodological result of these commitments towards qualitative study of people is “a process of discovery” (p. 28). In brief, the aim of descriptive research is “to describe

social phenomenon in detail” (Davidson & Tolich, 2003, p. 15), providing a picture of situations as they naturally are, a commitment to get close and be factual.

An intention of the current study is to report an accurate description of this cohort of nurses, confirm existing and identify any new information and meanings that have been discovered; promoting understanding and knowledge of the perceived effects of postgraduate education on the practice of RNs in EDs and classify this information for use by the discipline – nursing. Descriptive research most often involves the use of surveys or measurement tools and interviews (Tarzian & Cohen, 2006). However, it is not uncommon for researchers using such a design to combine quantitative methods with qualitative descriptive methods, which is the case in the current study (Burns & Grove, 2005; Patton, 2002).

4.3.3.2 Quantitative methodology.

Quantitative research is defined as a “formal, objective, systematic process to describe and test relationships and to examine cause-and-effect interactions among variables” (Burns & Grove, 2005, p. 747). Objectivism is the epistemological view of this approach, beginning from a position of detachment, with the researcher standing back and not influencing the data with their values (Davidson & Tolich, 2003). It is the traditional scientific approach (Polit, Beck, & Hungler, 2001), rising from a branch of philosophy called logical positivism (Burns & Grove, 2005); assigning numeric values, generating statistics and measuring concepts, for the purpose of describing phenomena (Polit & Beck, 2006). Historically, quantitative research has been viewed as equivalent with positivism (Crotty, 1998). Many quantitative researchers base their studies on a post-positive philosophy which has evolved from positivism, embracing the key philosophical beliefs of positivism or modernism but in a more modern form (Giddings & Grant, 2006). A post-positive approach focuses less on objectivity but maintains control on environmental influences (Burns & Grove, 2005).

This current study combines both quantitative and qualitative methodologies and using Habermas’s theory of critical social sciences, draws the discussion away from positivism focusing on Habermas’s three phases that create the practical intent of critical social theory, that of enlightenment, empowerment and emancipatory knowledge. A formal structured, systematic questionnaire was the tool used to collect the quantitative data from the respondents within this study. The questionnaire was posted throughout NZ; therefore the researcher remained distant and removed from the data collection process.

4.3.3.3 *Qualitative methodology.*

Qualitative research crosses traditions, disciplines, fields and subject matters. It consists of a complex and interconnected family of terms; it covers a wide range of research methods, all of which makes a single definition almost impossible. However it does have a field of inquiry in its own right (Denzin & Lincoln, 2005). Qualitative research is a situated activity which has the observer or researcher located within the research (Denzin & Lincoln, 2005). It can be described as the study of research questions about human experiences (LoBiondo-Wood & Haber, 2006) and is defined as: “A systematic, interactive, subjective approach used to describe life experiences and give them meaning” (Burns & Grove, 2005, p. 747). According to Crotty (1998) subjectivism is the epistemological view, or the why and how we know some things, the nature of knowledge and is a basis to qualitative research. It is a way to gain insights, to make sense of and interpret, through discovering meaning. Qualitative research values personal involvement and favouritism (Davidson & Tolich, 2003). It is a means of exploring the depth, richness and intricacy inherent in phenomena (Burns & Grove, 2005; Denzin & Lincoln, 2005), reflecting the quality of something (Davidson & Tolich, 2003) to improve our comprehension (Burns & Grove, 2005), in the form of words and narrative. Historically, qualitative research has evolved from the behavioural sciences of anthropology, psychology and sociology (Crotty, 1998; Denzin & Lincoln, 2005; Polit, Beck, & Hungler, 2001) as a method of understanding the uniqueness of the human being and social reality (Burns & Grove, 2005; Crotty, 1998). The goal in qualitative research is to enhance understanding of phenomena.

“Qualitative research is inherently multi-method in focus” (Flick, 1998, p. 229, cited in Denzin & Lincoln, 2003, p. 8), the findings develop from three kinds of data. This includes data from in-depth, open-ended interviews, direct observation and written documents. The qualitative researcher engages with people to capture and communicate people’s rich description of their experience (Patton, 2002). The data comes from fieldwork with the researcher being an integral part of the research process (Byrne, 2001; Patton, 2002). This study involved interviewing emergency nurses, engaging in dialogue via telephone, enabling the participants to express their views in a free and open-ended way. Throughout the interviews the researcher became absorbed in this dialogue, listening acutely to the detailed self-understandings and descriptions of the nurses’ personal journeys of postgraduate

education and their described effects and impact of PGS on their clinical nursing practice, their career paths, professional development and personal lives.

A strength of qualitative methodology is the inductive, naturalistic inquiry which doesn't have a predetermined hypothesis (Patton, 2002). It begins with details of experience or personal interest and moves to a more general picture (Davidson & Tolich, 2003; LoBiondo-Wood & Haber, 2006).

4.3.4 METHODS

This current study employs both quantitative and qualitative methods of data collection. Such combination of methods is becoming more common in social research and is known as mixed-methods research, advocating the use of multiple methods to answer the research question.

4.3.4.1 Mixed-Methods

Mixed-method research is a creative form of research, where the researcher mixes or combines quantitative and qualitative research methods into a single study (Johnson & Onwuegbuzie, 2004). Numerous terms for mixing research are identified in the literature; multi-method, multimethodology, integrated, combined, convergence, synthesis, quantitative and qualitative research, but mixed-methods research is another popular name (Tashakkori & Teddie, 1998). Authors use different terms interchangeably. The researcher will refer to mixed-methods in this study.

According to Creswell (2003) mixed-methods have come of age and to utilize only one method – quantitative or qualitative, falls short of the major approaches being utilized today. The integration of quantitative and qualitative data within single research studies is gaining momentum particularly in the context of social and behavioural sciences (Adamson, 2005; Creswell, 2003; Giddings & Grant, 2006; Jick, 1979; Polit, Beck, & Hungler, 2001). The mixed-methods movement takes qualitative methods away from their natural home and into a critical framework (Denzin & Lincoln, 2005), which is what is required for this current study. A mixed-methods approach is known as the triangulation process. Denzin (1978) was first to define triangulation as “the combination of methodologies in the study of the same phenomenon” (p.291).

Giddings and Grant (2006) claim that mixed-methods research has a range of strengths. Researchers employ mixed-methods to provide a richer, more thoughtful and deeper understanding of the question being investigated (Casebeer & Verhoef, 1997). Quantitative and qualitative data are corresponding (Burns & Grove, 2005; Polit, Beck, & Hungler, 2001) words and numbers (being the two fundamental languages of communication) (Polit, Beck, & Hungler, 2001) and they generate different kinds of knowledge from different settings, which is beneficial to nursing practice (Begley, 1996; Burns & Grove, 2005). Mixing two methods assists to verify, cross-validate or corroborate findings within a single study and offset weaknesses and bias within one method with the strengths of the other method, (Adamson, 2005; Begley, 1996; Casebeer & Verhoef, 1997; Cresswell, 2003; Giddings & Grant, 2006; Jick, 1979) allowing divergent results to enrich explanations (Begley, 1996). A mixed-method approach to research is particularly beneficial in surveys (Giddings & Grant, 2006). The mixed-methods design does present with some limitations. The researcher must be familiar with the relevant characteristics of both quantitative and qualitative research, which is time-intensive in nature, both in pre-planning, organization and analysing both numerical and narrative data, which is usually extensive. Other limitations include the large amount of data collected, integrating two different data collections, dealing with discrepancies, including limited literature on resolving discrepancies and the collection of unequal data and evidence (Adamson, 2005; Cresswell, 2003).

In this current study, both the quantitative (survey questionnaire) and qualitative data (telephone interviews) were collected in parallel (concurrently).⁴² The across method or between method triangulation, involving the utilization of both quantitative and qualitative methods together resulting in convergence to secure an in-depth understanding of this cohort of nurses was utilized for this current study. The method of analysis is described on pages 63-65.

⁴² The questionnaire data was collected from September to November 2006. The qualitative interviews were undertaken during November 2006.

4.3.5 *SAMPLE*

4.3.5.1 *Sample design*

Sampling is a process of selecting a portion of the population/groups of people with whom to conduct a study (Burns & Grove, 2005; Davidson & Tolich, 2003; LoBiondo-Wood & Haber, 2006). Participants can be recruited through notices/announcements, newspapers, and posters or via referrals from others (Dane, 1990; Polit & Beck, 2006).

Although the researcher in this current study aimed for a probability sample⁴³ this was problematic as the numbers were insufficient as described below and the accuracy of random selection throughout NZ could not be guaranteed. The researcher obtained information from the NCNZ on approximate numbers of emergency RNs with postgraduate qualifications in NZ. Adamson (2007) reported that 1,886 NZ RNs identified their practice codes as working in emergency and trauma in NZ DHB hospitals, at the end of September 2006.⁴⁴ Nurses identified as having postgraduate qualifications limited to postgraduate certificate, postgraduate diploma, Master's and a PhD totalled 305. There is no simple equation to determine the sample size for a probability sample however the largest sample possible is preferred (Polit & Beck, 2006). A total of 305 postgraduate nurses were considered too small a sample to develop a sampling plan using a random selection process across NZ DHBs and gain a representation of this cohort. Therefore the researcher came up with the following strategy: Stage one involved the identification of all NZ DHB hospital EDs as a resource for participants. Stage two involved obtaining a saturation sample of nurses with postgraduate education qualifications from the identified EDs as described further in this section.

4.3.5.2 *Inclusion criteria*

In the current study the inclusion criteria were clearly defined and specific to include RNs who have qualified with postgraduate qualifications from NZ tertiary organisations, from

⁴³ A probability sample in this current study would involve the random selection of participants meeting the inclusion criteria (Burns & Grove, 2005; Polit & Beck, 2006).

⁴⁴ This information was collected to correlate with the timing of this current research survey questionnaire data collection.

(and including) the year 2000, to (and including) 2005.⁴⁵ Therefore the inclusion of clear criteria within this instrument was intended to strengthen the reliability of the data. As this is a NZ study the researcher decided to keep to NZ tertiary qualifications gained through the recent development of NZ postgraduate education programmes, therefore excluding nurses who have received postgraduate education qualifications overseas. The researcher sought to reduce extraneous variables by specifying the entry criteria and decreasing any bias created by different educational criteria.

4.3.5.3 Participants

Participants were RNs who met the inclusion criteria. The ‘research packages’ (these are detailed below) were sent to EDs in DHB hospitals throughout NZ, excluding rural areas.

4.3.5.4 Participant recruitment, timing and setting

The MoH website provided information on the 21 DHBs in NZ. From this list 33 main public hospitals with EDs were identified and addresses were located via the Google website ‘Find a NZ Hospital’. A data sheet was collated with all DHB hospitals, addresses, telephone numbers and known contact names of nurse educators (NE) and CNM. Emergency nurse colleagues assisted with the collation of the contact names. The data collection was undertaken in two formats, a survey questionnaire and telephone interviews.

4.3.5.5 Survey questionnaire

Two hundred questionnaires were posted to 33 EDs throughout NZ. Envelopes were addressed to the NE or CNM. The researcher invited the support of the NE and/or CNM in the 33 hospital EDs throughout NZ for this study. These nurses were sent a courier package containing several information posters⁴⁶ and a selected number⁴⁷ of ‘research packages’,

⁴⁵ In the context of this study, higher-level education refers to postgraduate education and includes postgraduate certificates, postgraduate diplomas, completed Master’s and Doctoral Degrees in nursing in NZ and includes papers, which focus on the development of emergency nursing clinical practice.

⁴⁶ Refer to Appendix 3 for a copy of the information poster.

⁴⁷ Three, five or ten ‘research packages’ were sent to each hospital. The number sent was determined by the size of the hospital. Smaller hospitals received three; secondary hospitals received five and tertiary hospitals received ten ‘research packs’.

which included; a return envelope, information sheet for participants,⁴⁸ survey questionnaire,⁴⁹ telephone interview recruitment information⁵⁰ and an information sheet for participants of the 15-minute telephone interview.⁵¹ The ED NE or CNM were asked to display the information posters on notice boards within their ED, inviting postgraduate nurses to participate in this study. If nurses were interested, they were then able to request a research pack from the NE or CNM. The nurses were given the research pack and were free to complete the questionnaire in their own time and place, reducing bias that may be caused by peer pressure from other staff. The motivation underpinning the nurses' choice to volunteer or not into this study was not known to the researcher. On completion, respondents were requested to seal the questionnaire in the enclosed envelope provided, and place it in the courier pack available from the NE or CNM. The courier pack was then forwarded to an administrator at the University for collection. On each courier pack a coded number was printed, monitoring returns from geographical areas (Dane, 1990). The researcher did not view the returned courier packs ensuring anonymity.

Data collection took place over twelve weeks (September – November 2006) as some areas required a follow up via email to encourage the questionnaires to be returned. Therefore ensuring all possible questionnaires were collected prior to closure, thereby covering all options in attaining a saturation sample (Polit & Beck, 2006). As the researcher is an ED nurse and was also a clinical lecturer on a postgraduate programme at this time and may have been known to some of the nurses volunteering to participate, the following phrase (who may be known to you) was printed on the information poster and telephone interview poster. To avoid further conflict of interest, the researcher was on holiday from her current ED workplace when questionnaires were distributed, thereby preserving further anonymity for any colleague who may have participated.

⁴⁸ Refer to Appendix 4 for a copy of the information sheet for participants.

⁴⁹ Refer to Appendix 5 for a copy of the survey questionnaire.

⁵⁰ Refer to Appendix 6 for a copy of the telephone interview recruitment information.

⁵¹ Refer to Appendix 7 for a copy of the information sheet for participants of the 15-minute telephone interview.

4.3.5.6 Telephone interview

Information on the 15-minute follow-up telephone interview was included in the research pack on coloured paper to identify it as being separate to the survey questionnaire. Nurses self-selected their involvement in the follow-up 15-minute telephone interview and were asked to contact the researcher by telephone or email to register their interest. Following discussion with the researcher's supervisor, a sample of eight to ten emergency nurses was considered a reasonable number to harness a range of experiences from this cohort of emergency nurses for the qualitative interviews. Ten nurses self-selected and were interviewed.

4.4 DATA COLLECTION DESIGN

4.4.1 SURVEY QUESTIONNAIRE

Survey research methods are used to gather self-reported data about an identified population; the form of data and the method of analysis are the distinguishing features. Data in survey research covers a range of different research methods and can be collected in various ways: physiological, observational, interviews, questionnaires and records, content analysis or available data (Davidson & Tolich, 2003; de Vaus, 2002; LoBiondo-Wood & Haber, 2006). Polit, Beck and Hungler (2001) state that survey research is "nonexperiential research that focuses on obtaining information regarding the activities, beliefs, preferences, and attitudes of people via direct questioning of a sample of respondents" (p.472). In basic terms a survey is a study involving a group of people (or sample) selected from a larger group of people (or population) who are observed and questioned on the variables of interest to the researcher (Daly, Kellehear, & Gliksman, 1997). Mail surveys offer researchers a cost-effective way to gather data, however low response rates are problematic. The response rate for mailed questionnaires is usually small: 25 to 30 percent (Burns & Grove, 2005; Daly, Kellehear, & Gliksman, 1997; Davidson & Tolich, 2003).

After a review of the available literature and research of the topic area, the researcher identified that the questionnaire by Dianne Pelletier, currently Honorary Associate, Faculty of Nursing, Midwifery and Health, University of Technology, Sydney, Australia, related well to the researcher's own topic. This questionnaire contained questions, which the researcher was also interested in asking in a NZ setting. The survey questionnaire B was obtained with permission from Ms Pelletier. Ms Pelletier used this survey questionnaire for a

longitudinal study of RNs undertaking postgraduate studies in the Faculty of Nursing at an Australian University in Sydney, New South Wales as discussed in the previous chapter. Having been granted permission to use and adapt the tool, the researcher had an opportunity to compare results between the two studies. Question 16 was modified to comply with the NZ nurse titles and the emergency setting, the focus of the question remained consistent. Section E, the collection of demographic data was added to the questionnaire. This tool was then peer reviewed by an academic member of staff at the Centre for Postgraduate Nursing Studies, Christchurch.

The questionnaire contained 79 questions, divided into five categories and used a variety of questioning approaches.⁵² The timing and questions were piloted on a postgraduate ICU nurse colleague.

4.4.2 TELEPHONE INTERVIEWS

Telephone interviews, particularly shorter interviews offer the researcher a more convenient method of gathering data (Polit & Beck, 2004, 2006). According to Dane (1990), telephone interviews should be limited to no longer than 15 minutes. Telephone interviews between the researcher and the participant are considered a common measurement strategy in descriptive studies (Burns & Grove, 2005), are less expensive than face-to-face interviews, (Dane, 1990), and are fundamental in qualitative research (Hutchinson, Wilson, & Wilson, 1994). Disadvantages of telephone interviews include subject bias from inconsistencies in data collection (Burns & Grove, 2005), also an inability to observe body language and context.

A telephone information sheet was included in the 'research pack' and the volunteering nurse participants expressed their interest by email, after which the researcher contacted them either by email or telephone to arrange a suitable time for the interview. The interviews took place during November 2006. This study involved fifteen-minute telephone interviews and adopted an open-questioning technique/conversation. Every attempt was made to establish a rapport with the 10 participants, enabling them to express their views on the

⁵² Refer to Appendix 8 for a description of the questionnaire layout detail.

quality of care delivered. A flexible technique with a reflective, open-ended response format allowed the researcher to explore greater depth of meaning and flexibility, probing interesting areas that arose with appropriate follow-up questions (Burns & Grove, 2005; Clare, 2003; LoBiondo-Wood & Haber, 2006; Polit, Beck, & Hungler, 2001; Smith & Osborn, 2003). Critical researchers may be tempted to question or challenge the participants' views, however the researcher remained actively reflective to ensure the meanings were understood.

Although an open-ended response format was preferred, a telephone interview guide⁵³ comprising semi-structured open-ended questions was used to provide direction and prompts as necessary (Daly, Kellehear, & Gliksman, 1997; Smith & Osborn, 2003). The interviewer encouraged the participants to talk freely about the topics covered in the guide with little prompting, (Polit & Beck, 2006; Smith & Osborn, 2003) and attempted to get as close as possible to what the participant was thinking about the topic from their point of view (Smith & Osborn, 2003). One participant felt self-conscious with their conversation being audio-taped by the researcher, however after some brief discussion she became quickly at ease once underway with the interview.

The interviews were transcribed by a professional typist, however the researcher listened to all of the tapes to ensure accuracy, develop insight into interviewer technique, responses, tone of voice and silences. This assisted with auditory familiarity, hearing the points, which were important to the interviewee and appreciation of the role of the transcriber. The completed transcripts were printed off in preparation for analysis.

4.5 ETHICAL CONSIDERATIONS

Ethical approval for this study was obtained from the University of Otago Human Ethics Committee for Ethical Approval of a Research or Teaching Proposal involving Human Participants.⁵⁴ The researcher had an ethical responsibility to acknowledge and protect the

⁵³ Refer to Appendix 9 for copy of the telephone interview guide.

⁵⁴ Refer to Appendix 10 for copy of ethics approval.

rights of the nurses participating in this study. Research with human beings is guided by ethical principles (Burns & Grove, 2005; LoBiondo-Wood & Haber, 2006; Polit & Beck, 2006), which are discussed briefly here, including the process and procedures the researcher adopted to comply with these principles.

4.5.1 SELF-DETERMINATION

The Right to self-determination is based on the ethical principle of respect for human beings (Burns & Grove, 2005; Polit & Beck, 2006) which includes the right to decide voluntarily without external controls, the right to full disclosure (Burns & Grove, 2005; Polit, Beck, & Hungler, 2001) and the right to ask questions and decline information (Polit & Beck, 2006). According to de Vaus (2002) surveys reduce participants' exposure to physical risks. In this study participation was voluntary.

The 'research pack' detailed earlier in this chapter contained information sheets fully describing the nature of the study, potential risks and benefits and the nurses' involvement. Participants were informed that if they were not comfortable answering a question, they could leave it blank. As there were only six questions answered by all respondents (n=105), it was evident that respondents did opt to leave some questions blank. A contact telephone number was provided should a participant have any questions they wanted to ask at the time or in the future. Participants were informed that they were free to withdraw from the study at any time without disadvantage. These processes were offered to avoid coercion, harassment and exploitation within this study. Participants were informed that the results of the research project may be published however no material that could personally identify them would be used. Participants were able to request a summary of the results of the study. Some have already requested a summary to be published in the College of Emergency Nurses New Zealand – Emergency Nurse journal.

4.5.2 RIGHT TO PRIVACY

The Right to privacy is the right of an individual to decide the time, degree and general circumstances in which personal data will be shared (Burns & Grove, 2005; LoBiondo-

Wood & Haber, 2006). Research involving human participants constitutes an intrusion into personal lives, however participants have the right to expect that information shared by them will be kept private (Polit & Beck, 2006; Polit, Beck, & Hungler, 2001).

4.5.2.1 Questionnaire

The participants were free to complete the questionnaire in their own time and at a place convenient to them. On completion they sealed the questionnaire in the enclosed envelope provided prior to placing it into the courier pack for postage.

4.5.2.2 Interviews

The telephone interviews were arranged at the participants' convenience and in a place of their choice.

4.5.3 ANONYMITY AND CONFIDENTIALITY

The Right to anonymity and confidentiality is based on the right to privacy, participants have the right to trust that the data collected will be kept confidential, therefore participants are not linked or identified to information provided or published (Burns & Grove, 2005; LoBiondo-Wood & Haber, 2006; Polit, Beck, & Hungler, 2001). According to de Vaus (2002) participants in research can be harmed if anonymity and confidentiality are not honoured. Participants were informed that data collected would be stored in a locked secure environment during the study and for a further five years after completion of the study as required by the University's Research Policy.

4.5.3.1 Questionnaires

The questionnaires were not named or numbered, ensuring participants' anonymity. Coding was on the courier pack only, available to the administrator only to track their return locations.

4.5.3.2 Interviews

Maintaining anonymity in qualitative research is more challenging (Burns & Grove, 2005; Polit, Beck, & Hungler, 2001). The researcher has a long history and knowledge of the NZ ED scene and therefore personally knows a number of ED nurses working in NZ. The

researcher is mindful of the influence this connection may have on the results (Hewitt-Taylor, 2002). Efforts have been made to maintain anonymity with respondents of the telephone interviews and minimise conflict of interest. A transcriber was employed to transcribe audiotapes of telephone conversations between the participant and the researcher. A detailed written information sheet for transcribing⁵⁵ described fully the requirements of the transcriber and a consent form⁵⁶ was signed enforcing confidentiality. The transcribed data and emails were locked on the computer at all times; therefore entry to this data was blocked, available only to the transcriber by password. The transcriber coded the transcripts deleting identities and links to participants' names, and pseudonyms have been used in the writing up so the researcher does not identify these people. The data collected from the interviews was analysed collectively thus preventing identification of individuals.

4.5.4 FAIR TREATMENT

The Right to fair treatment is based on the ethical principle of justice, implying respect, universal fairness, equity and avoidance of discrimination or abuse of the data collected from the participant before, during and following the study (Burns & Grove, 2005; Polit & Beck, 2006; Polit, Beck, & Hungler, 2001; Rogers & Niven, 2003). The subjects were advised that there was no disadvantage to them if they declined to participate or withdraw at any time.

4.5.4.1 Interviews

These participants entered into a relationship with the researcher, which was courteous and tactful. The researcher respected the narrative provided by the participants as their perceived personal beliefs and opinions, therefore this data was not judged. Telephone interview times were organized and all agreements between the participant and researcher were adhered to. Information sheets provided detailed information for participants and transcriber. Participants had access to research personnel, namely the supervisor and researcher, at the Centre for Postgraduate Nursing Studies, at any point during the study to clarify information.

⁵⁵ Refer to Appendix 11 for a copy of the information sheet for transcribing.

⁵⁶ Refer to Appendix 11 for copy of the consent form for transcribing.

4.5.5 FREEDOM FROM HARM

The Right to protection from discomfort and harm is based on the ethical principle of beneficence, to do good, or grant some good, or do no harm (Burns & Grove, 2005; LoBiondo-Wood & Haber, 2006; Rogers & Niven, 2003). The risk of doing psychological harm is greater in qualitative research (Burns & Grove, 2005; LoBiondo-Wood & Haber, 2006; Polit & Beck, 2006) as the researcher during the telephone interview enters into a relationship with the participant.

4.5.5.1 Interviews

The researcher was aware of the possible intrusion into participants' personal experiences and that harm can be done unwittingly, however efforts were made to use reflective and considered questioning techniques. A telephone-interviewing guide was used to provide prompts and consistency as necessary. At the end of the interview once the audiotape was turned off, a brief debriefing with informal dialogue took place.

4.5.6 INFORMED CONSENT

Obtaining informed consent from the participating nurses is essential for the conduct of ethical research and is illustrated by the ethical principles of self-determination and respect (Burns & Grove, 2005; LoBiondo-Wood & Haber, 2006; Polit & Beck, 2006). Consent involves the transmission of essential ideas and content of the study from the researcher to the participant and requires an agreement from the participant to participate in a study as a participant following the assimilation of essential information (Burns & Grove, 2005). According to Polit and Beck (2006) researchers rarely obtain written informed consent for self-administered survey questionnaires.

4.5.6.1 Questionnaire

Consent was implied in this study when the participants read the information sheet and consented to the seven summarized points prior to voluntarily completing the survey questionnaire.

4.5.6.2 Interviews

Written consent⁵⁷ was obtained from respondents who opted in, confirming their knowledge and understanding of the research process for the telephone interviews prior to the interviews taking place. This information was kept in a locked file in the researcher's home until completion of this study, when it was then transferred to the University.

4.6 THE METHOD OF ANALYSIS

4.6.1 MIXED-METHODS DATA ANALYSIS PROCESS

The mixed-method approach was chosen to combine the qualitative and quantitative methodologies to assess the same phenomenon. The stages of mixed-methods integration are data collection, analysis and interpretation. Onwuegbuzie and Teddlie's (2003) seven-stage conceptualisation model was the general framework applied for this process. The seven data analysis stages as adapted to the current study are as follows:

1 Data Reduction –

Quantitative: The descriptive responses, which use numbers to describe and summarize the information, were entered into the Excel data grid. These numbers were then transferred from Excel into the Statistical Package for Social Sciences (SPSS).⁵⁸ This enabled the researcher to organize the data in ways that facilitate insight and offer meaning (Burns & Grove, 2005).

Qualitative: The qualitative transcripts and the qualitative comments from question 79 of the survey questionnaire were read and reread. Interesting or significant notes were recorded in the left margin, summarizing or paraphrasing the dialogue. Following this process the transcript was reread and emerging themes, patterns, keywords and titles were documented in the right margin. The

⁵⁷ Refer to Appendix 12 for copy of consent form for participants of the 15-minute telephone interview.

⁵⁸ Statistical analysis was performed with SPSS Version 14.0 software package for Windows (Carver & Nash, 2006).

researcher reflexively analysed the meaning of the experience, looked for emerging patterns and connections between them. Initially, this was carried out in a sequential order, however at the next level it involved a more analytical or theoretical order making sense of the connections and themes developing and linking them to the main areas of the study.



2 Data Display –

Quantitative: The statistical quantitative data were reported as frequencies, percentages and cross-tabulations.

Qualitative: This involved describing pictorially the qualitative data in the form of coding, using different coloured highlighter pens. Two main ‘mega’ themes emerged from the data. These ‘mega’ themes were ‘positive’ and ‘negative’.



3 Data Transformation –

Quantitative: This data was described in the form of tables and graphs.

Qualitative: This involved working with the tapestry (colour and variation) of information. The ‘mega’ themes were divided again into their own set of sub themes: Positive into eight different patterns, each pattern highlighted by a different coloured pen. The negative were divided into four different patterns, with each pattern highlighted with a different coloured pen.



4 Data Correlation – this concerns the strength of the relationships between the values of two variables.

Quantitative: Goodman-Kruskal Gamma (Γ), a non-parametric measure of correlation coefficient with a range of values from -1 to $+1$, was used to look for concordant pairs and discordant pairs by comparing cases. Analysis was undertaken using SPSS and cross-tabulations (Carver & Nash, 2006).

Qualitative: The data, supported by the respondents’ own words are correlated under the ten sub themes.



5 Data Consolidation – both qualitative and quantitative data were linked, integrated and combined together to create new and exciting data sets in the results chapter.



6 Data Comparison – involved comparing the qualitative and quantitative data sources.



7 Data Integration – The data is integrated with the literature presented in the earlier chapters, Habermas’s theory of enlightenment, empowerment and emancipation guides this integration and analysis. The findings from this current study are discussed along with Pelletier’s study and Boyer’s scholarship. This characterizes the final stage of data analysis.

4.7 SUMMARY

This chapter has described the aim of this social research study and the researcher’s choice of epistemology and theoretical perspective. The research methodology along with the methods and analysis provides the framework for unveiling the data to inform the research question. The ethical principles and their application are discussed.

The historical and philosophical underpinnings of critical social theory will assist in understanding the significance of this theory to nursing as discussed in chapter six. The four elements that inform one another in this study namely: epistemology, theoretical perspective, methodology and methods, underpin the detailed analysis, results and the findings from this study, which are presented in the following chapter.

CHAPTER FIVE: RESULTS AND ANALYSIS

“Knowledge breeds knowledge; the more knowledge we need, the more we are stimulated and challenged to further develop an understanding of phenomena”

(Meleis, 1997, p. 65).

5.1 INTRODUCTION

This chapter presents the results of this mixed-methods descriptive research study in two main sections. The first section presents a profile of the study respondents, including response rate, demographics, employment and qualification characteristics. The second section presents results from both the interviews and questionnaires and will be reflective of the ten themes identified in the data. The impact of PGS will be reported in terms of experiences and ‘effect’. Data will be presented as frequencies, percentages and cross-tabulations. The extent and direction of correlation will be assessed using the computer generated Goodman – Kruskal Gamma (Γ) measure of ordinal association (Davidson & Tolich, 2003; United Nations Educational Scientific and Cultural Organization, n.d.).

5.2 THE STUDY RESPONDENTS

5.2.1 SURVEY QUESTIONNAIRE

5.2.1.1 Response rate

Of the two hundred questionnaires mailed out, one hundred and five questionnaires were returned (105/200) with a response rate of 53 percent. Twenty-nine of 33 possible EDs were represented. Three EDs when telephoned as a follow-up did not have nurses qualifying for the study, this equated to nine ‘research packs’. One CNM returned three questionnaires and wrote informing the researcher that their staff were ineligible, as their postgraduate qualifications had been awarded in the UK and USA. When the actual numbers of ‘research packs’ sent out were re-evaluated (105/188), the response rate for this survey questionnaire

was 56 percent. The response rate for mailed questionnaires is usually small: 25 to 30 percent (Burns & Grove, 2005; Daly, Kellehear, & Gliksman, 1997; Davidson & Tolich, 2003), 60-70 percent is considered as high (de Vaus, 2002), therefore the response rate for this study was moderately high.

5.2.1.2 Demographics (n=105)

The demographic characteristics of the sample are presented in Table one. The participating group included 88 female nurses (84.6%) and 16 male nurses (15.4%) with one respondent not identifying their gender. Twenty responding nurses placed themselves in the ‘other’ category (19.2%). Three respondents identified themselves as NZ and Maori in the ‘other’ category; one respondent did not identify their ethnicity.

TABLE 1: Demographic characteristics of respondents (n=104)

Demographic Characteristics (n=104)	n	(%)
Female	88	(84.6)
Male	16	(15.4)
Mean Age in years (standard deviation)	42.4	(7.23)
Ethnic Group		
New Zealand European	82	(78.8)
Maori	1	(1.0)
Indian	1	(1.0)
Other	20	(19.2)

The age of respondents ranged from 26 to 59 years, with a mean age of 42.4 years (female=42.5 years, males=41.6 years) with a standard deviation of 7.23. The most common age group⁵⁹ of respondents were between 41 and 45 years of age (female n=23, 26.1%; males n=6, 37.5%). Two respondents did not identify their age (Figure 2).

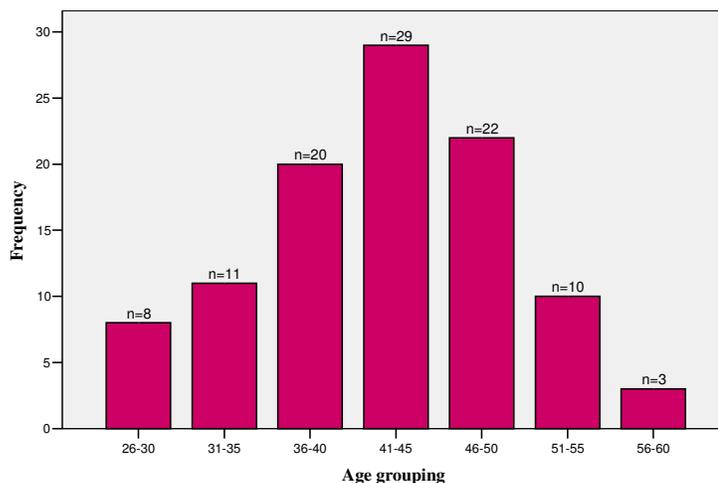


FIGURE 2: Age grouping of survey questionnaire respondents (n=103)

5.2.1.3 Employment characteristics of survey respondents

The majority of the respondents were employed full-time (n=72, 69.2%), with a smaller percentage working part-time (n=32, 30.8%). One respondent did not complete the question. A similar percentage of respondents worked in either Tertiary (50.5%) or Secondary (45.5%) Hospitals. A small minority worked in Sub-Acute Units (4.0%). Four respondents did not answer the question (Table 2).

⁵⁹ Age grouping was undertaken in the following groups 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60 years.

TABLE 2: Employment characteristics of respondents

Employment Characteristics	n	(%)
Currently Working (n=104)		
Full Time	72	(69.2)
Part Time	32	(30.8)
Hospital/Acute Management Service Employed In (n=101)		
Tertiary Centre	51	(50.5)
Secondary Hospital	46	(45.5)
Sub-Acute Units	4	(4.0)

5.2.1.4 Qualification characteristics of respondents

The respondents' highest qualification on entry to postgraduate study was a Bachelor of Nursing (n=40, 38.8%), Registered Comprehensive Nurses (Diploma entry) was the next highest qualification (n=31, 30.1%), followed by Registered General Nurses (n=24, 23.3%). Ten respondents identified with 'other' or did not answer the question. At the time this data was collected (September-November 2006), the largest group of respondent nurses identified their highest postgraduate qualification as a Postgraduate Certificate (n=56, 53.3%) (Table 3).

TABLE 3: Qualification characteristics of respondents (n=105)

Qualification Characteristics	n	(%)
Highest Qualification on Entry to Postgraduate Study (n=103)		
Registered General Nurse	24	(23.3)
Registered Comprehensive Nurse	31	(30.1)
Bachelor of Nursing	40	(38.8)
Other	8	(7.8)
Highest Postgraduate Qualification at Time of Research (n=105)		
Postgraduate Certificate	56	(53.3)
Postgraduate Diploma	29	(27.6)
Master's of Health Science	20	(19.0)
PhD	0	(0.0)

5.2.2 TELEPHONE INTERVIEWS

5.2.2.1 Response rate

Ten nurses volunteered (nine female and one male participant) for the interview section of this study. All volunteers met the inclusion criteria and thus were included; by chance they were equally divided between the North and South Island of NZ. Table four displays information regarding the ten nurses interviewed by telephone, including the size of the

hospital they worked in. Pseudonyms are utilized to protect participants identity, also obscured gender by use of female gendered names.

TABLE 4: Description of telephone respondents (n=10)

Pseudonym	Hospital Employment
Sue	Tertiary Hospital ED
Jane	Secondary Hospital ED
Ann	Secondary Hospital ED
Julie	Tertiary Hospital ED
Nancy	Secondary Hospital ED
Emily	Secondary Hospital ED
Belinda	Secondary Hospital ED
Lucy	Tertiary Hospital ED
Joanne	Tertiary Hospital ED
Crystal	Secondary Hospital ED

5.2.2.2 Description

All ten respondents were active in emergency nursing, however practising in various roles, from RN working all shifts, to NE and managers, including one with experience as a university lecturer. Qualifications ranged through the full spectrum from Postgraduate Certificate to Master’s Degree. Information linking respondents to their geographical location in the North or South Island, emergency role, age and ethnicity have not been included to protect the respondents’ identity.

By way of introduction, respondents’ significant reflective ideas are presented as general summative statements. These will provide a point of reference for a whole series of quotations presented within this results chapter.⁶⁰

I think that I probably entered post grad [postgraduate] education when I had quite a lot of ED experience under my belt, so I feel like I came into it with sort of lots of hooks that I could hang new knowledge on.

(Julie, Tertiary Hospital)

⁶⁰ Emphatic words or phrases are identified in bold type.

I think having, you know, done papers at university, my practice has certainly advanced and I am more aware of my practice, I am more conscious of using evidence to back up what I do, rather than just not, just not going ahead sort of ad hoc without things.

(Emily, Secondary Hospital)

I got more job satisfaction out of it [PGS], probably more job satisfaction because it has helped me in my decision-making or my arguments...

(Nancy, Secondary Hospital)

*It's made a **big impact** on me. It's changed the way I think about things, if you look at my writings before I started my studies and after, you can see a lot more critical thinking and I just don't mean my studies, I mean my patient assessment, I think through more...*

(Sue, Tertiary Hospital)

*It's a long **hard slog** but definitely worth it and I feel it's improved my practice and made me think a lot more globally, I think that's probably putting it in a nutshell, it widened my horizons, where I think, not just in nursing, my whole life, you know, the whole...living around you, definitely done that for me.*

(Crystal, Secondary Hospital)

*Its an experience I am very grateful for and I wouldn't have changed for anything...It was a **quantum leap**...Meeting wonderful people, developing networks, keeping my elderly brain working, there are lots of benefits.*

(Belinda, Secondary Hospital)

*Oh, I think the biggest value is that **re-energisation**. I had got to the stage in my career where I was just being a nurse, just coming, well just existing as a nurse, just coming to work, doing my job, going home. It refocused my thinking on nursing and I enjoy it far more than I ever used to, I think any time in my career... So I think that's what the post grad [postgraduate] was, a good board to leap from, but it was more like a trampoline.*

(Jane, Secondary Hospital)

*Well I think for me pretty much, a **quantum leap** really. I think, before I have always been good I think, partly you know because of the time that I have spent in the ED, that you learn by osmosis really from what you see and what you hear and stuff, but until you study it in depth and then more importantly I think until you have to teach it, then that just takes it to a new level. I think it's given me a much greater depth of knowledge on stuff that I had just never ever covered before, never looked at.*

(Joanne, Secondary Hospital)

*Oh, it's **kept me in nursing**... Yeah, it's kept me in nursing and it's given me clinical career paths, even if I have chosen to come off that pathway.*

(Lucy, Tertiary Hospital)

It certainly broadened my horizon quite a lot and opened my eyes to other emergency care...just thinking a bit more broadly.

(Ann, Secondary Hospital)

5.3 THEMATIC ANALYSIS

Two main themes arose from the analysis of the qualitative data (both the telephone interviews and question 79 of the survey questionnaire). These 'mega' themes are identified as 'positive' and 'negative'. They are presented in this chapter with their own sets of sub-themes, which in turn are supported by respondents' own words from the interviews in italic script. The quantitative data has been included within these themes as appropriate. Due to the large quantity of data some of this information will be presented in combined tables.

5.3.1 POSITIVE

Respondents of the telephone interviews were generally very positive about their tertiary-level education journey and willing to share the perceived effects and experiences of this on their practice. Table five lists the positive sub-themes the researcher collated from the data.

TABLE 5: Positive sub-themes (n=8)

Positive Sub-Themes (n=8)	
1	Advanced knowledge
2	Increased leadership
3	Increased academic and research skills
4	Increased confidence/self-esteem
5	Recognition by colleagues and team
6	Knowledge opening up a new world
7	Personal reflection and development
8	Life long learning

5.3.1.1 Advanced knowledge

The respondents interviewed shared their perceived personal growth and development in advanced knowledge; in particular their critical, reflective and independent thinking, questioning ability, decision-making and assessment, research inquiry and holistic nursing care. All participants shared examples of their advanced knowledge, some of which are as follows.

Emily reports her increased knowledge has enabled her to practice at a more advanced level, underpinning her practice with evidence, thinking and reflecting critically, reducing the possibility of risks and implementing activities early. *“Well, if I think about five years ago what I know now, its you know, I’ve hugely developed my knowledge in lots of areas...I wouldn’t have known half the things I know now, or known where to find it, yeah”.*

Lucy shares a similar view; her knowledge is now significantly more advanced, particularly in decision-making. *“In the past I would have perhaps thought there is something wrong with this patient...I don’t have the clinical knowledge to recognise, say for example, like an interpretation of a Blood Gas [Arterial Blood Gas (ABG)],⁶¹ an interpretation of ECGs [Electrocardiograms],⁶² and understand the pathophysiology of what was happening with the patient. She explains that she now has that knowledge to lead a discussion and patient care*

⁶¹ ABG is an arterial blood sample taken to measure the oxygen, carbon dioxide, bicarbonate and acidity (pH) levels in the blood (Newberry, 2003).

⁶² ECG is a test that records the electrical activity of the heart and is recorded in the form of a graph (Newberry, 2003).

plan with her medical colleagues, for example identifying an ABG is required as the patient is being put onto BiPAP⁶³ *“For me it’s that early detection and the confidence to be able to articulate to my medical colleague that there is something happening with this patient, and I have the skills to interpret it”*.

Julie’s advanced knowledge has guided her to *“think about them [patients] more if you like holistically, to figure out what is important for them, that they know [communication] and its not necessarily the things that we [nurses] perhaps think are most important”*. She feels she is more likely to successfully facilitate their journey through the health care experience because of her added independent thinking, clinical competence, assessment knowledge and skills, quality improvement awareness, improved communication with professional colleagues, collectively *“a beneficial approach on making sure that the patient’s journey is as seamless and needs based as possible”*. Crystal’s nursing care follows a holistic model with an importance on communication with the patient,

I think more critically...I think about the whole person, I think my study really helped me do that, because with nursing if you just go to work, your every day work and you do it and you come home. But for the patients, sometimes it’s a huge event and you forget you know that for them it’s more for them to be scared and frightened and they react in different ways... The things that come out of it were communication, they really wanted people to talk to them and telling them what was going on. It doesn’t have to be anything major or mind-blowing at all, just what was happening, where we’re at and that’s so simple.

Belinda shared an incident of a patient with an overdose who had been in the department for some time, had a Glasgow Coma Scale (GCS)⁶⁴ of eight and had been cleared by a junior doctor for transfer to the ward. Belinda stepped in and changed the plan, *“a GCS of 8, its mandatory intubation...Get the anaesthetist down here and they need to get this lady up to*

⁶³ BiPAP – Bilevel Positive Airway Pressure. A breathing apparatus to help patients get more air and oxygen into their lungs (Meacher, 2005).

⁶⁴ GCS is a neurology assessment scale that aims to give a reliable, objective way of recording the conscious state of a person. The highest score is 15 for a fully conscious person; therefore a score of 8 represents a patient in a coma. This patient would not be opening their eyes, not obeying commands and not responding with understandable words (Centre for Neuro Skills, 2006).

the unit, she is not going to the ward with a GCS of 8". On reflection Belinda said it was thinking critically, being decisive in the decision-making and assessment of the patient and having the advanced knowledge. The patient was intubated in ED and transferred to the ICU.

Joanne shares an event involving a 16-year-old youth who presented feeling a little bit tight in the chest and he felt like his throat was sore. He had been playing sport at school prior to coming into ED. Joanne examined him, palpated up around his neck and felt some surgical emphysema or bubbles of air under the skin, listened to his chest and then reflected on her assessment before going to the doctor and said *"I really think this boys got something going on here, I said I think he's got a pneumothorax"*.⁶⁵ The doctor listened to his chest and palpated it and concluded it was normal and Joanne reported that the doctor said,

I would never have x-rayed this boy in a hundred years, but because you have done the course and because you are strong about it, he said lets just x-ray him and we'll see what we can see and it came back that it has this pneumothorax that extended right up under his neck muscle and he said well there you go, I would never have picked that any day of the week, hats off to you, you picked it.

Sue reported that critical thinking has changed her practice; it has made her think outside the initial area. When a patient arrives with an apparent renal colic she assesses them thoroughly, emotionally and physically. She may pick up other symptoms like unexplained weight loss, whereas previously she would have thought of them as a patient with renal colic, given them pain relief and they will be fine now until the doctor comes.

Whereas now its kind of, could it be a bit more, ask more questions, so it's really, it's recognising that there is more to it than what meets the eye, there could be more going on and think about it, just keep it in the back of your mind and just make sure that you are not missing something, which could be fundamental but just a little bit more discreetly hidden...its just one step ahead, yeah.

⁶⁵ Pneumothorax is the abnormal presence of air between the pleural space (lung and the wall of the chest), resulting in partial or complete collapse of the lung (Newberry, 2003).

The interview data reflected by respondents' perceived effects of their PGS on advanced knowledge correlates with the survey data as detailed in Table six. The majority of responses are reported in the slightly and significantly increased column, with the highest total positive effect⁶⁶ ranging from 59.0 percent up to 92.2 percent. The highest total effect for advanced knowledge described by respondents (92.2%) was for question 37; making care decisions based on research, with the majority of respondents (48.5%) from this group identifying this effect as significant. Other items with a high total positive effect were for question 45, 84.4 percent of respondents reported that PGS has increased their participation in ethical decision making. A similar number of respondents (84.3%) in question 50 reported that PGS has increased their ability to identify research questions. A further six items are reported with a total positive effect ranging between 59.0 percent and 81.4 percent. The 'no effect' column ranged from 5.8 percent up to 41.0 percent. The significantly and slightly decreased effects column ranged from 0.0 percent to 1.0 percent.

⁶⁶ The highest total positive effect is the combination of slightly increased and significantly increased data results.

TABLE 6: Respondents' perceived effects of PGS on advanced knowledge

	n	Significantly decreased n (%)	Slightly decreased n (%)	No effect n (%)	Slightly increased n (%)	Significantly increased n (%)
Question (Q.) 27 Resources for care ⁶⁷	98	1 (1.0)	1 (1.0)	25 (25.5)	49 (50.0)	22 (22.4)
Q. 32 Advocacy skills ⁶⁸	102	1 (1.0)	1 (1.0)	26 (25.5)	38 (37.3)	36 (35.3)
Q. 37 Decisions on research ⁶⁹	103	1 (1.0)	1 (1.0)	6 (5.8)	45 (43.7)	50 (48.5)
Q. 44 Legal implications ⁷⁰	101	0 (0.0)	0 (0.0)	16 (15.8)	42 (41.6)	43 (42.6)
Q. 45 Ethical decision ⁷¹	102	0 (0.0)	1 (1.0)	15 (14.7)	53 (52.0)	33 (32.4)
Q. 46 Ethics/computers ⁷²	100	0 (0.0)	0 (0.0)	41 (41.0)	41 (41.0)	18 (18.0)
Q. 50 Research questions ⁷³	102	1 (1.0)	1 (1.0)	14 (13.7)	55 (53.9)	31 (30.4)
Q. 52 Evaluation of care delivered	102	0 (0.0)	1 (1.0)	18 (17.6)	50 (49.0)	33 (32.4)
Q. 59 Decision making ⁷⁴	99	0 (0.0)	0 (0.0)	24 (24.2)	50 (50.5)	25 (25.3)

5.3.1.2 Increased leadership

The interviewed participants reported examples of increased leadership knowledge, skills and vision in varying degrees. These included patient advocacy, autonomy, initiating change,

⁶⁷ Q. 27, Ensuring resources required for care are present.

⁶⁸ Q. 32, Enhancing the quality of your patient advocacy skills.

⁶⁹ Q. 37, Making care decisions based on research.

⁷⁰ Q. 44, The awareness of the legal implications of practice.

⁷¹ Q. 45, The participation in ethical decision making.

⁷² Q. 46, The awareness of ethical implications of computer use.

⁷³ Q. 50, The identification of research questions.

⁷⁴ Q. 59, The capacity to support patients in decision making process.

collaboration, clinical governance and quality improvement along with establishing clinical pathways for patients. Joanne feels as nurses “*we spend more time with the patient... we are able to elicit stuff [information]*”, advocate and articulate patient needs better, “*speed things up you know*” working in collaboration with the doctor and patient.

Emily shared her experience as being part of a team successfully initiating change throughout the organization. Her Master’s research project resulted in a quality initiative being introduced in the ED.⁷⁵ Following the success of this initiative, a hospital wide steering group was formed and this project was introduced throughout the hospital. It was Emily’s vision, research and knowledge that guided this group; “*We’re doing a pilot at the moment so you know it has a direct result from what I have been doing. So that’s quite exciting*”.

Julie chose to study a patient population with soft tissue infections for a year. She identified, *...gaps in our service that I could action and also sort of see a place where nurses could actually be far more involved in the management of those patients, with no detriment to their clinical outcome and probably lots of other pluses in terms of patient flow and satisfaction and information that was given to people ..., inter-agency liaison*

Lucy reflected on a situation in ED when the nursing staff commenced early thrombolytic treatment⁷⁶ for patients with acute myocardial infarctions as part of a drug trial. The “*organisation has been involved in a lot of international clinical trials;*” most of these having been undertaken by their “*coronary care nurse colleagues*”. However when it came to ED, the nurses investigating the study proposed learned that their organisation was receiving money for their contribution, so “*put a case forward*” for “*a percentage of funding*”. They were successful and now receive a percentage of the funding towards their education fund. Previously “*we would never have perhaps realised and we wouldn’t have had the confidence to ask for it*” and lead such a process.

⁷⁵ The researcher is unable to identify the specific project as the participant may be identified.

⁷⁶ Medication used to dissolve pathologic thrombus or blood clot.

Sue was enthusiastic about the nurse-led activities in her work place. Nurse-led critical pathways⁷⁷ have been introduced over recent years following nurses' postgraduate study projects. Nurses are required to successfully complete an education and assessment process prior to commencing nurse-led pathways. Nurse-led critical pathways have "*given me the confidence to go out there and see patients and be ready to discharge patients, whereas before I would want to just pass everything onto a doctor... Whereas now we have got these guidelines, he [the patient] fulfils the Ottawa Ankle Rules,⁷⁸ he's ok to go home*" and Sue is confident discharging the patient with advice and follow-up information as necessary or initiating an x-ray for them. "*Whereas before I just didn't have that confidence and not only am I doing that but I am encouraging others to do that*". Critical Pathways, "*these are researched based clinical paths*" for nurses. Sue described how nurses initiate medication and administer pain relief earlier, reducing the patient's anxiety and pain levels, therefore focusing on the patient's care, whereas previously patients would have to wait to see the doctor first. Others include taking blood samples from patients. Sue can initiate about 13 different blood tests for patients presenting with particular symptoms. If these pathways are followed then the patient spends less time waiting and the patient flow is more efficient. For example the abdominal pain pathway,

Here you are doing the appropriate bloods right from the word go, rather than doing the basic bloods and the doctor saying mmmm it could be liver based, lets send them to the surgeons. So the surgeons can request these bloods, so they [patient] have to wait another two hours for their blood results to come back. If we do them [appropriate blood tests] right from the word go, the doctor can say to the surgeons this gentleman has got... he's got this, this and this and its just saved the patient two hours on a hard trolley in the ED which has got to be better for the patients.

⁷⁷ Clinical/Critical pathways in ED are multidisciplinary guides that assist clinicians to manage patients on the basis of symptomology. These patients are often unstable, undiagnosed and require assessments and investigations before a diagnosis is able to be made and or specific treatment may commence (Salter, 2005).

⁷⁸ A set of rules to aid in deciding if a patient with an ankle or foot injury requires an x-ray (Ottawa Health Research Institute, 1994).

Crystal reports how she likes to understand everything that she is doing. Tertiary-level education,

Its helped me think it out you know and if you don't know the answer you find it out and it just makes the whole lot so much more interesting. You can tell the patients, you know, yeah and it's also like more of an advocate with the patients I think because I don't always believe everything I am told any more.

The quantitative data reported by respondents from the perceived effects of their PGS on increased leadership concurs with the qualitative data and gives it additional breadth. Table seven demonstrates that the majority of responses are reported in the slightly and significantly increased column, with the highest total positive effect ranging from 42.2 percent to 89.3 percent. The 'no effect' column ranged from 10.8 percent up to a high 54.9 percent. The significantly and slightly decreased effects column ranged from 0.0 percent to 3.1 percent.

TABLE 7: Respondents' perceived effects of PGS on increased leadership

	n	Significantly decreased n (%)	Slightly decreased n (%)	No effect n (%)	Slightly increased n (%)	Significantly increased n (%)
Q. 28 Barriers ⁷⁹	99	0 (0.0)	1 (1.0)	18 (18.2)	46 (46.5)	34 (34.3)
Q. 29 Standards ⁸⁰	97	0 (0.0)	1 (1.0)	18 (18.6)	45 (46.4)	33 (34.0)
Q. 30 Allocations ⁸¹	97	1 (1.0)	1 (1.0)	41 (42.3)	34 (35.1)	20 (20.6)
Q. 31 Stress/colleagues ⁸²	101	1 (1.0)	1 (1.0)	33 (32.7)	47 (46.5)	19 (18.8)
Q. 33 Autonomy ⁸³	102	1 (1.0)	0 (0.0)	20 (19.6)	40 (39.2)	41 (40.2)
Q. 36 Goals ⁸⁴	100	1 (1.0)	1 (1.0)	23 (23.0)	53 (53.0)	22 (22.0)
Q. 40 Learning needs ⁸⁵	98	0 (0.0)	3 (3.1)	17 (17.3)	51 (52.0)	27 (27.6)
Q. 41 Clinical skills ⁸⁶	97	0 (0.0)	1 (1.0)	13 (13.4)	57 (58.8)	26 (26.8)
Q. 42 Staff development ⁸⁷	98	0 (0.0)	2 (2.0)	19 (19.4)	45 (45.9)	32 (32.7)
Q. 47 Quality assurance ⁸⁸	100	1 (1.0)	0 (0.0)	21 (21.0)	56 (56.0)	22 (22.0)
Q. 49 Time management ⁸⁹	102	1 (1.0)	2 (2.0)	56 (54.9)	27 (26.5)	16 (15.7)
Q. 51 Standards ⁹⁰	100	0 (0.0)	0 (0.0)	21 (21.0)	52 (52.0)	27 (27.0)

⁷⁹ Q. 28, The identification of barriers to staff performance.

⁸⁰ Q. 29, The development of standards for staff performance.

⁸¹ Q. 30, Making effective patient – staff allocations.

⁸² Q. 31, Sensitivity to work-load stress on colleagues.

⁸³ Q. 33, Increasing the degree of autonomy in your work.

⁸⁴ Q. 36, Assisting staff to set goals in relation to patient care.

⁸⁵ Q. 40, Assisting clinical staff to identify and meet their learning needs.

⁸⁶ Q. 41, Assisting staff to develop clinical skills.

⁸⁷ Q. 42, Providing opportunities for staff development.

⁸⁸ Q. 47, The participation in quality assurance activities.

⁸⁹ Q. 49, Utilizing time management skills.

⁹⁰ Q. 51, The development of standards for quality patient care.

	n	Significantly decreased n (%)	Slightly decreased n (%)	No effect n (%)	Slightly increased n (%)	Significantly increased n (%)
Q. 55 Motivating staff	99	0 (0.0)	1 (1.0)	23 (23.2)	55 (55.6)	20 (20.2)
Q. 56 Morale of staff ⁹¹	99	0 (0.0)	2 (2.0)	35 (35.4)	40 (40.4)	22 (22.2)
Q. 58 Decision making ⁹²	99	0 (0.0)	1 (1.0)	15 (15.2)	58 (58.6)	25 (25.3)
Q. 61 Role model ⁹³	102	0 (0.0)	0 (0.0)	11 (10.8)	53 (52.0)	38 (37.3)
Q. 62 Change agent ⁹⁴	101	0 (0.0)	0 (0.0)	13 (12.9)	47 (46.5)	41 (40.6)

5.3.1.3 Increased academic and research skills

All interviewed respondents expressed their increased confidence and improved ability to access information for themselves through the different electronic databases; to read, interpret and evaluate the research, apply evidence-based practice through scholarship, reflection on nursing practice and a willingness to share this knowledge and assist and support other nurses. Sue reported: *“When somebody asks a question I can’t answer, it doesn’t bother me to say oh I don’t know and its not even a case of go and ask so and so, he will know all about it, its go look it up and lets find out together”*.

Crystal noted that academia was all new to her however: *“yeah I could go on for ever”* she was absorbed and stimulated by all the new learning *“that’s broadened my knowledge...there’s a huge network out there if you are prepared to look for it yeah”*. She now assists other nurses with their assignments and academic writing. Nancy reported, *“I know where to find evidence based materials to actually substantiate my argument”*.

⁹¹ Q. 56, Enhancing the morale of staff.

⁹² Q. 58, The capacity to support staff in decision making process.

⁹³ Q. 61, Acting as a role model.

⁹⁴ Q. 62, Acting as a change agent.

Lucy reported,

If we want to bring a new practice out, then I have the skills to go away and look at how to do the research, how to look at what practice is being proposed, to review the literature and be able to articulate verbally or in writing whether I agree or don't agree with the change.

Lucy perceives she has an increased ability to research widely, read and understand the various papers “*write it up...and back it up with evidence*”. She described a recent experience with a Health and Disability Commissioner case where this knowledge was invaluable. Anne acknowledges her increased academic and research skills “*being able to read government documents instead of having someone tell you*”.

The above qualitative data on increased academic and research skills is supported by the quantitative data in terms of the potential of computers within nursing; the value of evidence-based-practice; academic and research writing, projects and presentations.

Of the 101 respondents answering question 26, the majority of respondents (69.3%) identified that PGS had increased their recognition of the potential of computers to support their nursing practice either slightly (39.6%) or significantly (29.7%). Less than one third of respondents (29.7%) reported that PGS had no effect on the potential of computers to support their nursing practice (Figure 3).

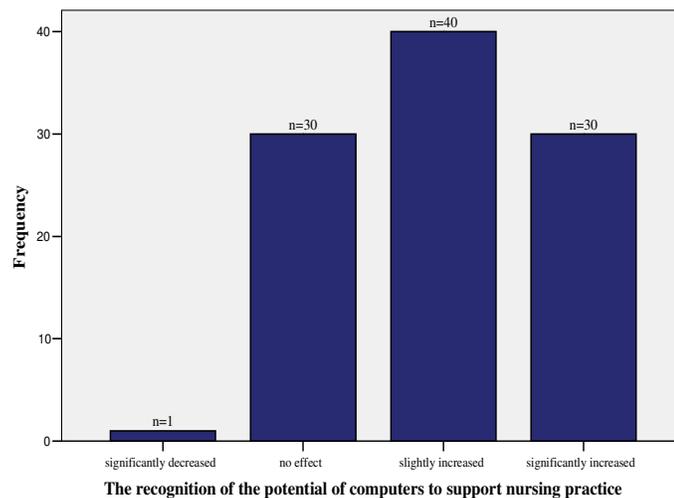


FIGURE 3: The recognition of the potential of computers to support nursing practice (n=101)

Question 68 asks about the perception of the value of basing practice on research findings (n=104) and found that an overwhelming majority of respondents (83.7%) reported that PGS had increased their perception of the value of basing practice on research findings (Figure 4).

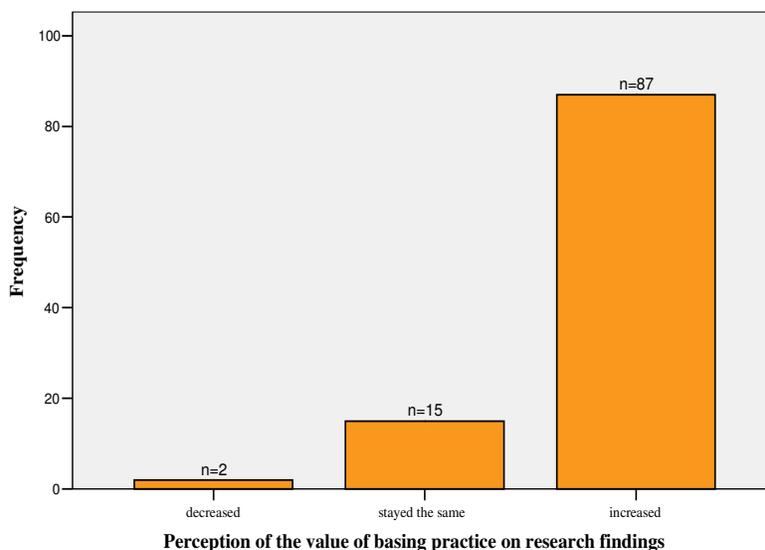


FIGURE 4: Perception of the value of basing practice on research findings (n=104)

Table eight shows that in question 65 just over half of the respondents (53.8%) have participated in research projects for the first time (25.0%). Question 66 reports; of the 104 respondents answering this question, just under one third of respondents (32.7%) have initiated a research project following PGS.

TABLE 8: Academic and research skills

	n	Yes, for the first time n (%)	Yes, but have done so before n (%)	No, never have n (%)	No, but have done so before n (%)
Q. 63 Submitted any professional writing (books/journals) for publication?	104	16 (15.4)	12 (11.5)	63 (60.6)	13 (12.5)
Q. 64 Given a conference paper?	104	17 (16.3)	13 (12.5)	66 (63.5)	8 (7.7)

	n	Yes, for the first time n (%)	Yes, but have done so before n (%)	No, never have n (%)	No, but have done so before n (%)
Q. 65 Participated in any research project?	104	26 (25.0)	30 (28.8)	38 (36.5)	10 (9.6)
	n	Yes n (%)	No n (%)		
Q. 66 Have you initiated any research project?	104	34 (32.7)	70 (67.3)		

5.3.1.4 Increased confidence/self-esteem

The interview respondents acknowledged that their confidence had developed with postgraduate education in many different ways. Emily described this as broadening her horizons and developing a bigger picture of the health context. Rather than seeing it through individuals, she was now looking beyond to the community that ED nurses serve. Ann's view is similar; she now opens her *"eyes a wee bit more to the bigger picture"*. She describes how she is more vocal, more political and actually speaks up publicly now, when previously she wouldn't have. Crystal says she is much more confident now, study has: *"opened my mind to looking at every possible scenario"*.

Julie reported having a greater understanding of the language [of academia]. This has been a real advantage, not only the words but also the way in which she presents herself, *"...greater understanding of the language and it's very easy to talk to people when you are familiar with each others language"* and gaining greater collaboration. She has been able to focus her thinking in a more professional, disciplined and logical way; *"I can use the language so I can express clearly what I need to express and I can receive the information as well"*. Julie feels more confident in knowing a structured formatted approach when presenting information both written and verbal.

Lucy describes how with a recent restructure she now had the confidence to go and speak on committees, sometimes she would be the only nurse and postgraduate education has given her the verbal skills to know how to articulate verbally and in writing submissions with success: *"It has given me that format and framework to know how to write a submission and to be confident in what I am writing."*

Nancy agrees that the course has given her confidence particularly when handing over a patient's case to the doctor; *"I am far more confident in actually presenting the case for the patient to the doctor"*. She perceives that it has made a difference to the patient outcomes; her confidence has also grown when building an argument particularly relating to resources.

Julie describes that: *"post grad [postgraduate] education has given me new knowledge, but also confidence, cos I feel now that there is more depth to my opinions and my ability to put forward ideas in order to progress issues and things"*.

Jane describes how she was working permanent night shift when she started higher education *"keeping very much to myself and out of politics and that has changed somewhat"*. Her confidence has grown; she now holds a significant management role and chairs a community owned trust and: *"I am giving far more back"*. She now sees the bigger picture, not only responsible for the health care within the facility she works for, but the wider community and influencing health and socio-economic policy.

The quantitative data reflected by nurses' perceived effects of their PGS on confidence is very similar to the qualitative findings.

In question four, the effect of PGS on nurses' self-esteem (n=105), an overwhelming majority of respondents (86.7%) described a positive effect on their self-esteem (Figure 5). Age group descriptive data reported that respondents in the 31-40 year age group reported the only negative results and respondents in the 51-60 year age group reported only positive results.

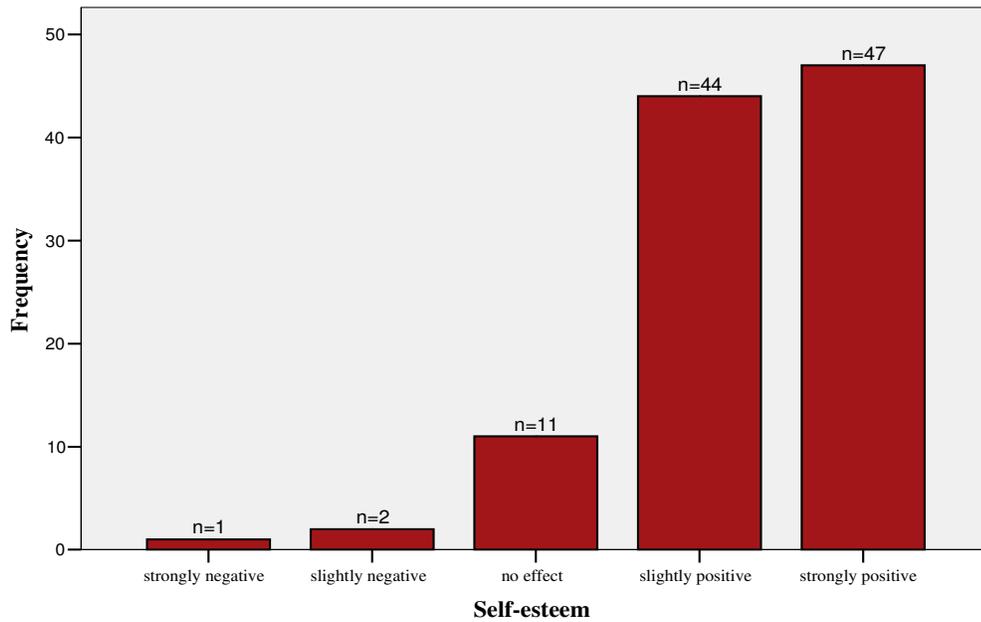


FIGURE 5: The effect of PGS on self-esteem (n=105)

Table nine details the frequency with which respondents perceived PGS has impacted on their confidence and self-esteem. Just over three quarters of the respondents (78.0%) answering question 35 reported that PGS has increased their confidence to perform effectively in group situations such as team conferences. An overwhelming majority of respondents (85.3%) in question 48 identified that PGS has increased their confidence to question care decisions of their colleagues including doctors. The majority of respondents (79.6%) in question 53 reported that PGS has increased their confidence to convey information either written or verbal.

TABLE 9: Respondents' perceived effects of PGS on increased confidence/self-esteem

		Significantly decreased	Slightly decreased	No effect	Slightly increased	Significantly increase
	n	n (%)	n (%)	n (%)	n (%)	n (%)
Q. 35						
Performing effectively in group situations such as team conferences	100	1 (1.0)	0 (0.0)	21 (21.0)	40 (40.0)	38 (38.0)

	n	Significantly decreased n (%)	Slightly decreased n (%)	No effect n (%)	Slightly increased n (%)	Significantly increase n (%)
Q. 48 Questioning care decisions made by other colleagues including doctors	102	0 (0.0)	1 (1.0)	14 (13.7)	44 (43.1)	43 (42.2)
Q. 53 Conveying information, written and verbal	103	0 (0.0)	0 (0.0)	21 (20.4)	47 (45.6)	35 (34.0)

5.3.1.5 Recognition by colleagues and team

The interview respondents perceived that they had gained greater recognition by colleagues and other team members, as a result of PGS. Crystal reported that she understands the medical language now: *“I feel like I can really talk to the doctors, kind of on their level and discuss things in more depth, which is great, and they will ask my opinion and things like that”*.

Julie discussed how the knowledge and skills learned from postgraduate education helped build her professional relationships resulting in more professional conversations,

Yeah, more considered but also professional medical conversation has a structure and I guess that’s been presented to me, and I now understand the structure and therefore when I have a conversation I feel I have more credibility somehow.

Lucy reports, *“Using that language, they [doctors] are going to be able to understand”* which has assisted in gaining medical recognition. She perceives that peers and other nursing staff recognise that she has *“the clinical acumen and academic ability to challenge them and motivate them”*.

Joanne is animated in her thoughts. Prior to postgraduate education when discussing a patient’s case she would give her personal opinion, however, she discovered that medical staff were not overly enthusiastic about: *“being plagued by mere nurses”*. She now supports her discussion with knowledge, research and evidence; *“and I get much more openness to what I am saying and a little more respect”*. She believes her depth of knowledge, understanding and thought processes have assisted her in describing patient information in a format recognised by her medical colleagues, *“pitch it to the same level then you know you*

get the eyebrows going up and they take far more recognition of that”. She feels that medical staff are recognising that some nurses are advancing to a different level and: “are no longer there just to stick bandages and plasters on people [patients]”.

Sue acknowledges that as a result of postgraduate education, recognition from a wide range of staff has been greater,

...recognition by others, my colleagues, senior staff, peers, junior staff, they started to ask me questions and not only are they asking questions, but I am answering their questions and that’s given me an emotional boost to carry on studying, its really worthwhile.

Nancy has received positive recognition and feedback from junior doctors while working on night shift “I am glad that you were on”, or “thank you so much you know, it was really helpful”. She acknowledges her advancing knowledge, which guides the junior doctors while working with limited resources at night.

Again the above qualitative data on the recognition by colleagues and the team concurs with the quantitative data. The majority of respondents (61.6%) either agreed (48.1%) or strongly agreed (13.5%) that PGS had assisted them to gain recognition from others. There were a total of 104 respondents who answered question two (Figure 6).

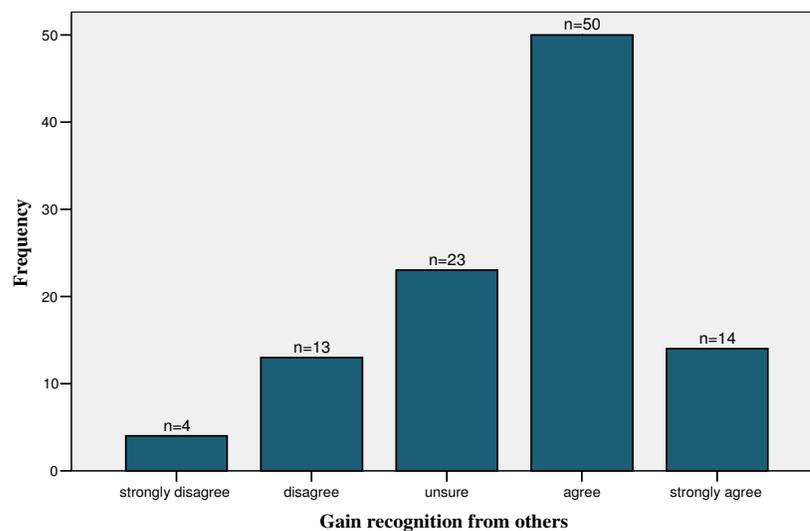


FIGURE 6: PGS have assisted respondents to gain recognition from others (n=104)

5.3.1.6 Knowledge opening up a whole new world

Crystal said that postgraduate education had “*extended her knowledge beyond belief*”. She went from a hospital training qualification to Master’s level “*which was huge*”. She has enjoyed developing her knowledge “*the stimulation just keeps going. So yeah, I had to do something cos I was bored really*”. She has completed several different papers, with some areas linking with others and all connecting to improve and deepen her knowledge. Now when she reads an article she knows something about it “*its not like starting from scratch, it sort of builds layers*”. Jane reported that her increased knowledge on philosophy and theory had given her greater ability to work with people. She is now more open-minded about how people think, “*It’s opened up a whole new world to me*”, and she has a greater understanding of the impact of her care on patients.

Emily notes that her knowledge “*has built up over time*” and with each new paper it develops further. The pharmacology paper developed her knowledge in pharmacodynamics⁹⁵ and pharmacokinetics⁹⁶ and as she linked this into her clinical practice she was inspired to learn more. “*So I am linking my knowledge and taking it to a completely different level, doing that sort of thing*”. Ann reports that she has enjoyed the clinical papers like pharmacology as “*it related to my everyday practice*” and improved patient care. Joanne’s knowledge development has taken a “*quantum leap*” and with teaching she has taken it to a different level. Emily reported that PGS has “*given me opportunities to extend my knowledge...taking on more senior roles*” with mentoring nurses and teaching within her workplace and nationally.

Julie appreciated the opportunity to focus on a specific field of emergency nursing knowledge, a real focus for a whole year “*enabling me to drill down and look at things in depth and then build up again*”. She reflects on this body of knowledge “*it enabled me to be more rounded in my thinking... an added depth... my postgraduate years have taught me to need to know further down, ask those other questions...the picture evolves*”.

⁹⁵ Pharmacodynamics is the detailed study of how drugs act (Page, Curtis, Sutter, Walker, & Hoffman, 1997).

⁹⁶ Pharmacokinetics is the study of how the body absorbs, distributes, metabolises and excretes drugs (Page, Curtis, Sutter, Walker, & Hoffman, 1997).

Sue sums it up by saying,

The increased knowledge base and not just the knowledge base but the knowledge that I have this knowledge...validates what I do and gives me the confidence...and willingness to go further and take it further and encourage other people to go further with their education. It's something that everybody really needs to get on with and go for.

The quantitative data on knowledge opening up a whole new world has a concurrence with the qualitative data through the education and mentoring of nurses and increased relationships with patients.

Figure seven demonstrates the highest increased effect overall from PGS was reported by an overwhelming majority of respondents (93.1%) for teaching colleagues (Question 39).

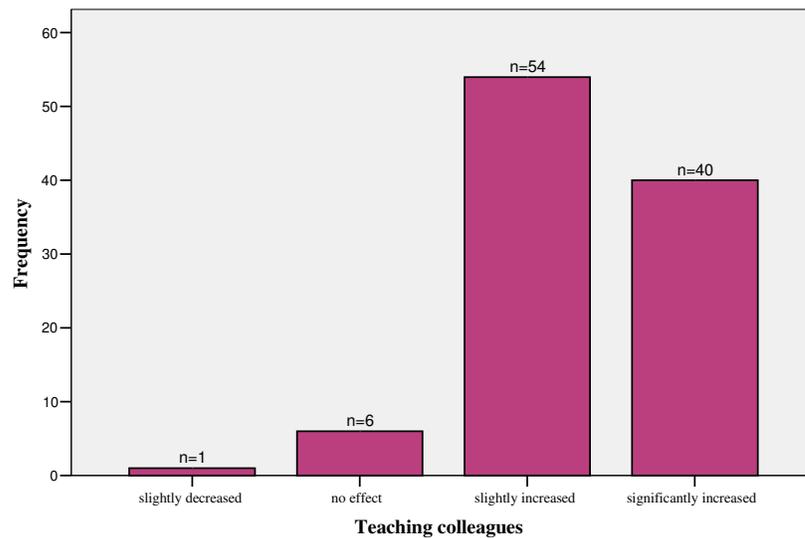


FIGURE 7: The impact of PGS on teaching colleagues (n=101)

Additional data linking with teaching colleagues from section D of the survey questionnaire included question 69, mentoring others (n=104), just over two thirds of respondents (n=69, 66.3%) described an increase in mentoring others. Just under one third of respondents (n=31, 29.8%) reported that mentoring others stayed the same, with a very small number of

respondents (n=4, 3.8%) identifying this activity as decreased. Ninety-two respondents answered question 70, which asked how many nurses would they have mentored since commencing PGS. Respondents reported an average of 12 nurses being mentored by respondents (11.4%).

Table ten details the quantitative data with the respondents' views on increased knowledge opening up a new world with the patient and their family.

TABLE 10: Respondents' perceived effects of PGS on knowledge opening up a new world

	n	Significantly decreased n (%)	Slightly decreased n (%)	No effect n (%)	Slightly increased n (%)	Significantly increased n (%)
Q. 34 Increasing your professional competence in relation to patient care	103	0 (0.0)	1 (1.0)	13 (12.6)	45 (43.7)	44 (42.7)
Q. 38 Teaching patients	102	1 (1.0)	0 (0.0)	27 (26.5)	43 (42.2)	31 (30.4)
Q. 43 The recognition of the relationship between care and outcomes	101	0 (0.0)	0 (0.0)	24 (23.8)	54 (53.5)	23 (22.8)
Q. 54 The communication with patients and family	100	0 (0.0)	1 (1.0)	40 (40.0)	35 (35.0)	24 (24.0)
Q. 57 Enhancing the moral of patients	100	0 (0.0)	0 (0.0)	44 (44.0)	41 (41.0)	15 (15.0)
Q. 60 Motivating patients	99	0 (0.0)	0 (0.0)	47 (47.5)	37 (37.4)	15 (15.2)

5.3.1.7 Personal reflection and development

Personal reflection and development was evident with all the interviewed participants.

Joanne reflects on her postgraduate education journey,

I think it's been a huge impact on what I do and how I do it ... I think probably there were things that I missed and purely because of lack of knowledge in the past, whereas now I think I am much more able to explain to the patient, you know, the various processes going on biologically and the synthesis of systems

and application of research, being able to quote publications and dates when talking to registrars and consultants, whereas before I tended to have a very good overview but not necessarily a tremendous depth of relevant knowledge.

Crystal reflects on her personal development,

So, I've sort of grown personally a lot...It was the best thing I have done really, I think for me anyway...actually it blows me away that I have done it [Masters Degree]. I just kept going you know, I just sort of think of the next paper and then go like that and that's how I have done it. I didn't have a master plan at the beginning to say right I'm going to finish this, I just got up and thought right I'll get my post grad and that will be that, but I just kept on going.

Ann reflects on her own practice a lot more and observes how others are practising, then reflects on how she can improve her own practice. *"I am very aware of what can go wrong and yeah, cause you always want to try to provide better practice to your patients...I would certainly say that postgraduate study has helped me to provide better care of the patients".* Sue expresses *"its made a big impact on me"* and Nancy reflects *"I am pleased I have done it, it has helped me in other areas outside work, so I think from that point of view I think, it had a positive affect"*. Jane describes it as *"Oh its made life much harder"* [Laughter]. She feels she is much harder on herself because she has developed her own philosophies and higher standards *"It has made it harder but it's made it much more worth while... it's just been a real fun journey, it's had its moments"*.

Lucy perceives the skills and knowledge she gained from PGS helped her prepare for an interview for a nursing management position, particularly in terms of quality improvement, research and evidence, academic writing and a wider vision. *"Having postgraduate study fully assisted me to get that position"*. Belinda describes her clinical practice as being validated by postgraduate study and academically she learnt how to undertake and research a project. *"I realised that it was achievable to be able to study at postgraduate level and to know that it was achievable to go all the way to complete a thesis"*.

Emily was ecstatic during the interview, as she had just received word that she had passed [Masters Degree],

So at the moment I am probably pretty chuffed with myself...it's a sense of achievement. I did comprehensive nursing 20 odd years ago, so I didn't have a degree. It's a big step on the academic side of things, I feel quite pleased about that and it certainly gives you some kudos around the place.

Julie could see advanced nurse practice roles developing, so developed a plan for her academic study, aiming to be in a position where she could choose her direction. She reflects,

That to get to the end of the year and I am still here [lots of laughter] that I have passed. You know we all get to the point and sometimes you think, oh I just can't do this. Then when it all sort of adds up and so there's definitely, absolute personal satisfaction that I am able to succeed and succeed pretty well at that level of scholarly stuff. I mean that was a big boost, because before I did this like I hadn't done my degree...You are building on your knowledge, I have been nursing for 30 years and there is still stuff out there to learn and you can learn it and it can make a difference and its that feeling like you are still getting better, you are progressing and moving forward.

Question 79 (the general comment question on the survey tool) respondents' reflections include,

I have found that postgraduate study has not only improved my assessment, ...skills but also enhanced relationships between colleagues & patient.

For me postgraduate education was a positive experience, which gave me great insight into nursing/health care.

Postgraduate study created an opportunity to network with nursing colleagues, which was invaluable for sharing ideas and resources for my emergency nursing roles. This certainly improved my self-confidence to challenge practice.

Julie reflected on her choice to move away from her hometown for her study and the benefits of networking,

I think that that has actually been an advantage in that sense because I have met people from places where I would never have met before, whereas if you did it closer to home you would probably tend to see the same people that you see

everyday. And it's nice to get away from your own environment for a while...and be a student. Whereas when you are in your own environment you are still the wife and mother and the worker, so I think that's been an advantage.

The quantitative data on personal reflection and development concurred with the qualitative data in areas of career, goals and future. This is reflected in the following results. Question one, the effects PGS has on nurses' careers and their future is shown in Figure eight.

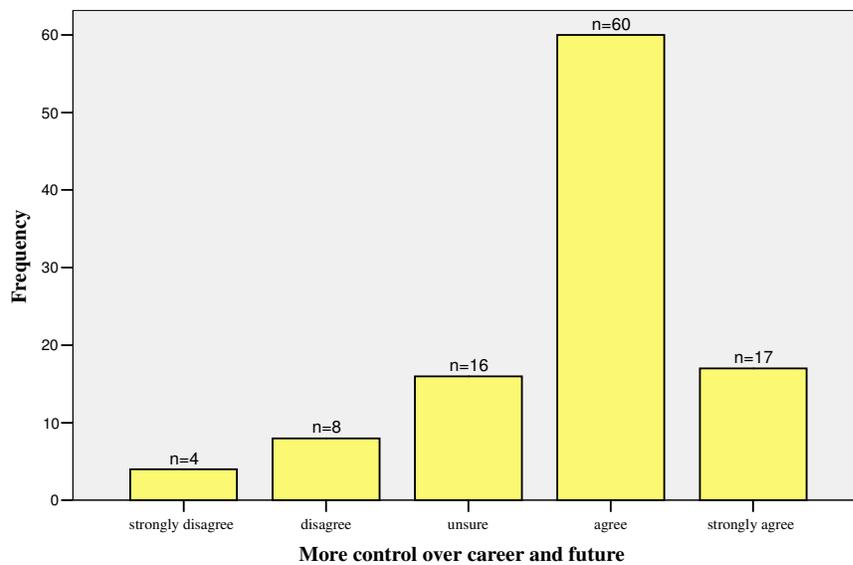


FIGURE 8: PGS giving more control over career and future? (n=105)

Table 11 details respondents' reflection on their work role and job satisfaction.

TABLE 11: Respondents' reflection on work role and job satisfaction

	n	Strongly negative n (%)	Slightly negative n (%)	No effect n (%)	Slightly positive n (%)	Significantly positive n (%)
Q. 5 Ability to carry out your current work role	104	2 (1.9)	1 (1.0)	16 (15.4)	39 (37.5)	46 (44.2)
Q. 6 Job satisfaction	104	0 (0.0)	4 (3.8)	29 (27.9)	45 (43.3)	26 (25.0)

Question seven asks if nurse’s career goals have changed since completing their PGS. All 105 respondents answered this question, with just over three quarters of respondents (77.1%) identifying that PGS has changed their career goals (Table 12).

TABLE 12: Respondents’ change in career goals since completing PGS (n=105)

	n	Not at all	Slightly	Moderately	Quite a bit	A great deal
		n (%)	n (%)	n (%)	n (%)	n (%)
Q. 7 Have your career goals changed since you completed your PGS?	105	24 (22.9)	17 (16.2)	29 (27.6)	25 (23.8)	10 (9.5)

Respondents were asked in question eight to select one statement, which best describes the way their goals have changed. Of the 80 respondents answering this question, the majority of respondents (46.3%) reported that PGS has assisted in developing their professional nursing role (Figure 9).

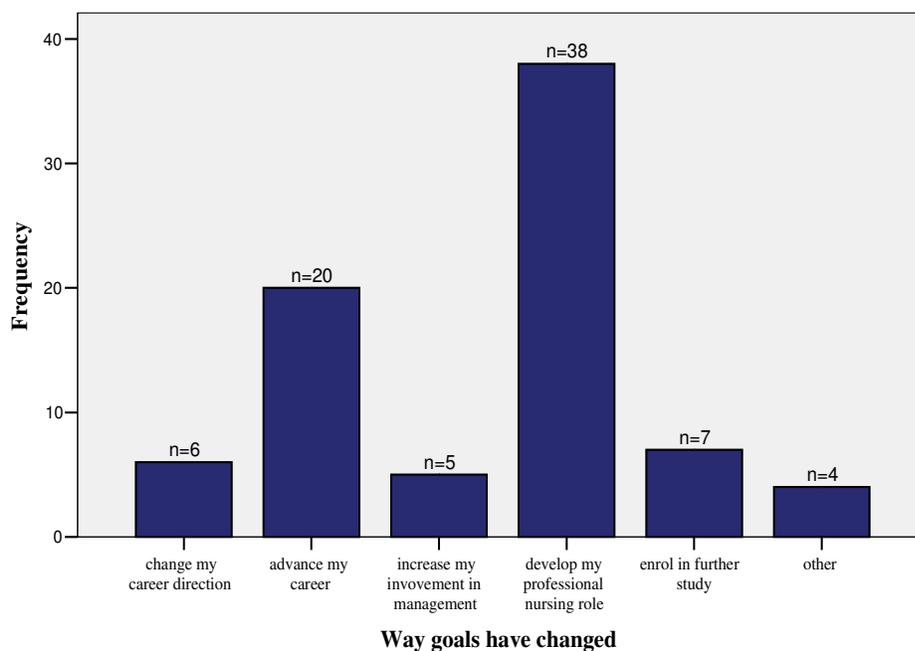


FIGURE 9: Respondents’ description of the way their goals have changed (n=80)

Figure 10 demonstrates the number of respondents and their perceived plans over the next five or ten years or more (Q. 9 & 10).

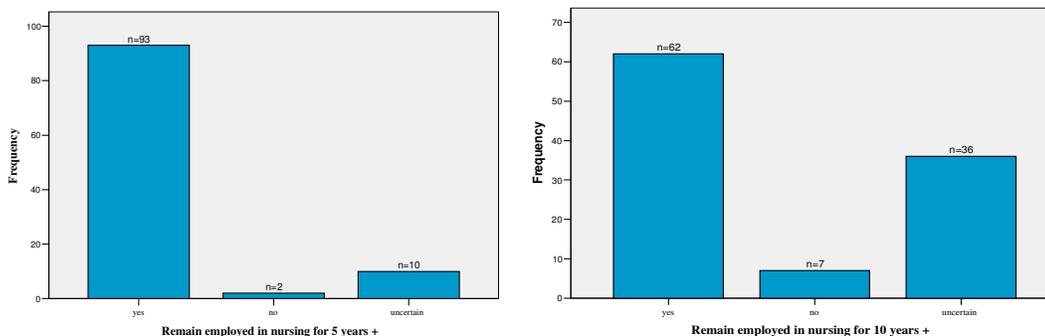
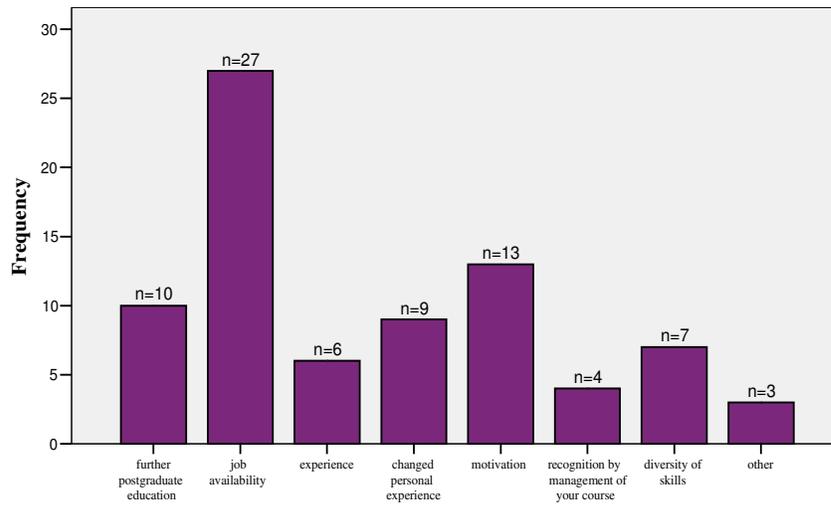


FIGURE 10: Comparisons of nurses intending to remain employed in nursing (n=105)

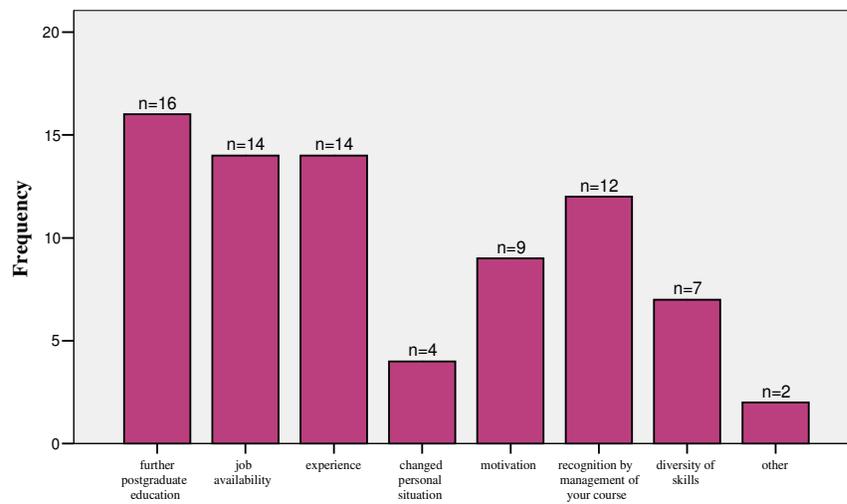
Question 11 asks respondents to select two choices representing what they think would facilitate their career advancement and rank them one and two. Figure 11 details that from the 79 respondents;⁹⁷ just over one third of respondents (34.2%) reported job availability would be their first choice in facilitating their career advancement. Figure 12 shows that from the 78 respondents, a variety of answers were selected for their second choice. The largest number, just over one fifth of respondents (20.5%) reported that further PGS would facilitate their career advancement. Question 11 along with question 12 (p. 99) were misunderstood by approximately 24 percent of the respondents. These respondents did not rank their answers as requested.

⁹⁷ Question 11 and 12 involved two parts to accurately answer these two questions. An average of 75.5 percent of respondents followed the instructions and successfully answered both questions.



Facilitate career advancement 1st choice

FIGURE 11: Respondents' first choice of what would facilitate their career advancement (n=79)



Facilitate career advancement 2nd choice

FIGURE 12: Respondents' second choice of what would facilitate their career advancement (n=79)

Respondents were asked in question 12, what did they think were the main barriers to their career advancement and to rank their answers one (Figure 13) and two (Figure 14).

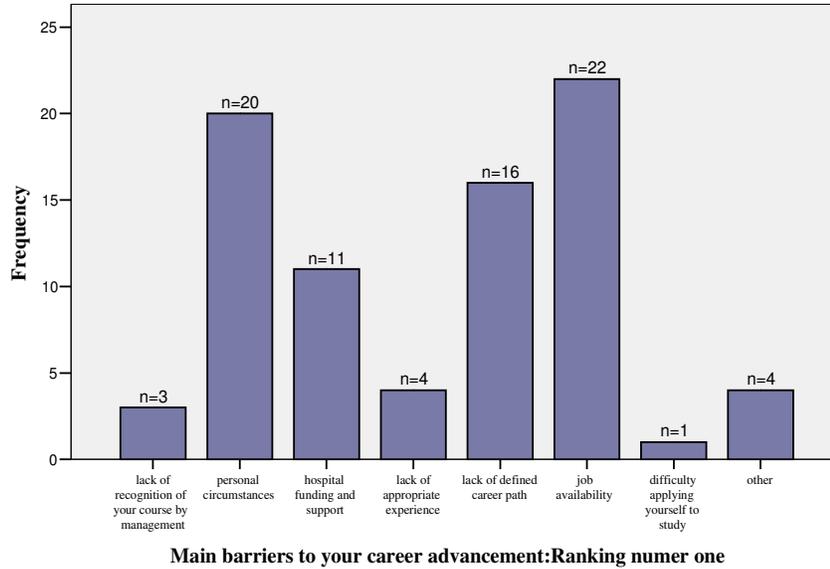


FIGURE 13: Respondents’ number one ranking in what they perceive as the main barrier to their career advancement (n=81)

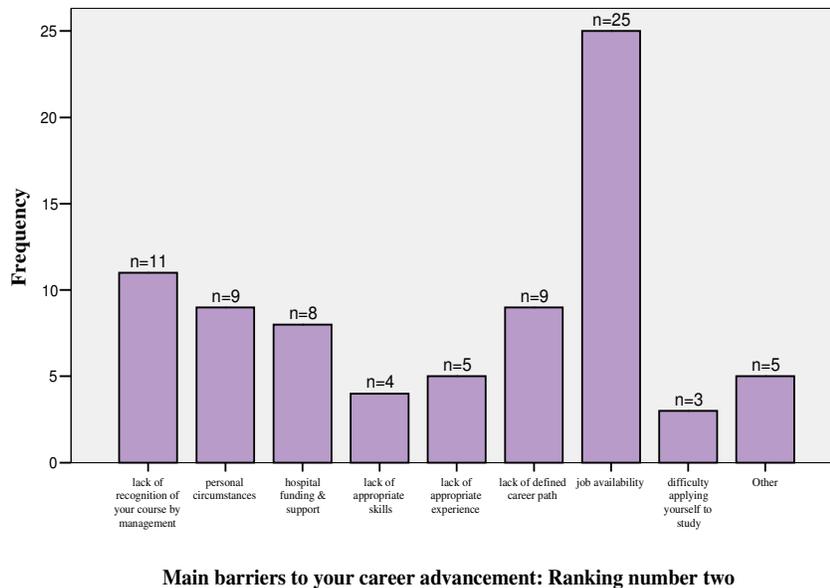


FIGURE 14: Respondents’ number two ranking in what they perceive as the main barrier to their career advancement (n=79)

This section relates to respondents who are in a different work position now following PGS. Question 16 asks respondents to report on what position they now hold. Almost half of the total respondents (48.6%) completing this survey questionnaire have changed jobs following PGS and now hold a new position (Figure 15).

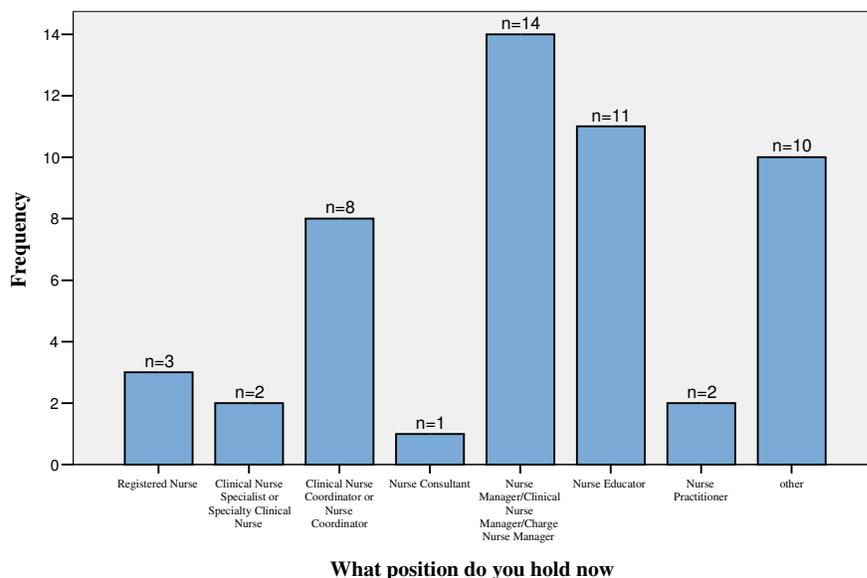


FIGURE 15: New positions following PGS (n=51) ⁹⁸

Questions 17-19 ask respondents in these new positions which areas they now work in, how this move is seen within their organization and the effect on their salary.

Almost three quarters of respondents (71.4%) reported that they work in education, management or clinical areas, most of the time (Question 17). One respondent working in education did not identify their gender. Only female respondents reported working in joint positions of management and education or management and clinical (Figure 16). Question 17 was re formatted following data collection, to reflect the respondents responses of combined positions documented in the ‘other’ column.

⁹⁸ Nurse titles have been updated from the survey questionnaire to reflect the new designated senior nurses / midwives job titles (New Zealand Nurses Organization, 2007).

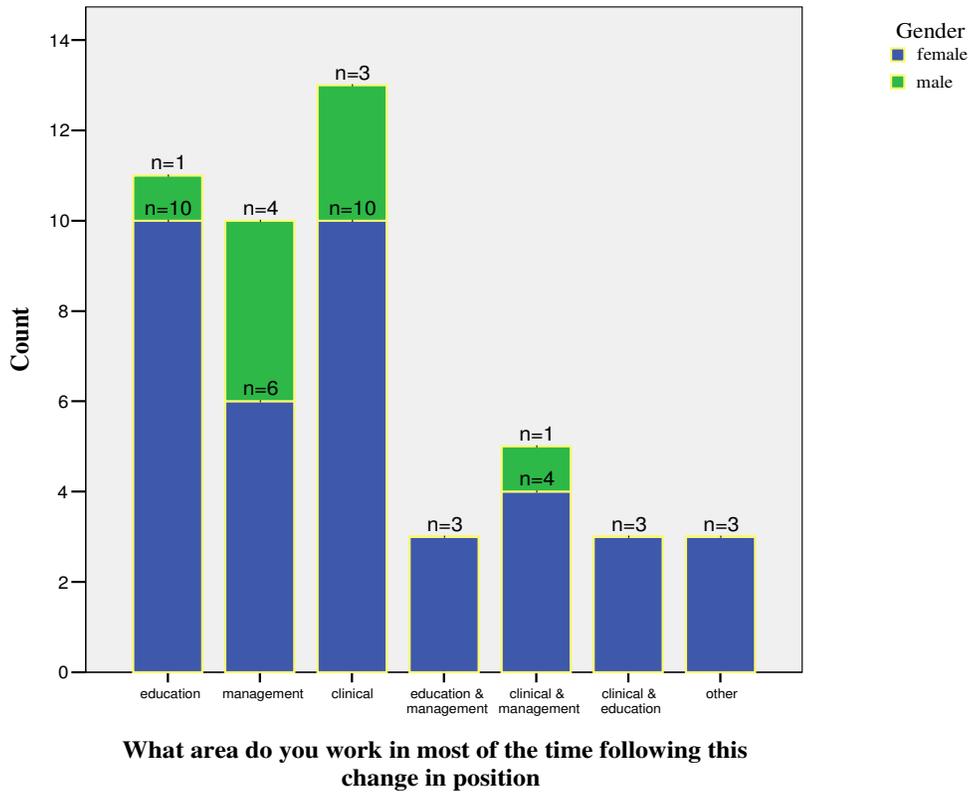


FIGURE 16: Work area respondents work in most of the time following PGS and a change in position (n=49)

For question 18, the majority of respondents (80.0%) reported that this change in position would have been seen as upward within their organisation (Table 13).

TABLE 13: Respondents' views of how this change of position was viewed in their organisation (n=50)

	n	Upward n (%)	Downward n (%)	Horizontal n (%)
Q. 18 In your organisation would this move have been seen as:	50	40 (80.0)	0 (0.0)	10 (20.0)

Table 14 details that for question 19 the majority of respondents (84.3%) reported that as a result of this change of position their salary was raised.

TABLE 14: Respondents' views on their salary following this change in position (n=51)

	n	Upward n (%)	Downward n (%)	Horizontal n (%)
Q. 19 As a result in this change of position, has your salary:	51	43 (84.3)	0 (0.0)	8 (15.7)

Questions 22-25 ask respondents in these new positions to reflect on how this change in position has been for them personally (Table 15).

TABLE 15: Respondents' perceived views, which best represent, their response to their change of job

	n	Not at all n (%)	Slightly n (%)	Moderately n (%)	Quite a bit n (%)	A great deal n (%)
Q. 24 Change the level of work satisfaction	47	1 (2.1)	1 (2.1)	12 (25.5)	16 (34.0)	17 (36.2)
Q. 20 On a personal level, how significant has this job been for you?	50	2 (4.0)	2 (4.0)	14 (28.0)	13 (26.0)	19 (38.0)
Q. 21 Did the completion of graduate studies enhance the success of your application?	49	5 (10.2)	6 (12.2)	9 (18.4)	15 (30.6)	14 (28.6)
Changing jobs was motivated by a desire to:						
Q. 22 Advance my career	48	2 (4.2)	2 (4.2)	11 (22.9)	19 (39.6)	14 (29.2)
Q. 23 Balance my life and work responsibilities	44	9 (20.5)	5 (11.4)	12 (27.3)	8 (18.2)	10 (22.7)
Q. 25 Consolidate my knowledge	44	3 (6.8)	3 (6.8)	9 (20.5)	18 (40.9)	11 (25.0)

5.3.1.8 *Life long learning*

Life long learning was evident with the majority of the respondents interviewed, their thirst and energy to continue learning and keep up to date professionally was expressed. Jane expresses herself, *“It’s made me far thirstier for more knowledge, at morning tea now I read journals and the library newsletter and start ordering papers. I do that for relaxation...then I pass them onto all the departments”*. Crystal reports how she is often looking up information and keeping up to date. *“I am interested and I am a lot more stimulated and finding out why I am doing and what I am doing”*.

Question 79 (general comments) respondents wrote,

“Study improves understanding and the quality of care delivered. Everybody should study”.

Others wrote, *“I like to study”*.

“Postgraduate study has many benefits...it keeps me interested and motivated”.

Crystal sums it up *“there’s nothing stopping anyone but themselves”*.

The quantitative data on life long learning enriches the qualitative data as respondents reported their interest in further studies and participation in professional nursing organisations.

The majority of respondents (68.3%) either agreed (50.0%) or strongly agreed (18.3%) in question three, that PGS has increased their interest in further studies (Figure 17).

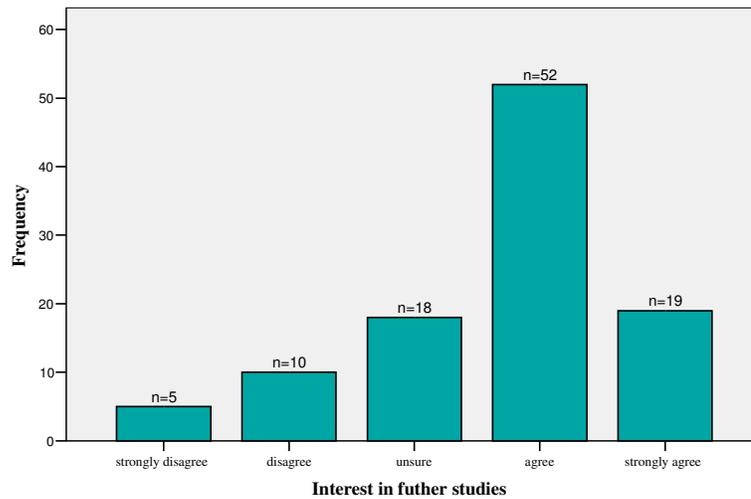


FIGURE 17: Respondents' interest in further studies (n=104)

All 105 respondents answered question 13, with just over half of the respondents (55.2%) reporting that they plan further study in nursing (Table 16).

TABLE 16: Plan further study in nursing (n=105)

	n	Yes n (%)	No n (%)	Uncertain n (%)
Q.13 Do you plan further study nursing?	105	58 (55.2)	19 (18.1)	28 (26.7)

Respondents were asked to identify which postgraduate pathway they plan to take with their university study (Question 14). The largest group, just over two fifths of respondents (43.3%) reported that they plan to complete a Clinical Master's. The second largest group, almost one third of respondents (29.9%) reported they plan to complete their studies at the level of a Graduate Diploma. A smaller number of respondents (14.9%) plan to complete a Master's by thesis and an even smaller group of respondents (6.0%) plan to complete their Doctoral Studies (Figure 18).

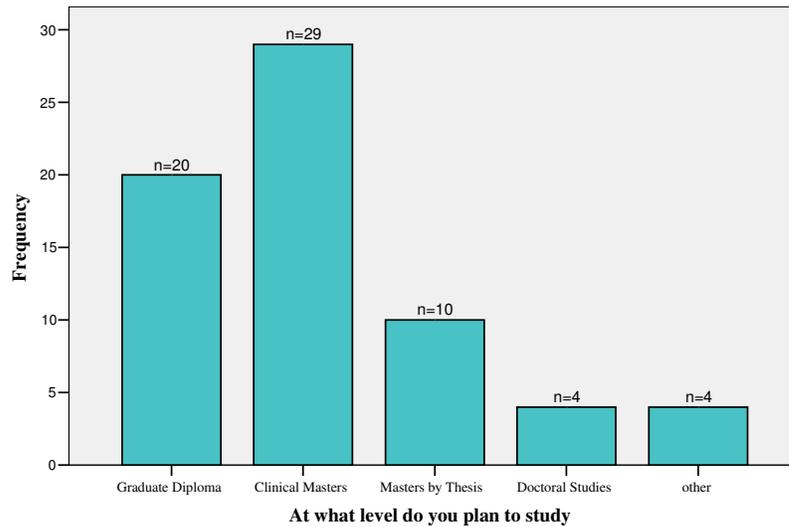


FIGURE 18: Respondents' views of their future study plans within nursing (n=67)

Following PGS respondents' participation in professional organisations (Question 67) has increased by over one third (38.5%) as described in Table 17.

TABLE 17: Respondents' participation in professional nursing organisations (n=104)

		Increased	Decreased	Stayed the same
		n (%)	n (%)	n (%)
Q.67	n			
Participation in professional nursing organisations	104	40 (38.5)	6 (5.8)	58 (55.8)

5.3.1.9 The impact of PGS on the quality of patient care: Section C survey questionnaire

Seventy-five and one half percent of responses in Section C of the survey questionnaire reported increased responses following PGS, in other words 75.5 percent of respondents perceived that quality of patient care had improved following PGS (Table18).

TABLE 18: Totals of data from all 37 questions in Section C of the survey questionnaire on quality of patient care (n=105)

Section C survey questionnaire		
List of components (n=105)	n	%
Slightly increased	1709	46.0
Significantly increased	1094	29.5
Totals	2803	75.5 ⁹⁹

5.3.1.10 Summary of correlations

The strength of dependence (association) between the selected ‘quality of patient care’ positive sub-theme variables,¹⁰⁰ with ordered categories, is detailed by a gamma correlations matrix in Table 19. Correlations were assessed using the Goodman – Kruskal Gamma (Γ), which is a nonparametric measure of correlation with a range of coefficients from -1 (negative correlation) to $+1$ (positive correlation). The gamma statistic is preferred to Spearman’s *Rho* and Kendall’s *Tau*, in cases where there are many tied observations in the data (United Nations Educational Scientific and Cultural Organization, n.d.). To assess the degree of association between the variables, the researcher has identified statistically significant (95% confidence) positive and negative correlations (Davidson & Tolich, 2003; United Nations Educational Scientific and Cultural Organization, n.d.).

Table 19 shows a selection of cases from the quantitative data discussed earlier in this chapter and significant ($p < 0.05$) positive correlations were found between all pairs in the gamma correlations matrix. Hence the knowledge gained from the qualitative data describing the positive sub-themes and their relationships is supported by the results of the Goodman – Kruskal Gamma (Γ) correlation analysis: In particular:

- (A) Making care decisions based on research and (B) the evaluation of care delivered (.78).
- (B) The evaluation of care delivered and (C) the development of standards for quality patient care (.89).

⁹⁹ These figures were tabulated from the original Excel data grid.

¹⁰⁰ Cases were selected randomly from the positive sub-themes in the quantitative data, measuring the quality of patient care, Section C of the survey questionnaire, for the Gamma Correlations Matrix in Table 19. This sample provides an example of the correlations from within the data.

- (C) The development of standards for quality patient care and (D) acting as a change agent (.82).
- (D) Acting as a change agent and (F) questioning care decisions made by other colleagues including doctors (.81).
- (E) Increasing professional competence in relation to patient care and (G) teaching colleagues (.82).
- (F) Questioning care decisions made by other colleagues including doctors and (G) teaching colleagues (.79).
- (G) Teaching colleagues and (I) enhancing the moral of staff (.75).
- (H) The recognition of the relationship between care and outcomes and (J) utilising time management (.62) and
- (I) Enhancing the moral of staff and (J) utilising time management (.65).

TABLE 19: Gamma correlations matrix

Goodman – Kruskal correlation coefficients for each pairing of the eight selected positive sub-theme variables. All coefficients are statistically significant at 95 percent confidence, i.e. $p < 0.05$.

	A	B	C	D	E	F	G	H	I	J
A	1.0	.78	.74	.74	.74	.70	.74	.59	.47	.35
B		1.0	.89	.75	.76	.84	.69	.81	.63	.64
C			1.0	.82	.62	.72	.68	.63	.46	.46
D				1.0	.62	.81	.78	.62	.65	.32
E					1.0	.78	.82	.72	.70	.72
F						1.0	.79	.73	.73	.66
G							1.0	.64	.75	.57
H								1.0	.57	.62
I									1.0	.65
J										1.0

Key:

- A - Q. 37. Making care decisions based on research
- B - Q. 52. The evaluation of care delivered
- C - Q. 51. The development of standards for quality patient care
- D - Q. 62. Acting as a change agent
- E - Q. 34. Increasing your professional competence in relation to patient care
- F - Q. 48. Questioning care decisions made by other colleagues including doctors
- G - Q. 39. Teaching colleagues
- H - Q. 43. The recognition of the relationship between care and outcomes.
- I - Q. 56. Enhancing the moral of staff.
- J - Q. 49. Utilising time management skills.

The following relationship between (B) the evaluation of care delivered and (C) the development of standards for quality patient care (.89) shows the strongest correlation (0.89) from all the pairings. A possible cause of this strong correlation will be the new learning from PGS. Thereby respondents will be linking their new knowledge, expertise and understanding to theory, evidence, legal and ethical frameworks, to develop and improve patient outcomes. Another possible cause being respondents' increased knowledge of critical reflection and evaluation of practice, followed by a renewed enthusiasm and energy to improve and develop quality patient care. The strong correlation highlights the impact PGS has had on the quality of patient and client care and nursing practice, which is an expected outcome by the NCNZ (2001) for continuing nursing education at a postgraduate level in NZ.

Although a key role for statistics is to identify counter intuitive or unexpected results (Burns & Grove, 2005; Davidson & Tolich, 2003; Polit & Beck, 2006), on this occasion the Gamma correlations matrix (Table 19) did not identify any unexpected (or negative) correlations.

5.3.2 NEGATIVE

A small number of respondents shared negative views with the researcher. Table 20 lists the negative sub-themes the researcher collated from the data.

TABLE 20: Negative sub-themes (n=4)

Negative Sub-Themes (n=4)	
1	Studying stressors
2	Workplace frustrations
3	No effect from PGS
4	Slightly/significantly decreased effect from PGS

5.3.2.1 Studying stressors

For some nurses studying at a postgraduate-level has resulted in a negative and stressful experience for them. The content of the course was not what they had expected.

The course I attended was so totally useless ... the only thing that was of any benefit was my own project and time spent on that. ... The course was more like punishment and extremely stressful...

(Question 79 "Your comments")

“Put off by bad course too much waffle not enough practical skills”.

(Question 79 “Your comments”)

Ann felt that some of the papers she had completed weren't *“probably clinical enough for me”*. Question 79 respondent says *“I entered PG [postgraduate] study in order to become better at my job – clinical. I found PG study tends to value education and management roles above clinical”*.

Respondents shared their frustration relating to time involved with study and the personal cost to them and their families. Crystal describes the journey as *“hard work...especially with young kids and working”*. She reported that PGS was fitted in whenever she could and her study was compromised, *“I could never dedicate hours and hours of work to it...so I struggled quite a few times, but I am really glad”*. Belinda reflects, *“I am aware it took a big toll”* it was a huge time involvement. As she was focused on her studies everything else was *“peripheral, some of it I should have been paying attention to”*, she refers to family and personal life. Nancy describes how the study *“made a lot of stress for me”*. Joanne commented, as everyone is under so much stress and so much pressure to perform and produce results, in what she calls an *“unrealistic time frame”*, the final process is *“sub-standard”*.

Other comments from Question 79 respondents include,

Postgraduate study has a negative impact on work/life balance.

Doing my MN [Master's of Nursing] had devastating effects on my social life & some of my friendships have been irretrievably damaged. My significant other nearly gave up on me. The pressure of doing it while working full time was immense and I have seen others in the same position crash and burn. For the benefits gained, the personal cost is too high; let alone the lack of financial recognition of PG [postgraduate] qualifications.

The pressure of postgraduate study on myself as an individual and holding down a 1.0 FTE [One full time equivalent] has been enormous. Exercise, rest and general well being has suffered. I believe it is very stressful to work in health delivery full time and study!! At post grad [postgraduate] level!

Support during dissertation minimal. Now exhausted/disillusioned to think I must do business papers and be politically savvy to create a job e.g. NP!

Others shared their frustrations relating to the financial cost of tertiary-level education. Jo believes the financial burden was huge and has been a “*complete put off for a whole bunch of people*”. Lucy acknowledges that her study was “*a significant financial cost to myself*”.

The biggest barrier to study is justifying spending thousands when I have family commitments (a 2 year-old and currently pregnant with 2nd child).

(Question 79 “Your comments”)

Belinda describes a family member who is a teacher and undertaking a Maori immersion programme, she describes how she is funded for the whole years salary and expenses while she does it. “*We’ve had to study while working full time and that’s a huge cost and you realise that you’re not valued, if you were valued you would have those opportunities as well*”. Belinda enjoys studying, learning and sharing this enthusiasm and knowledge “*probably if there was better support I would have carried on, have kept going*”.

The negative qualitative data on studying is supported by the quantitative data in terms of respondent’s plans for further study outside of nursing (Question 15) (Table 21).

TABLE 21: Do you plan further university study outside of nursing? (n=80)

	n	Yes n (%)	No n (%)	Uncertain n (%)
Q.15 Do you plan further university study outside nursing?	80	18 (22.5)	30 (37.5)	32 (40.0)

5.3.2.2 Workplace frustrations

Respondents expressed their frustrations with their organization particularly the lack of recognition and opportunity to progress. A question 79 respondent said that management are “*not interested in what I have done*”. Other nursing leaders within the organization have fewer qualifications than she does. “*The DHB does not value qualifications and I believe this has a flow on effect. Positions are often given to people who are asked to apply*”. Other respondents documented:

*My own postgraduate studies are not recognised by management and I have written documentation advising me of this. The use of the skills attained in the ED is frequent despite this. I am studying towards a PhD outside of nursing and **WILL** leave nursing when this is attained, or before depending on funding.*

(Question 79 “Your comments”)

Very little recognition for post grad [postgraduate] education, no financial incentive – too many hoops to jump through with regard to NP pathway. No recognition from DHBs for NP role. No structured career pathway for nurses who do not want to go into ‘management’.

(Question 79 “Your comments”)

In current work environment postgraduate study does not appear to hold much weight in obtaining a permanent position relative to other applicants. This has been frustrating.

(Question 79 “Your comments”)

Two nurses expressed other frustrations with management:

Jobs not always available due to financial/structural changes.

(Question 79 “Your comments”)

Employers need to recognise that formal mentoring & preceptoring must be compensated... the individual nurse must be recognised as such.

(Question 79 “Your comments”)

Medical dominance was another area to generate comment. Jane expressed how there is a “*medical dominance and an influence around the place,*” however she asserts, “*nursing is a*

profession as much as possible and you can see small changes.” Nancy describes her work place as “*definitely doctor driven*” and the nurses struggle to have their voice heard or initiate improved patient outcomes “*...basically very little chance for the nurses to initiate change*”. A standing order, as appropriate, for simple analgesia, researched and proposed by nurses has been in the review process for 14 months by doctors and managers, “*they are basically stalling the process to the point of frustration and nurses throwing their hands in the air and saying why am I doing this?*” Other nurse-initiated practice development proposals remain stalled in the review process. Nancy reports that her critical thinking has improved and helps with making decisions “*as far as I am allowed to make decisions*”.

5.3.2.3 *No effect from PGS*

Almost one quarter of respondents’ responses (n=869, 23.4%) reported that PGS had ‘no effect’ on their quality of patient care (Table 22). The highest percentage of ‘no effect’ overall was 54.9 percent for utilizing time management skills (Q. 49, p. 81). However, of interest are the items directly relating to patient care. Almost half of the respondents (47.5 %) perceived that PGS had no effect on motivating patients (Q. 60, p. 92). Forty-four percent of respondents identified that PGS had ‘no effect’ on enhancing the morale of their patients (Q. 57, p. 92). Making effective patient-staff allocations (Q. 30, p. 81) was perceived by 42.3 percent of respondents as having ‘no effect’. Forty percent of respondents reported that PGS had ‘no effect’ on the communication with patients and their family (Q. 54, p. 92). Just over one quarter of respondents (26.5 %) described PGS having ‘no effect’ on teaching patients (Q. 38, p. 92). Enhancing the quality of patient advocacy skills was perceived as having ‘no effect’ from PGS by 25.5 percent of the respondents (Q. 32, p. 77). Just over one quarter of respondents (25.5%) identified ‘no effect’ on ensuring resources required for care are present (Q. 27, p. 77) and the capacity to support patients in the decision making process was reported by 15.2 percent of respondents as having ‘no effect’ following PGS. (Q. 58, p. 82).

Another area of interest reporting high percentage of ‘no effect’ was items that relate to supporting colleagues. Respondents identified that PGS had no effect by 35.4 percent on enhancing the morale of staff (Q. 56, p. 82) and by 32.7 percent on the sensitivity to workload stress on colleagues (Q. 31, p. 81). Respondents identified computers as another area with ‘no effect’ from PGS. Respondents identified that PGS had ‘no effect’ by 41.0 percent on the awareness of ethical implications of computer use (Q. 46, p. 77) and by 29.7

percent for the recognition of the potential of computers to support nursing practice (Q. 26, p. 83).

TABLE 22: Totals of data from all 37 questions in Section C of the survey questionnaire on quality of patient care (n=105)

Section C survey questionnaire		
List of components (n=105)	n	%
Significantly decreased	13	0.4
Slightly decreased	27	0.7
No effect	869	23.4
Totals	909	24.5 ¹⁰¹

5.3.2.4 Slightly or significantly decreased effect from PGS

Respondents reported decreased effects from PGS ranging from 0.0 to 3.1 percent on the quality of patient care. Therefore 1.1 percent of the responses in Section C of the survey questionnaire reported decreased effects following PGS on patient care activities (Table 22).

5.4 SUMMARY

This chapter has presented the results of this mixed-methods descriptive study. The combination of the two methods (qualitative and quantitative) has generated broadly consistent data, which has provided informative and descriptive insights into the perceived effects of postgraduate education on the practice of RNs working in EDs in NZ. The Goodman – Kruskal Gamma (Γ), a nonparametric measure of correlation coefficient has confirmed correlations within this current research and demonstrates how these two methods are inextricably intertwined. The positive results significantly outweigh the negative results.

The very good response rate from respondents combined with the collection of two different data sets has generated a large amount of data for analysis, which will be discussed in chapter six.

¹⁰¹ These figures were tabulated from the original Excel data grid.

CHAPTER SIX: DISCUSSION

From Phaedrus (237-235)

“In every discussion there is only one way to begin, if one is to reach a sound conclusion: that is to know precisely what one is discussing. Otherwise one is liable to miss the mark entirely” (Van de Weyer, 1997, p. 51).

6.1 INTRODUCTION

The literature on postgraduate nursing education at Master’s degree level suggests that programmes have been designed to enrich, deepen and broaden nurses’ knowledge (Gerrish, Ashworth, & McManus, 2000; Hendricks, Mooney, Crosby, & Forrester, 1996a). In NZ, PGS is expected to develop nursing practice and lead towards quality patient and client care, resulting in improved outcomes (Nursing Council of New Zealand, 2001). As previously stated, the overall aim of this social research study is to investigate emergency nurses’ perceptions of the impact of postgraduate education on their practice in NZ and will be discussed in terms of experience and effect.

This chapter will be presented in two sections. The first section, utilizing critical social theory as an overarching framework, presents a discussion based on the results and analysis drawn from the ten themes identified in the previous chapter. These themes are then related to the literature from chapter two and three, including Pelletier and colleagues’ Australian study. Boyer’s scholarship in nursing will be applied within the discussion. Section two will discuss the strengths and limitations of the study.

6.2 CRITICAL SOCIAL THEORY

Critical social theory informed by Habermas provides the overarching framework for this discussion. Habermas's main aim was to develop a theory of society with a practical intention of freeing people from domination. Postgraduate programmes and increased tertiary education funding during the early 21st century has provided the platform for nurses to advance their knowledge through education at a tertiary-level. This discussion will examine the key results identified in this study's data and will integrate these with the educational theory and supporting literature. The discussion is presented under the headings enlightenment, empowerment and emancipation, being the three phases that create the practical intent of critical social theory.

6.2.1 ENLIGHTENMENT

6.2.1.1 *Reflection and critical understanding*

For critical theory to accomplish its practical undertaking, nurses must be willing and ready to think, develop the skills and knowledge of self-reflection and redress the situation of powerlessness through critical understanding. The first step of critical theory is the process of enlightenment. Through a process of enquiry and systematic reflective analysis, postgraduate educated nurses will be able to uncover the conscious and unconscious constraints of holistic practice. Nurses thereby will enhance their own autonomy and responsibility (Habermas, 1971, 1974; Hyrkas, Tarkka, & Paunonen-Llmonen, 2001; Kim, 1999; Scanlan, Care, & Udod, 2002; Scanlan & Chernomas, 1997; Wilson-Thomas, 1995) towards a culture of reflective enquiry and evaluation, and will be amenable to the process of enlightenment. Habermas (1974) states, "the thinking subject just as well as the reflecting subject must play at least two roles of the dialogue" (p. 28). The respondents in the current study indicated they had advanced their learning to reflect and develop width and depth of critical understanding in their nursing practice. For example Julie (p. 74) has learnt to "figure out" critically, to prioritise care and facilitate a more seamless journey for the patient. Crystal (p. 74) identified that she now thinks about the whole person within a holistic model of care. Both Belinda and Joanne (p. 74-75) facilitated a different way forward for their patients through critical thinking and leadership, resulting in Belinda's patient being transferred to ICU and Joannes's patient receiving a different diagnosis. Sue (p. 75) for whom critical thinking has changed her practice now thinks outside the initial area and asks more searching questions, recognising that there could be more going on for the patient.

Joanne (p. 93) concluded "...I tended to have a very good overview but not necessarily a tremendous depth of relevant knowledge" prior to PGS. The survey results revealed that respondents' questioning of care decisions made by other colleagues, including doctors (which involves reflective critical thinking) is perceived to have increased by 85.3 percent following PGS. This percentage is similar to Pelletier et al's., (2003) study which reported 81 percent. Respondents, reflecting on the evaluation of the patient care delivered, perceive this care to have increased by 81.4 percent following PGS. These respondents will have been using reflective frameworks to critically reflect in and on action, questioning the ideologies that shape their clinical practice (Habermas, 1971; Schön, 1987; Teekman, 2000). The above examples demonstrate that PGS has enlightened respondents to develop the powers of critical thinking, recognising the multiple perspectives within clinical practice, to go beneath the surface of a situation, to expose the underlying assumptions and to use this reality and power to try and create a new way forward for the patient, rather than the previous traditional nurse training practices,¹⁰² such as simply following orders. Habermas (1971) expresses how oppression exists where there is unreflective communication. Developing and utilising critical thinking skills is one of the key areas concentrated on in PGS (Nursing Council of New Zealand, 2001). These findings on critical thinking are consistent with other research results (Cragg & Andrusyszyn, 2004; Gerrish, Ashworth, & McManus, 2000; Rassool & Oyefeso, 2007; Spence, 2004a; Whyte, Lugton, & Fawcett, 2000). Spence's (2004a) study identified cognitive capacity as an essential quality towards thinking critically, synthesising information and integrating different perspectives. Gerrish, Ashworth and McManus (2000) questioned the breadth and depth of knowledge development, from their results there was a general focus on depth rather than breadth. Furthermore the current study's respondents have learned to look wider at the 'whole person' and outside the 'initial area'. Thereby developing a wider and broader critical understanding of the patient. Respondents report that through increased knowledge, research and evidence they have developed depth and critical reasoning, recognising the multiple perspectives of practice. This behaviour links with the scholarship of application, an ongoing alertness to learn and question, as clinical scholarship includes the critical questioning of practice (Boyer, 1990, 1996; Pape, 2000). Therefore, these results would indicate that PGS through a critical praxis,

¹⁰² The word training implies routine performance, rigidity and predictability of procedures. "If you always do what you've always done, you'll always get what you've already got" (Hendricks-Thomas & Patterson, 1995, p. 596., cited in Boychuk Duchscher, 2000, p. 458).

thinking with more depth and breadth has raised respondents' consciousness and enlightened them to identify and examine the practical and political interpretations of their world, creating a group of critical and socially enlightened nurses.

Critical thinking was recognised within the positive sub-themes of the results analysis. Furthermore the following four parts, studying stressors, workplace frustrations, respondents' perception of 'no effect' and respondents' perception of the 'negative effects' from PGS are identified as the only negative sub-themes.

6.2.1.2 Studying stressors

Although PGS is enlightening respondents, the social constraints of society are providing some political and stressful challenges. The nursing workforce in NZ comprises approximately 46,700¹⁰³ RNs and provides the health sector's largest qualified professional workforce (Nursing and Midwifery Workforce Strategy Group, 2006). The current study revealed that the majority of respondents were women (84.6%) and were not well supported when juggling work, study and family commitments. Examples from the current study include Crystal's interview (p. 109) where she draws attention to the struggle of juggling study with young children. Belinda (p. 109) describes PGS as absorbing significant time and generally taking a 'big toll', particularly with family and personal life. Question 79 respondents (p. 109-111) report that PGS had a negative impact on work/life balance; partnerships and friendships were irretrievably damaged, personal fitness and general well being also suffered.¹⁰⁴ For the respondents in the current study to be eligible for full CTA funding they were required to be working full time. Part time trainees were funded on a pro-rata full time equivalent basis (Clinical Training Agency, 2000). The requirement to be working full time by CTA may have been a contributing factor to these stressors. Similar findings supporting this current study include a study on Irish nurses by Timmins and Nicholl (2005), where the majority of participants again were women (91.0%) and highlighted nurse stressors in the 'moderate' or 'severe' category. Balancing work

¹⁰³ NZ nursing workforce of approximately 46,700 RNs is based on 2004 figures (Nursing and Midwifery Workforce Strategy Group, 2006).

¹⁰⁴ Two male respondents documented additional comments in question 79 of the survey questionnaire, none related to stressors and PGS.

commitments while studying was reported as the number one stressor, followed by balancing home commitments while studying as the second stressor. Timmins and Nicholl (2005) concluded that there was a:

...personal killing involved in dedicating time to personal studies... that this kill is a source of stress, resulting directly from work/study and work/home balance, getting time off work to attend, as well as the academic requirements of the programme (p.481).

Other studies supporting the current study with similar findings include a NZ study by Spence (2004b), where nurses had to give up certain activities to achieve new goals with one respondent reporting “time, money, family commitments and other colleagues saying ‘why bother?’ ” (p. 22). Spencer (2006) identified home commitments and child care as stressors. Dowswell, Hewison, and Hind’s (1998) study reported personal strain and tension from changes within the family and partnerships to accommodate PGS and reduced leisure time. Chaboyer, Dunn, Theobald, Aitken and Perrott (2001) identified stressful and heavy student workloads. Gould, Drey and Berridge’s (2007) results conveyed the absorption of personal time and stress to complete programme work, and Whyte, Lugton and Fawcett (2000) identified similar stressors with one respondent expressing; “I did not have study time to work on my dissertation except when I was meeting my supervisor. The whole summer was spent forcing myself to work on the dissertation after a full day at work and at weekends” (p. 8). The authors also acknowledge that it should not be assumed that postgraduate students do not require personal and academic support (ibid). Evans, Brown, Timmins and Nicholl (2007) identified that the younger participants (the majority 64.0%, were between 20-30 years of age) were more likely to report higher-levels of process stressors relating to assignment work, balancing work commitments and study, along with the demands of academic writing. Furthermore as the stress increases, performance may deteriorate (ibid). Within the current study, the respondents in the 26-30 year age group were the minority (n=8, 7.8%) therefore the greater number of participants were older than the above study and reported stressors experienced for postgraduate levels of study.

The current study identified just over one third of respondents reported ‘no effect’ from PGS on the sensitivity to workload stress on colleagues and enhancing the morale of staff, while Pelletier et al’s., (2003) data results reported just less than one third of respondents reporting ‘no effect’. It could be that nursing has become even more stressful between Pelletier’s study and the current study. Furthermore it is possible respondents were already supportive and

sensitive towards colleagues under stress and already had high morale. The above results relating to stress are of concern, particularly as emergency nurses work within a busy and stressful health care environment. The researcher holds similar views to Pelletier et al's., (2003) study; that there is possibly a deficit in nurse preparation at postgraduate-level and it is possible that nurses lack awareness of the stressors, or how to manage this situation. They may be insensitive to workload stress or that this level of stress is now the accepted norm.

Financial stressors have been potentially reduced with CTA funding now available in NZ since 2007.¹⁰⁵ However, the availability of paid release time for research, synthesis and writing should be given serious consideration for nurses at this postgraduate-level. If nurses received some paid study time, additional to attending lectures, this is likely to result in improved academic performance because as the respondents in this study have reported, they could not dedicate hours of time to study, timeframes were unrealistic and the final process substandard. A participant in Spencer's (2006) study reported "I just...wish I could devote more time to it, because it's a compromise isn't it. You have to accept lower marks because you're balancing everything; you have to compromise with everything else in your life" (p. 49). The current study reported that almost one quarter of respondents' plan further study outside nursing, furthermore, two fifths, were uncertain about whether to continue university study outside nursing. Pelletier et al., (2005) identified 16-25 percent of respondents across all five cohorts were studying outside of nursing. Collectively these findings reveal the personal cost of postgraduate programmes, which may be a contributing factor towards why or as to why not more nurses are not planning to continue in nursing.

6.2.1.3 Workplace frustrations

In the current study, four respondents' reported frustrations relating to the lack of recognition and opportunity to progress within the workplace following PGS. These frustrations ranged from observing colleagues without postgraduate qualifications being promoted ahead of those with postgraduate qualifications, nurse leaders with fewer qualifications compared with other nurses, no structured career pathways for nurses not wanting to go into management and one respondent expressed frustration with their DHB for not recognising

¹⁰⁵ As there has been a change in the funding model for PGS for 2007, question 78 of the survey questionnaire has not been reported on, as this data is no longer relevant.

the NP pathway. This is disturbing as it may reflect a belief by employers that postgraduate qualifications are not recognised. One respondent, as a result of this experience is currently studying towards a PhD outside of nursing and has plans to leave nursing. Other workplace results in the current study show that medical dominance was a frustration. Nancy and Jane (p. 111-112) both expressed that the medical model within their workplace generally presented some challenges. Furthermore, Nancy's workplace was described as doctor driven with the nurses struggling to implement change. The frustration was evident during the interview; Nancy felt that any innovations for practice development were constantly being stalled and she expressed strongly that there was "...basically very little chance for nurses to initiate change" (p. 112). A standing order for simple analgesia has been in the management committee review process for 14 months.

Literature relating to the current studies results on workplace frustrations was limited to four articles. One article focused on medical colleagues as being ambivalent to nurses undertaking PGS or that they didn't really see any benefits (Spencer, 2006) however there was no discussion relating to the domination of a medical model. Spencer's (2006) study also reported that two nurses perceived an inability to effect change and one respondent sought promotion in order to be influential. Armstrong and Adam's (2002) study reported many nurses experienced frustration within the workplace; "You feel your wings are clipped" (p. 173). These nurses with postgraduate qualifications were unable to use their new knowledge to move practice forward. Spence's (2004b) NZ study showed that the attitudes of management, senior nurses and peers were perceived as constraining at times. Lack of support for practice developments, an example included evidence-based practical information handouts, taking long periods of time being critiqued thorough management committees. The CNMs and NEs philosophies and vision determine what happens within the clinical area and these can be constraining and limiting (ibid). Tye and Ross's (2000) UK study identified medical opposition to nurses expanding their role. Scholarship in nursing will fail to ignite in workplaces where there are constraints on nursing practice development, leaving the flame ignited through PGS to die, with lost opportunities and wasted resources.

These results demonstrate experiences of power imbalances with respondents feeling constrained and oppressed within the confinement of hospital bureaucracy including medical and nursing models. Freire (1974) noted that education may be a tool of conformity or a process of liberation. For these respondents, through the process of higher education they have become enlightened, the skills and knowledge of self-reflection have enabled them to

identify the situation of powerlessness. However it would appear that they have been unable to use this enlightenment to deconstruct and reconstruct the workplace environment. This could be for a number of reasons; one being that critical social theory is utopian in character (Carr & Kemmis, 1986), a criticism of Habermas's theory in that it doesn't relate to the real situation. Although these nurses are enlightened they are unable to free themselves from the oppressed workplace. Another is that Habermas's theory is orientated towards the individual (Fay, 1987) and is therefore a weakness when wanting to initiate social change on a workplace scale. These nurses may not have sufficient numbers of colleagues enlightened and confident through PGS to combine forces, through collective action to reshape and change the oppressive conditions and cultural arrangements of the workforce. Interestingly Freire (1974) suggested that domination is nonetheless most complete when it is not even recognised.

6.2.1.4 Results demonstrating 'no effect' from PGS

Study results show that almost one quarter of respondents (23.4%) in Section C of the survey questionnaire revealed that their PGS had 'no effect' on particular items of patient care activities. This percentage revealed that almost one quarter of respondents perceive that PGS does not automatically lead towards improved outcomes for quality patient and client care, as anticipated with the competencies for specialty and advanced nursing practice (Nursing Council of New Zealand, 2001). Therefore these results become significant. Over half of the respondents (54.9%) in this current study reported 'no effect' for utilizing time management skills, those aged 36-50 years reported the highest number of 'no effect'. This percentage is high compared with 34.0 percent in Pelletier et al's., (2003) study. It could be argued that time management education is not offered or not effectively delivered; it is possible that respondents are already highly knowledgeable, however when reflecting on the nurses' study stressors discussed earlier, time management learning may have benefits in reducing stressors.

'No effect' items, in the current study that were rated the highest were directly relating to patient care, incorporated motivating patients, enhancing the morale of patients, making effective patient-staff allocations along with the communication with patients and family. These 'no effect' items ranged from 47.5 to 40.0 percent respectively. Pelletier et al's., (2003) study for the same items ranged from 28 to 38 percent, of interest some of these nurses were from mental health and paediatrics, therefore more likely to have well developed

skills and knowledge in motivating, communication and enhancing the morale of their patients. Therefore the profile on entry for Pelletier and colleagues' study was different to this current study. With almost half of the respondents in the current study (47.5%) reporting that their goals have changed following PGS, and they are now looking to develop their professional role, it is possible that for the respondents reporting 'no effect', that their perceived skills and knowledge were already well developed in this area.

Items of 'no effect' relating to computer use in nursing practice included the awareness of ethical implications of computer use, with the greater percentage of respondents reporting this result in the 36-50 year age group. The recognition of the potential of computers to support nursing practice reported a high 'no effect' result with the larger group of respondents in the 36-45 year age percentage. These items reported 41.0 and 29.7 percent respectively compared with Pelletier et al's., (2003) study which reported 38.0 and 21.0 percent respectively. These results raise concerns, particularly as computers are a vital component of patient information data, research and scholarship. Specialty and advanced nurses in the 21st century are expected to access computers for patient information and search for evidenced-based-research findings (Nursing Council of New Zealand, 2001) using electronic databases and the World Wide Web resources. Furthermore these respondents may already be well conversant with computers.

Although the results discussed above from the current study are comparable with Pelletier et al's., (2003) study, the current study results however have a constantly higher percentage of 'no effect'. Possible explanations that may account for this difference include; Pelletier and colleagues' were undertaking the study as employees of the University and as results from the five separate cohorts were progressive,¹⁰⁶ this may have given them an opportunity to improve their programme over this time. Respondents in the current study are postgraduate nurses working in EDs only, whereas in Pelletier and colleagues' study, respondents were not all from one area of nursing; furthermore these nurses included managers and clinicians across the public health sector including mental health, paediatrics and midwifery (Pelletier, Donoghue, & Duffield, 2003). It is possible that some of these items may not have had relevance therefore, such as managers communicating with patients. Restructuring was

¹⁰⁶ Five separate cohorts of respondents, from 1992 to 1996 and followed up every two years for six years following graduation.

taking place in Australia during the time of Pelletier's study, middle management roles disappeared and new nursing roles emerged along with casualisation of nursing staff. Respondents' made career moves and changed jobs during this time (Pelletier, Donoghue, & Duffield, 2005). Specialist nursing education was well recognised and established in Australia; therefore CNSs comprised the greater number of students in the earlier cohorts and they were already working in leadership roles. By 1996 (the final cohort) RN numbers increased and represented 73 percent of the student intake (Pelletier, Donoghue, Duffield, & Adams, 1998a). Like the current study, the respondents in Pelletier and colleagues' study were predominantly women (93.0%). Their ages ranged between 21 and 58 years with a mean age of 35, compared with this current study, which reports an age range from 26 to 59 years, with a mean age of 42.4 years. It is possible that the respondents in this current study, being older, have been isolated from academic study for a longer period of time. The years between academic studies experienced by the respondents was not canvassed in this study.

Critical questions arise from such findings and may suggest that PGS has had no effect on these items of behaviour contributing to patient care in Section C of the survey questionnaire, as the respondents entered with varying levels of knowledge and experience. It is likely that these nurses brought highly developed skills into the programme with them (see Julie, page 70). The current study design does not enable the researcher to compare pre-entry and exit data or detail of respondents' years of ED experience and positions held when entering PGS. For some respondents the learning may have been too overwhelming, Belinda (page 71) and Joanne (page 72) described the learning as a quantum leap. Crystal, (p. 90) went from a hospital training qualification, which was huge, and for others it builds up over time (Emily, p. 90), requiring time for synthesis to take place. Respondents may have found it challenging to reflect objectively and critically to identify prior learning and experience from the more recent postgraduate learning. For others, they may have chosen not to pursue academia and practise reflectively. It maybe the nurses' expectations for PGS were too high and therefore not met. Based on the 'no effect' results reported here, institutions delivering postgraduate programmes will need to work collaboratively with the health sector to reflect on their programme content and evaluate that their programme is delivering the outcome in clinical practice as required by the framework for post-registration nursing practice (Nursing Council of New Zealand, 2001). That some components of the postgraduate programme were not included or were not facilitated well is a possibility; therefore the links and communication between theory and clinical practice were not effective. Academic staff have a responsibility to stimulate students intellectually, including those who bring with them

highly developed knowledge and skills, so to continue their life long learning. According to the CTA (2000), lecturers are expected to adapt teaching methods and style to meet the individual student requirements. Pelletier et al's., (2003) study shared some of this rationale namely that there is a gap between the health sector/students' expectations and postgraduate education institutions' delivering of content. No other studies were identified reporting no effects from PGS on patient care activities.

6.2.1.5 Results demonstrating 'negative effect' from PGS

The current study results report an average perception of 1.1 percent negative effects from PGS compared with Pelletier's study which reported an average of 16 percent negative effects from PGS (Pelletier, Donoghue, Duffield, & Adams, 1998b). It is strongly possible that more recent legislation within NZ has been a driver for nurses undertaking PGS. This legislation includes 'The Framework for Post-Registration Nursing Practice Education' (Nursing Council of New Zealand, 2001), the Health Practitioners Competence Assurance Act (New Zealand Government, 2003), PDRP (Nursing Council of New Zealand, 2005) and nursing competencies (Nursing Council of New Zealand, 2007). PGS has provided the educational pathway for nurses to progress academically advancing their body of knowledge at this higher level. In NZ the NP role presents postgraduate nurses with the opportunity to practise autonomously. Furthermore a few respondents reported feeling bored and tired (p. 71-72 & 90) with nursing and PGS has offered a challenge and re-energised them. Therefore this study had less negative feedback because NZ nurses possibly have greater opportunities for PGS.

6.2.2 EMPOWERMENT

Power exists within critical social theory when a person or group of people are controlled and dominated, furthermore power also exists when a person or group of people join together, become knowledgeable, energized and enabled, to drive forward a new sense of purpose or project, otherwise known as empowerment (Fay, 1987; Habermas, 1971, 1974). Power is not only domination but is also empowerment. The first step towards empowerment is through education and developing knowledge (Freire, 1974).

6.2.2.1 Advanced knowledge and leadership

The current study revealed that PGS has enabled respondents to develop their knowledge in clinical practice at a more advanced level. Advanced knowledge, leadership and understanding leads towards empowerment and encourages nurses through a cognitive process to develop personally, undertake activities in clinical practice which work to improve the situation and achieve common goals (Habermas, 1971; Kuokkanen & Leino-Kilpi, 2000; Kuokkanen & Leino-Kilpi, 2001). PGS increased respondents' knowledge and leadership in a wide range of areas.

Knowledge outcomes from the survey data, which rated the highest, incorporated the participation in ethical decision making by 84.4 percent, this is higher than Pelletier et al's., (2003) study of 76 percent. The awareness of the legal implications of practice increased with PGS by 84.2 percent, which is close to Pelletier et al's., (2003) study of 79 percent. The researcher believes these respondents were cognitively stimulated to think in new ways using ethical and legal frameworks, improving the safety of their practice and outcomes for patients and clients, adding depth and knowledge to their decision making. The evaluation of care delivered increased by 81.4 percent and has significant positive correlations between all the pairs in the gamma correlations matrix. Therefore respondents are more reflective on their practice and critically evaluate the care they deliver. The evaluation of care delivered was not reported by Pelletier. Enhancing the quality of patient advocacy skills increased by 72.6 percent, which was lower than Pelletier's study, which reported 82 percent. This is an interesting result and may indicate that respondents in the current study were already empowering their patients and clients. Ensuring resources for patient care are present increased by 72.4 percent, which is similar with Pelletier's study of 70 percent. Furthermore the researcher believes that PGS has advanced respondents' reflective learning, respondents are generous with their new knowledge, re-energised and applying it with greater confidence and satisfaction. The literature supporting PGS however does reflect that postgraduate education expands nurses' knowledge and clinical application (Armstrong & Adam, 2002; Chaboyer, Dunn, Theobald, Aitken, & Perrott, 2001; Cragg & Andrusyszyn, 2004; Pelletier, Donoghue, Duffield, & Adams, 1998b; Spence, 2004a; Spencer, 2006; Whyte, Lugton, & Fawcett, 2000). True scholarship as described by Kitson (2006) reflects both the depth and breadth of knowledge a person develops in a particular subject. The respondents in this study are developing depth and breadth of emergency knowledge and the ability to articulate a clear and sound understanding and explanation, as described by Crystal "...to actually substantiate my argument" (p. 82).

As nurses develop their knowledge and understanding through education, they become freed and liberated from exploitation and therefore empowered to become more effective leaders of change. Through reflection and empowerment, nurses are able to initiate action and bring about change within their practice (Habermas, 1971). The study results reported that PGS increased respondents' ability to act as a change agent by 87.1 percent, again this result is similar to Pelletier et al's., (2003) study that reported 83.0 percent. The qualitative data captured respondents' rich descriptions of their experiences. Emily (p. 78) shared her experience from her Master's research project, which resulted in initiating a change in practice within the ED and then throughout the organisation. Julie (p. 78) initiated a nurse pathway for patients with soft tissue wounds. Sue (p. 79) discussed the nurse-led activities in her organisation, which had been led by nurses following PGS. Fry and Jones (2005) and Salter's (2005) studies found that clinical initiatives and change by nurses contributed to more timely patient care and outcomes. Respondents' in this current study initiating change are applying Boyer's (1990) scholarship of application. They are thinking, reflecting and questioning practice, exploring options, research, linking the theory and implementing a change in practice based on all the supporting evidence. Boyer's (1990) scholarship of discovery is also applied during the questioning, investigation and beginning stages of change. This is the "intellectual excitement" (p. 18), which involves audits or research within practice identifying the need for change.

PGS has empowered respondents to increase the degree of autonomy in their work force. Critical social theory through enlightenment and empowerment facilitates self-reflection. Through the process of self-reflection nurses develop their knowledge further, learning to break down barriers enabling themselves to live autonomously as they would like. Autonomy according to Fay (1987) is "moral freedom" (p. 76), he describes this as "self-legislating" (p.76). This study reported that PGS increased the respondents' degree of autonomy in their workplace by 79.4 percent, compared with Pelletier et al's., (2003) study, which reported a lower figure of 75 percent. Knowledge and understanding is enabling these postgraduate nurses to become free of the constraints within their workplace, the master of their own life, therefore nurses who are empowered are better able to be autonomous.

6.2.2.2 *Academic and research skills*

Comparable with the findings of Whyte et al., (2000), Cragg and Andrusyszyn's (2004) and Spence's (2004a) studies, respondents in the current study identified perceived benefits from PGS on making care decisions based on research and returned the highest total positive results with 92.2 percent. This result is higher than Pelletier's study of 87 percent. The results from the telephone interviews supported this data. Lucy has learnt to research widely "write it up ...and back it up with evidence" (p. 83). Making care decisions based on research correlated strongly with numerous patient quality cares.¹⁰⁷ Furthermore the perception that PGS had increased the value of basing practice on research findings increased by 83.7 percent. These results are interesting, particularly in light of the survey results, which showed that only 16 respondents (15.4%) had submitted professional writing for publication for the first time and 17 respondents (16.3%) had given a conference paper for the first time following PGS. It is possible that these respondents are not visioning the links, the creation and advancement of clinical knowledge through to publication. Maybe time is a factor or nurses do not perceive any value in the workplace for publishing. It is possible within the fiscal constraints of DHBs that these nurses do not get the opportunity to attend conferences and develop a greater understanding of these links. As Spence (2004b) found, lack of courage maybe a factor as postgraduate nurses require considerable courage to assert themselves within the health care arena. Furthermore interest in research is reported as increasing with 26 respondents (25%) participating in a research project for the first time and 34 respondents (32.7%) having initiated a research project. Pelletier et al's., (1998b) study results report similar data, with an average of 11.3 percent of respondents having published for the first time, 16.0 percent having presented a conference paper for the first time and 22.8 percent having participated in a research project for the first time. In contrast, Whyte et al's., (2000) study reported 58 percent of respondents had published papers following PGS and 20 percent had followed or were currently undertaking research within their doctoral studies. Of interest within Whyte's study was that one of the educational aims of their Master's programme was to encourage and develop individual creative potential, professional leaders who were articulate and well informed, with a high level of academic skills. Their respondents acknowledged that PGS had given them the skills and confidence

¹⁰⁷ The patient quality cares include the evaluation of care delivered, the development of standards for quality care, acting as a change agent, increasing professional competence in relation to patient care, questioning care decisions made by other colleagues including doctors and the recognition between care and outcomes.

required to construct and publish their work (ibid). It is possible that the Universities and DHBs do not encourage and support nurses' vision to publish and present papers. There is only one nurse researcher appointed within an ED in NZ (Richardson, 2008), furthermore research is a role which should be developed or included within nurses' job descriptions. Nursing scholarship will struggle without the opportunity and support of DHBs to support nurses to discover new knowledge within their practice. Collaboration and communication with nurse researchers and other health workers help build relationships and initiate scholarly discovery, integration and application. NZ Universities and DHBs rarely undertake combined research projects; they seem to be separately pursuing projects. An Australian study by Pallen and Timmins (2002) found that the research-practice gap still exists. The lack of confidence, courage, mentorship, support, knowledge, power, energy and time may all contribute (ibid). In the current study, 34 respondents initiated a research project, 11 of these respondents had a Postgraduate Certificate, 15 a Postgraduate Diploma and eight a Master's of Health Science, therefore identifying respondents initiated research across all levels of the Master's programme. In contrast, Cragg and Andrusyszyn's (2004) study found that respondents who had completed course-based rather than thesis-based programmes rarely referred to their skills as researchers.

The respondents in this current study are demonstrating the quest for new knowledge and ongoing alertness to question and learn, known as the scholarship of discovery (Boyer, 1990). This is closely overlapped by Boyer's scholarship of integration as the respondents begin to undertake research, integrating ideas and connecting thought into action, synthesising knowledge (ibid). Scholarly investigation through research is deepest to the work of higher learning (American Association of Colleges of Nursing, 1999; Boyer, 1990, 1996; Braxton, Luckey, & Helland, 2002; Pape, 2000; Worrall-Carter, 1995) furthermore to progress emergency nursing, research must be supported within practice. Respondents academic and research skills have increased through PGS. Eighty-four percent of respondents perceived that PGS had increased their ability to identify research questions within their workplace; again this figure concurs with Pelletier and colleagues' (2003) results of 82 percent. Current study results inform us (n=67, 63.8%) that the majority of respondents (43.3%) plan to complete a Clinical Masters, a smaller group (14.9%) plan to complete a Master's by thesis and an even smaller group (6.0%) plan to complete their Doctoral studies.

NP roles in ED are supported in the literature (Searle, 2008; Wilson, 2005) however NPs in EDs are a new phenomena in NZ, with only two existing nationally, both at Auckland City

Hospital's Adult ED (Geraghty, 2007). Future service development priorities identified by the Nursing and Midwifery Workforce Strategy Group (2006) include primary care, mental health, chronic management and intellectual disability. When service demand is expected to increase in NZ with an aging population, an increase in chronic illness and patients with complex and high co-morbidities, it is of interest that emergency care is not considered a priority. The opportunity to increase more specialist and advanced nursing roles in emergency care is paramount particularly given the waiting times within EDs and the training specification requirements for advanced emergency nursing (Clinical Training Agency, 2000, 2006).

6.2.2.3 Increased confidence/self-esteem and recognition

A Finish study by Kuokkanen and Leino-Kilpi (2001)¹⁰⁸ identified the empowered nurse as possessing something additional; self-esteem. Respondents in the current study reported a perceived increased confidence in using academic language to communicate and gain greater collaboration (Julie, p. 85). Nancy (p. 86) feels more confident handing over patient assessment information, which she perceives improves patient outcomes. The survey questionnaire identified 86.7 percent of respondents perceived an increase in their self-esteem following PGS which is significantly higher than Pelletier et al's., (1998b) study which found that just over 70 percent of participants experienced an increase in self-esteem. This was an increase on their earlier work which reported a 50 percent increase in self-esteem (Pelletier et al., 1994). This finding may relate to differences in the cohorts. Of particular interest in the current study is that respondents in the 31-40 year age group reported the only negative results, compared with respondents in the 51-60 year age group, who reported only positive results on self-esteem. Such findings may reflect different stressors at different times and periods of ones life, including the busyness with families. Interestingly, these results are in contrast to a study by Evans, Brown, Timmins and Nicholl (2007) who found that nurses 31 years and older and referred to as mature, appeared to be less vulnerable to age specific academic stressors. The mature nurses generally had greater

¹⁰⁸ Kuokkanen and Leino-Kilpi's (2001) qualitative study aimed to investigate the factors involved in nurses' empowerment in Finland. Thirty nurses who had participated in a career advancement project at a University hospital were interviewed. The data was analysed by qualitative content analysis. Five categories were identified: moral principles, personal integrity, expertise, future orientation and sociability. The study concluded that empowerment is a pathway guided by personal values and actions as well as environmental factors.

motivation and were more assertive (ibid). Cragg and Andrusyszyn's (2004) study found that the older respondents were more confident, able to speak the language of different professional groups more proficiently and experienced a greater sense of equality. Spence's (2004a) NZ study identified confidence along with cognitive capacity and clinical credibility as consistent themes throughout her study. Whyte et al., (2000) identified 22 percent of their respondents comments related to confidence, PGS has helped respondents to develop an understanding, format and use of academic language and assisted them to articulate verbally and in writing at a more professional level. Armstrong and Adam's (2002) study reported increased confidence in respondents following PGS. Respondents were more confident personally and professionally, which lead to increased respect from their peers and were more confident questioning medical colleagues on patient diagnoses and treatment plans. The current study reflects similar findings that PGS has assisted almost two thirds of respondents in gaining recognition from others. Crystal perceives "I feel like I can really talk to the doctors, kind of on their level and discuss things in more depth..." (p. 88). Nancy received positive recognition from a junior doctor while working night shift "*I am glad you were on*" (p. 89). Three quarters of respondents in Pelletier et al's., (1998b) study perceived PGS assisted in gaining recognition from others, slightly higher than the current study.

It could be suggested that self-esteem had a roll over effect with study results which revealed that almost half of the respondents (48.6%) have changed jobs following PGS, which for 80 percent of respondents this has been perceived as an upward move within their organisation and for 84.3 percent this change has resulted in an increase in their salary. The majority of these respondents have moved into nurse manager roles, age proving no barrier as their ages ranged from 29 to 58 years. Comparisons with Pelletier and colleagues' study relating to changing jobs was challenging due to the variations and multiple job changes within a 10 year period (Pelletier, Donoghue, & Duffield, 2005). Respondents report in the current study that PGS has enabled nurses to have more control over their career and future by 73.3 percent. This percentage remains higher than Pelletier et al's., (2005) study which reported only half to two thirds of respondents perceived they had gained sufficient control over their career and future following PGS. Therefore PGS has enabled respondents in this current study to gain more autonomy and empowerment. In contrast, over one third of respondents reported job availability as their number one barrier to career advancement. Thereby, when the majority of respondents report that their new positions included nurse/clinical/charge nurse management roles and a very small

percentage reporting new positions as NS and NP, the researcher questions what positions are available for these postgraduate nurses seeking promotion within emergency nursing? Have nurse-led services as recommended by the Ministerial Taskforce On Nursing (1998) been implemented? The Nursing and Midwifery Workforce Strategy Group (2006) has identified that the future will include specialist and expanded nursing roles, nurses working in expanded roles will overlap with other health professionals. Furthermore emergency care was not identified as a priority.

Of interest is a study by Green, Perry and Harrison (2008) on the careers of physiotherapists in the UK.¹⁰⁹ The results of this study suggested that PGS has enabled participant physiotherapists to take on new and extending roles, which have resulted from a number of political imperatives. Results from Green et al's., (2008) study include respondents reporting increased personal and professional confidence, increased ability to teach, research, perform critical thinking, analysis and advanced clinical skills. As discussed and identified by Kuokkanen and Leino-Kilpi (2001), increased confidence and self-esteem flows into successful job performance and progress is therefore possible. Progressing empowerment is reflected in respondents' perceived ability to carry out their current work role, which results showed had increased by 81.7 percent however job satisfaction has not increased at the same rate. This does require further review in light of nursing shortages and retention and is of importance. The majority of respondents (88.6%), with a mean age of 42.4 years, plan to stay employed in nursing for the next five years however this reduced to 59.0 percent for the longer term. These results are of importance to the NCNZ, MoH, DHBs, the Nursing and Midwifery Workforce Strategy Group with regards to future planning, extending nurses' roles and developing their nursing careers, and thus gaining maximum benefit from this investment in PGS. Pelletier's study, with a mean age of 35 years, reported a combined average of 50.8 percent of respondents remaining in nursing for five years reducing to 27.6 percent for the longer term (Pelletier, Donoghue, & Duffield, 2005).

¹⁰⁹ A postal survey was undertaken to gather data on the career pathways of a group of postgraduate manual therapists to investigate the impact PGS had on their careers. This was a retrospective study surveying graduates from the Master of Science Manipulative Therapy programmes from 1994-2005 (response rate of 62.3%, n=48) (Green, Perry, & Harrison, 2008).

An 'empowered nurse' was categorised by Kuokkanen and Leino-Kilpi's (2001) study as a nurse with moral principles, personal integrity, knowledge, life long learning and sociability. The respondents in this study are revealing similar attributes. PGS is enabling nurses to become empowered through developing their knowledge and understanding, self-esteem, confidence and autonomy. Empowerment is the beginning of emancipatory practices. Emancipation is the third and final phase of Habermas's practical intent of critical social theory. Respondents once empowered will be able to rearrange their world by understanding and moving forward with new arrangements leaving behind the oppressive ones, therefore acting in a more purposeful way (Fay, 1987; Habermas, 1971, 1974).

6.2.3 EMANCIPATION

Emancipatory knowledge is grounded in the ability of humans to act wisely, to reason self-consciously and to make decisions underpinned by knowledge, evidence, rules and desires (Fay, 1987; Habermas, 1971). Habermas (1971) refers to this knowledge as self-knowledge or self-reflection. "For the pursuit of reflection knows itself as a movement of emancipation" (Habermas, 1971, p. 198). Furthermore, insights gained through critical self-awareness are emancipatory. Through critical reflection nurses are freed to look at things in different ways and transform their perception. Emancipation is the goal to empowerment, enabling nurses to learn new ways of practice and leadership, replacing traditional or oppressive ways, leading forward in a more collaborative, respectful and satisfactory way (Fay, 1987).

6.2.3.1 Nurses' emancipatory narration

The postgraduate nurses' narration in this study provides the evidence of how postgraduate education has opened their eyes to a new world, liberating them to think in different ways, challenging internal constraints, enhancing individual autonomy and responsibility. Respondents in the current study reported a change in their outlook, a widening of horizons, developing a bigger picture and being more politically aware. Clinical examples discussed earlier in this chapter include nurses introducing change through projects and clinical/critical pathways, however the following two narrations include emancipatory social change at another level. Jane shares an instance of working permanent night shift when she commenced postgraduate education: "keeping very much to myself and out of politics and that has changed somewhat" (p. 86). With enlightenment along with empowerment developed from PGS, Jane's knowledge, understanding and confidence has grown, she now has a significant nursing management role and chairs a community trust. Jane describes how

PGS has "...opened up a whole new world to me..."(p. 90). She has developed a greater vision on health care and can see the larger picture. Not only is she responsible for the health care within the facility she works for, but for the wider community and influencing health and socio-economic policy. This action, which is informed through critical reflection, is emancipatory.

Lucy (p. 78) shared a situation where she critically reflected on the thrombolytic treatment-taking place in their ED. She learned that there was payment involved from a company acknowledging nurses' participation in the thrombolytic trial; the payment was paid to another department, which routinely undertook these trials. By analysing and reflecting on the situation, identifying the constraining circumstances, she gathered up all the data, research and evidence and put a case forward for a percentage of the funding. This process assisted in the liberation of the funding which she was successful in obtaining. She also described an occasion (p. 85) that she was involved in during restructuring of the hospital. At this time management was reviewing all senior nurse positions with redundancies in mind. Lucy felt empowered to take her message out and speak freely on committees, taking action, leading forward and empowering others. Lucy's participation along with other nurses' actions resulted in a review of senior nurse positions, with more senior positions being retained. These actions are emancipatory.

These two respondents have actively made change within the environmental social structure altering the consciousness, values and choices of others to bring about social change. Transformed nurses will become key leaders in bringing about social change.

Resemblances to the current study as discussed above were found in the literature. Spence's (2004a) study found that participants reported, "postgrad [postgraduate] education moves you. It is about taking action" (p. 50). Another reported, "when something's happening in Wellington, some policy or funding decision...I have written submissions providing the rationale for my recommended changes" (p. 52). Another respondent expressed how she collaborated with her CNM and said, "We need to get together to do a submission on this'. It's an equal thing" (p. 52) (ibid). Cragg and Andrusyszyn (2004) found that respondents were more aware of policy issues and how politics play out in the hospital. PGS had globalised their thinking "...since my Master's I see that ...I can [do] it more globally in terms of what you can do for the province, what you can do for the country, the type of change, and not just on an

individual basis” (p. 5). Whyte et al., (2000) found a few respondents identified that their Master’s degree helped broaden their knowledge enabling them to look more globally at health care.

6.2.3.2 Emancipatory teaching and lifelong learning

Teaching begins with what the teacher knows (Boyer, 1990); therefore PGS builds a sound foundation of knowledge. Furthermore teachers are required to understand the pedagogical and andragogical methods of teaching, to be successful in enlightening, empowering and emancipating their students and nurse colleagues. Joanne and Emily expressed how PGS enabled them to develop their knowledge in much greater depth and then to follow this learning with teaching and mentoring colleagues, this experience then took this knowledge to a new level. As Aristotle said, “Teaching is the highest form of understanding.” (Boyer, 1990, p. 23). Teaching involves facilitating, motivating, transforming and extending ones knowledge (Boyer, 1990). Respondents’ ability to teach colleagues has increased by 93.1 percent compared with Pelletier et al’s., (2003) study who reported 84.0 percent. Scholarship in teaching includes professional role modelling and mentoring (Pape, 2000). The current study revealed that postgraduate nurses’ ability to act as role models, increased by 89.3 following PGS. This is comparable to Pelletier et al’s., (2003) study of 84 percent. Three-quarters of respondents reported increased mentoring of others compared with Pelletier and colleagues’ study of more than 45 percent, furthermore mentoring was not well understood in Australia at this time (Pelletier, Donoghue, Duffield, & Adams, 1998b). Over 85 percent of respondents reported an increase in assisting staff to develop their clinical skills and almost 80 percent identified that they were more able to assist clinical staff to identify and meet their learning needs.¹¹⁰ Providing opportunities for staff development increased by almost 80 percent compared with 71 percent in Pelletier et al’s., (2003) study. Clinical teaching is thriving, Boyer (1990) expresses, that enthusiastic teaching keeps nursing scholarship alive, shaping both research and practice. Emergency nursing and patients are benefiting from postgraduate nurses as teachers, facilitating scholarly inquiry within clinical practice. Thereby linking theory into practice and practice into theory, the scholarship of application, building bridges between the two within the clinical environment. This is emancipatory, both respondents and clinical staff engaged in learning, sharing knowledge,

¹¹⁰ Pelletier and colleagues’ did not report on these two findings.

experiences in life-long learning and scholarship. Whyte et al., (2000) was the only study to report that PGS had assisted students with their teaching.

Scholarship involves a lifelong commitment to education and learning, reflection, questioning and pursuing answers (Boyer, 1990; Pape, 2000). Jane (p. 103) expressed how PGS has made her thirstier for more knowledge. This current study reports PGS has increased respondents' interest in further studies by more than 68 percent, with over 55 percent planning further study in nursing. Pelletier et al's., (2005) study identified a likely pattern of lifelong learning in the younger population, with interest in further study surging during the final cohort to 74 percent (Pelletier, Donoghue, Duffield, & Adams, 1998b). Boyer's (1990) model of scholarship is applicable to postgraduate education and includes a lifelong commitment to increasing ones knowledge.

6.2.3.3 *Professional boundaries*

Respondents' in the current study demonstrated enthusiasm in using their knowledge and leadership skills to develop nurse-led critical pathways and projects extending and developing nursing roles. Any extensions to professional boundaries were not canvassed within the survey questionnaire and as the telephone interview followed an open-questioning technique/conversation, data were not collected on this topic. Furthermore if the researcher had selected a sequential¹¹¹ procedure for data collection this information may have been collected during this phase.

Of interest is Harris and Watson's (2005)¹¹² NZ study of a nurse-led pre-assessment clinic in the cardiology day unit at Christchurch Hospital, which has proven to be a successful experience for patients, an efficient use of resources and an opportunity for nurses to expand their practice. Therefore specialist and expanded nursing roles are potential areas for development in emergency care. Enabling nurses with postgraduate qualifications to develop

¹¹¹ A sequential procedure in this research design would begin with the quantitative method (survey questionnaire) and follow with the qualitative method (telephone interviews) in a different phase. This would enable the researcher to expand on the understanding of the earlier data through a second phase (Cresswell, 2003).

¹¹² Harris and Watson's (2005) study comprised a sample of 30 patients who presented to the pre-admission clinic over a two-month during 2004. Nineteen of the patient surveys were returned, with a response rate of 63 percent. Although a small survey and without ethical approval, the results are of interest.

autonomous practice working in expanded roles along with other health professionals. This would give the respondents of this study an opportunity for emancipatory practice, working autonomously and making decisions underpinned by knowledge and evidence, freeing nurses to develop new ways of practice and leadership.

It is evident that postgraduate knowledge and understanding has assisted nurses in opening up a new world, thinking globally and taking political action, with some transforming the direction of nursing. According to Kincheloe and McLaren (2005) action or the potential for action at this political level is the desired outcome of critical theory. Denzin and Lincoln (2005) acknowledge that no one person is completely emancipated from the socio-political situation, however these nurses are gaining power and insight. This action takes huge courage (Spence, 2004b; Spence & Smythe, 2007) and risk.

6.2.4 SUMMARY

The similarities found between this study, Pelletier's Australian study and those identified in the literature, show that a number of effects resulting from PGS transcend individual programmes and universities, enhancing patient care and nursing effectiveness nationally and internationally. Results found between this study and that of Green, Perry and Harrison's (2008) study with physiotherapists again demonstrate a number of similarities within PGS, therefore results may also transcend multidisciplinary programmes.

Respondents perceive that PGS has overwhelmingly increased their reflection and critical understanding; assisted to develop their knowledge, leadership and understanding, their awareness of ethical and legal implications, therefore resulting in improved quality of patient care delivered. Moreover PGS has enabled respondents to underpin their practice with evidence, improve their effectiveness as a change agent and to increase their professional competence in relation to patient care. Furthermore PGS has increased respondents' ability to teach colleagues and facilitate additional learning in clinical practice. Clinical research and the identification of research questions are now an active part of their thinking and activity. Respondents perceive their self-esteem has increased overwhelmingly during this postgraduate journey and that PGS has been a major contributor to nurses' personal and professional development. Therefore demonstrating that nursing scholarship is flourishing through discovery, integration, application and teaching.

Insights gained through critical self-awareness encourage and empower confidence and understanding in these emancipated nurses, therefore recognising the larger socio-political, historical and economic arrangements of the nursing context. Postgraduate education has been the instrument of liberation. These nurses are freed to engage in a process of action to challenge the traditional norms and bring about change; improving the quality of patient care. Additionally, these results support the premise that ANP enriches, deepens and broadens nurses' knowledge which leads towards quality patient and client care, with improved outcomes.

6.3 LIMITATIONS AND STRENGTHS

6.3.1 LIMITATIONS OF THE STUDY

There are several potential limitations to this study, which require discussion. First of all this study consisted of a single cohort of nurses (i.e. ED nurses employed by NZ DHBs) and therefore has not investigated the views and perspectives of other significant people such as rural nurses, patients, managers and medical staff, or a control group of RNs without postgraduate education. ED nurses entered PGS at different stages in their career, therefore the pre-study level of participants may influence the data as some nurses will be working at a higher-level and the perceived difference may not be as significant.

Another potential limitation is that the study included a sample of nurses from EDs, who were possibly completing the survey questionnaire within their work place and were also possibly known personally to the researcher; therefore this may carry risks that the nurse respondent could respond in a socially agreeable way. NEs and CNMs were aware of which nurses were eligible or not eligible to participate, therefore the potential for influencing participation was possible. The measurement of perceptions as opposed to the measurement of changes in practice was a limitation. Perceptions are subjective, whereas measuring changes in practice are objective and factual.

Question 73 requested that respondents identify their ethnic group, although taken from the 2006 census form, this format did not deliver sufficiently accurate data, with almost one fifth of respondents (19.2%) placing themselves in the 'other' category. Therefore analysing

statistical data with ethnicity was limited, and a decision was made not to include this data within the analysis.

Questions 11 and 12 proved to be problematic as respondents were asked to select two answers only and rank the answers one and two. An average of 75.5 percent of respondents followed the instructions successfully; approximately 24 percent did not rank their answers. Possible reasons for the respondents misunderstanding the instructions include time and speed of reading the questionnaire therefore missing key instructions. Question 16 did not offer a sufficient combination of choices with 19.6 percent of respondents completing the 'other' option. Question 17 referred to clinical work areas and should have been worded more generally to include all areas. A number of respondents completed the 'other' option providing detail of their combined work areas. As a result the combined areas were included into the excel data grid and transferred into SPSS for analysis, reflecting the respondents data. Although a member of the academic staff and an ICU colleague reviewed the survey questionnaire, these limitations were not identified.

6.3.2 STRENGTHS OF THE STUDY

Aside from these limitations, this study has potential strengths. The descriptive study describes and defines this cohort of nurses and adds to the existing literature on the perceived effects of postgraduate education on nurses, a subject of which there is little NZ literature. The results of this research offers valuable information on the perceived effects of PGS on nurses and their patients and may not be unique to emergency nursing and therefore may have equal resonance and transferable benefits across other postgraduate courses. Another strength is that this study generally concurs with Pelletier and colleagues' findings, set in Australia with similar cultural attributes, which is a form of reliability.

The data for this current study included a saturation sample of respondents (n=105) from the majority of DHBs in NZ, with a response rate of 56.0 percent. The inclusion criteria were clearly defined and specific. It is postulated that approximately one third of the potential RNs qualifying within the inclusion criteria responded to this questionnaire. The qualitative data was collected from volunteering nurses equally divided between the North and South Islands of NZ (n=10, nine female and one male participant). Although respondents were not asked to identify the tertiary-level education institution they had undertaken their study through, the data collected for this study is likely to include respondents from most, if not

all, of these institutions within NZ delivering Master's Degree education. The results were generated from respondents who have clinical experience in emergency nursing and have graduated with postgraduate qualifications from a NZ tertiary institution.

The combination of both quantitative and qualitative methods has enabled the researcher to be more confident of the results. This mixed-method approach, informed by a triangulation process has some major advantages. Using more than one method may offset the weaknesses and bias within one method with the strengths of another. Mixed-methods research enables the researcher to view the data from various perspectives, to provide a richer and deeper understanding. Furthermore uncovering contradictions, leading to synthesis or integration of theories and stimulating the researcher to better define and analyse the questions adding rigour and complexity to the inquiry (Denzin & Lincoln, 2005; Jick, 1979). The mixed-method study design may receive greater credibility from a wider audience (Begley, 1996; Burns & Grove, 2005; Denzin, 1978; Denzin & Lincoln, 2005; Patton, 2002).

CHAPTER SEVEN: CONCLUSIONS, AND RECOMMENDATIONS

*“Aristotle told us the difference between the artisan and the master craftsman
is that the artisan knows how to do things very well.*

*The master craftsman, on the other hand, knows not only how to do things well, but the
reasons for why things are done”.*

Anon

7.1 CONCLUSION

This research study has provided deep and meaningful research-based evidence in the form of a descriptive study, using a mixed-method triangulation process to investigate emergency nurses’ perceptions of the impact of postgraduate education on their practice in NZ. This study is the first of its kind in NZ and internationally known to have researched this topic with solely emergency nurses. The study provides evidence that postgraduate education in emergency nursing has mostly a positive effect on the development of nurses, they have been re-energised and for some it has kept them in nursing.

Master’s level courses for RNs are gaining momentum in NZ and more recently this momentum has increased with CTA funding becoming more readily available. NZ emergency nurses are experiencing a process of change and transformation through PGS. The journey for these nurses is taking place on two fronts. On a personal level these nurses are developing their advanced knowledge in emergency nursing through critical thought and reflection, education, research and praxis and on a wider front they are learning about the challenges and change in society, politics and the power structures constraining clinical practice and our wider society. PGS combined with clinical experience has provided a solid foundation from which this cohort of nurses can be actively involved in bringing about future social change in emergency health care. It is these visionary and responsive nurses that have been enlightened, empowered and emancipated through postgraduate education that will lead this transformation.

The change that is imminent, will include the blurring and expanding of nursing boundaries and the development of ANP roles leading to new career structures; NP positions, new

partnerships and working together as respectful, knowledgeable peers. Currently the only pathway forward for specialty or advanced nurses is that of NP and not everyone wants to pursue a career as a NP. Therefore it is important that the remaining nurses are given an opportunity to advance their practice and knowledge and continue their learning. The researcher believes that the ‘shades’ must be lifted from managers’¹¹³ and medical eyes for them to see a different, wider and respectful way forward to create a social environment opening up opportunities for these visionary nurses nationally. Failure to provide options or ways forward to advance nursing will lead to frustration and nursing resignations. At a time when retention of nursing staff is paramount it is important that career pathways are addressed so nurses continue to be challenged and to learn.

The results from this research study begin to build some understanding about postgraduate nursing education and will contribute to the development of improved understandings of this cohort of postgraduate nurses. Furthermore, the findings from this study may be a first step toward forms of political action in itself, therefore the results may have the potential to inform educators as well as provide direction for policy development within NZ by the NCNZ, NZ Universities, DHBs and the MoH. With over three quarters of the respondents reporting increased effects from PGS and almost one quarter of nurses reporting ‘no effect’ from PGS on items of patient care activities, this research will provide the data and opportunity for these organisations to provide appropriate continuing professional development activities. Sufficient support mechanisms are required to enable these advanced and specialty nurses to progress their knowledge, undertake research and to publish, along with the development of nursing roles and careers.

NZ emergency nursing is progressing and developing a tide of knowledgeable and increasingly politically aware nurses, using their knowledge to debate the issues, which is a positive outcome considering some NZ ED’s currently troubled socio-political context. This current research provides nurses contemplating PGS with supportive evidence of the potential benefits of undertaking postgraduate education programmes. Finally, for nurses undertaking PGS, these results are empowering as they highlight the nurses’ experiences and

¹¹³ These people include multiprofessional staff involving hospital administrators, medical personal and nursing managers.

reveal how PGS contributes to the personal development of the nurse and improved quality benefits to the patient and the employer. These results are then both affirming and challenging.

Scholarship in nursing practice is paramount. Recognising and creating an environment of knowledge development, where discussion, debate and understanding will be nurtured, supportive of academia with sufficient resources, will assist to develop a critical mass of scholars confident to engage in debate, education and lead the next generation of emergency nurses.

7.2 RECOMMENDATIONS

Several recommendations arise from the findings of this study; the first three are related to research and the final two are related to education.

It is desirable that additional research using follow-up longitudinal designs is required to evaluate the long-term effects of PGS on this cohort of nurses, including the opportunities and challenges they are facing. Exploring the positive and negative drivers for career development and job satisfaction would assist in understanding the development or political controls of new advanced nursing roles.

Collaboration and the building of relationships in terms of research between DHBs/EDs and the University education sector must take place in terms of addressing the respondents perceived results of 'no effect' from PGS on quality of patient care, therefore making PGS more accessible and relevant for some RNs. Collaborative research between the University education sector and clinical practice within DHB EDs would offer opportunities to build academic and clinical links, developing relationships and creating a new way forward in the 21st century.

A database is required to collate clinical research projects and evaluation taking place in EDs, their topics and outcomes. It is recommended that DHBs support the nurse authors of research projects to publish their work. Further research is required by emergency nurses to identify the factors within the ED environment that encourage or discourage clinical research within EDs nationally.

That support be offered to ED nurses embarking on PGS in collaboration with the Universities and DHBs to include study skills and assignment construction and formatting, computer writing and editing skills, academic writing and time management workshops. This must take place in terms of addressing the respondents' perceived stressors to enable a smoother and less stressful transition to postgraduate learning.

That the MoH, NCNZ and DHBs work together in a collaborative way to embrace and provide a way forward, offering career pathways for these advanced emergency nurses to extend their roles and develop their careers in practice.

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***APPENDIX 1: COMPETENCIES FOR SPECIALTY NURSING
PRACTICE AND COMPETENCIES FOR ADVANCED NURSING
PRACTICE PROGRAMMES (with/without Nurse Prescribing)***

***SPECIALTY NURSING PRACTICE PROGRAMME STANDARDS
AND COMPETENCIES***

3.2 Competencies for Specialty Nursing Practice

3.2.1 Shows sound levels of judgement, discretion and decision-making in patient/client care.

- 3.2.1.1 Increases clinical understanding and practice on which to assess and manage clinical situations.
- 3.2.1.2 Utilises effective assessment skills (physical and psychosocial).
- 3.2.1.3 Performs technical skills effectively.
- 3.2.1.4 Utilises specialty knowledge and experience to provide effective emotional and informational support to clients and families.
- 3.2.1.5 Foresees likely course of events for clients.
- 3.2.1.6 Individualises client centred care beyond a routine approach to care.
- 3.2.1.7 Further develops effective organisational skills, such as time management and priority setting.

3.2.2 Shows clinical nursing leadership.

- 3.2.2.1 Actively participates within the health care team.
- 3.2.2.2 Acts as a positive role model of specialty nursing practice.
- 3.2.2.3 Acts as a nursing resource for the health care team.
- 3.2.2.4 Effectively communicates with members of the interdisciplinary team.
- 3.2.2.5 Provides guidance, support and nurturing to novice nurses and those entering the specialty practice area.
- 3.2.2.6 Acts as an advocate for nursing within the specialty practice area.

3.2.3 Monitors and improves standards of nursing through quality improvement processes.

- 3.2.3.1 Identifies researchable practice issues and refers to appropriate people.
- 3.2.3.2 Actively participates in quality improvement activities.
- 3.2.3.3 Contributes to the development of policies/audits/standards.
- 3.2.3.4 Gives and receives critical and reflective peer feedback.
- 3.2.3.5 Evaluates nursing practice against current standards through the use of nursing audit tools.

3.2.4 Develops nursing practice through research and scholarship.

- 3.2.4.1 Provides specialty nursing care which reflects current nursing knowledge, research and understanding.
- 3.2.4.2 Utilises research and scholarship judiciously to critique clinical practice guidelines.
- 3.2.4.3 Develops awareness of the impact of broader health policies and directions on specialty practice.
- 3.2.4.4 Presents and participates in client review from a nursing perspective.

***ADVANCED NURSING PRACTICE PROGRAMME STANDARDS
AND COMPETENCIES.***

4.2 Competencies for Advanced Nursing Practice Programmes (with/without Nurse Prescribing)

4.2.1 Articulates scope of nursing practice and its advancement.

The nurse:

- defines the scope of independent/collaborative nursing practice in health promotion, maintenance and restoration of health, preventative care, rehabilitation and/or palliative care
- describes diagnostic enquiry process responding to actual and potential health needs and characteristics of the particular population group
- explains the application/adaptation of advanced nursing knowledge, expertise and evidence based care to improve the health outcomes for client across the care continuum within the scope of practice
- generates new approaches to the extension of nursing knowledge and delivery of expert care with the client groups in different settings.

4.2.2 Shows expert practice working collaboratively across settings and within interdisciplinary environments.

The nurse:

- demonstrates culturally safe practice
- uses advanced diagnostic enquiry skills
- develops a creative, innovative approach to client care and nursing practice
- manages complex situations
- rapidly anticipates situations
- models expert skills within the clinical practice area

- applies critical reasoning to nursing practice issues/decisions
- recognises limits to own practice and consults appropriately
- uses and interprets laboratory and diagnostic tests.

4.2.3 Shows effective nursing leadership and consultancy.

The nurse:

- takes a leadership role in complex situations across settings and disciplines
- demonstrates skilled mentoring/coaching and teaching
- leads case review and debriefing activities
- initiates change and responds proactively to changing systems
- is an effective nursing resource
- participates in professional supervision.

4.2.4 Develops and influences health/socio-economic policies and nursing practice at a local and national level.

The nurse:

- contributes and participates in national and local health/socio-economic policy
- demonstrates commitment to quality, risk management and resource utilisation
- challenges and develops clinical standards
- plans and facilitates audit processes
- evaluates health outcomes and in response helps to shape policy.

4.2.5 Shows scholarly research inquiry into nursing practice.

The nurse:

- evaluates health outcomes, and in response helps to shape nursing practice
- determines evidence-based practice through scholarship and practice

- reflects and critiques the practice of self and others
- influences purchasing and allocation through utilising evidence-based research findings.

The following are additional competencies for those nurses who are seeking prescribing rights.

4.2.6 Prescribes interventions, appliances, treatments and authorised medicines within the scope of practice.

The nurse seeking prescribing rights:

- uses professional judgement to:
- assess the client's health status
- make a diagnosis
- implement nursing interventions/treatments
- prescribe
- refer the client to other health professionals
- orders appropriate diagnostic tests, accurately interpreting the results and prescribing in accordance with these results
- collaborates and consults with, and provides accurate information to, the client, the client's family and other health professionals about prescribing relevant interventions, appliances, treatments or medications
- facilitates the client's access to appropriate interventions or therapies
- prescribes and administers interventions, appliances, treatments and medications (including vaccines) within legislation, codes, scope of practice and according to the established prescribing process and guidelines
- prescribes within a framework of current best practice, nursing knowledge and knowledge of pharmacology, physiology, chemistry, pathophysiology, pharmacokinetics and pharmacodynamics

- understands the use, implications, contra-indications, and interactions of prescription medications with each other and with alternative/traditional/complementary medicine and over-the-counter medications/appliances
- understands the age-related implications of prescriptive practice on clients within the particular scope
- accurately documents assessments of the client's health status, diagnosis and decisions made about prescribed interventions, appliances, treatments, medications and referrals or follow-up
- evaluates the effectiveness of the client's response to the prescribed interventions, appliances, treatments and medications, and monitors decisions about prescribing, taking remedial action and/or referring accordingly
- demonstrates an ability to limit and manage adverse reactions/emergencies/crises
- recognises situations of drug misuse and acts appropriately
- understands the regulatory framework associated with prescribing, including the legislation, contractual environment, subsidies, professional ethics, and roles of key government agencies

Reference:

Nursing Council of New Zealand (2001) *Framework for Post-Registration Nursing Practice Education*. Wellington: Author

APPENDIX 2: SEARCH STRATEGY

MASTER'S RESEARCH SEARCH STRATEGY

A systematic search strategy was employed gathering literature in preparation for this review. This involved the use of OVID, CINAHL, MEDLINE, Embase, ERIC and PsycInfo databases. Other sources included journal hand searching, Internet searching on the World Wide Web, university, hospital, polytechnic and New Zealand (NZ) Nurses Organization libraries. The main search terms included: tertiary education, higher education, postgraduate education, higher-level education, education, continuing education, continuing professional education, post registration, career paths, advanced nursing practice, advanced practice, clinical nurse specialist, nurse practitioner, expanded roles, emergency nursing. Other articles of interest were cited from the reference list of selected articles. Librarians were contacted and offered their expertise as requested.

The literature review yielded six references in addition to Pelletier's papers. One qualitative NZ study was located by Spence (2004a, 2004b) who reported on the impact of clinically focused postgraduate education on advancing nursing practice. No NZ studies were identified reporting on ANP in NZ emergency departments (EDs) therefore a gap in the literature has been identified which opens an opportunity for this study. Other references yielded, reported on continuing professional development and post-registration studies, which combined undergraduate degree and masters students in the studies.

A separate literature review was conducted on all other topics, topics included Jürgen Habermas and critical social theory, nursing scholarship and Ernest Boyer to name a few.

Emergency Nurses with New Zealand Postgraduate Qualifications, working in Emergency Departments.

You are invited to take part in a research survey of New Zealand (NZ) registered nurses working in Emergency Departments.

The aim of the Masters Thesis Research study is to investigate a national emergency nursing perspective of the perceived effects of higher nursing education on practice for emergency nurses. In the context of this study, higher education refers to postgraduate education including postgraduate certificates, postgraduate diplomas, and completed Masters Degrees and Doctorates in nursing in NZ, which include papers focused on the development of emergency nursing practice.

If this is you and you would like to participate in this national study please see your Clinical Nurse Leader for further information. Your contribution will be appreciated.

JULY 2006

APPENDIX 4: INFORMATION SHEET FOR PARTICIPANTS

[06/068]

[July 2006]



To investigate the perceived effects of Higher Education on the practice of Registered Nurses working in Emergency Departments in New Zealand (NZ).

INFORMATION SHEET For Participants

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate I thank you. If you decide not to participate there will be no disadvantage to you of any kind and I thank you for considering my request.

I am a Masters student in Health Sciences (Nursing) at Otago University. As part of this degree I am undertaking a research project, which will investigate the perceived effects of higher education on the practice of registered nurses working in emergency departments in NZ. This study is timely in light of policy directions of the Ministry of Health regarding first contact care and education of the nations emergency workforce and the results will be used to develop knowledge of emergency nurses and the perceived effects on their clinical practice. Information collected will contribute to the ongoing development of nursing and educational approaches.

This study will explore the effects of postgraduate education studies on quality of care delivered and career paths of emergency nurses on completion of their studies.

I am inviting registered emergency nurses who have qualified with postgraduate qualifications (postgraduate certificates, postgraduate diplomas, completed Master's Degrees and Doctorates) from NZ tertiary organizations from (and including) the year 2000, to (and including) 2005 to participate in this study.

You will be asked to complete a questionnaire, which will take no longer than 20 minutes. If you are not comfortable answering a question, please leave it blank.

Your participation is entirely voluntary.

Personnel who will have access to this data include the researcher, supervisors and administrators.

The data collected will be stored in a locked secure environment during the study and for a further 5 years on completion of the study as required by the University's research policy. Only those mentioned above will have access to the data.

Results of this project may be published however no material that could personally identify you will be used. You are most welcome to request a summary of the results of the project should you wish.

If you have any questions about this project, either now or in the future, please feel free to contact either: - Carolyn Bennison – Principal researcher or Lorraine Ritchie – Student Supervisor, at the Centre for Postgraduate Nursing Studies, Christchurch School of Medicine and Health Sciences, Telephone: 03 364 3850.

If you are willing to take part in this survey and

1. fully understand the nature and purpose of this research,
2. have had all questions satisfactorily answered,
3. are aware of what will become of this data,
4. know that you are free to withdraw from this questionnaire at any time without disadvantage;
5. are aware that the data may be published,
6. are aware that a third party may have access to this data;
7. and aware that every effort will be made to preserve anonymity of the participants,

Please complete the attached anonymous questionnaire.

When complete, please seal the questionnaire in the enclosed envelope provided and place it in the courier postage pack available from the Clinical Nurse Leader, thank you.

Remember, your answers will be **CONFIDENTIAL**

Thank you for your help with this research.

This project has been reviewed and approved by the University of Otago Human Ethics Committee

APPENDIX 5: SURVEY QUESTIONNAIRE

Survey Questionnaire: - To investigate the perceived effects of Higher Education on the practice of Registered Nurses working in Emergency Departments in New Zealand.

About the Sections in this Questionnaire

There are six sections:

Section A: The questions in this section ask about your career goals and the effect of your study.

Section B: This section seeks information if you are in a different work position now following your postgraduate studies.

Section C: This section seeks to establish the impact of postgraduate studies on the quality of patient care.

Section D: This section seeks information on your activities and developments since graduation.

Section E: This section gathers demographic data.

Instruction:

1. Please answer the questions by ticking ✓ the box, circling the most appropriate response on the scale or filling in the space provided.
2. Please complete all sections of the questionnaire.
3. On completion please seal the survey questionnaire in the enclosed envelope provided and place it in the courier postage pack available from the Clinical Nurse Leader.

Remember, your answers will be **CONFIDENTIAL**



SECTION A

The questions in this section ask about your goals and the effect of your study.

For questions 1 to 7 please circle the number which best represents your response.

Postgraduate studies have:

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
1. given me more control over my career and future.	1	2	3	4	5
2. assisted me to gain recognition from others.	1	2	3	4	5
3. increased my interest in further studies.	1	2	3	4	5

How would you describe the effect of your postgraduate studies on your:

	Strongly Negative	Slightly Negative	No Effect	Slightly Positive	Strongly Positive
4. self-esteem?	1	2	3	4	5
5. ability to carry out your current work role?	1	2	3	4	5
6. job satisfaction?	1	2	3	4	5

	Not at all	Slightly	Moderately	Quite a bit	A great deal
7. Have your career goals changed since you completed your graduate studies?	1	2	3	4	5

If you answered “Not at all” go to Q.9, otherwise continue on with Q.8

8. Select ONE statement below which BEST describes the way your goals have changed?

I am now looking to:

- change my career direction (01)
- advance my career (02)
- increase my involvement in management (03)
- develop my professional nursing role (04)
- enrol in further study (05)
- other (Please specify) _____

9. Do you intend to remain employed in nursing for
the next 5 years or more?
Yes (01) No (02) Uncertain (03)

10. Do you intend to remain employed in nursing for
the next 10 years or more?
Yes (01) No (02) Uncertain (03)

11. What do you think would facilitate your career advancement?
Please select **TWO** answers only. **RANK** your answers 1 and 2.

- further postgraduate education (01)
- job availability (02)
- experience (03)
- changed personal situation (04)
- motivation (05)
- recognition by management of your course (06)
- diversity of skills (07)
- other (Please specify) _____

12. What do you think are the main barriers to your career advancement?
Please select **TWO** answers only. **RANK** your answers 1 and 2.

- lack of recognition of your course by management (01)
- personal circumstances (02)
- hospital funding and support (03)
- lack of appropriate skills (04)
- lack of appropriate experience (05)
- lack of defined career path (06)
- job availability (07)
- difficulty applying yourself to study (08)
- other (Please specify) _____

Please select ONE answer only for Q. 13-15.

13. Do you plan further study in nursing?
- Yes (01)
- No (02)
- Uncertain (03)

If you answered Yes continue to Q. 14, otherwise go to Section B.

14. At what level do you plan to study?
- Graduate diploma (01) Masters by Thesis (03)
- Clinical Masters (02) Doctoral Studies (04)
- Other (Please specify) _____

15. Do you plan further university study outside of nursing?
- Yes (01) No (02) Uncertain (03)

SECTION B

If you are in a different work position now than you were when you graduated continue with Q.16. If you are in the same position as you were when you graduated go to Q.26.

Please tick one box only for the following questions.

16. What position do you hold now?
- Registered Nurse (01) Clinical Nurse Leader (05)
- Clinical Nurse Specialist (02) Deputy CNL (06)
- Clinical Nurse Coordinator (03) Educator (07)
- Nurse Consultant (04) Nurse Practitioner (08)
- Other (Please specify) _____

17. What area do you work in most of the time?

Education (01)

Management (02)

Other (Please specify) _____

18. In your organisation would this move have been seen as upward (01)

downward (02)

horizontal (03)

19. As a result in this change of position, has your salary increased (01)

decreased (02)

stayed the same (03)

For questions 20-25 please circle the number which BEST represents your response to each of the following statements/questions.

	Not at all	Slightly	Moderately	Quite a bit	A great deal
20. On a personal level, how <u>significant</u> has this job change been for you?	1	2	3	4	5
21. Did the completion of postgraduate studies enhance the success of your application?	1	2	3	4	5
Changing my job was motivated by a desire to					
22. Advance my career	1	2	3	4	5
23. Balance my life and work responsibilities	1	2	3	4	5
24. Change the level of work satisfaction	1	2	3	4	5
25. Consolidate my knowledge	1	2	3	4	5

SECTION C

I am seeking to establish the impact of postgraduate studies on the quality of patient care. The following is a list of components which contribute to quality patient care. Using the scale provided indicate the impact that your postgraduate studies have had on the following:

Not applicable	Significantly decreased	Slightly decreased	No Effect	Slightly increased	Significantly increased
0	1	2	3	4	5

26. The recognition of the potential of computers to support nursing practice
27. Ensuring resources required for care are present
28. The identification of barriers to staff performance
29. The development of standards for staff performance
30. Making effective patient – staff allocations
31. Sensitivity to work-load stress on colleagues
32. Enhancing the quality of your patient advocacy skills
33. Increasing the degree of autonomy in your work role
34. Increasing your professional competence in relation to patient care
35. Performing effectively in group situations such as team conferences
36. Assisting staff to set goals in relation to patient care
37. Making care decisions based on research findings
38. Teaching patients
39. Teaching colleagues
40. Assisting clinical staff to identify and meet their learning needs
41. Assisting staff to develop clinical skills
42. Providing opportunities for staff development

Not applicable	Significantly decreased	Slightly decreased	No Effect	Slightly increased	Significantly increased
0	1	2	3	4	5

- 43. The recognition of the relationship between care and outcomes
- 44. The awareness of the legal implications of practice
- 45. The participation in ethical decision making
- 46. The awareness of ethical implications of computer use
- 47. The participation in quality assurance activities
- 48. Questioning care decisions made by other colleagues including doctors
- 49. Utilizing time management skills
- 50. The identification of research questions
- 51. The development of standards for quality patient care
- 52. The evaluation of care delivered
- 53. Conveying information, written or verbal
- 54. The communication with patients and family
- 55. Motivating staff
- 56. Enhancing the morale of staff
- 57. Enhancing the morale of patients
- 58. The capacity to support staff in decision making process
- 59. The capacity to support patients in decision making process
- 60. Motivating patients
- 61. Acting as a role model
- 62. Acting as a change agent

SECTION D

Please tick ONE box only for the following questions.

Since graduation, have you:

63. submitted any professional writing (books/journals) for publication?

yes, for the first time (01)

yes, but have submitted before (02)

no, never have (03)

no, but have submitted before (04)

64. given a conference paper?

yes, for the first time (01)

yes, but have done so before (02)

no, never have (03)

no, but have done before (04)

65. participated in any research project?

yes, for the first time (01)

yes, but have participated before (02)

no, never have (03)

no, but have done so before (04)

66. initiated any research project?

yes (01)

no (02)

Please tick ONE box only for the following questions.

Since graduation has your:

67. participation in professional nursing organisations
increased (01)
decreased (02)
stayed the same (03)
68. perception of the value of basing practice on research findings
increased (01)
decreased (02)
stayed the same (03)
69. mentoring others
increased (01)
decreased (02)
stayed the same (03)
70. How many nurses would you consider you have mentored since commencing postgraduate study?
.....

Permission to use this questionnaire instrument has been obtained from Dianne Pelletier, Sydney Australia. This questionnaire has been used in a longitudinal study with postgraduate nurses graduating from a University in Sydney, Australia.

PTO

SECTION E

The following questions are collecting background information.

71. What is your gender?
- Female (01)
- Male (02)
72. What is your age?Years
73. Which ethnic group do you belong to?
- New Zealand European (01)
- Maori (02)
- Samoaan (03)
- Cook Island Maori (04)
- Tongan (05)
- Niuean (06)
- Chinese (07)
- Indian (08)
- other such as *DUTCH, JAPANESE, TOKELAUAN*. Please state:
.....
74. Are you currently working?
- Full time (01)
- Part time (02)
75. What was your highest qualification on entry to postgraduate study?
- Registered General Nurse (01)
- Registered Comprehensive Nurse (02)
- Bachelor of Nursing (03)
- Other (Please specify) _____ (04)

76. What is your highest postgraduate qualification?
- Postgraduate Certificate (01)
 - Postgraduate Diploma (02)
 - Masters of Health Science (03)
 - PhD (04)
 - Other (Please specify) _____ (05)

77. How has your study been funded?
.....

78. What size hospital/acute management service do you work in?
- Tertiary Centre (01)
 - Secondary Hospital (02)
 - Sub-Acute Units (03)

79. If you have any other comments relevant to this survey you would like to make, please note them here. Any comments you make will be appreciated.

Your comments:

Remember your answers will be **CONFIDENTIAL**

Thank you for your help with this research

**APPENDIX 6: TELEPHONE INTERVIEW RECRUITMENT
INFORMATION**

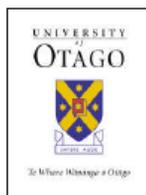
[06/068]
[July 2006]

**Would You Be Interested
In Participating In
A Telephone Interview?**

**The Researcher Carolyn Bennison
(Who may be known to you)
Would Like To Invite
Registered Emergency Nurses
To volunteer for a 15-minute Telephone Interview,
This involves
An Open-Question Technique.**

If You Would Like To Volunteer Please Read On.

**APPENDIX 7: INFORMATION SHEET FOR PARTICIPANTS OF
15-MINUTE INTERVIEW**



[06/068]

To investigate the perceived effects of Higher Education on the practice of Registered Nurses working in Emergency Departments in New Zealand (NZ).

**INFORMATION SHEET
For Participants of the 15-minute Telephone Interview**

Thank you for your interest in this project. Please read this information sheet carefully before deciding whether or not to participate.

The aim of the telephone interview is to gain deeper understandings and enrich the data collected in the survey questionnaire, exploring the effects of postgraduate education studies on quality of care delivered and career paths of emergency nurses on completion of their studies.

The researcher Carolyn Bennison (*who may be known to you*) is seeking registered emergency nurses to volunteer for a fifteen-minute telephone interview. This interview is voluntary, involves an open-questioning technique/conversation, enabling nurses to express their views on quality of care delivered more fully and freely.

This telephone interview which involves an open-questioning technique where the precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops.

In order for the researcher to concentrate on what you are saying, without taking notes, the interview will be audio-taped. The audio-tapes will be transcribed; this means they will be typed on paper.

Interview data will be stored in a locked secure environment during the study and for a further 5 years at completion of the study.

If you would like to be involved, or have any questions about this interview, please contact the researcher Carolyn Bennison to register your interest by
Telephone: 03 364 3650 or
Email: carolyn.bennison@nmhs.govt.nz

Remember, your answers will be **CONFIDENTIAL**
Thank you for your help with this research.

This project has been reviewed and approved by the University of Otago Human Ethics Committee

APPENDIX 8: SURVEY QUESTIONNAIRE LAYOUT

SURVEY QUESTIONNAIRE LAYOUT

The questionnaire includes five sections:

Section A: The questions in this section ask about career goals and the effect postgraduate studies have had on this.

Section B: This section seeks information from the nurse if they are in a different work position now following their postgraduate studies.

Section C: This section seeks to establish the impact of postgraduate studies on the quality of care.

Section D: This section seeks information on the nurse's activities and developments since graduation.

Section E: This section gathers demographic data.

Question Format

A variety of forced-choice question formats were used, namely five:

1 A five-point Likert-style format was used, where the participants were provided with statements, asking them to indicate how strongly they agree or disagree i.e.:

Postgraduate studies have:	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
Given me more control over my career and future.	1	2	3	4	5
Assisted me to gain recognition from others.	1	2	3	4	5
Increased my interest in further studies.	1	2	3	4	5

2 Selection choices where the participants are asked to choose in preference to others i.e.:

Do you intend to remain employed in nursing for
the next 5 years or more?

Yes (01) No (02) Uncertain (03)

3 Direction and Ranking Scales where the participants are given a list of alternative answers and asked to select first which of the two they think is the most important priority and rank their importance i.e.:

What do you think would facilitate your career advancement?

Please select **TWO** answers only. **RANK** your answers **1 and 2**.

further postgraduate education (01)

job availability (02)

experience (03)

changed personal situation (04)

motivation (05)

recognition by management of your course (06)

diversity of skills (07)

other (Please specify) _____ (08)

4 Attitude choices where the participant was asked to select the view that is closest to theirs i.e.:

I am seeking to establish the impact of postgraduate studies on the quality of patient care. The following is a list of components, which contribute to quality patient care. Using the scale provided indicate the impact that your postgraduate studies have had on the following:

Not applicable	Significantly decreased	Slightly decreased	No Effect	Slightly increased	Significantly increased
0	1	2	3	4	5

- The recognition of the potential of computers to support nursing practice
- Ensuring resources required for care are present
- The identification of barriers to staff performance
- The development of standards for staff performance

5 Open-ended questions where the participants were able to formulate their own answer i.e.:

Question 79. If you have any other comments relevant to this survey you would like to make, please note them here.

APPENDIX 9: TELEPHONE INTERVIEW GUIDE

Research Thesis (CB) 15-Minute Telephone Interview Guide *Open-Questioning Technique*

November 2006

- Welcome and thank the participants for volunteering to participate in this interview.
- Acknowledge consent received by post
- 15-minute interview being audio-taped
- Will keep to time – a reminder that 5 minutes remaining
- This interview is open-questioning technique so please feel free to talk

- Please give me your thoughts, on your experience, of the effects Postgraduate Education has had, on your practise as an emergency nurse?

- How do you believe this study impacted on the your career goals?

- How do you believe this study impacted on the quality of your nursing care and delivery?

- Please expand on this with examples from practice?

- How do you believe this study affected your thinking?

- How do you believe it has developed your knowledge?

- How do you believe your practise has changed over time?

- How do you see the benefits to the patient?

- What do you believe has been the value to your ED?

- Five minutes remaining

- What do you believe has been the value to you?

- Is there anything else you would like to share with me?

- Thankyou for your support with my research, which is greatly appreciated.

APPENDIX 10: COPY OF ETHICS APPROVAL

COPY

06/068



ACADEMIC SERVICES
Manager, Academic Committees, Mr G K (Gary) Witte

20 June 2006

Ms L Ritchie
Centre for Postgraduate Nursing Studies (ChCh)
Christchurch School of Medicine
and Health Sciences

Dear Ms Ritchie

I am again writing to you concerning your proposal entitled "**To investigate the perceived effects of Higher Education on the practice of Registered Nurses working in Emergency Departments in New Zealand (NZ).**", Ethics Committee reference number **06/068**.

Thank you for your letter of 15 June 2006 regarding the above titled study. We appreciate the additional information on the points the Committee raised and the amendment to the Information Sheet regarding preservation of anonymity.

On the basis of this response, I am pleased to confirm that the proposal now has full ethical approval to proceed.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'G. Witte'.

Mr G K (Gary) Witte
Manager, Academic Committees
Tel: 479-8256
Email: gary.witte@stonebow.otago.ac.nz

c.c. Ms B A Burrell Director Centre for Postgraduate Nursing Studies (ChCh)

**APPENDIX 11: INFORMATION SHEET FOR TRANSCRIBING and
CONSENT FORM FOR TRANSCRIBING**

Survey: - To investigate the perceived effects of Higher Education on the practice of Registered Nurses working in Emergency Departments in New Zealand.

INFORMATION SHEET

For Transcribing

You are invited to transcribe audiotapes of a telephone conversation between myself, the researcher and the emergency nurse being interviewed. Eight to ten emergency nurses will be interviewed during September/October 2006.

Transcripts are required to be typed triple-spaced with wide margins, to be verbatim and without grammatical editing. Filler words such as “err,” “um,” “you know,” etc. are to be included and pauses to be noted. Changes in voice tone; emotional reactions must also be noted on the transcript. No transcript cleaning or editing will take place by the transcriber. Each nurse’s transcript will be coded and typed on different coloured paper, which I will supply.

To take part in this study you will need to be an experienced typist preferably with some experience in transcribing. Be willing to give approximately 50 minutes of your time for each interview of which there will be eight to ten.

No material, which could personally identify the participants, will be used in any way or form. Audiotapes and transcripts will be kept in a safe and secure place while being transcribed and returned to me on the immediate completion of this work. The identity of the nurses involved in this study and the content of this material must remain confidential. The transcriber must conform to the Privacy Act 1993.

If you are willing to undertake the role of transcriber, please complete the attached consent form and return it in the postage paid envelope.

If you have any questions about this research please contact: -

Carolyn Bennison
Centre for Postgraduate Nursing Studies
Christchurch School of Medicine and Health Sciences
PO Box 4345
CHRISTCHURCH
Email: carolyn.bennison@chmeds.ac.nz

Telephone: 03 544 0451
May1st, 2006

This project has been reviewed and approved by the University of Otago Human Ethics Committee.

Survey: - To investigate the perceived effects of Higher Education on the practice of Registered Nurses working in Emergency Departments in New Zealand.

CONSENT FORM
For Transcribing

Researcher: - Carolyn Bennison
Centre for Postgraduate Nursing Studies
Christchurch School of Medicine and Health Sciences
PO Box 4345
CHRISTCHURCH

1. I have read and understand the Information Sheet dated May 1st, 2006 for the transcribing typist involved in typing up this nursing research data.
2. I have had the opportunity to discuss this study and my role as transcriber with the researcher and I am satisfied with the answers I have been given.
3. I understand that taking part in this study as a transcriber I will be paid fifteen dollars per hour for my time.
4. I understand that my participation in this study as a transcriber is confidential and that no material, which could identify the participants will be used in any way or form by me.
5. I agree to protect the identity of the nurses in the research by using the allocated codes and to keep the information that will be shared confidential.
6. I know whom to contact if I have any questions about the study.

I agree to take part as a transcriber in this study.

.....
(Signature of Transcriber)

.....
(Date)

This project has been reviewed and approved by the University of Otago Human Ethics Committee.

**APPENDIX 12: CONSENT FORM FOR PARTICIPANTS OF THE
15-MINUTE INTERVIEW**

**To investigate the perceived effects of Higher Education on
the practice of Registered Nurses working in Emergency
Departments in New Zealand (NZ).**

**CONSENT FORM
For Participants of the 15-minute Telephone Interview**

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that: -

1. I have read and understood the information sheet;
2. I know whom to contact if I have any questions about this interview;
3. I understand that taking part in this interview is entirely voluntary and I may withdraw from this study at any time, and may decline to answer any particular questions.
4. I understand that my confidentiality will be maintained and no data that could personally identify me will be used in publications or reports on this study.
5. I consent to my interview being audio-taped

I agree to take part in this telephone interview and enclose this consent in the postage paid envelope.

.....
(Signature of participant)

.....
(Date)

.....
(Signature of Principal Researcher)

.....
(Date)

This project has been reviewed and approved by the University of Otago Human
Ethics Committee.

