

**The transition experiences, work conditions and factors that  
influence career intent of degree graduate nurses:  
A Mixed Method Study**

A dissertation submitted to the University of Dublin  
for the Degree of Doctor of Philosophy  
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## **Declaration**

I hereby declare that this thesis has not been submitted as an exercise for a degree at this or any other university and this it is entirely my own work.

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## **Summary**

### **Background**

Ireland has converted to an honours degree as the exclusive entry point to the nursing profession and in 2006 the first degree graduate nurses entered the health service workforce at a time of unprecedented career choices. Turnover is an important employment indicator and has been found to be high among new nursing graduates. The work readiness of this new cohort of registered nurse has been an issue of concern and it is anticipated that the four year honours degree pathway may result in different transition experiences and requirements for support upon entry to practice for these graduates than those of previous educational programmes. The aim of the study is to gain understanding to the transition experience and career expectations of degree graduate nurses and thus contribute to appropriate health policy planning in relation to retention of an adequate and consistent number of motivated nurses in the Irish Health service.

### **Design**

A sequential explanatory mixed method research design was used in this descriptive study. The first stage was a quantitative national survey of 2007 nursing graduates that examined the educational preparation, career intentions, employment profiles, employment patterns, professional progress, occupational demands, personal demands, and support during transition from student to staff nurse and to determine the factors that influence the intent of degree graduates to stay in or leave the profession. This was followed by qualitative interviews with a sample of 22 registered nurses 12 months after entry to practice to examine their experiences on transition into practice particularly in relation to their reactions and support on transition, factors that influence intent to stay and leave and future career expectation.

## **Findings**

The desire to care remains the primary motivation to a career in nursing. Degree graduates are just as likely as previous graduates to stay in nursing but are more likely to change nursing job than those at a later stage of career. Forty-eight percent of graduates do anticipate changing nursing job in the near future. Eleven percent expressed intent to leave the profession in the next five years. However, 19% reported they are thinking about leaving nursing frequently, somewhat higher when compared with the main nurse population across Europe. Decision making as to the speciality area, if any, pursued by new graduates was influenced by the jobs they were offered and the constraints of the employment embargo that emerged in the health service as they graduated.

The findings of this study continue to add to the growing body of evidence on the sources of stress and challenge for new graduates, some of which can be overcome. A number of explanatory factors have been shown to have a push or pull influence on intent to leave the profession. Professional commitment, organisational commitment, satisfaction with pay and social support from supervisor were all found to be predictive of increased intent to stay in a nursing job. Job satisfaction and professional commitment were found to be predictive of intent to stay in the profession while only uncertainty regarding treatment was found to be predictive of intent to leave the profession.

Socialisation to nurse environment is of critical importance to new graduates and they adapt to the expectations and social norms of the environment around them with some exceptions. The expectations that graduates have of their own performance are quite high and they demonstrate a keen enthusiasm to fit in with and please their colleagues. The nature and quality of formalised induction and support for new entrants to the profession varied considerably across the

country but staff nurse colleagues were identified as the primary source of support. Graduates are generally satisfied with the education they received on the honours degree programme and believed it has prepared them to uptake employment in nursing.

### **Conclusion**

In comparing the work conditions of degree graduates in Ireland, consideration must be given to the structural differences that exist in the way nursing work is organised, staffed and delivered in Ireland and across Europe. This new generation entering the workforce anticipate a nursing career with adequate opportunity for professional development while working in team oriented environments. The anticipated turnover rates are high in this cohort and largely influenced by graduates seeking to maximise professional development opportunities at this early career stage. Standardisation of learning outcomes and clinical activities during the internship period and human resource support initiatives on uptake of employment would assist in facilitating graduate movement and avoid duplication of spending and resource usage.

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# **Chapter 1: Background**

## **1.1 Recruitment and retention issues**

Nurse recruitment and retention is a highest priority nursing management research issue for the Irish Health Care system as emphasized in the Nursing and Midwifery Research Priorities Report (National Council for the Professional Development of Nursing and Midwifery 2005:39). Imbalances in the nursing workforce have consequences for the quality and productivity of the health services (Zurn *et al.* 2002). Nurse staffing levels are a critical concern as lower levels are associated with higher rates of adverse patient outcomes (Needleman *et al.* 2002; Aiken *et al.* 2003). The shortage of nurses is a global problem due, in part, to staff attrition, changing demographics, patient care development, government policy changes and enhanced patient survival with chronic illness (DOH&C 2002b; Antonazzo 2003; International Council of Nurses (ICN) 2009). The need to ensure adequate numbers of motivated health professionals has been emphasised (DOH&C 2001, 2002a, 2002b) and prompted the HSE to set up a working group on National Retention and Recruitment of Nurses (Health Services Executive 2005). In the past, Ireland had an over-supply of nurses and limited job opportunities which enabled a culture of enforced migration of new graduate nurses up to the mid 1990s. However, developments in nursing education created the need for more registered nurses in recent years. Currently Ireland is both a receiver and donor country for migrating nurses. Nurses from Australia, India, South Africa, UK and Philippines have augmented the numbers of professionals available to work in Ireland (Kline 2003). One manpower strategy in recent years has been this recruitment of nurses from the developing world, a practice that deprives those countries of essential human capital while only providing short term solutions to national shortages, and therefore the WHO (WHO 2004) has urged countries to look to solving their shortages from within their own countries through effective recruitment and retention strategies.

## **1.2 Projected shortages of graduates**

Interest in the career expectation and adjustment to the workplace of new degree graduates was precipitated in the mid 2000s, as Ireland struggled with its first experience of an acute nursing shortage partially due to the absence of graduates in 2005 following the introduction of the 4 year degree. A statistical characteristic of Ireland is its very large number of practising nurses (15.2 per 1000), the 2<sup>nd</sup> highest in Europe and higher than Germany (11.6), UK (9.2) or France (7.9) (Organisation for Economic Co-operation and Development (OECD) 2010). In Ireland, the apprenticeship model of nursing education provided both nursing training and health care labour requirements resulting in mass production of Irish certificate-trained nurses until the early 1990s, therefore supply exceeded local demand and enforced emigration was a common event. The introduction of nursing degree education in 2002 resulted in an under-supply of graduates with the result that Ireland introduced never-before-seen flexible working arrangements for nurses and became a recipient country for nurse migration. Between 2002 and 2006, 40% of newly registered nurses were migrants, 62% of all migrant working visas issued between 2002-2005 were to nurses and at present 21% of nurses on the active register in Ireland are migrant workers (Humphries *et al.* 2009). The number of nurses graduating every year is also high at 37 per 100,000 head of population, above Germany (27.1), UK (33.7) and France (33.6) (Organisation for Economic Co-operation and Development (OECD) 2010). These OECD statistics contradict the universal perception of a shortage of nurses and efforts to ensure comparability have limitations for a number of reasons. Statistics recorded in some countries may reflect whole time equivalents rather than head counts registered as recorded by An Bord Altranais (ABA), an inability to distinguish nurses who are recorded on more than one part of the register, variation in skill mix across countries, the low proportion of assistive personnel in the Irish health service and high proportion of nurses (40%) working part-time in Ireland (International Council of Nurses (ICN) 2009).



While there is a projected surplus of nurses in Ireland in 2011, there is an estimated shortage in the next 5-10 years (ICN2009). There is a shortage of nurses internationally and it is anticipated that the number of registered nurses globally and within Ireland will fall short of service requirements due to early exit of graduates from practice and an ageing nurse population (Buchan and Aiken 2008; Behan *et al.* 2009). In a report by the Skills and Labour Market Research Unit (SLMRU), in response to DOH&C and HSE requirements for work force planning, experts in the field attempt to forecast Irish nursing manpower requirements for the period 2008-2020 (Behan *et al.* 2009). While present market conditions have resulted in a medium-term over-supply of nurse graduates, the report does indicate that by 2020 local supply of nurse graduates will fall short of requirements by 785 (or 650 WTE) annually (see further breakdown in table 1.1). These projections incorporate private and public sector employment and are derived from population growth estimates at a national level of 8% to reach 4.8 million in 2020 (Behan *et al.* 2009). The projection is contingent on service delivery patterns remaining the same and the population and demographic changes as predicted by the Central Statistics office. However the projected change in demographics by 2010 will result in a larger proportion of older person service user and change service delivery patterns and will no doubt further increase demand for health care and nursing services.

The SLMRU report on Irish nursing manpower requirements for the period 2008-2020 predicts that the recruitment for nurses will not be met by the anticipated graduate supply of approximately 1350 per annum taking into account exit numbers of 2450 (head count) per annum (Behan *et al.* 2009). At the time of commencement of this project, third level organisations in ROI were funded to educate 1640 students (1057 general, 343 psychiatric and 240 intellectual disability nurses (An Bord Altranais 1994, 2004b). The number rose to 1880 in the intervening period due to the introduction of the direct entry

midwifery programme (140 places) and combined children’s and general nursing programme (100 places). In 2009 the HSE reduced places across all third level colleges for General by 197 (18.64%); Intellectual disability 60 (25%) and psychiatric nursing 53 (15.45%), reducing undergraduate places to 1570 (Wallace 2009). It is not entirely clear but it is likely that the projections were derived from the intake of 1880 places per year as it stood before the HSE decision in 2009 and therefore the FAS projections may actually underestimate the shortfall. Based on an intake of 1570, and a estimated replenishment figure of 1350 (Behan *et al.* 2009), then 87% of all graduates must proceed to registration, to meet projections and this will still represent a considerable shortfall.

**Table 1.1 Summary nurse manpower projections (Behan *et al.* 2009)**

Discipline	2007	2020
Registered General Nurse (RGN)	41000	Shortage 1050
Registered Psychiatric Nurse (RPN)	6800	Oversupply 25
Registered Nurse Intellectual Disability (RNID)	1700	Oversupply 85
Registered Child Nurse (RCN)	1670	Oversupply 80
Registered Midwife (RM)s	1650	Oversupply 155
Registered Public Health Nurse (RPHN)	2200	Oversupply of 25
Total	55020	Shortage 785

There is a deficiency in data available to facilitate workforce planning in relation to employment patterns of Irish nurses, their career decisions, professional development undertaken or career pathways pursued since registration. The HSE has recently commenced efforts to

collect information on the destination of new graduates and 1369 graduates from the year 2007 were surveyed with a 33% (n=453) response rate (Health Services Executive 2009). The report concluded that 100% of graduates who sought work achieved it, although 8% (n=36) took longer than three months to find work and reported the factors that influenced employment site was clinical placement site (49%); employer close to home (32%); first job offer (38%) and positive reputation of unit (18%) (Health Services Executive 2009). However, this information to date does little to augment understanding of the career pathways of nurses as the response rates were low and the self report survey conducted is focused on nurses who responded, therefore little is known about those who chose not to respond, those who could not find employment or indeed those who do not seek to uptake employment.

### **1.3 Nursing education in Ireland**

Until the early 1990s nurses were trained in the apprenticeship model with the training hospitals located within and run by individual hospitals. The student nurses were part of the allocated workforce and engaged in direct patient care throughout the educational process and ultimately graduated after three years with a certificate in nursing. During the early 1990s the certificate programme was phased out and the Nursing Diploma was introduced to enhance the academic standing of the nursing qualification, heralding new partnership arrangements between the third level institutions and schools of nursing in the respective hospitals or health care sites for the delivery of nursing education. Until 2002 nurses in Ireland were educated in three year higher diploma programme where the educational experience was primarily hospital-based in partnership with the third level institutions. In response to the Commission on Nursing Report (1998), the first four year undergraduate honours degree in nursing commenced simultaneously in the thirteen third level colleges that deliver undergraduate nursing education in 2002. This educational endeavour was widely debated and signalled the degree as the only point of entry

to the nursing profession in the Republic of Ireland (ROI) for Irish educated nursing students. Nursing is a four year honours degree programme and while entry criteria have been broadened to attract mature candidates to the programme particularly in the smaller disciplines of psychiatric and intellectual disability nursing (with 35% reserved places for mature applicants), there is still a very steady demand for nursing among Irish school leavers (An Bord Altranais 2008). The majority of graduates are aged between 22 and 24 years, and retention of younger nurses is of particular importance because while mature entrants to the profession are an important human resource, they will spent only half the time of a school leaver in the workforce (Ingersoll 2002).

Degree students of nursing in Ireland undergo a discipline-specific educational programme with a minimum of 58 weeks theoretical instruction, a minimum of 40 weeks in clinical placement, a minimum 36 weeks paid internship and a further 10 weeks allocated on a discretionary basis over the course of 4 years (An Bord Altranais 2005). The Irish curriculum attempts to gain a balance between the theoretical instruction and clinical practice. The academic status of nursing has changed considerably over the last twenty years and over that period the education of nurses has been separated from the needs of service. As per previous cohorts, students are supernumerary when in clinical placement except for the paid internship period which, at the time of this study took place between third and fourth year. Supernumerary status of diploma students has led to concerns that students are not as engaged as previous cohorts (Hyde and Brady 2002).

There are considerable differences across and within countries internationally in relation to pre-registration education of nurses. The transformations in nursing education have placed Irish Nursing in a unique position across Europe as the entire workforce has been converted to degree-based education on entry to practice. European

policies aimed at promoting, transparency, cooperation and career mobility among its citizens have heralded the introduction of a common university structure, known as the Bologna process (Zabalegui *et al.* 2006). Attempts to harmonise nurse education across Europe are emerging through this process whereby higher education institutions are seeking to establish a common structure to enable interpretation of curricula, and credit transfers although much work has yet to be done (Salminen *et al.* 2010). The conversion to the bachelor's degree as the entry point to the nursing profession represents a major reform in nurse education, and has far-reaching implications for the nursing work force and for the approaches to care delivery within the health service at large. Nolan and Brimblecombe (2007) investigated the approach to education of nurses across 12 European countries. They reported fifty percent of student time across all countries is spent in clinical practice but found considerable diversity in relation to the academic award (degree or diploma) and the time spent in education with several countries providing a route to registration within three years in contrast to 4 years in Ireland (Nolan and Brimblecombe 2007).

Education in Ireland is exclusively based within the third level sector as it is in Holland, Italy, Malta, Norway, Sweden and United Kingdom (Nolan and Brimblecombe 2007). The degree programme in Ireland remains a direct entry, discipline specific one contrasting with the approach taken in other large developed countries across the developed world including, Australia, United States, New Zealand, Japan, Italy, Norway Denmark, France Switzerland and Canada (Nolan and Brimblecombe 2007; Robinson and Griffiths 2007). A common core curriculum has been advocated in Europe but its realisation is complicated by the diversity in health care culture, structure and economic across member states (Salminen *et al.* 2010). Evidence suggests that resistance to a generalist model of nurses education is due to the anticipated negative impact on mental and intellectual disability nursing (Robinson and Griffiths 2007). A degree entry route

to the profession as the exclusive route to the register is still quite unique in Europe and this system is only operant in Ireland, Scotland, Wales, Greece, Italy, Malta, Norway and Sweden. England continues to retain both the diploma and degree entry to the professional at this time. Robinson and Griffiths (2007) identified four models of nurse education on a continuum from discipline specific to a generalist approach preparing students to work in any of the disciplines; some countries enable the student to specify their discipline of choice only after completion of a common core module. Five points of entry to the register is another unique aspect of the Irish system, whereby candidates elect their specialisation upon entry to the programme (Nolan and Brimblecombe 2007). Very few countries offer learning disability and psychiatry as a direct entry course (Nolan and Brimblecombe 2007; Robinson and Griffiths 2007).

Curriculum design has emphasised the preparation of graduates who process a broad range of knowledge so they work in a variety of care settings and adapt to the changing needs of the health service (An Bord Altranais 2005). In 2006, the first degree graduate nurses entered the health service workforce at a time of unprecedented career choices and these graduates are thought to have much greater mobility than previous cohorts, should they decide to leave the profession. A career in nursing in the 21<sup>st</sup> century is no longer the vocation of earlier generations where careers were noted for longevity (Hodges *et al.* 2005). Careers are 'an interaction between individual choice and the enabling or constraining aspects of the social context' (Robinson *et al.* 2001:XI ). The ethos of the degree course is that graduates would be adequately prepared to work in the community as well as institutional settings (Commission on Nursing 1998; An Bord Altranais 2005). Nursing in the past was able to perpetuate a system whereby short-term practical training sufficed to do the job and in the Irish health service traditionally, care was delivered in a work climate that emphasised obedience and vocation supported in no small way by the rigid educational preparation of nursing staff. Many graduates of

previous nursing education systems can offer accounts of examples of ritualised practice where service need and tradition took precedence over patient care. The conversion to a degree graduate nursing workforce arose from the demand to develop and foster flexible and autonomous practitioners, capable of responding effectively to the increased demand for interdisciplinary collaboration in the delivery of high quality health care services (Commission on Nursing 1998; DOH&C 2001, 2002a). There are various arguments for and against the move to degree education. On the positive side, some would argue that the advent of degree education will attract higher salaries for nurses and contribute to enhanced patient outcomes although for others there is a perception that a degree qualification produces nurses less willing to the hands-on work of nursing (Wetzel *et al.* 1989; Blegen *et al.* 2001; Aiken *et al.* 2003). Graduate education has elevated the status of nursing (Wieck 2003), and degree graduate nurses have been shown to demonstrate enhanced professional behaviours (Swindell and Willmott 2003). A higher proportion of employment of these nurses is correlated with reductions in adverse patient outcomes (Aiken *et al.* 2003).

#### **1.4 Turnover among graduates**

Demand remains consistent among Irish students applying for degree courses to pursue careers in nursing. Degree graduates have been shown to have different ambitions, expectations and attitudes and if they are unsupported may be more likely to leave the profession (Wieck 2003). Turnover rates for new graduates have been estimated to be as high as 61% (DOH&C 2002b; Casey *et al.* 2004; McCarthy *et al.* 2007; Beecroft *et al.* 2008). It is estimated that up to 3108 (8%) nurses are leaving the country annually with a further 3.8% entering the country (International Council of Nurses (ICN) 2009) and many of those are now thought to be new graduates. It is estimated that an Irish nurse who goes abroad will do so for an average of 5-10 years (International Council of Nurses (ICN) 2009). In the recent turnover report, 22% of nurses who expressed intent to leave the profession

held a degree qualification, while only 8% of those who expressed intent to stay in the health service were degree graduates (DOH&C 2002b). Securing an adequate nursing labour supply for the future is a pressing social policy issue particularly in light of recent changes and increased expenditure in Irish nursing education. Training more individuals or reliance on internationally educated nurses is not necessarily the answer to the nursing skill shortage in the Irish Health Service (Zurn *et al.* 2002). Internationally educated nurses are more likely to have graduated with diploma qualifications and work in environments that the indigenous population of nurses find less desirable (Yu 2003). The availability of culturally attuned degree graduate nurses with understanding of the cultural and local health service issues and with the appropriate skills, is key to the development of the Irish health strategy. Irish government investment in the education of degree graduates who leave the profession translates into considerable financial loss (Jones 2004, 2005). Direct costs associated with such losses to the profession include the recruitment and training of new staff, overtime and use of agency staff. Indirect costs associated with turnover include an initial reduction in the efficiency of new staff and decrease in staff morale (Jones 2004). The National Health Strategy (DOH&C 2001) has expressed a desire that the health service become an employer of choice and has articulated the need to implement human resource planning initiatives and to avoid inappropriate expenditure. In order to anticipate future demands for nursing it is necessary to understand trends and employment choices taken by entrants to the profession.

Turnover is an important employment indicator and retention rather than recruitment is the primary strategy to address shortages (DOH&C 2002b). The quality of working life of recent graduates will have direct bearing on their intent to stay in the profession and their ease of transition is heavily influenced by the perceptions of support received on entry to the profession (Gerrish 2000; Mc Kenna *et al.* 2003; Draper *et al.* 2004). Graduates will be less likely to remain in a



workforce where there are restrictions on their autonomy or lack of respect or support from health care colleagues and management (Mc Kenna *et al.* 2003). There is a requirement for common understanding of national norms in relation to transition and potential reasons for early departure of degree graduates combined with efforts to define those measures that may be undertaken by policy makers to sustain a healthy and responsive nursing workforce in order to guarantee the future for the profession and health care delivery in the Irish Republic (Hasselhorn *et al.* 2003a). There is anecdotal evidence of wide variation between organisations as to how degree graduates are recruited, orientated, and supported during their initial period in practice. Little is known about the employment patterns of graduates and tracking of these graduates will augment knowledge of the issues and career aspirations of this group. Some investigation of the unique needs and perception of the transfer to employment is warranted. Supporting graduate nurses in making a successful transition from novice to competency (Benner 1984) is essential to the provision of high quality nursing services and the retention of suitably motivated staff, service providers may need to adapt to the needs of a different sort of nursing graduate. Due to the recent change to a four year honours degree a study of the transition experiences and career expectation of graduates on the entry of the professional nursing role was timely at this juncture. Research that increases understanding about the factors that influence career decisions can be used to inform health work force planning and strategies to maximise the optimal transition for new graduates.

## **1.5 Aim**

To gain an understanding of the labour supply behaviour of degree graduate nurses, and thus contribute to appropriate health policy planning in relation to retention of an adequate and consistent number of motivated nurses in the Irish Health Service.

### **1.5.1 Specific objectives**

- To explore the impact of the transition experiences of new graduate nurses on entry to nursing practice
- To identify the career pathways and employment profiles of new degree graduate nurses
- To explore new graduate perception of readiness and preparation for the professional role
- To ascertain the perceived working conditions of degree graduate nurses and how this impacts on their career expectation and decision-making
- To ascertain the nature and quality of support given to new graduates on entry to practice and to compare this support across different clinical settings and geographical locations
- To identify the factors that positively influence new graduate retention and the factors that influence intent to leave.

### **1.5.2 Long range objectives**

- Inform the preparation of nursing graduates for nursing practice and identify factors that contribute to a positive transition from student to staff nurse for new graduates
- Document and contribute to a data-base of information on graduate employment pattern and career progression
- Contribute to appropriate health policy planning and development in relation to retention of degree graduate nurses as a means to ensure adequate nurse labour supply.

## **Chapter 2: Literature review**

### **2.1 Introduction**

The transition from student to initial employment is a challenging period in the career of any registered nurse. The desired outcome of the nursing degree programme is to produce graduates who are suitably motivated, work-ready, equipped with a broad base of knowledge and critical thinking ability to respond to the demands of contemporary health care who will not only uptake employment but most significantly will be retained within the nursing profession (Commission on Nursing 1998; DOH&C 2002a). The health care environment into which degree graduates embark on a career in nursing is defined by a multitude of factors that did not impact on previous generations of nurses, including an ageing population, increased consumer involvement, more options for women in the workplace and unprecedented demands for fiscal restraint in healthcare.

This chapter provides a review of the literature relating to the key concepts that informed the development of aims and objectives and utilises literature published upto 2007, when the study commenced. The literature accessed from 2007 to the end of the study in 2010 is discussed in chapter 7. To provide background on the theories underpinning graduate transition and expectations on entry to the profession, a comprehensive search of the literature was conducted. Published research in English was accessed for the period 1960-2007 using the data bases of CINAHL, Pubmed, Psych INFO, Cochrane library, Business Source premier and Biomed. The key words used were orientation, graduate nurses, transition, turnover, job satisfaction, degree, intent to stay/leave, orientation, preceptorship, mentorship, competency, and clinical skills. Manual searches were conducted of references lists of reviewed articles and of all relevant

journals and related material held in Libraries at Trinity College. The following themes were used to navigate the literature: significance of turnover in new graduates, importance of retaining new graduates, factors that influence job turnover in new graduates, transition experience & expectations of new graduates, acceptance and support on transition. A summary of the key findings of the literature review is presented at the end of the chapter.

## **2.2 Significance of turnover in new graduates**

Turnover can be defined as the voluntary withdrawal from one's employment and can be attributed to a variety of reasons. 'Voluntary termination includes dismissals, voluntary retirement and leave of absences because of medical, educational or maternity reasons' (O'Brien Pallas *et al* 2006:172). Turnover rates are calculated as the percentage of RNs who turnover in one year out of the average number of nurses employed in one financial year (Jones 2004). Turnover theory arises from the understanding that people leave if they are unhappy with their job and if alternatives are available (Mitchell 2001). The intent to leave present employment is the variable most associated with nursing turnover (Price and Mueller 1981). Turnover studies tend to use intent to leave as the criterion of measure because studies that use actual turnover rates take too long to complete (Mitchell 2001).

Several studies have examined the factors that influence turnover in nursing (Mobley *et al.* 1979; Price and Mueller 1981; Taylor and Covaleski 1985; Borda and Norman 1997; Lum *et al.* 1998). Other studies have focused efforts on trying to estimate the cost of turnover (Gray 1990; Gray and Philips 1994; Gray 1996; O'Brien-Pallas *et al.* 2001; Jones 2004; Waldman *et al.* 2004; Jones 2005). Accurately costing turnover is problematic due to the difficulty in gaining access to accurate financial information relating to recruitment, time, administration and loss of productivity (O' Brien-Pallas *et al.* 2006).

The interpretation of nursing statistics is not straight-forward due to the lack of availability of statistics in the same category from year to year (Hemsley-Brown 1997). One of the difficulties in interpreting the available statistics around the nursing workforce is that comprehensive data are not available on all the individuals who are involved in the provision of nursing (Hemsley-Brown 1997). Some hospitals do not record data on internal turnover (Jones 2004). The definition of a nurse is also problematic as it is uncertain at times who to include; for example it may include undergraduate students on permanent placement, who while unqualified do nonetheless form part of the nursing workforce. The loss of learners from the workforce does mean that fewer people are doing the work of nursing although the numbers of registered RNs on the face of it has increased. The Department of Health & Children (DOH&C) statistics may not accurately capture the real picture of those working in a discipline; there are a number of groups who may not be included in the numbers who are providing nursing care, for example those in training to be Registered Nurses (RNs) in all disciplines, Midwives, Public Health Nurses (PHNs) and auxiliaries (DOH&C 2002b). An Bord Altranais does produce numbers each year in relation to the numbers on the register but does not record those who are not working or working outside of nursing (An Bord Altranais 2004a). It is not possible to distinguish the number of available registered nurses or midwives as one individual may be included in a number of different parts of the register. Many Irish nurses are recorded on more than one part of the register and midwives in some countries are not counted in nursing numbers. The numbers do not reflect whole time equivalents engaged in the system and in Ireland up to 40% of Irish nurses are working part-time (DOH&C 2002c).

Countries that are experiencing increased mobility in the graduate nurse workforce are challenged to estimate total cost (indirect and direct) of nursing turnover accurately (O' Brien-Pallas *et al.* 2006). A high turnover rate means that experienced nurses are spread more

thinly over each shift and this does impact on effectiveness. The care that is provided then becomes more expensive to maintain. The impact of turnover on patient outcomes has been studied directly on a limited basis but impact on skill mix, staffing and experience of the nurse is being demonstrated to a greater extent (Aiken *et al.* 2003; O' Brien-Pallas *et al.* 2006). There is an interpretation in health care that nurses are highly replaceable and exchangeable with the result that there is a high tolerance for turnover. This may have arisen from the apprenticeship model of education in times when acuity and expectations of health were lower.

McCarthy *et al.*, (DOH&C 2002b; McCarthy *et al.* 2007) in a cross sectional study investigated turnover rates across 128 health service locations and 126 nursing homes in Ireland using existing employee data from 1999–2000 provided by local managers to determine profiles of leavers. The final phase of the study examined the intent to stay or leave of nurses (n=352) in 10 hospitals throughout Ireland (McCarthy *et al.* 2007). The nursing turnover rate in the Irish report is calculated on the whole-time equivalent rate (WTE) data hence it cannot be compared to international nursing turnover rates as they are derived from head counts. Therefore the numbers could be remarkably lower when compared with head count leaving full and part-time positions. The study found of the total sample of 352, that the majority of nurses (79%) were working in circumstances where getting jobs was relatively easy and that 96% did not anticipate difficulty in getting another job (DOH&C 2002b). Cross tabulations were carried out on 83 nurses (23%) who expressed intent to leave. Sixty percent of participants intending to leave were single and 22% of them held a bachelors degree while only 8% had attained a diploma level qualification (DOH&C 2002b). Turnover data for the country revealed that the majority of staff (53%) were employed on a permanent full-time (45%) or part-time (8%) contract. However, in the 10 hospitals given closer study 83% of those who expressed intent to leave were in fulltime positions, indicating that tenure was not a significant issue for

participants (Mc Carthy *et al.* 2007). The majority (65%) were intending to leave critical care or medical surgical environments. The critical outcomes of this study were that job commitment, kinship responsibilities and job satisfaction were associated with intent to stay. Of those 83 nurses who expressed intent to leave, 70% were aged between 21 and 35 and 43% had three or more years of experience. Over half of those who leave registered within the last three years and 64% of leavers are aged 30 or under, while relatively few individuals leave because of kinship responsibilities (DOH&C 2002b). The mean turnover rate for nursing was 12% nationally; and in Band 1<sup>1</sup> hospitals averages 20% but at times, turnover has been recorded as high as 48% (DOH&C 2002b).

The estimation of nursing turnover cost is complicated due to the lack of consistent definitions and measurement tools in this area. Decision-makers from Canada, New Zealand, Scotland and USA participated in an international pilot study to refine the methodology to identify the turnover rate of medical and surgical nurses and to determine the true turnover cost (O' Brien-Pallas *et al.* 2006). This study was guided by a patient care system and nurse turnover explanatory model which suggests that patient, nurse, hospital, and unit characteristics combine with throughput influences on nursing deployment and complexity of care environments, to influence staff satisfaction and turnover rates. This in turn will impact on patient safety, patient satisfaction, health and safety output (O' Brien-Pallas *et al.* 2006). Indirect costs in this US (United States) study related to administrative cost of the turnover process and the cost of orientation of the new graduate. The average cost of turnover was \$21,514 (SD 12,226) and the average rate of turnover was 9.49% (O' Brien-Pallas *et al.* 2006). In the United Kingdom (UK) a review of initiatives to overcome recruitment and retention issues in the health service reported that turnover rates from 11-38% have been documented nationally with higher levels found

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<sup>1</sup> Band one hospital: Activity levels at 20,000 patients per annum; responsibility for 200 nursing staff or over; Accident and Emergency department with over 15,000 attendances per annum.(DOH&C 2002b).

particularly in London (Finlayson *et al.* 2002). Conflicting estimates of the costs of graduate turnover have been reported. The estimated turnover cost of a nurse employed less than one year has been estimated at \$49,000 (Beecroft 2001). Turnover costs are derived from estimates of pre-hire costs (advertising, recruiting, vacancy, hiring) and post hire costs (orientation/training, new hire RN productivity, pre-turnover productivity and termination (Jones 2004, 2005). The Nursing Turnover Cost Calculation Methodology (NTCCM) was used in a retrospective study of nurse turnover in 600 bedded US acute hospitals in 2002 (Jones 2005). Data were collected at both service and hospital level. The pre-hire costs include advertising, recruiting and vacancy costs. The vacancy costs are those incurred as a result of staff shortages when a position is unfilled and includes agency, overtime, bed closures and patient deferrals (Jones 2004). The hiring costs are incurred due to interview, employee processing and background checks. The post-hire costs include orientation, training, decreased RN productivity in new hires and remaining staff, decreased pre-turnover productivity and termination costs (Jones 2004). Organisation investment in new employees includes recruitment, cost, and training, socialising of new hires, benefits, salaries and tuition for continuing education (Jones 2004). There are several financial consequences associated with turnover in nursing.

- Loss of return of investment in nurses who leave.
- Instability in the workforce may impact on quality of care and may increase potential for burnout in existing staff.
- Loss of productivity due to bed closures, use of agency and overtime to provide coverage.
- Investment needed for training of new staff (Jones 2004).

The turnover rate for the study site was 19.4% and included voluntary and involuntary turnover (Jones 2005). The estimated turnover cost ranged from \$62,100 to \$67,100 (per turnover). They determined that vacancy, orientation and training of new hired RN productivity and



advertising and recruiting costs accounted for 90% of costs. The vacancy cost is by far the largest and in turn accounted for 75% of that and included overtime and agency, closed beds, patient deferrals and productivity losses of permanent staff. Orientation costs were 8-9% of the total amount and 90% of this was incurred by preceptors and training staff. The researchers estimated that the productivity costs incurred as a newly graduated nurse finds his/her feet was 6 times greater than for experienced nurses (Jones 2005). Turnover costs in this study represented 1.2 to 1.3 times the RN Salary.

### **2.3 Importance of retaining degree qualified nurses**

Ultimately the purpose of any nursing education programme is to influence patient outcomes positively. A small number of studies illustrate the association between nursing degree educational attainment and enhanced professional skills (Johnson 1988; Young *et al.* 1991), while others are emerging that demonstrate a relationship between nursing staffing/skill mix (Blegen *et al.* 2001; Sovie and Jawad 2001; Aiken *et al.* 2002; Clarke *et al.* 2002) and higher proportions of degree graduates (Aiken *et al.* 2003) with enhanced clinical outcomes and reduced adverse events in health care. Blegen *et al.* (2001) in a secondary analysis of the relationship between nurse staffing and quality of patient care used data collected on 81 US nursing units and demonstrated that nurses with greater levels of experience positively influence outcomes, such as medication error rates and patient falls. New graduates represent the greatest human resource pool with which to replenish supplies of nurses who if retained will ultimately be positioned to gain experience. As job performance generally improves with experience, it is desirable to have a spread of experienced nurses over each shift. A high turnover rate means that experienced nurses are spread more thinly over each shift and this can impact on effectiveness. The care that is provided then becomes more expensive to maintain. The multiple skill set of nurses is the strength of the profession but it does mean that they can

draw on these skills to substitute for others and fill in at times of domestic or medical shortages (Meerabeau 2004). Failures in the technical aspects of care in the health service are more objectively attributed to mis-management or systems failures in the health service at large. However failures in the delivery of personal care are attributed to the personal failings of the nursing profession, without adequate consideration of staffing or resources (Meerabeau 2004).

Increasingly skill mix strategies such as use of unlicensed personnel are implemented to cope with the qualified nursing shortage. Sovie and Jawad (2001) examined the effect of nursing structure and processes on selected patient outcomes in the 29 university teaching hospitals across the United States. Increasing the number of registered nurses resulted in reduction in patient falls, and increased satisfaction with pain management. They further found that there was no significant effect on labour cost as a result of increasing the number of registered nurses (Sovie and Jawad 2001). Needleman *et al.* (2002) analysed the relationship between selected patient outcomes including rates of adverse outcomes and rates of lengths of stay and nurse staffing in 799 hospitals from 11 states in the United States. The study included data generated from the discharge summaries of 6,619,628 medical and surgical patients. The study reported that a higher proportion of registered nurses was associated with shorter lengths of stay, incidence of UTIs, pneumonia, and failure to rescue those who become acutely ill. This positively demonstrated that organisations that can provide adequate numbers of qualified nursing staff will be able to reduce negative patient outcomes.

Pearson *et al* (2004) found that hospitalised patients in the United States, with anterior myocardial infarctions (n=118,940), benefited from knowledge, skill and judgment and were less likely to die when care was provided by a higher ratio of registered nurses. Pearson *et al* (2004) concluded that acute, complex and unpredictable health care situations benefit from the knowledge and clinical judgment of

registered nurses. However, organisations with higher registered nurses ratios are likely to have enhanced access to technological and professional expertise, which may have also contributed to increased survival rates. Aiken *et al* (2003) has demonstrated an association between nurse–patient ratios and 30 day mortality and failure to rescue rates in US surgical patients. In this cross sectional study researchers analysed outcome data for 232,342 patients across 168 adult acute care general hospitals in Pennsylvania (Aiken *et al.* 2003). The aim of the study was to determine the relationship between proportion of registered nurses at baccalaureate or graduate level degree and patient mortality rates. The researcher found a 10% proportional increase in baccalaureate or graduate nurses involvement in direct care resulted in a 5% decrease in patient mortality. The researchers concluded that retention of registered nurses with degree education in the provision of direct care will contribute to measurable improvement in patient outcomes.

## **2.4 Factors that influence turnover in new graduates**

The attitudes and motivation of nursing graduates is a critical determinant in ensuring an adequate nursing labour supply (DOH&C 2002b; Antonazzo 2003). Behavioural intent has been demonstrated to be the most immediate predictor of behaviour (Lane *et al.* 1988). Intention to leave has been consistently associated with turnover and indicates a measure of the perception of the individual of their current employment situation and options available to them (Mobley *et al.* 1979). Turnover is a multistage process, influenced by individual, economic and work factors (Lum *et al.* 1998). Factors associated with turnover include age, work experience, tenure, kinship responsibilities, education, promotional opportunities, pay, distributive justice, work environment, alternative employment opportunities and job commitment (Mobley *et al.* 1979; Price and Mueller 1981; Taylor and Covaleski 1985; Lum *et al.* 1998; DOH&C 2002b; Hasselhorn and Buscher 2003). Mobley *et al* (1979) offers a number of determinants

for employee turnover, including age, tenure, job satisfaction, intention to stay and organisational commitment all of which are concepts normally associated with turnover. Mobley *et al*'s (1979) model of professional employee turnover gives insight into the push and pull factors that influence turnover. Aspects that will draw an employee to an organisation include satisfaction with pay, work conflict, and professional opportunities. External factors which may pull an employee include dissatisfaction with pay, opportunities as well as job alternatives (Mobley *et al.* 1979).

The Nurse Early Exit (NEXT) model of departure from health care work was developed in work undertaken between 2002 and 2005 funded by the European Union in 10 European countries (Belgium, Finland, France, Germany, Great Britain, Italy, The Netherlands, Poland, Sweden and Slovakia). This collaborative study used mixed methods to explore turnover of nurses across Europe (Stordeur 2006) and was designed to capture the multiplicity of factors that can be at play simultaneously and may influence the exit decisions taken by registered nurses. The NEXT Model of Departure from health care work incorporates aspects of work environment & conditions in addition to individual resources and private conditions that all are thought to influence the career intention of practising nurses. The NEXT study used all grades of care staff and in some countries the population of registered nurses was as low as 5%. A drawback of the NEXT study was that findings did not differentiate between registered nurses and other grades in nursing. However, many of the elements in the NEXT study's first stage have resonance to a study of undergraduate nurses. As this is an exploratory study the NEXT model provided a useful perspective to explore the multiplicity of work and personal factors that can influence the turnover intent and adjustment to the work place of the graduate nurse. Three sources of data were used in this study to uncover the features of hospitals with low and high turnover rates. A total of 1175 new nurses completed the NEXT basic

questionnaire, which was designed to elicit information on nurses' perceptions of health related factors, job demands and stressors, work schedules, and organisational climates, and an organisational assessment of each hospital was conducted to examine the health care context, features of the institution, employment patterns of nurses, sources of support and resources. Hospitals were defined according to their turnover rates as 'attractive or conventional' and the lowest quartile rate (0.6%-3.1%) was defined as attractive. Following the analysis of the organisation, an integrative model emerged that attempted to define the 'healthy work organisations' (Stordeur 2006:52). This included key elements relating to organisation, policy, culture and climate. Other elements common to attractive hospitals were fairness, openness, organisation support, and employee's recognition and the approach taken within the organisation to ensure employee occupational health through job design and management of work. These elements combined provided higher organisational commitment, job satisfaction and lower intent to leave in attractive hospitals. A critical shortcoming in the NEXT study was that it did not differentiate between grades or education preparation of staff working in nursing and so may have limited applicability to the degree population of nurse graduates.

Alspach (2006) recommends the profession learn from its own experiences, that each new cohort of graduates affords the opportunity for us to extend a sincere and empathetic welcome to new graduates that can effectively contribute to their successful assimilation and can ultimately affect their desire to stay in both the job and the profession. Regan (2002) used mixed methods to explore the issues of concern to new graduate nurses (n=536) in British Columbia and identified insufficient support, staffing and the absence of formal mentorship as particular concerns of new graduates. This study included all entrants to nursing and confirms much of the evidence in the literature about the factors that influence satisfaction and retention of nurses in general.

Contributory causes to the satisfaction issues in nursing include pay or cost of living, changing nature of the job, feeling valued and other employment opportunities (Finlayson *et al.* 2002). Nursing satisfaction has been adversely affected by approaches to work design and workforce management (Aiken 2001; Aiken *et al.* 2001). A cross sectional study conducted by the international hospital outcomes research consortium examined the effects of nursing staffing and organisation on patient outcomes and retention of nurses (Aiken *et al.* 2001). In this study 43,000 nurses in 711 hospitals across the US, Canada, UK, Scotland and Germany completed the questionnaire design to elicit information on the organisational climate, nurse staffing and nurse and patient outcomes. Various databases of information in relation to mortality and hospital outcomes were used to enable comparison across the geographical regions. Nurses did appear to be more dissatisfied when researchers compared nurses to other workers using US data generated from the General Social Survey of the National Opinion Research Center. In comparing US nurses to other US workers the study reported 41% of nurses expressed dissatisfaction, a considerable contrast to the 10% of professional and 15% of general workers who expressed dissatisfaction. Dissatisfaction rates ranged from 17.4% (Germany) to 37.7% (Scotland) in the other participating countries. Of particular concern were the numbers of nurses under thirty as they have the potential for an extended career in the profession (Aiken *et al.* 2001). Gardulf *et al.* (2005) surveyed a sample of registered nurses (n=889) in Sweden and found that 54% (n=449) intended to quit and 35% had initiated plans to leave. Quitters were drawn from younger age groups and cited a number of factors influencing their decisions, including lack of professional opportunities and support, fast pace of work and lower quality patient care. Bowles and Candela (2005) reported that turnover among graduates in Nevada was recorded at exceptionally high levels, with over 30% having left their first job by year one and 57% by the end of

year two. This study examined graduate nurse perceptions of their first nursing positions and in the case of leavers the reasons that motivated them to leave the job (Bowles and Candela 2005). The response rate was low (n=352, 12%) in this study and does limit the ability to generalise findings. However, the factors that were cited that motivated graduates to change jobs were not unfamiliar. Participants reported stress related to patient safety, staffing and work environment was the primary cause of decisions to change job although desire for re-location was another reason commonly cited.

Similar concerns have been expressed in Ireland in relation to high turnover among graduates due to the high percentage of new graduates planning to leave their current positions, which is much greater than the rest of the general population of nurses (DOH&C 2002b). Although the reasons for this are not clear, an association between educational attainment and reason for leaving is potentially attributed to desire for career advancement while those with lesser academic achievement may leave due to dissatisfaction with conditions of the job (Rambur *et al.* 2005). Such turnover patterns among younger employees will have considerable influence on the future staffing and skill-mix levels within the profession. Discontent in hospital work is associated with inadequate staffing levels, inadequate support services and unresponsive management with insufficient opportunity to contribute to decision-making (Aiken *et al.* 2001). In a study of graduate nurse experiences (n=270) across six Denver acute care hospitals, sources of dissatisfaction for graduates included lack of opportunities for career development (40%) salary (39%) and work schedules (42%) (Casey *et al.* 2004). A critical finding of Aiken's study (2001) of hospital care across five countries emerged when US nursing staff (n=43,329) documented what they had done in their last shift. The percentage of nurses who reported cleaning rooms or transporting food trays or patients were one third to two thirds. At the same time a number of tasks that are the critical indicators of good nursing care, for example, oral hygiene, skin care, and teaching had been left undone

(Aiken *et al.* 2001). Nurses in other US studies have reported that excess demand forces nurses to prioritise critical work, as researchers discovered in an survey investigation of job satisfaction in baccalaureate nurses (Roberts *et al.* 2004).

Adams and Bond (2000) examined the relationship between organisational characteristics and job satisfaction in English nurses (n=834). Even though organisational factors are influential, 'the culture and social organisation of the local unit is possibly of great significance when determining nurse perceptions of their work environment' (Adams and Bond 2000:537). Researchers surveyed 1499 nurses in 119 wards across 17 hospitals using a stratification approach designed to include representation of all health regions with a reported response rate of 57% (n=834). The quality of their practice and their relationship with other nursing colleagues were of significance in determining satisfaction. Teamwork, skill mix and favourable scheduling were all implicated in enhanced job satisfaction. It has been proposed that part-time work is a means by which highly educated workers may retain employment opportunities and skill in demonstrating a high level of professional and organisational commitment (Tansky *et al.* 1997). The organisational characteristics were consistently found to be positively connected to increased satisfaction; however, a significant source of dissatisfaction was the value placed on both them as individuals and on their nursing work by both nursing superiors and medical colleagues (Adams and Bond 2000). Halfer and Graf (2006) studied the perceptions and job satisfaction for new graduate nurses (n=84) in the first 18 months of practice at a US magnet designated children's hospital using the job/work satisfaction environment nursing satisfaction survey. This longitudinal survey found new graduates were pleased with their transition as over the course of their orientation their ability to manage the demands of the job improved as did their awareness of professional opportunities. A significant finding in this study was again the importance of job satisfaction in new graduates and work



scheduling and managing expectations before commencement of employment.

Blegen *et al* (2001) in a meta analysis of 48 studies (n=15,048) revealed job satisfaction for nurses was most closely associated with stress (-0.69) and organisational commitment (0.526). Lum (1998) investigated the effect of organisational commitment and satisfaction with job and pay on intent to leave in a sample of 466 staff nurses, concluding that job satisfaction does not influence intent directly but rather is mediated by organisational commitment. Individuals commence work with certain abilities and skills anticipating that they will be appropriately utilised and an appropriately responsive organisation will communicate effectively with employees, promoting involvement in decision-making and encouraging team values (Lum *et al.* 1998). Negative job satisfaction was found to be associated with nurses with young families and those working 12 hour shifts. Job satisfaction was associated with pay in this cohort. A critical finding was that decreased job satisfaction was found to be predictive of turnover intent. The study also uncovered that those who had attained a degree level of education had an increased likelihood of turnover intent (Lum *et al.* 1998). Lum reported that up to 39% of staff were considering leaving their job and found that nurses with less experience were more likely to be dissatisfied with pay. While pay is a concern for nurses at large (Hasselhorn *et al.* 2003a) it is not always the driving force for degree nurses and what may be of greater importance is if pay is fair in relation to others (Roberts *et al.* 2004).

The link between client and job satisfaction was also evident in the findings of a study by Fletcher (2001) of the job satisfactions and dissatisfactions of Hospital RNs. The researchers used mixed methods to survey 1512 RNs employed in 10 hospitals in southern Michigan, in relation to the many variables affecting their work related stress including job satisfaction, intent to stay, salaries and benefits and management structure. Overall the quantitative findings were benign

and respondents reported themselves as slightly satisfied with their job (mean 5.04; SD 0.99) on a scale of 1-7. Overall intent to stay among this group was relatively high at 4.08 (SD: 1.12) on a scale of 1=very unlikely to 5=very likely. The findings are somewhat inconsistent with largely negative comments reported by the 28.6% of respondents who did take the opportunity to complete the section for any other comments. Of particular consequence is the impact of morale on the quality of care. Poor work attitudes among colleagues, work design, management structure, and the motivations reported for the intent to stay appear to be somewhat incompatible with the professional and motivated workforce required to provide a good standard of nursing care.

Job dissatisfaction characteristics (pay, staffing, management) have been found to be more prominent than situational factors in determining whether or not nurses intended to leave their job (Rambur *et al.* 2003; Rambur *et al.* 2005). Satisfaction with job and career choice of the new graduate will be shaped by the first nursing position held (Roberts *et al.* 2004). Insufficiencies in staff and skill mix were recurrent themes impacting on the sources of satisfaction in nursing work in a study to determine aspects of satisfaction in being a nurse (n=20) in Southeast USA (Roberts *et al.* 2004). Findings illustrated the intrinsic rewards of nursing work anticipated in those things that make it more meaningful (comforting, making a difference, education advocacy) although the researchers did conclude that the lack of professional opportunities can make it difficult to recommend nursing as a career.

Current work environments are heavily influenced by rationalisation and staff shortages and, coupled with increased acuity and technological advancement in health care, can place excessive demands on the new graduate taking up first employment. Most research to date has focused on the satisfaction of the entire nursing body rather than on the new graduate exclusively (Roberts *et al.*

2004). Although as far back as 1981 Price and Muller found that those nurses who had trained in college and universities (baccalaureate nurses) were characterised by less intent to stay than those who has completed their training in hospitals and reported a significant correlation between baccalaureate training ( $r -0.26$ ;  $p > \pm 0.06$ ) and weak intent to stay in job (Price and Mueller 1981). Ingersoll (2002) surveyed RNs ( $n=4000$ ) in upstate New York to determine workforce characteristics, their perceptions of their work environment and 1 year and 5 year career intent to leave their job. Nurses who had undertaken a baccalaureate degree were more likely to report intent to change position but not leave nursing. Nurses greater than 50 years of age working in rural areas, employed in hospital settings and positions outside of direct clinical care were more organisationally committed. Age was found to be a significant predictor of intent to change job and younger nurses aged 20-30 were also more likely to change job but not leave nursing. High levels of satisfaction and organisational commitment were found in degree nurses. It is necessary to develop understanding of the multiple factors that may impinge on the turnover intent of new degree graduates particularly in the Irish context as they are different to those previously studied (Roberts *et al.* 2004).

## **2.5 Transition experiences**

There is considerable discourse evident in the literature as to the transition experiences (Kramer 1974) and adjustment to the professional role of nurses (Corwin and Taves 1962; Taylor *et al.* 2001). Seminal research studies on the socialisation and role adjustment of new graduates to their first place of employment have been conducted in the Unites States (Corwin 1961b; Kramer 1974). It has been suggested that changes in the educational preparation process can cause role conflict for nurses (Taylor *et al.* 2001). Professional socialisation is the process by which graduate nurses acquire the knowledge and attitudes of the main body of professional nurses encountered in the work place and necessitates the adoption

and acceptance of the group values (Corwin 1961b). Corwin (1961) describes the role conception of nurses as comprising three distinct components; bureaucratic role defined by the strict adherence to rules and regulations of the hospital system with less emphasis on the nurse-patient relationships; professional role conception is characterised by primary orientation to professional commitment over organisational commitment; service role conception values; service to the patient and the provision of holistic care. Discrepancy occurs when the role orientation and values of the nurse cannot be reconciled with the work environment they find themselves in. Taylor et al. (2001) examined the role orientation of 52 degree graduates and 28 diplomates in the United Kingdom (UK) over the first 12 months in practice using the Corwin Role Orientation Scale. The study did not detect statistically significant differences between the educational groups but was limited by a small sample size. The researchers did speculate that the absence of any differences may be explained in the common clinical exposure time experienced by both degree and diploma students in the United Kingdom, with the result that the transition experience for the groups was very similar.

The factors that influence stress levels in new graduates have been documented in previous studies and include fear of mistakes, unrealistic expectations, lack of support from colleagues, and staffing and workload (Kelly 1996; Oermann and Moffitt-Wolf 1997; Kelly 1998; Charnely 1999; Gerrish 2000; Duchscher 2001; Ellerton and Gregor 2003; Halfer and Graf 2006) sometimes exacerbated by unsupportive work environments (Mc Kenna *et al.* 2003; Mc Kenna 2006). Deficits in clinical knowledge and skills have also been highlighted as difficulties for new graduates (Luker 1996; Macleod Clark *et al.* 1996; Ballie 1999; Roberts and Farrell 2003; Casey *et al.* 2004). Self reliance has been demonstrated to be important in coping with stress for new graduates (Brown and Edelman 2000). The first year in the professional role is a critical phase where graduates are as yet vulnerable and confidence is still under development. Their

attitudes towards their future career are still quite flexible rendering this transitory phase an important juncture in the career pathway. Considerable variation is evident across clinical settings in relation to the willingness and acceptance of graduate nurses (Thomka 2001). The quality and nature of support available to protect from such violence in their workplace is important, so skills and strengths may be nurtured that will potentially affect their future desire to stay within the profession (Alex and Mc Farlane 1992). Chang *et al* (2006) explains that during the exploratory stage of career, graduates of less than 2 years focus on finding their preferred area of practice in addition to gaining confidence and competence in their organisation.

The transition period into the nursing profession can be considered under three constructs; professional socialisation (reality shock and work readiness); interpersonal relationships (conflict and support); and workplace environment (support and workload) (Taylor *et al.* 2001). Evans (2001) used focus groups to explore the concerns and expectations of newly qualified child health nurses (n=9). This study defined the transitional period of the graduate in terms of separation from student status, transition to staff nurse, and integration into the profession. The researchers recommended the development of organisational guidelines for all stakeholders in relation to the support required by graduates on transition including organisational and staff supports in addition to availability and nature of preceptorship. In particular the study highlighted the tendency to expect that new graduates be able to deal all with contingencies that may arise in the course of practice and that the profession should adjust its thinking to a realistic expectation of new graduates. Philpin (1999) reported that the socialisation to nursing practice is influenced by clinical context in a grounded theory study of Welsh graduates commencing employment in a variety of care environments. Those working in acute areas experienced dissonance between values experienced in their third level institution and the reality of practice, which is characterised by a dominant hierarchy and rigid structure where conformance is

expected. Economic constraints emerged across all disciplines, a pervasive theme in the transition experience, and no doubt influenced socialisation and there was awareness that psychological care, despite graduate intentions, was often forfeited to meet the physical need. Halfer and Graf's (2006) study of the perceptions and job satisfaction for new graduate nurses at a magnet designated children's hospital (previously discussed) found that although graduates were pleased with their transition the findings also confirmed Kramer's (1974) theory in relation to reality shock and conflict felt on entry to practice and estimated that the period of adjustment for new graduates was 18 months. During this period of adjustment participant satisfaction did waiver particularly in relation to knowledge and skills to perform the job demonstrated in earlier phases.

## **2.6 Expectations of new graduates**

The transition between academic institution and workplace is a critical phase in the work life of the beginning nurse (Delaney 2003). In a phenomenological study of transition experience Delaney (2003) uncovered variability in the support experienced by new graduates and reported that graduates are very concerned with 'fitting' in. She did recommend that increasing patient workload and responsibility during the student years would assist in reducing the anxiety level. Sources of satisfaction and dissatisfaction for all nurses are influenced by changing social beliefs about work and may have evolved in response to modern management systems, technology and changing work environments (Tovey and Adams 1999). Organisational commitment (Lum *et al.* 1998) is of greater significance than job satisfaction on the intention to quit by nurses in the United States. If conditions of employment are sufficiently supportive, other factors that influence satisfaction are not as important (Sand 2003). Organisations that are responsive to using employee skills and satisfying their basic needs are characterised by participation in decision making, clear communication, autonomy and a sense of cohesion among its members (Lum *et al.* 1998).

The issues of concern to new graduates from the Midwest of United States on entry to practice were investigated in a study by Oerman and Garvin (2002). Baccalaureate and associate graduates (n=46) in practice for a few months working in diverse clinical settings were surveyed in relation to the nature and type of stress they experienced. Moderate levels of stress (mean=2.57; SD=0.96) on a scale of 0-4 were reported. Again issues around applying their knowledge to the reality of practice, gaining confidence, increased workload and responsibility and lack of organisational knowledge were the key issues. Researchers did not detect any relationship between degree of stress and previous experience. The most frequently reported sources of stress were worries about their confidence and competence and possibilities of making mistakes. Oermann & Garvin (2002) reported other concerns including relationship and degree of support provided by other staff, suggesting that difficult colleagues can be a source of stress for new graduates and a key recommendation of this research was that suitable mentoring staff be selected in the workplace.

A phenomenological study (Duchscher 2001) explored the perceptions of nursing baccalaureate graduates (n=5) in which participants kept journals for six months of the study and were interviewed on 2 different occasions. Participants reported considerable dependency on others and a strong desire for acceptance by their colleagues. Their dependence was neither accepted by themselves or their colleagues. Expectations were dictated by the perceptions of their new colleagues. Duchscher (2001) found that the 'not knowing' was interpreted as a fault rather than a normal state of being on commencing a new job (pg 427). Considerable anxiety was uncovered in relation to their relationship with physicians. The responsibility and demands of the real world of practice were compounded by the strong desire to fit in and meet the expected norms efficiently and with speed. The initial months of practice, found that graduates were less able to question

authority and were likely to compromise their own standard of professional care to maintain the status quo.

Semi-structured interviews were used to investigate the perceived stress of P2000 diplomates (n=18) in a study that reported significant anxiety and stress in new graduates during the first six months in practice (Charnely 1999). There was inconsistency between the high standards anticipated in their college education and the reality of professional practice. Participants reported their stress was caused by a multitude of factors including the reality of responsibility and sheer workload, lack of organisational knowledge and relationship with other staff. New responsibility experienced on transition included the supervision and delegation to unlicensed personnel compounded by lack of clarity around assistive roles and inexperience of same while a student.

Researchers used mixed methods with multiple stakeholders to evaluate the impact of P 2000 on the nature and discipline of nursing and the preparation for practice (Macleod Clark *et al.* 1996, 1997). The sample included students (n=494), diplomates, teachers, practitioners and nurse managers' opinions on the preparation for practice following the introduction of the course in the UK. Newly qualified diplomates reported themselves to be less well prepared for practice than students in their final year of training. Inadequacies in the preparation for the management aspects of the nursing work, decision-making, organising workload and delegation were reported to be impacted by the variation of practice experience prior to transition. While the majority of respondents felt the preparation was adequate and generally endorsed the theoretical aspects of the course, concern was evident in relation to the practical skills of graduates. Reduced attainment of practical skills was one justification offered to explain the requirement for these graduates to be adequately supported during the initial post-registration phase. Manager participants did express concern in relation to the unrealistic expectation placed on



new graduates and readjustment of thinking in this area was warranted. However, researchers suggest that expectations of clinical staff have always been too high and require adjustment (Macleod Clark *et al.* 1997). While it is desirable to be in charge, manager participants did acknowledge that being in charge during initial employment was not a fair expectation. However, being thrown in at the deep end was reported as positive in an exploratory study (Amos 2001) of the transition experiences of P2000 suggesting it can engender a sense of achievement if the graduates perceive they coped well. A key finding in this study was the emphasis placed by new graduates on the need for support and preceptorship on first entry to practice (Maben and Macleod 1998). Participants described the first year as a period of 'breaking in' (Macleod Clark *et al.* 1996:26) where consolidation of knowledge gained was necessary and that skills, although weak initially, were dramatically strengthened 6-9 months post registration.

There is evidence that there is a lack of clarity or consistency about the expectations of new graduates with limited participation of third level sector in the orientation and support of new graduates following transition (Levett-Jones 2005). Roberts and Farrell (2003) compared the expectations of new graduates in Tasmania upon entry to and after 12 months in employment. An evaluation of attainment on the Australian Nursing Council Incorporated Competencies found graduates (n=60) expected more of themselves in the initial days than did either preceptors or managers. However after 12 months in practice graduates estimated their competency to be higher than their preceptors or managers did. Casey *et al.* (2004), in a longitudinal study, examined the US nurse graduate experience in six acute Denver hospitals at various time junctures in the first year of practice. Responding to emergent situations (code blue), chest tubes, IV skills, epidurals, central lines, and administration of blood were particularly highlighted as concerns leading researchers to conclude that patient safety can be at risk without adequate supervision and support of new

graduates (Casey *et al.* 2004). The study particularly highlighted the difficulty graduates can have as they struggle to be independent while dependent on the support and guidance of others. Brown and Edelman (2000) found that graduates perceive more problems than there actually are. Jasper (1996) in a phenomenological study described the stress of the adjustment for new graduates (n=8) and concluded that P2000 diplomates have attained the technical and clinical skill that may be anticipated in any new nurse but also displayed a greater sense of confidence and aptitude for decision-making.

Much has changed in the way that university graduate nurses are educationally prepared and, indeed, in the practice environments into which they transition with some believing that contemporary graduates need to hit the ground running (Ellerton and Gregor 2003). The expectations in acute care have increased dramatically due to shorter length of stays and increased acuity of those clients who are admitted to hospital, the complexity of care-giving has increased due to increased technology with many tasks that were once in the domain of medicine now included in the mainstream of nursing (Ellerton and Gregor 2003). Jones (2005) used the experience and judgement of clinical directors to estimate how much time it took to adjust, suggesting that on average it was 14 weeks for a new graduate (i.e. a nurse with less than one years experience) to reach 90% productivity. Conversely, it took only 6 weeks for a newly hired but experienced nurse to reach that level of productivity (Jones 2005). A cross sectional design was used to garner the opinion of nurse administrators in the USA in relation to the competencies needed by new baccalaureate graduates (Utley-Smith 2004). Factor analysis was used to group the 45 competencies into health promotion, supervision, interpersonal communication, direct care, computer technology and caseload management. There was variation in the rate of importance attributed by the three health agencies included in the study, i.e. hospital, home health and nursing homes. Health promotion rates were higher in the home health setting; direct care in the hospital and

nursing home administrators placed great importance on the competency of nurse graduates in the area of supervision (Utley-Smith 2004). Ballie (1999) also reported the dissatisfaction of the majority of managers with the management skills of new graduates.

Open-ended interviews were used in a study with 11 nurses in Nova Scotia who were graduates of a baccalaureate programme and working in a variety of acute units (Ellerton and Gregor 2003). The nursing graduates had experienced varied orientation programmes from no classroom instruction to a full 2 weeks of classroom work and a range of informal supported preceptorship periods. They defined their work as a set of skills with particular focus on skills of assessment, without always understanding the significance of their findings. At this early time in their careers they did not always appreciate the academic knowledge and valued clinical performance behaviours more. The researchers particularly stressed the important contribution made by experienced nurses in the transition process of new graduates. Graduates relied heavily on their guidance. They were sceptical about the expectations of managers who expect new graduates to 'hit the ground running' and feel this is not possible. In a practice discipline such as nursing, expert practitioners play a vital role in the development of new graduates. This is accepted in medicine. However in nursing, a nurse may sometimes be counted as a replaceable body rather than an experienced practitioner.

## **2.7 Gaining acceptance in practice**

In this stage of their career graduates prioritise learning the routines, and practices and shortcuts that are not easily accessible in textbooks but are so essential to clinical performance. Meissner (1999) argues that the nursing profession continues to 'eat its young' with restrictive and authoritarian approaches to education and unrealistic expectations of performance on new entrants compared to those required of experienced staff (Meissner 1999). Expectations of new graduate nurses may be too high (Jasper 1996), contrasting with the

experiences of other professions where expectations are more realistic and on the job training and internships are the norm. The reality of care delivery is a source of disappointment for some new graduates and differs greatly from the expectations and values they have developed throughout their education. Graduates who query these differences may even be seen as a 'deviant group' who need to adopt survival tactics as they learn the most important component of transition (Wittmann-Price and Kuplen 2003), to cope with work place reality. Begley and Brady (2002) used unstructured interviews to explore Irish nurse managers' (n=10) views of the impact of supernumerary status in the workplace and found that nurse managers expected that diploma students would 'fit in with old roles and value systems' (page 343). The researchers question whether the persistence of nurse managers to hang on to traditional values in managing staff will continue in the light of changes in education. This has implications for the staff that are emerging into the workforce with new ideas if the staff within the clinical area are socialised to old ways of doing things and in order to survive the new graduate may be forced to adapt without any adaptation of the work environment to accommodate this different degree graduate nurse entrant to the profession. This will undoubtedly produce work-related frustration as will the ideals of nurse graduates constantly being neutralised by the reality of the work environment, or will over time be forced to adapt. Luker et al (1996) evaluated the fitness for purpose of the Project 2000 education course in the UK. A key outcome of the evaluation was that P2000 graduates did not have the skills required or anticipated by health care managers and were unfavourably compared with their conventionally trained colleagues. The report recommends that Project 2000 training needs adjustment to fit with needs of practice (ABA 2000). However the health service should also develop and has posited the need to have more flexible graduates with transferable skills; yet when they are produced and moved into the workplace the profession appears to desire them to be the same as everyone else in practice. Perhaps in addition to evaluation of the education experiences

consideration is also required as to the fitness for purpose of work environments to determine are they capable of providing the support required to nurture graduates to work and to pursue careers in nursing.

A grounded theory study investigated the perceptions of new US graduates (n=22) of their adjustment to the new role in the first 2 years following graduation (Kelly 1998). Six stages were identified in this process 'getting through the day; coping with moral distress; alienation from self; coping with lost ideals and integration of new professional self-concept' (Kelly 1998:1134). Participants reported alienation from original visions of their potential contribution in nursing. As they attempt to cope with their moral distress they are particularly vulnerable to advancing self-defence mechanisms in order to cope, such as working fewer hours, avoiding patient interactions, changing jobs or leaving the profession (Kelly 1998). New graduates will over time adjust their thinking to fit with professional norms and values of the organisations within which they work (Corwin 1961b; Corwin & Taves 1962). This type of self protectionism can produce standards of nursing care that are at odds with the lofty ideals of the baccalaureate education that they have undertaken. A strong belief in oneself and adequate support is key in this transition period of adjustment to protect them from the environment in which they work. Considerable resources have been put into the degree programme as it is proposed that this is the key to the future development of the health service (Commission on Nursing 1998). New graduates, however, are required to adopt the values of the environment in which they work; for example, speed is interpreted as an indicator of performance (Charnely 1999). As they cope with the adjustment they may lose some of the values that attracted them to nursing in the first instance. Over time, enthusiasm for a job performance that is 'less well done' than they had anticipated can adversely affect performance in the job or indeed encourage exit strategies (Kelly 1998). Kelly (1996) in an earlier study found the expectations of graduates of themselves and of

their colleagues to be unrealistic. The study found that not only do staff expectations require adjustment but so do those of the new graduates. Expectations of new graduates in this study were high with strong pressure to shed individualistic ideals in favour of more practical team values.

Research was conducted to compare the careers and competencies of nurses qualifying from three year degree and diploma courses in the UK (Robinson *et al.* 2003). They found that the degree graduates were less heterogeneous than their diploma colleagues who were significantly younger, significantly less likely to have a partner and significantly more likely to have higher educational qualifications before entering. They cautioned that all-graduate entry may result in reduced diversity among the nursing workforce. They also found that degree graduates were significantly more likely than diploma graduates to undertake continuous professional courses three years after qualification. One significant outcome of this research was the realisation that there were not obvious objective differences between graduates and diplomates in the first three years, the groups having largely similar career experiences and performance outcomes. However, they do report considerable differences in the expectations, aspirations, and attitudes of these two groups. They caution that these subjective differences may potentially develop into objective differences over time. Although the two groups are essentially the same, the job can have different meanings for graduates. Attitudes of either graduates or employers must change to ensure that satisfaction and retention do not become more significant problems for this group in the future. They found a mismatch between the graduates' career opportunities with in the NHS and speculated that there is potential for unmet career expectations (Robinson *et al.* 2003).

Gerrish *et al.* (2000) compared the transition experience of newly qualified nurses in 1985 and P2000 diplomates in 1998 in the UK. They coined the phrase "fumbling along" to describe the process by which

new graduates find their way to performing their role in spite of inadequate preparation and support. In the earlier cohort graduates received no induction and found themselves very quickly in charge of other staff, with the result that they found the transition extremely stressful. Stress was still a feature of transition for the later cohort but to a lesser extent as they were more appropriately supported and responsibility was confined to the patient group rather than a whole unit. The earlier cohort had greater confidence in their clinical skills in transition; however, the increased support and more reasonable expectation of the later P2000 graduates did result in a less stressful adjustment to the role. The significant difference between the two cohorts studied here was of course the introduction of the P2000 courses which would not only have initiated a more proactive approach to the educational requirements of graduates but also would have altered the traditional care delivery patterns in the nursing workplace, meaning that greater availability of qualified staff would possibly have reduced the need for graduates to be thrown in at the deep end in taking charge. The transition from competent student to registered nurse is one of socialisation into the world of professional nursing. Expectations of what should be included in undergraduate nursing programmes and what should be attained by competent student nurses and in the immediate post-registration period are so high, it leads one to question what will graduate nurses be 'learning to do' on the day after transition and in the subsequent years (Holland 1999:235).

McKenna et al (2003) surveyed nurses in New Zealand (n=551 response rate 47%) to investigate the prevalence, nature and consequences of horizontal violence experienced by nurses in the first year of practice. The nature of horizontal violence experienced by new graduates is to a large extent covert and mainly unreported. It was found to have a considerable effect on the confidence acquisition in this group and caused many participants (34%) to consider leaving nursing as a result. McKenna (2003) reported that overt interpersonal

conflict was prevalent between nurses and manifested as being undervalued, feeling neglected or distressed by conflict, learning opportunities blocked and being given responsibility with inadequate support.

## **2.8 Support on Transition**

The context of employment will influence the recruitment, socialisation and adjustment of any newcomer to work (Blake *et al.* 1998). The purpose of transition programmes is to produce appropriately competent, confident RNs who succeed in professional adjustment and foster a commitment to the profession (Levett-Jones 2005). Considerable variation exists in transition of programmes in relation to duration, content, supernumerary status, and type of clinical exposure with preceptorship (Nail and Singleton 1992; Oermann and Moffitt-Wolf 1997; Robinson *et al.* 2001), mentorship (Beecroft *et al.* 2006) and residency (Robert Wood Johnson Foundation 2005) strategies all discussed in the literature. The nature of programmes are also quite diverse and may range from formal or informal support with or without study days/weeks of classroom education (Levett-Jones 2005). Levitt-Jones expresses concerns about the efficacy of formal transition programmes and advances an argument to suggest that what graduates value most is support received from the clinical environment in which they work. Furthermore she suggests that resources should be re-directed to create work environments where staff are enabled to nurture and support new entrants and maximise learning opportunities.

The nature of nursing work has changed dramatically, with increasing technological and acuity challenges and has resulted in increased stress for those working in the profession. A myriad of stressors for new graduates are reported including increased responsibility, higher levels of acuity, tiredness and insufficient support from colleagues by graduates (n=10) interviewed about their transition from student to staff nurse (Maben and Macleod 1998). Oermann and Moffitt (1997)



described the stresses and challenges experienced by graduates on initial entry to practice and examined the nature of support offered during the period in Midwest USA. All participants (n=35) were employed in three metropolitan hospitals in the area and were working less than one month at the time of data collection. Overall stress levels were found to be moderate with lack of experience, interactions with doctors, limited organisational ability and new situations cited as the principle sources of stress for graduates. Other sources identified to a lesser extent included, interruptions during work, volume of caseload, inadequate orientation and support and personal expectations. The challenges for new graduates highlighted here included transition from student to staff, learning to organise and prioritise workload, practical skill development and managing communication with doctors (Oermann and Moffitt-Wolf 1997). An important finding was the importance placed by the newly qualified on the use by the organisation of consistent preceptors who were appropriately skilled to assess the needs of the graduates and tailor guidance appropriately. Strategies to guide and develop new graduate confidence and communication and practical skill included staff nurse role modelling, specific direction from others and simulations. Staff equipped with the willingness to work with and guide others with strong interpersonal skills are most suitable to take on the mentorship role (Oermann and Moffitt-Wolf 1997). 'Precepting is a relationship in which a staff nurse assists the novice by explaining the context of the work environment, articulating the norms of professional practice in that particular area, making introductions among the peer groups and being available to answer work-related questions. This relationship is usually a 'short, formal, institutionally mandated pairing of individuals' (Yoder 1995:291). In a later study Oermann and Garvin (2002) recommended that workload and responsibility should be gradually built when planning assignments so the graduate has time to adapt and also suggested brief periodic meetings during the shift and debriefing sessions at the end of shift would assist in reducing stressors.

In a longitudinal study (n=1831) of diploma graduates Robinson et al (2001) investigated, using a postal survey, the factors that supported the transition of project 2000 diploma graduates (Robinson *et al.* 2001). Participants were drawn from all four branches of the diploma course, which are adult, mental health, learning disability and child. They reported a very high demand for preceptorship in the post qualification period, particularly in the area of clinical skills, confidence building and elements of support and ninety-seven percent of participants reporting the importance of effective preceptorship in their first job. They identified 11 important aspects in this role in descending order of importance as follows: constructive feedback on clinical skills (91%); teaching new clinical skills (83%); confidence building (63%) helping me to settle into the work environment (60%); advice on professional issues (58%); assisting in setting learning objectives (51%); emotional support (50%); someone to work alongside (31%); someone to meet with on a regular basis (29%); someone to confide in (29%); and discussing career plans (19%). This research managed to identify the constituent elements of preceptorship. One of the key recommendations of this research was that employers should ensure that all newly qualified entrants to the professions should be allocated a preceptor. A change in mindset will assist staff in reframing their perception of new graduates as incompetent and learning activities should be focused on assisting the graduate to augment those skills that are lacking (Oermann and Garvin 2002). There was acceptance that such recommendations had time implications for clinical staff already heavily extended with clinical commitment and in the facilitation of pre-registration staff and researchers suggest workforce planners need to consider this aspect of the registered nurse role (Robinson *et al.* 2001).

Meaningful retention strategies designed for all nurses were evaluated in a study conducted in 8 hospitals in the Cleveland health system in Ohio (Kuhar *et al.* 2004). Staff nurses and leaders (n=1174) were

surveyed using the meaningful retention strategy inventory devised for use in the study. The top ten retention strategies were teamwork, periodic increases in salary, co-worker support, shift differential, amount of differential pay, ready supply equipment/supplies, health care benefits, job security and shift of choice. In response the health care system devised multiple strategies categorized as people, process and technology to retain staff and 16 week internship programme for new hires were initiated. Parsons and Stonestreet (2004) used focus groups with a sample of 31 nurses drawn from all specialties in nursing to explore the factors that influence staff nurses retention. The dominant factors that emerged were compensation and staffing in addition to relationship with physicians and colleagues and the level of participation in decision-making and problem solving. This qualitative study was conducted in a five hospital health care system in Texas and had a somewhat limited sample size but the researchers reported the findings were consistent with other major studies in the area.

The need for management to set realistic job expectations was recommended by a study which examined the orientation programme in a 150 bed acute care general hospital in the US (Nail and Singleton 1992). A considerable amount of resources were devoted to the 6-10 week individualised orientation with use of supported preceptorship on each shift. The selection of preceptor was key to the success of the programme. The reported feedback from orientees (n=6) noted the contrast between student and staff status as assignments were controlled with another person from whom to seek direction. In their capacity as a staff nurse responsibility was much greater and the sphere of responsibility much wider. The study does underline the usefulness of a supportive preceptor, which increased the network of people that they were familiar with the hospital. A critical observation of the participants in this study was that the graduate needed to have a realistic view of the job for which they are employed, as this was a critical determinant of the job satisfaction in addition to orientation programme or employee benefits package (Nail and Singleton 1992).

Work readiness is only partly achieved by the educational preparation of new graduates, and is supported and improved by mentorship programmes in the workplace (Kleinman 2004b, 2004a). A significant negative correlation between the levels of stress experienced by student nurses and dimensions of commitment indicating that those who are stressed may be less committed to the National Health Service site in which they work (Draper *et al.* 2004). An understanding of factors that promote or inhibit learning will contribute to a supportive work environment, which will enable graduates to develop confidence and competence for practice. Kleinman (2004a) posits a direct relationship between retention and a leadership style that is considerate of staff and state that developing effective leadership should be an inherent part of any recruitment and retention strategy. Nurses prioritise support for education, working with others who are clinically competent, autonomous nursing practice, a culture that values concern, control over nursing practice, perceived adequacy of staffing and nurse managers' support as magnetic elements in nursing work environments (Kramer and Schmalenberg 2002). The purpose of Yoder's (1995) study was to investigate the career development relationship experienced by army staff nurses in relation to the outcomes of professionalism, job satisfaction and intent to stay. Their findings found that while 61% of participants had experienced some kind of career development relationship it had not had an effect on professionalism and only a small effect on turnover and intent to leave. What the study did uncover was that if staff felt valued by the developer, then they viewed the relationship as professionally important and this interest in their career did positively influence their intent to stay.

In the UK and Ireland the preceptor is usually the person assigned to supervise and assess performance at pre-registration and post-registration levels. Mentorship in this context is a more informal process of ongoing support by more experienced staff (An Bord

Altranais 2003). However in the context of the United States this type of ongoing and informal support is sometimes referred to as preceptorship but in other health care environments the roles are actually the same (Beecroft *et al.* 2006). Mentoring new nurses is seen as an extension of the caring role (Roberts *et al.* 2004) and the skills considered most favourably to equip one as a mentor, include appropriate professional knowledge, experience, expertise, understanding of the mentorship role, good interpersonal skills and enthusiasm for both teaching and nursing (Gray and Smith 2000; Oermann and Garvin 2002). Generally the mentor serves as a role or guide to professional judgement, patient assessment, interventions, procedures and skills (Neary 2000). New graduate perception of mentorship were surveyed in a sample where half of the American participants were < (n=318) and 61% were degree graduates (Beecroft *et al.* 2006). The mentorship was found to be successful when meetings happened and assisted in stress reduction, confidence building and integration of new staff. However 15% of participants reported they did not have a good fit with mentor and a number of obstacles to successful mentorship were highlighted included issues of commitment and time. Careful selection of appropriately committed individuals to serve as mentors was recommended (Beecroft *et al.* 2006).

Nurse residency programmes have emerged in recent years, most prominently in the US, in response to shortages of nurses and the desire for academic hospitals in particular to devise strategies to retain new graduates and assure their clinical competence (Beecroft 2001; Rosenfeld *et al.* 2004). Rosenfeld *et al.* (2004) reported on a 1 year residency programme (NPP) implemented at the New York University hospitals. Participants in the internship programme assumed the responsibly of the staff nurse role but were also supported with a structured programme of education and mentorship. The programme resulted in a high retention rate, as 93% of interns were still employed after 2 years and an average employment period of 44 months at time

of data collection. Beechcroft et (2001) responded to a shortage of skilled paediatric nurses and evaluated the outcomes of 1 year RN internship programme. The programme included 716 hours of guided clinical experience, 224 classroom teaching hours, a designated preceptor, ongoing mentorship, debriefing & self care sessions and peer support. The sample constituted 50 graduates and 45 new hires from the preceding 6 months serving as a control group. No statistical difference was detected between the groups in relation to measures of professional socialisation, autonomy or organisational commitment. However an increase in retention from 66.3% to 86% was reported in the internship group. Costs associated were considerable but researchers estimated a return on investment of 67%.

## **2.9 Theoretical perspectives**

There are a number of theoretical perspectives that have informed the various components of this research. Seminal work in the area of nurse graduate transition is proposed in a theory of postgraduate socialisation by Marlene Kramer (1974). The central premise is that the idealised educational preparation that students may have received is not always congruent with the reality of the clinical situation (Greenwood 1993) and this may pose a 'reality shock' for the new graduate. Kramer (1974) analysed the diaries of six baccalaureate nurses from diverse geographical backgrounds in the US during the first year in practice. Retrospective data were also drawn from interviews with 127 new graduates from the classes of 1968-1970 in diverse but mainly hospital work environments. New graduates experience a reality shock on finding that they are not fully prepared and have to grapple with maintaining a balance between the professional and bureaucratic loyalties that present on entry to practice (Kramer 1974). Graduate nurses may experience role conflict, self-doubt and confusion due to disparities that may exist between the reality of practice and idealised education (Taylor *et al.* 2001),

especially as they believe that when they enter practice, they enter a world they know (Kelly 1998).

The major socialisation agents for nurses were found to be the nurse's aides, physicians and head nurses (Kramer 1974). The on-the-job learning was not directly influenced by active input by other nurses but was heavily influenced by their expectations. Graduates are equipped to develop evidenced based approaches to care delivery, and the questioning of existing practice may be a source of conflict for graduates in their new work environments, and horizontal violence from their own colleagues is commonly experienced (Begley 2002; McKenna *et al.* 2003). The new graduate is confronted with both the backstage and front stage reality of the nursing workplace as they transition (Kramer 1974). In the university the expectations of new graduates are clear, concisely presented and made explicit through course objectives, rules and regulations. Following uptake of employment the new graduate is confronted with more informal expectations where he/she is evaluated as a worker rather than as a learner (Kramer 1974). The explicit feedback experienced as a learner is replaced by more informal means of communicating feedback. Several phases are identified in the process of socialisation of the neophyte graduate (Kramer 1974)

- Skill and routine mastery
- Social integration
- Moral outrage
- Conflict resolution

Winter-Collins & Mc Daniel (2000) describes these phases in four stages occurring sequentially at this juncture in the new graduate career. The first is a honeymoon phase, characterised by excitement where the graduate embraces the initial period of paid employment as they master the skills needed for the job. The shock phase follows when the graduate realises the limitations of their experience and their work environment. The third phase, similar to Kramer's original model

is defined by outrage at the reality of practice where their idealised expectations as shaped by their college experience do not materialise. However, it also defined by recovery as they gain perspective on the reality of the job. The final phase is described as one of resolution where the graduate creates a new self-identity (Winter-Collins and McDaniel 2000).

During the initial phases graduates experiences are dominated by stress, frustration and sometimes isolation (Kramer 1974) and they can be prone to high turnover rates. Gardner (1992) surveyed new graduates (n=97) in a longitudinal study over the first year in practice and detected a relationship between interpersonal conflict, job satisfaction and turnover. New graduate isolation was offset by the support of staff nurse colleagues in this US study. Hollefreund et al (1981) reported on the success of a reality shock program in reducing turnover among new graduates in Cleveland, Ohio. A series of facilitated seminars and workshops over six weeks resulted in a dramatic reduction in turnover from 35% to 13% within one year of commencing employment. A critical feature of this programme was the commitment to a non-judgemental environment drawing upon significant human resources to enable both facilitation by experienced staff and release of new graduates to attend seminars and workshops. A survey of new graduates (n=250) in Indiana was guided by the assumption that all new graduates experience some degree of reality shock (Winter-Collins and McDaniel 2000). The study detected a significant relationship between a sense of belonging and job satisfaction. Researchers concluded that new graduates are motivated to turnover in pursuit of greener pastures and that natural urges can be mitigated against by enabling supportive work environments in which graduates want to work.

A causal model for turnover was developed in work by Price and Muller based on a number of interrelated propositions about turnover in nursing (Price and Mueller 1981). The model was derived from data



generated with registered nurses (n=1091) across seven US hospitals. This study defined intent to stay as "the likelihood perceived by the individual of continued participation in the organisation" (Price and Mueller 1981:10). As intent to stay is a psychological concept it only refers to the perceptions of nurses in relation to what they intend to do rather than what they actually do. However, in this study, the researchers interpreted intent to stay as one of the three dimensions of commitment to the organisation, whereby, intent to stay is combined with an acceptance and belief in organisational goals and willingness to apply one's efforts to meeting those expectations; it provides a comprehensive explanation of commitment in employees (Price and Muller 1981). The model identifies both inherent elements in nursing work and external motivational factors that contribute to job satisfaction for nurses, including routinisation, participation, instrumental communication, integration, pay, distributive justice and promotional opportunities. The model illuminates that when job opportunities exist, such elements that contribute to job satisfaction will potentially be influenced by individual specific influences such as desire of professionalism, kinship responsibility and general rather than specialised training. The outcome of the convergence of these elements is that intent to stay and therefore turnover may be positively or negatively influenced. Price and Muller (1981) offer seminal work demonstrating that dissatisfaction with job directly influenced intent to leave, which in turn impacted on turnover in the main nurse population.

This notion of healthy organisation is evident in a theory of organisational behaviour and its structural determinants, which arose from work entitled the 'Men and Women of the Corporation' by Rosabeth Kanter (1977). This theory has been used to explain the individual's response to organisations and a central construct of Kanter's work is the degree of opportunity that exists for an employee. The theory posits that the opportunity, power, and even the numbers within a group can influence the organisational commitment of the

individual. This work inspired much of the later work on Magnet hospitals (Upenicks 2003). Its application to the world of new graduate nurses lies in the level of opportunity or power perceived by the neophytes as they embark on a career in nursing. They enter a profession where they may not have been as strongly socialised to the real norms of opportunity for the nursing profession as they progressed through university based education. Individuals who are low in opportunity will limit their aspirations, have lower self-esteem and will concern themselves with extrinsic rewards (Kanter 1977). When opportunity is low, individuals will compare themselves horizontally and will be oriented to protectionist behaviours that limit change. Conversely individuals who are high in opportunity will be competitive, exhibit higher self-esteem, potentially greater commitment and if dissatisfied will initiate and pursue change.

Kanter (1977) argues that power within the organisation is determined by the job characteristics and the informal alliances that may be available to the group. Inherent characteristics of nursing work in relation to visibility, approval, and control over decisions will determine the power of such individuals within the organisation (Upenicks 2003). Kanter's theory explains that people with limited power may foster lower group morale and will exhibit controlling behaviours toward subordinates (Upenicks 2002). They may be insecure, possibly have a desire to hold back talented subordinates, and are excessively focused on control and likely to be less talkative in meetings with people with higher levels of power. Those individuals who perceive they have greater power will foster high morale, engage in cooperative behaviours and will seek to enable opportunities for subordinates. The relative number of individuals within a group will also dictate behaviour within an organisation (Kanter 1977). Professions such as nursing may be seen as less visible but will be more likely to benefit from the informal support network of peer alliances and be accurately perceived. Alternatively groups who are low in number within an organisation will be more visible but are less

likely to benefit from informal peer networks. As they are small in number they may be at risk of preconceptions in relation to their identity and role and may develop a preference for already established relationships.

Studies have demonstrated an association between empowerment and job satisfaction in nursing. Spence Laschinger et al (2003) in a national study across Canadian hospitals found a link between structural empowerment and Magnet characteristics. Lake (2002) advanced the following as characteristics of Magnet hospitals; nursing leadership; collegial-doctor nurse relationship; nursing participation in decision-making; and adequate support in terms of nurse staffing and skill mix. This link was further demonstrated in an exploratory study of one Canadian community hospital in which Armstrong & Laschinger (2006) reported that nurses' (n=97) perceptions of opportunity, information, support and power were all indicators of empowerment and found them to be associated with magnet characteristics. Kanter's theory of empowerment model inspired an innovative collaboration between one university and health care system in Massachusetts to advance a support program for new graduates (Roche *et al.* 2004). Strategies included individual support (preceptorship), group support (once per month), night resource support and a collaborative recognition program at the end of orientation. As a result of the program retention rates in the first six months increased from 66% to 99.5% over the course of the programme (Roche *et al.* 2004).

## **2.10 Summary**

The transfer of nursing education from the hospital to the university sector has increased debate in relation to the graduate adjustment, clinical preparedness and their future careers in the profession. The nursing workforce is influenced by ever shifting factors including, aging population, few workers, aging, mismatch of diversity, increased options for women, generation gaps, work environment, consumer activism and pressures in health care financing (Kimball and O' Neill

2002). The literature review highlighted the multiplicity of factors that can influence new degree graduates career expectations and transition experiences as illustrated in conceptual framework Figure 2.1 (next page) all of which will potentially shape the decision-making of this cohort in relation to a career in nursing. The range of factors influencing the degree graduate in the early part of the 21<sup>st</sup> century in Ireland includes the experience of transition, individual and personal demands, conditions and nature of nursing work, and the degree of support and opportunity graduates perceive as they enter the workforce.

Transition experiences are varied but characterised by challenges in adjusting and stress for new graduates in those initial months associated with lack of experience and difficulty in organising and prioritising (Charnely 1999; Oermann and Garvin 2002). The literature suggests there is an association between the workload of some graduates and increased responsibility and fear of making mistakes (Casey *et al.* 2004). Eagerness to learn have been previously documented in new graduates (Oermann and Garvin 2002; Halfer and Graf 2006) and the professional development opportunities associated with job satisfaction for new entrants to the profession have been previously observed (Gardulf *et al.* 2005). Deficits in clinical skills are anticipated and are a source of worry for graduates (Macleod Clark *et al.* 1996; Casey *et al.* 2004). Graduate and staff expectations in relation to the performance expectation of new graduates during this period may be too high (Jasper 1996; Ellerton and Gregor 2003). A variety of strategies are evident in the literature designed to support graduates including preceptorship (Robinson *et al.* 2001), mentorship (Beecroft *et al.* 2006) and residency programmes (Beecroft 2001; Rosenfeld *et al.* 2004) with varying levels of outcomes demonstrated. Socialisation of new graduates is influenced considerably by the social context of workplace into which they transition (Kramer 1974; Kramer and Schmalenberg 2002). Role discrepancy and conflict occurs when

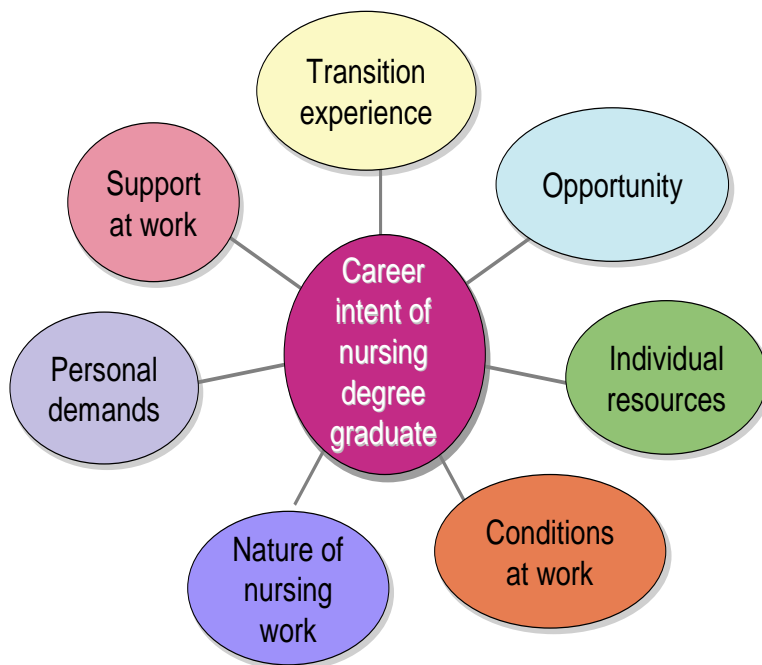
the graduates are unable to reconcile their own values with those around (Corwin 1961b; Kramer 1974; Philpin 1999).

The literature demonstrates that turnover rates of new nursing graduates is a serious manpower issue in health care (DOH&C 2002b; O' Brien-Pallas *et al.* 2006) and that associated costs are considerable (Jones 2004, 2005). Significant discourse is evident in relation to turnover and a number of models have been developed to explain turnover in nursing (Price and Mueller 1981; DOH&C 2002b; Hasselhorn and Buscher 2003). The central premise of these theories in nursing suggest the reasons for turnover are complex and that a variety of explanatory factors for turnover are evident in the literature including job satisfaction (Price and Mueller 1981; DOH&C 2002b), organisational commitment (Lum *et al.* 1998; DOH&C 2002b); work related conditions (Hasselhorn and Buscher 2003), pay (Finlayson *et al.* 2002), family commitments (Price and Mueller 1981; DOH&C 2002b) and organisational support (Kramer and Schmalenberg 2002). Demanding aspects of nursing work such as work overload, and time constraints have been associated with intent to leave nursing (Janssen *et al.* 1999; Gardulf *et al.* 2005).

There is little research on the perceptions of degree graduates exclusively in relation to the nature or value of transition programmes particularly from an Irish context. The considerably different socialisation and skill development during the course of the Irish 4 year degree education may potentially produce different learning and support needs in this group. Rates of turnover in new graduates have been found to be higher than in the rest of the population (DOH&C 2002b). Retention of experienced staff and degree graduates have been associated with enhanced outcomes (Aiken 2001; Sovie and Jawad 2001; Aiken *et al.* 2003). Shifting attention to workplace strategies that will contribute to a positive transition including mentorship, improved workloads and nurses' professional status are thought to contribute most to overcoming the nursing shortage. The

majority of nurse leavers from the health service are within three years of registration (DOH&C 2002b), which is an unaffordable waste of the Government's expenditure on education. Research is therefore necessary into the career expectations and intentions of new graduates at the point of registration, and into the factors influencing leaving, so that any obvious trends and patterns may be identified and addressed.

**Figure 2.1 Factors influencing career expectations and turnover in new graduates**



## **Chapter 3: Methodology**

### **3.1 Introduction**

This chapter considers approaches to, and rationale for, mixed methods inquiry. It provides justification for the sequential explanatory mixed method design used in this study. Methodology is concerned with the theoretical assumptions underpinning a particular research approach (Giddings 2006) and therefore the chapter also offers perspectives on the philosophical underpinnings that informed the selection of mixed methodology in this project. The perceived difficulties in combining quantitative and qualitative methods, which have shaped methodological selection in research, will be debated. The re-emergence of pragmatism as a philosophical basis for mixed method research and its impact on the development of mixed methods as the third research paradigm will be considered. Lastly, the potential limitations of this methodological approach will be discussed.

### **3.2 Philosophical perspectives**

The purpose of a strategic framework for research inquiry is to provide a vehicle by which separate tasks may fit together in common purpose (Patton 1990). Mixed method way of thinking embraces diversification in research drawing upon multiple methodological traditions (Greene 2005). Strategic decisions need to be taken as to the research methods used in any research endeavour (Patton 1990) and researchers are urged to locate their research in a selected paradigm. The world view, theoretical lens and paradigm are all terms used interchangeably in the literature. A paradigm represents the values, beliefs, and practices that guide a particular field of research inquiry (Kuhn 1996; Morgan 2007) and will be based on different assumptions that influence the world view of the researcher. Paradigm is defined by distinct elements including epistemology (how we know what we know); ontology (nature of reality); axiology (values) and methodology (the process of research) (Hanson *et al.* 2005). Put simply, paradigm differences influence how we know, our

interpretation of reality, our values and methodology in research. Paradigm will influence the questions that researchers will pose and the methods they employ to answer them (Morgan 2007). Patton explains that research operates in the context of the real world and requires a systems perspective to understand issues of concern (Patton 1990). The complexity that exists in practice sciences such as nursing, means nurse researchers work within a variety of ways of knowing (Stajdihar *et al.* 2001). As all human endeavours can be improved upon, the interpretation of truth is always tentative and will fall short of a definitive knowledge of truth (Rescher 2000). Research endeavour continually responds to inadequacies, and scientific theories that were once considered cutting edge have been replaced and even discarded as new theories have emerged (Kuhn 1996). However, these earlier theories were not necessarily unscientific because our interpretation of science continues to evolve as we respond to the limitations of contemporary paradigms (Kuhn 1996). A mixed method way of thinking acknowledges the multiplicity of ways of thinking and interpretations of knowledge that exist (Greene 2007).

Paradigm beliefs are deeply embedded in the socialisation and values of researchers and directly or indirectly guide them to determine what is important or legitimate (Patton 1990). The individual personality and background of the researcher will influence the application of those shared values and beliefs. Uniform adherence to particular paradigms is expected but Kuhn (1996) does accept that a certain subjectivity and variability in the application of research is to be expected. Socialisation towards a particular way becomes such a norm that researchers often do what is natural without questioning the underlying epistemological perspective that informs their thinking (Patton 1990). There is some evidence of imperialism within academic communities with dominance of particular epistemological perspectives perhaps as means to share risk and ensure long-term viability (Kuhn 1996; Olsen 2004). The real world of mixed method research means that researchers do not concern themselves with paradigm differences



(Moran-Ellis *et al.* 2006). Rorty (1979) claims that the purpose of philosophy is to expose and possibly debunk scientific, moral or religious claims to knowledge. Philosophy anchored in the realm of ideas, seems to bear little connection to the everyday pragmatics of research practice and, indeed, nursing inquiry has struggled to define what is good research (Stajdihar *et al.* 2001). Denzin (1989) explains that the selection of research methods is not a neutral process but is influenced by the social interaction of the researcher with their environment. The proliferation of mixed method research in the 1990s was influenced by global policies on value for money and the pressure to produce evidenced-based practice (Giddings 2006). There is pressure on health care researchers to provide research outcomes that will inform policy decisions and therefore should be based on research methods that are considered to be legitimate and therefore scientific.

Scientific methods are supported by empirical evidence and experimentation informed by both inductive and deductive logic (Nielsen 1990). In the positivist domain, truth is defined objectively and can be measured, verified and replicated. Positivism contends that there is a single reality and therefore seeks to identify causal relationships through objective measurement and quantitative analysis (Firestone 1987). In the positivist paradigm the researcher is considered independent and objective using larger samples to test carefully constructed hypotheses. The prevailing wisdom is that researchers in the positivist tradition can put aside values to avoid bias in a process of inquiry. Historically, the approach in health care research was nearly exclusively of the quantitative or positivist tradition, which was predicated on the necessity for the researcher to be objective and unbiased and for many is considered to be the 'gold standard'. Much of the research in nursing is influenced by the positivist world view and approaches such as survey enable existing theoretical viewpoints to be verified through empirical measurement. Indeed, the survey design is an advantage as it enables the researcher to be objective and makes deductions informed by the relevant

theoretical assumptions while at the same time allowing for the control of bias to a large extent. The type of data generated is linear and to some extent one dimensional. Nurse researchers can be dissatisfied with research on humans reduced to small and objectively measurable variables as it does not always succeed in capturing the full picture; the variety and diversity of contextual and subjective influences on human behaviour.

The epistemological and ontological assumptions of the positivist paradigm were challenged in the post modernism period (post World War II) by many notable philosophers (Popper 1959; Kuhn 1996) and led to the acceptance of a more modern interpretation of world view. Post modernists challenged the prevailing world view that shaped masculinised European culture and initiated an exploration of discourse (Lemke 1994). Philosophers of this period began to explore the importance of experience, relativity, personal interpretation and subjectivity. The critical realisation of post-positivism was that scientific theories could not establish 'objective truth' and that knowledge is not a fixed reality as stated 'we do not know we can only guess' (Popper 1959:258). Truth is not a certainty in the absolute sense but is instead a reasonably accurate interpretation of facts as perceived (Patton 1990). However, rejecting the feasibility of truth or objectivity is not necessarily a reflection of efforts to be objective and near a level of truth (Fielding and Fielding 1986). The emergence of post positivism arose due to an increased understanding that research is influenced by the values of researchers and that truth is not a fixed reality (Popper 1959). Research endeavour is influenced by the decisions that are made at every juncture of the research process, from the questions that are asked to the implementation of research instruments, and of course how the data are interpreted and communicated to the stakeholders (Creswell and Plano-Clark 2007). The post-positivist philosophical view no longer confined research to that which could be observed or produced in numbers but also incorporated knowledge gleaned from subjective perceptions of the

researcher. Researchers no longer interpreted truth as absolute but relative. Kuhn was criticised for his relativist viewpoint by the traditional positivist world of science but he argued that all science is influenced by intuition or subjectivity and scientific understanding is shaped by values and experiences (Kuhn 1996). Inherent subjectivity in research was understood in this post-positivist period and was said to pave the way for qualitative approaches in mainstream research (Giddings 2006). Post-positivists accepted that knowledge cannot always be derived through independent observation and measurement and that the real world research requires both deductive and inductive approaches to knowledge acquisition.

Constructivism in contrast is more informal, where it is generally accepted that the process is more subjective and researchers acknowledge their own influence on the research process and findings are used inductively to generate new theories. The ontological assumption of constructivism is relativism, an objective belief of truth is not assumed and research outcomes are seen as variables influenced by the beliefs of the researcher and recipients (Guba and Lincoln 1989). Constructivism or qualitative research emerged as an alternative to the post-positivist form of inquiry as researchers sought to examine the context of human experience (Schwandt 2000). The qualitative paradigm is receiving greater attention in recent years and is sometimes described as the naturalistic inquiry, post-positivist, constructivist or interpretative approach (Creswell 1994). Constructivism proposes that there are multiple realities and that different interpretations may result from any research endeavour (Appleton 2002). Those interpretations are shaped by the particular circumstances that exist as a study unfolds. Researchers who work within the constructive paradigm seek to illuminate the reality of others through the process of detailed descriptions of their experiences (Appleton 2002). In the interpretative paradigm the researcher is subjective with the focus directed at deeper understanding of what is happening with a smaller sample. There are a number of key

assumptions made by those who pursue a naturalistic approach to research including that it is possible to separate the subjective and objective to be studied, and it is possible for one to record accurate information in a reliable way. The constructivist approach to research empowers the researcher to be more innovative, using research instruments that have the flexibility to respond to, and capture the meaning and relevance of, the individual experience and to make sense of the theoretical propositions about the factors that influence human behaviour. New perspectives and ideas are inspired by dialogue with participants enabling the development of new theory. Mixed method research is dominated by these two paradigms in particular, constructivist and post empiricist, often referred to as the quantitative-qualitative debate (Greene and Caracelli 1997). Both the post-positivist/empiricist and naturalistic/constructivist perspectives are reflected in the research questions posed in this inquiry yet neither alone provides sufficient foundation. Quantitative versus qualitative debate has resulted in an illusion that the two approaches are mutually exclusive (Sandelowski 2001).

### **3.3 Quantitative/Qualitative Debate**

The world view of the researcher is greatly influenced by the positivist (quantitative) paradigm or naturalistic/constructivist (qualitative) tradition to which they align themselves. Traditionally a forced choice between the positivist scientific model of research is associated with quantitative methods and the interpretative model is associated with qualitative ones (Howe 1985). Considerable debate exists in the literature around the issues of compatibility in combining qualitative and quantitative methods (Howe 1985; Smith and Heshusius 1986; Bryman 2006; Yanchar and Williams 2006; Morgan 2007). It features the pitching of realism against relativism and objectivity against subjectivity. The qualitative approach to research is based on the assumption that there are multiple realities and all perspectives are valid, resulting in interdependence between variables. Conversely, in

the quantitative domain reality is reduced to quantifiable and objective variables, which can be rigorously validated to out-rule the potential for subjectivity (Haase and Myers 1988). 'The qualitative/qualitative methodological distinction is often taken to be identical to the positivist/interpretivist epistemological distinction' (Rolfe 2006:306). However if these terms are really only a description of methods the tension between the two appears to be misplaced (Rolfe 2006). Haase and Myers (1988) believe that the two views are compatible and are indeed essential to understand the complexity of human experience fully.

Purists argue that paradigms represent different assumptions about the nature of knowledge and the world that are incompatible, so they cannot be mixed (Greene *et al.* 1989). There is an assumption that the research paradigms are not compatible because it is not possible to combine the ontological and epistemological stances of both traditions (Guba and Lincoln 1988). They suggest that there must be a logical relationship between the methods selected and the paradigm (Firestone 1987) and indeed philosophical purity is essential to guide methodological decisions (Lincoln and Guba 2000). Reichardt and Rollis (1994) argue that Guba and Lincoln's notions of incompatibility are predicated on a view that knowledge is absolute and this does not stand up if one commits to the post-positivist view that all knowledge is in fact fallible.

Smith and Heshusius (1986) contend that the two sides of the paradigm debate are diametrically opposed, speaking different languages that preclude compatibility. The two paradigms are said to be incompatible as they fundamentally differ in three ways; the relationship of the researcher to the research inquiry, the relationship between facts and values and, lastly, the purpose of the investigation (Smith 1983). The positivist viewpoint is that research outcomes are not biased by the values of the detached positivist researcher unlike in the constructivist paradigm where the researcher is immersed

(Firestone 1987). The assumption is that logical positivism is objective while the naturalistic inquiry is subjective. Positivists believe research is value free while interpretivists believe it is influenced by the researcher (Onwuegbuzie and Leech 2005). Howe (1985) argues strongly that no research endeavour is free from value judgements and that an 'attempt to bracket values' (p12) only produces more insidious bias. The influence of values on the process of inquiry is not exclusive to qualitative research as all phases in the quantitative inquiry are shaped by the values of the researcher (Reichardt and Rallis 1994). Fielding and Fielding (1986) agree that all research data involves subjective interpretation by the researcher. In practice all researchers are compelled to accept that reality is shaped by human perceptions and external reference points (Reichardt and Rallis 1994). Objectivism proposes that reality exists independently of the mind while subjectivism or constructivism proposes that reality is always influenced by humans. The holism advocated in qualitative research sharply contrasts with the pre-defined operational variables necessitated in the positivist paradigm (Patton 1990). However, both research camps use comparable strategies, aimed at explaining the complexity of factors that affect phenomena, to strengthen rigor; for example, multivariate analysis in quantitative studies and seeking rich contextual data in qualitative methods (Onwuegbuzie and Leech 2005).

One of the key ways that qualitative and quantitative research may be differentiated is the distinction between induction and deduction (Morgan 2007). The simplistic view of quantitative research is that it is an objective process of deduction whereas the qualitative process is subjective and uses a process of induction that can only be viewed in context (Morgan 2007). Methodological purists argue that researchers cannot be inductive and deductive simultaneously, yet in reality human reasoning is sufficiently complex and flexible (Patton 1990). Focussing on epistemological purity in a way that was popular previously is no longer considered to be best practice and, indeed, has

been described as outdated (Onwuegbuzie and Leech 2005). Nursing research is challenged to find a balance between the extremes of opposing paradigms to guide inquiry endeavours. Competition between paradigms is not helpful and researchers are now focusing on ways that traditional rivalries may be usefully combined (Sale *et al.* 2002; Stevenson 2005). The practice disciplines are sometimes overly concerned with 'methodological acrobatics' (Sandelowski 2000b:335). The quantitative/qualitative debate is no longer meaningful, revealing a tendency to divide nursing enquiry rather than finding practical means to explore issues of relevance in the complex, contemporary arena of health care. The polarisation has compelled research to give allegiance to one side or other, and is counterproductive to their development as 'pragmatic researchers' (Onwuegbuzie and Leech 2005:376). The detached researcher in the positivist approach to inquiry results in the production of detached evidence and will not succeed in capturing the true context of health service work (Stevenson 2005). The type of knowledge generated by the traditional paradigms such as interpretivism and post positivism do differ but they are 'not necessarily logically incompatible' (Greene and Caracelli 1997:13). As advocated by a 'paradigm of choices'(Patton 1990:39). Patton rejects methodological orthodoxy in favour of methodological quality. The researcher is asked not to follow blindly but to justify that their research choices are appropriate to the purpose and resources at their disposal. The dialectical positions advocated by Greene (2007) seeks synergy at a philosophical level, between existing positivist and constructivist paradigms to underpin mixed methods, so fuller understanding can be reached and ultimately the inferences are stronger. Mixed method researchers 'should not continue to be preoccupied with the explicit assumptive differences between paradigms that have been frequently offered as points of contrast, conflict and incompatibility' (Greene and Caracelli 1997:12). Differences between methods are to be expected and have the capacity to generate knowledge inquiry (Greene and Caracelli 1997). Haase and Myers (1988:133) posit that practice can only be informed

by research that has 'both interactive and detached involvement'. It is proposed that mixed methods may be the third paradigm, capable of bridging the gap between the quantitative and qualitative positions (Johnson and Onwuegbuzie 2004). The compatibility supported at a philosophical level by pragmatism emerged during the 1990s and, as a consequence, mixed methods has now begun to establish itself as a separate field

### **3.4 Pragmatism**

Mixed method research is guided by philosophical assumptions that enable the mixing of quantitative and qualitative approaches throughout the research process (Hanson *et al.* 2005). Decisions around methodology are not always specifically linked to a particular paradigm. Pragmatic thinkers, who seek solutions to collective problems do not subscribe to the limitations or rules enforced by one paradigm or another. Pragmatists believe that specific methods are not exclusive to one particular paradigm (Reichardt and Cooke 1979). Pragmatism advanced the anti-foundationalist notion that the consequences are more important than the process and therefore that 'the end justifies the means'. The pragmatic validity of inquiry will be determined by its relevance and use to who it is presented (Patton 1990). It advocates eclecticism and 'a needs-based or contingency approach to research method and concept selection' (Johnson and Onwuegbuzie 2004:17), so that researchers are free to determine what works best to answer the research questions. Pragmatism offered an interpretation of truth as something that happened to an idea, as it is experienced and interpreted by users. The grandfather of pragmatism, CS Peirce, believed all reasoning to be like a cable with many strands that could be interconnected. He introduced the notion of a problem solving approach to research, which he described as abduction as well as induction and deduction as alternate approaches to inquiry (Haack 2004). The pragmatic approach to research is informed by the belief that the practicalities of research are such that



it cannot be driven by theory or data exclusively and a process of abduction is recommended, which enables one to move back and forth between induction and deduction through a process of inquiry (Morgan 2007). Pragmatism interprets knowledge to be based on the reality of our experiences and our construction of it. 'The guiding idea of pragmatism is that of propositional knowledge that not only enjoys no priority over how-to knowledge but even stands subordinate to it' (Rescher 2000:59).

Pragmatists challenged the view of only one scientific method and may be defined in two periods, classical (1860-1930) and neo-pragmatism (1960s forward) (Maxcy 2003). The classical period defined by the work of Peirce, Dewey, and James, was influenced by Darwin and conceived humans as adaptable and capable of social, political and economic reform (Hollinger and Depen 1999). Classical pragmatism was a reaction to the prevailing philosophical viewpoint of absolutism (Maxcy 2003). The subsequent neo-pragmatist period was defined by the realisation that all conceptual endeavours could only be evaluated by the utility of their outcomes (Hollinger and Depen 1999). Pragmatism was a philosophy that spoke to people who cared about social changes, was built without deep foundations, and the dominant idea was idealism (Maxcy 2003). Peirce interpreted science as a methodology of inquiry but rejected the positivist notion that science could provide all the answers but he did believe that over time one could ultimately reach an idealised and acceptable version of truth (Rescher 2000). C.S Peirce's view of research is considered more right-wing than the more liberal and relativist version of pragmatism presented by the neo-pragmatist Rorty. Peirce believed the traditional process of scientific inquiry to be fallible; however, he did believe that if investigation continues long enough a final single agreed opinion would be reached (Haack 2004). Peirce explained beliefs are 'that upon which a man is prepared to act' (Peirce 1931CP 1:12). As knowledge is fallible, it is always open to improvement or revision in the pursuit of a perfect or independent reality, arguing that practical

knowledge is of much greater importance than theoretical (Peirce 1931)

James another notable proponent of Pragmatism saw truth as something personal and accepted that in fact there could be a plurality of truth (Rescher 2000). He believed that an objective or fixed truth must give way to practicality (Rescher 2000). The core of James's interpretation of pragmatism lay in its efficacy in application and he believed truth to be correspondent with reality (James 1904a). Dewey had a transactional view of knowledge, believing it could not be viewed as exclusively objective or subjective but rather as an interaction between the two (Dewey 1929). Less interested in theorising, Dewey described his version of pragmatism as anti-intellectual; his approach to discussion of epistemology was not focused on knowledge but on the process of inquiry (Rescher 2000). Dewey believed that philosophy is a spur to societal change and his view of inquiry was that a transactional approach was best and it should be responsive to the community. James enthusiastically posited that the range of human inquiry is greater than the limits of current inquiry and knowledge (James 1904a). The world is shaped by inquiry as a problem solving strategy and a continuous endeavour. Dewey contrasted greatly with Peirce who was grounded in science (Rescher 2000) and Dewey and James advanced more practical notions of truth as what worked, and agreed that our interpretation of the truth is shaped by experience (Mounce 2000). The defining aspect of pragmatism is the rejection of truth as a fixed reality, proposing that actions and practicalities should take precedence over ideation and may not always depend on evidence (Rescher 2000).

*'Any idea that will carry us from any one part of our experience, to any other part, linking things satisfactorily, working securely, simplifying, saving labor is true'* (James 1904a:6). Truth may not always depend on hard evidence and indeed may only be an approximation (Doane 2003; Im and Chee 2003). Ideas are true if they can be accepted as

meaningful and verifiable to us but will be false if we no longer find them so (James 1904b; Hollinger 1989; Hollinger and Deppen 1999). In fact our interpretation of truth relies on credit; ideas will become and remain true as long as nothing challenges them (James 1904b). Peirce contended that it is only in the long run that knowledge can be equated with truth (Rescher 2000). The underlying assumptions of pragmatism is that the aim of research should be to justify our beliefs (Avis 2003) and beliefs are only true if they work. All our theorising should be practical and applied rather than abstract.

If truth is really what works for one it may be the same for another. Pragmatism was criticised for being overly permissive as it enabled too much choice. Peirce did not share this permissiveness and believed there was potential for idealised shared truth rather than pluralistic truth (Peirce 1931). The original Peircean version of pragmatism has been transformed and influenced by the post-modern theorists such as Rorty (Rescher 2000). Rorty (1979) was not concerned about idealised notions of truth, but saw inquiry as a process that enabled social progress and solidarity, that allows people to take up shared values. Rorty advanced an interpretation of neo-pragmatism, which popularised the notion that more than one conflicting view of the world may exist at the same time (Rorty 1979). Pragmatism is a paradigm framework that can accommodate both singular and multiple realities, where researchers are not confined by rules of subjectivity or objectivity, but can be adaptable and adopt whatever research strategies will enable the process of inquiry. 'Good science is characterised by methodology pluralism' (Sechrest and Sidani 1995:77). Pragmatism has been criticised for permitting too many philosophical propositions and for being too American with its emphasis on successful application (Rescher 2000). Controversy arises for opponents as they attempt to determine what is true and Pragmatism explains truth as something that happens to an idea after it is experienced and interpreted by users (Hollinger 1989). Opponents of pragmatism cite this as its inherent weakness because false beliefs

can be applied to provide successful but misinformed actions. While something may well be applied it may not necessarily be right (Rescher 2000). Pragmatism emphasises pluralism and diversity and depends on an ethical base of what is reasonable (Moran-Ellis *et al.* 2006).

The advent of post modernism thinking has challenged nursing as well as other disciplines to reconsider the philosophical underpinning for the methodological decision-making. Research skills are subject to different interpretations, given the paradigm influences of the reader. Nurse researchers commonly endeavour to locate their research inquiry in one of the established scientific modes of inquiry, Positivism/post-positivism within science, phenomenology within philosophy, grounded theory within sociology and ethnography informed by anthropology (Thorne *et al.* 1997). However 'Epistemological purity does not get research done' (Miles and Huberman 1984:21). This project design reflects the attempt to engage with the different world view perspectives within the health care field that impact on the new graduate, and pragmatism offers an eclectic worldview capable of supporting the mixed methodology used in it.

### **3.5 Descriptive research**

Descriptive research strategies suit inquiry that wishes to pursue 'the who, what and where of events' (Sandelowski 2000b:339) using either, or both, qualitative and quantitative approaches and this type of research is amenable to achieving answers that are relevant to policy makers. Descriptive research undertakes to study a phenomenon in its natural state without pre-determined theoretical and philosophical commitment, and is perhaps best defined by the fact that the researcher makes no attempt to manipulate the setting, and indeed seeks to document the real world of the research setting (Patton 1990). Sandelowski (2000b) views description as an under-

acknowledged research approach that does not necessitate highly abstract interpretation of data and therefore the interpretation will not be influenced by the spin of a particular brand of interpretive qualitative research; for example, ethnography, phenomenology or grounded theory. Descriptive research, even if exploratory, should be based on a theoretical framework; the critical analysis provides a good foundation, focus and direction and informs the decision-making (Thorne *et al.* 1997). This study was uniquely guided by the work on postgraduate socialisation of nurses (Kramer 1974), the factors that influence the turnover of nurses (Price and Mueller 1981; Hasselhorn and Buscher 2003) and the Rosabeth Kanter (1977) theory on men and women of the organisation which has been used to explain the individual's response to organisations. This solid base enabled the researcher, as the analysis advanced, to achieve intimate knowledge of individual situations, to make sense of new meanings and make interpretations of the findings (Thorne *et al.* 1997). Quantitative strategies such as the descriptive survey used allowed the researcher to describe the population of new graduates objectively and to explore the relationships between their career expectations and a number of factors related to work conditions on transition into the profession but were insufficient to capture a full picture of real world context for new graduates. Qualitative research requires one to go into the field, getting familiar with the participants and their settings so that one may gain insight (Patton 2002). Therefore an embedded qualitative sample was drawn from the participants in the quantitative survey for interviews to seek contextual understanding of how new graduates view their transition into the workplace, and to learn about their perceptions of their working conditions. The researcher seeks understanding of people in whatever circumstances they are encountered and does not place pre existing conditions as in a survey but instead seeks to make sense of what they see. Direct contact with participants through the process of interviewing enabled the researcher to reach a more complete understanding of the issues for new graduates. There is no requirement to presuppose in advance the

operational variables (Patton 2002) and the interviews thus sought to capture an insight into the complexity of the students' individual perceptions and experiences and to explore the relationship between their personal and working worlds. It was anticipated that the semi-structured interviews facilitated a complete understanding of both individual and contextual influences on intent to stay in nursing and what constitutes a positive transition to the profession.

### **3.6 Mixed methods research**

Mixed methods research is defined as research in which the investigator uses both qualitative and quantitative approaches or methods in a single study (Tashakkori and Creswell 2007). It is described as both a methodology and a method may draw on diverse meta-theoretical assumptions (Creswell *et al.* 2006; Moran-Ellis *et al.* 2006) and is informed by a multiplicity of philosophical paradigms and research traditions (Greene 2007). Several typologies or classifications of mixed method research are evident in the literature (Johnson *et al.* 2007). There is inconsistency among researchers about what constitutes mixed methods and considerable variation in the classification of mixed method research (Sandelowski 2001; Teddlie and Tashakkori 2003; Creswell and Plano-Clark 2007; Greene 2007; Tashakkori and Creswell 2007). The range and diversity of classifications in mixed methods research can make it difficult to do easy comparison across studies (O'Cathain *et al.* 2007). Research where more than one method was used was traditionally described as triangulation (Denzin 1989). The term triangulation popularised by Denzin has been misused to some extent (Bazeley 2004). It was originally used to describe the use of different approaches to study the same phenomenon, in search of convergence of results, but in recent years has been more loosely applied as a 'catch all' description for mixed methods without due regard to the original concept (Bazeley 2004). Indeed, the interpretation of triangulation has expanded greatly since it was first used. In the 3<sup>rd</sup> edition of *The Research Act*, Denzin

updates his interpretation of triangulation as solely a process of validation and suggests it enables personal bias of single methodologies to be overcome (Denzin 1989). Terminology in the area of mixed methods research has advanced considerably in the last decade and triangulation is now a term to describe a type of mixed methods study in more contemporary writings (Creswell and Plano-Clark 2007).

Recent decades have seen the emergence of interest in mixed methods approaches to nursing and health care inquiry (Twinn 2003). There has been increased interest in mixed methods circles in reaching an agreed classification to legitimise and to provide organisational structure, common language and guidance to users, in relation to design and implementation (Tashakkori and Teddlie 2003). A mixed method study is one that includes a qualitative and quantitative dimension but difficulties arise when the researcher attempts to articulate how the two elements relate to one another (Tashakkori and Creswell 2007). Research is not restricted by the use of traditional approaches to data collection but is guided by a foundation of enquiry that underlies the research activity (Creswell 1994). The literature reflects the attempt of some researchers to develop an understanding of the importance of truly integrating the two approaches (Hanson *et al.* 2005; Bryman 2007; Creswell and Plano-Clark 2007). Tashakkori and Teddlie (2003) advocate the use of the term mixed model rather than mixed method as the mixing can occur at any phase in the research process and some interpretations confine description to method only (Creswell and Plano-Clark 2007).

The primary dimensions that characterise types of mixed method designs relate to the way methods are conceptualised, designed and implemented, the dominance if any given to one methodology, and the concurrent or sequential timing (Greene 2008). Caraceilli and Greene's (1997) typology of component and integrated mixed method designs (triangulation, complementarity, expansion, integrated, iterative,

embedded/nested, holistic, transformative) is based on the approach to and purpose of combining or integrating methods. Moran-Ellis et al (2006) explain that integrated, combined and mixed are all terms used to explain mixed methods. Creswell and Plano-Clarke (2007) provide three explanatory factors to determine the design of a study including implementation, priority and timing of integration. Tashakkori and Teddlie (1998) offered a similar pragmatic three stage approach to classifying mixed methods including the weighting, dominance, and approach to integration. Methodological triangulation within a research study may be 'within method' or 'across methods' (Denzin 1989:243). Johnson et al (2007) view mixed method as something that occurs at any or all stages of the research process and place emphasis on the mixture of paradigms. Mixed methods research permits flexibility with adaptation and variation to respond creatively to practicalities of research (Patton 2002).

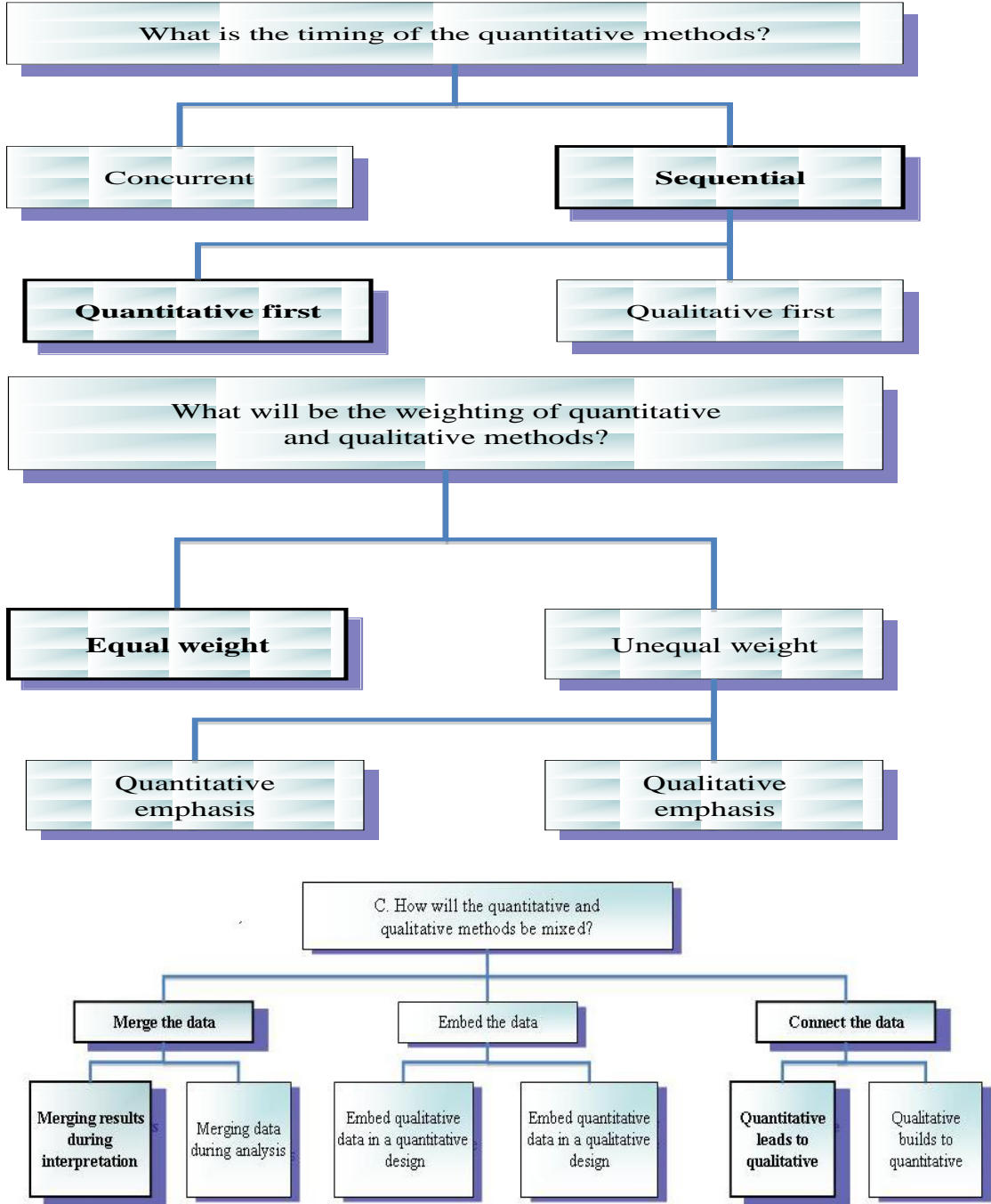
### **3.7 Sequential Explanatory Mixed method design**

A sequential explanatory mixed method design is utilised in this study. The selection was guided and informed by Creswell and Plano-Clarke's (2007) Decision Tree for Mixed method Design in relation to timing, weighting and mixing of methods. The decisions made for the design of this study are highlighted in bold in figure 3.1.

The study is characterised by the use of a survey to all new graduates followed sequentially by in-depth descriptive interviews with a smaller purposive sample. The response sample used in the quantitative strand was used as the sampling frame for the subsequent qualitative phase. Equal priority is given to each of the two types of data and the two methods were connected and integrated during the interpretation phase of the study. The research steps are outlined in figure 3.2.



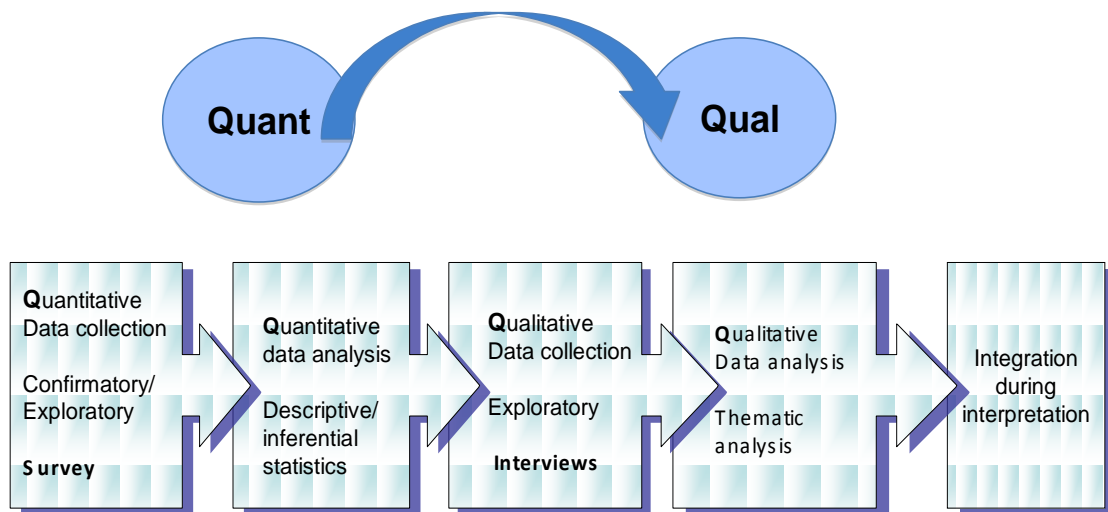
**Figure 3.1 Decision Tree for Mixed method Design criteria for timing, weighting and mixing. (Creswell and Plano-Clarke 2007:80).**



The purpose of this complementary mixed method design was to measure the overlapping elements of transitional support and career intent on the multiple personal and organisational factors that influence intent to stay. It was determined that the most effective way to gain information from the 2007 graduates, given the financial and

logistical constraints, was by census using postal questionnaires to the entire cohort; this has been described as the ideal sample survey (Abbott and Sapsford 1998). The survey was designed to examine the key concept of 'intent to stay' and could potentially have been interpreted exclusively within one quantitative method using several different empirical measures. However, confining the study to 'within methods' data collection, could potentially, have resulted in a biased or incomplete picture of the research aims. The unique limitations that can exist in survey were overcome by pursuing an 'across methods' strategy to include a more detailed investigation through one to one interviewing, which permits interpretation of the statistical presentation and gives it human meaning (Patton 2002).

**Figure 3.2: Sequential Explanatory Mixed method design**



### 3.8 Rationale for Mixed method Research

The purpose of mixing approaches is to afford opportunity to gain a more complete understanding of research problems (Creswell and Plano-Clark 2007). Researchers anticipate that mixing methods will enable them to capture the complexity of human phenomena (Sandelowski 2000a). Five purposes for using mixed method in

research have been identified by Green et al (1989): triangulation, complementarity, development, initiation, and expansion. These are all reflected in the work of Bryman (2006) who provides very detailed explanation of the diverse reasons for using mixing methods, triangulation, compensation, completeness, prioritising research questions, explanation of unexpected results, instrument development, sampling credibility, context illustration, utility, confirmation, discovery, the opportunity for enhancement and the inclusion of diversity of views. The adoption of a cross sectional survey design with semi-structured interviews in this study reflects many of the objectives clearly illustrated in Bryman and Greene's rationale for mixed methods. A holistic portrayal of the reasons for new graduate transition experience and intent to stay was enabled by this mixed method approach with uncovering of unique elements, which may have been missed if only one method was used (Jick 1979). The factors that influence new graduate retention and adjustment to the workplace are complex, in some ways individual but also applicable and generalisable to others. Mixed method studies have the capacity to create knowledge that is reflective and relevant to participants, will illuminate the individual and broader context, but will also have the applicability and generalisability to others (Greene and Caracelli 1997). The utility of research is determined by its users. Mixed methods respond to the interests and needs of diverse stakeholders in research; for example, health policy planners who desire concrete outcomes that will provide standardisation and cost-effective evidence based human resource practice (Greene 2005). Mixed method research responds to the pressures for outcomes such as retention in healthcare but it can also report on the context of those outcomes. In this study the selection of mixed methods as a methodology sought to provide hard data for the decision-makers who seek to determine health care policy in relation to the retention of, and support for, new graduates.

The purpose of triangulation is to seek convergence or corroboration of results. Lincoln and Guba (1985:283) argue that information unless from an unimpeachable source should not be given serious consideration unless it can be triangulated. This research inquiry sought insight, understanding, and discernment rather than just convergence. The complementary intent in research is different from that of triangulation because the quest for convergence requires different methods to assess the same phenomena (Greene *et al.* 1989: 258). Complementarity seeks to enhance, elaborate or clarify results using one method to inform the other. Considerable flexibility is permissible in mixed method design particularly when the purposes are complementary or expansion, overcoming the constrained interpretation of the purpose of triangulation (Greene 2007). The complementary use of survey and interviews enabled some findings to be corroborated, while at the same time allowing the project to pose related but different research questions in relation to intent to leave and transition experiences. The survey facilitated access to a purposeful and embedded sample for interviews allowing the opportunity to find explanation for survey findings through the close up inquiry. Mixed methods allowed the project to answer questions that could not be fully answered by other approaches, enabled greater diversity and ultimately provided greater strength to inferences made (Teddlie and Tashakkori 2003). The utility and credibility of the research is enhanced as the survey provides generalisable data to inform strategic policy while at the same time providing contextual understanding and illustration for the qualitative findings. Theories were combined to get a fuller picture of the reasons new graduates may intend to stay in nursing. The survey is designed and based on theories in relation to intent to leave and experience on transition and this information was enhanced or augmented with the more detailed inquiry afforded through the probing of interviews. Diversity of views was also captured through the open ended questions included in the survey.

The purpose of all research can be said to fall on a continuum from exploratory to confirmatory (Onwuegbuzie and Leech 2005). In the pursuit of completeness, combining methods can also result in 'abductive inspiration' (Risjord *et al.* 2001:44) whereby the qualitative and quantitative methods can develop findings derived from one another, illuminate one another, and thereby suggest new ways of examining a particular issue. A major advantage of using mixed method in this study is that it enables the research to respond simultaneously to both confirmatory and exploratory questions, thereby verifying and generating theory in the same project (Tashakkori and Teddlie 2003:15). Mixed method research embraces multiple viewpoints, perspectives and positions (Johnson *et al.* 2007), affording comprehensiveness and off-setting the weakness of one approach (Creswell and Plano-Clark 2007). Qualitative methods such as the interviews used here can suffer from 'elite bias' (Fielding and Fielding 1986:27) where those who are more articulate or strategically placed as they actually volunteer to be interviewed are concentrated on more by researchers; this potential is offset by combining the interviews with an alternative qualitative method, open ended survey questions and thereby more diverse new graduates' views are contributed. The combination of words and numbers can provide both divergent or convergent data, which can enable research inquiry to be more complete and thereby more believable to a wider audience (Yoshikawa *et al.* 2008). Divergence can often turn out to be an opportunity for enriching the explanation' (Jick 1979:607), and can advance the inquiry process as it can initiate a re-examination of the conceptual framework (Tashakkori and Teddlie 2003).

### **3.9 Limitations of Mixed method research**

Distrust has been expressed as to the feasibility and accuracy of mixed methods (Massey 2008). Lincoln and Guba caution that a 'coherent picture' may not be generated using different methods (1985:306). It has been proposed that all research methods have limitations,

combining two or more can offset such problems, and if the data converge then the validity of the mixed methods approach is endorsed (Greene *et al.* 1989). Many decisions made during the research process can have a subjective influence on the methods with questionable levels of reliability demonstrated in relation to instruments or low levels of power accepted as verification (Onwuegbuzie and Leech 2005). Begley argues that many of the limitations of triangulation such as incorrect methods or bias are potential limitations of all types of research and are not exclusive to triangulation (Begley 1996). Each data collection method has positive features which render it unique, suitable in some situations but those features can render it constrained in other situations

Mixed methods are useful for evaluating the extent and direction of bias, providing both convergence of results and complementary information on the phenomena of interest. Fielding and Fielding (1986) argued that combining theories or methods do not necessarily reduce bias, increase accuracy or facilitate the pursuit of a more objective truth but did propose that triangulation facilitated the pursuit of greater depth and range, in essence the fuller truth. By combining methods and investigators in the same study, observers can partially overcome the deficiencies that flow from one investigator and/or method (Denzin 1970). The notion that one method can confirm another is problematic as one agreement between the results does not mean the research output is correct nor does it mean the research instruments were either reliable or valid (Massey 2008). Risjord et al (2001) point out the methods used should be distinct and capable of withstanding scrutiny on their own merit, therefore it follows that confirmation between the results is not a realistic expectation.

Convergence suggests that if data are generated from different sources, or method it will produce evidence of agreement in research findings defined as 'data from different sources, methods, investigators, and so one will provide evidence that will result in a

single proposition about some social phenomenon' (Mathison 1988:15). Concern arises in mixed methods such as triangulation if instead of the anticipated convergence divergent or contradictory results emerge. Morse (1991) is quite unyielding about the issues of divergent results arguing that should contradictory results result from using quantitative and qualitative methods, then one of those findings is incomplete or inaccurate. However if the two answers disagree this does not contradict the validity of either answers but simply informs the researcher that different results have been found. Inconsistent or contradictory data need to be evaluated in terms of the process of inquiry and the larger social context (Mathison 1988). The divergence of data is not necessarily a problem as it can provide useful data that can further illuminate issues not addressed in the survey or interviews. Divergent research results may be the outcome of different research methods and may result from measurement bias, but such outcomes may also reflect the different types of knowledge that may be accessible through use of different methods (Mathison 1988). Indeed, the convergence of triangulation is not of greater value than the divergence and dissonance that may result from mixed method inquiry (Greene 2007).

Integration may be achieved at any point in the research process (Moran-Ellis *et al.* 2006). Sandelowski (2000a) proposes that mixed methods represent a combination of sampling data collection and analysis but not at the paradigm level; while it is possible to frame a process inquiry in two or more world views, these world views will always remain distinct from one another. Some would question if the current approaches to the analysis and reporting of mixed methods actually achieves the mutual illumination and integration that is envisaged when determining research design (Bryman 2007). A study of social researchers (n=20) in the UK who are experienced mixed methods researchers sought to explore the barriers to integrating quantitative and qualitative data in mixed methods research (Bryman 2007). Methodological preferences, structure and timing of projects,

researcher skill and experiences, nature of data stakeholder interest and publication constraints were some of the barriers identified.

### **3.10 Summary**

The advantage of a discussion of alternative research paradigms is that it sensitises us to the potential for methodological bias to obstruct the flexibility required to undertake meaningful research (Patton 1988:118). The complexity of health care research mandates more complex research designs, and greater attention is being paid to using mixed methodologies in health care research. Through the 1990s a number of influential researchers began to highlight mixed method research as the third paradigm (Patton 1990; Teddlie and Tashakkori 2003; Johnson and Onwuegbuzie 2004; Greene 2007) and the field of mixed methods and language used to describe it is relatively new. The assumption of mixed methods is that more than one paradigm can offer a legitimate means of inquiry (Greene and Caracelli 1997). 'Methods are the kaleidoscope: depending on how they are approached, held, acted toward different observations will be revealed' (Denzin 1989:235). The epistemological assumption in this research is that the world can be interpreted through both numbers and words. Mixed method research is responsive, and despite the exhaustive arguments that the world view of the traditional approaches to data collection cannot be mixed, renewed interest is evident in the literature as to the potential for pragmatism to inform such research endeavours. The sequential explanatory and complementary descriptive research design used in this study provides the robust framework of inquiry to explore the research objectives outlined for this study. The issues around transition into the workplace and intent of new graduates are multifaceted, rendering the necessity for a research approach that is capable of reaching the breadth and depth required to meet the research objectives.



## **Chapter 4 Methods**

### **4.1 Introduction**

There are a number of key steps to be taken in a descriptive design to protect against bias including appropriate sample selection, use of valid and reliable instruments and care in data collection and analysis procedures (Burns and Grove 2005). Therefore this chapter will discuss in detail the research methods, approach to sampling, the procedures for data collection and the approach taken to the analysis of quantitative & qualitative data. The adaptation and development of the Nurse Early Exit basic questionnaire (Hasselhorn *et al.* 2003a) used for the quantitative phase of the study is explained, and the procedures and precautions to ensure rigor, reliability and validity are presented. Measures of the internal consistency (Cronbach's alphas) are outlined here but reported in greater detail in the quantitative findings in chapter 5. Ethical issues that pertained in this study are given detailed consideration. The concept of reflexivity acknowledges the researcher is part of the research and will influence the findings (Miles and Huberman 1994). Therefore throughout the chapter there is effort to reflect on the procedures and challenges in the course of the study as reflexivity enables transparency and trustworthiness as it develops one's awareness of one's own experiences and values and the influence they have on the process (Miles and Huberman 1994). Toffiolo and Rudge (2006) explain that a reflective position contrasts with a reflexive position in that the former suggests a descriptive report of experiences while undertaking research while the latter makes explicit both the impact of the researcher on the study and the study on the researcher.

### **4.2 Study design**

A mixed method research design as described by Creswell *et al* (2003) was utilised, characterised by the collection and analysis of quantitative data from the whole sample followed by the collection and analysis of qualitative data from a volunteer sub-sample. A

quantitative national survey of 473 recent nursing graduates who have made the transition into the nursing workforce was undertaken to examine the educational preparation, career intentions, employment profiles, employment patterns, professional progress, occupational demands, personal demands, and support during transition from student to staff nurse and to determine the factors that influence the intent of degree graduates to stay in or leave the profession. This was complemented by qualitative interviews with a sample of 22 registered nurses 12 months after entry to practice to examine their experiences on transition into practice particularly in relation to their reactions and support on transition, factors that influence intent to stay and leave and future career expectations. As explained in the previous chapter, the purpose of utilising a mixed method sequential explanatory design (Creswell and Plano-Clark 2007) for this study was to capture a more complete, in-depth and contextual understanding of the transition experiences and the impact on career decision-making. The mixed method design afforded access to the sample for the second stage of the study, which involved interviews with graduates, and all those taking part in the survey were invited to be contacted to take part in the interviews. The rationale for using this particular staged design is that it allows qualitative results to explain and interpret the findings from the quantitative component further, thereby providing rich and productive data (Begley 1996) that gives more depth to the topic under investigation. The data were integrated in the interpretation phase of the study.

### **4.3 Ethical considerations**

Permission to access the sampling service of the professional nursing body An Bord Altranais in Ireland to distribute the survey was contingent on ethical approval from Trinity College Dublin (appendix 9.1). Full ethical approval was granted from the Ethics Committee of the Faculty of Health Sciences Trinity College Dublin (3<sup>rd</sup> Oct 2007) and the process took about 3 months to complete (appendix 9.2). Any

research involving humans is required to comply with the highest standards as articulated in critical international guidelines or codes pertaining to the ethical conduct in research including the Declaration of Helsinki (World Medical Association 2004), the Belmont Report, (National Commission for the Protection of Human Subjects of Biomedical and Behavioral research 1979) and the Nuremberg Code (1949). The Declaration of Helsinki states that research involving human subjects must not take priority over the rights and interests of individuals (World Medical Association 2004). Throughout any research project it is the responsibility of the researcher to ensure participants' rights are protected (Polit and Beck 2004; Burns and Grove 2005). The Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral research 1979) identified core ethical principles upon which ethical conduct in research is built, beneficence, respect for human dignity, and justice all of which applied in this study and are discussed in the following sections.

#### **4.3.1 Beneficence**

The principle of beneficence implies that research should do good for others and maximise positive outcomes for society and participants while avoiding or minimising undue harm or risk (Beauchamp and Childress 2001; Polit and Beck 2004). In this project there was no expectation of benefit to the individual, but of advancement of knowledge for the nursing profession due to its relevance of the survey and interview data to unmet practice issues. The researcher did not anticipate any undue psychological distress to result from taking part in the interviews but there were one or two occasions when participants became emotional during interview. When any discomfort in participants was noted during the interview, the interview was immediately stopped and measures taken to alleviate any discomfort, and any issues that arose were dealt with in a sensitive and tactful manner by the researcher. Time was given for the participant to

recover from any discomfort, following which the interview continued if the participant desired.

### **4.3.2 Respect for persons**

The principle of respect for persons, or human dignity as described in the Belmont Report (1979), encompasses the right to autonomy and self determination. There is a close relationship between autonomy and informed consent the former being concerned with freedom of choice and the latter concerned with open disclosure so that individuals may make an informed and considered judgement (Kendrick 1994). Sieber (2004) cautions that informed consent is not as simple as the completion of a consent form but is a process of communication. The elements of informed consent are an explanation of the purpose, risks, and benefits, voluntary participation and the opportunity to ask questions and alternatives and the right to abstain or withdraw consent without fear of reprisal (Declaration of Helsinki, World Medical Association 2004). Written information was provided to all participants, outlining the study, aims, methods, and their rights to full information, confidentiality, anonymity and the right to withdraw at any time without explanation (appendix 9.4). Completion and return of the survey was taken as indication of consent to participate in the survey phase of the study. Participants who wished to take part in the interviews ticked a box on the questionnaire and supplied their contact details. They then completed an informed letter of consent before participation in an interview (appendix 9.5). Participants had the right to withdraw at any time and were not coerced to participate (Sieber 2004).

### **4.3.3 Justice**

The final principle articulated in the Belmont report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral research 1979), justice is concerned with the fairness of procedures and is applied in this study through protection of

participant privacy, anonymity and confidentiality. All data were stored in keeping with the Data Protection (Amendment) Act (Government of Ireland 2003). Confidentiality of data was maintained by separation of consent forms and other research files, therefore the template of names and allocated numerical codes was stored in a locked cabinet separately to the data. The hardcopy records are stored in locked cabinets in my office in the School of Nursing and Midwifery in Trinity College Dublin and will be kept there for 5 years following the completion of the project. The data collected will be solely utilised for the purposes of this study and will be destroyed 5 years following completion of the project. Confidentiality of data was maintained by the use of code numbers on questionnaires and other research documents. There are no identifying names or addresses on the transcripts and the typist responsible for transcription was required to treat all data in confidence. Any publications will not include any identifying data about individual participants or their workplaces. The researcher did not have personal knowledge of the potential participants in the surveys as they were accessed anonymously through An Bord Altranais. Survey participants were asked to allocate their own numerical code that will allow for their responses to be compared at some time in future and there were no identifying features on the questionnaire. Interviewees completed a written form of informed consent (appendix 9.5), maintained separately from other research files and had a numerical code allocated by the researcher by which interview tapes and transcripts were identified only. All participants were informed in the consent process that interviews were coded by a 3 digit number and an abbreviation to signify their discipline.

## **4.4 Population and sample**

### **4.4.1 National Survey**

There are thirteen third level institutions involved in undergraduate nursing education in the Irish Republic. At the time of the study only

three undergraduate nursing programmes were offered; a combined children's & general nursing programme has since commenced in 2008. Approximately 1,740 nurses commenced nursing education across the three disciplines of intellectual disability, psychiatric and general nursing in 2003 (An Bord Altranais 2004a). This was a larger number than in subsequent years to compensate for a shortage in the first year of implementation of the pre-registration honours degree due to problems with the application process. A population is considered to be any group that shares a set of common traits (Polit and Beck 2004) and in this study refers to all nurses who went on to graduate from the 4-year Bachelor of Science in Nursing course in 2007. The target population was all those who became newly registered nurses on the general, psychiatric and intellectual disability divisions on the An Bord Altranais nursing register in 2007 following successful completion of the honours degree. Thus, a census sample of the 2007 nursing graduates was surveyed despite the associated increase in cost (Fink 2003) as it was anticipated that this strategy was most likely to maximise the number of respondents given the normal relatively low rates of survey response (Blumberg *et al.* 1974) and in order to increase the representation and enable the closer examination of discipline, regional and employment differences.

#### *4.4.1.1 Eligibility criteria*

The eligibility criteria were informed by the desire to capture graduates who had had similar experiences at the same point in time therefore the sample was selected from the same year.

##### *4.4.1.1.1 Inclusion Criteria*

- Graduated from a 4-year nursing degree programme in the Irish Republic in 2007
- Newly registered on the An Bord Altranais register in one of the three disciplines, psychiatric, general or intellectual disability nursing.

#### 4.4.1.1.2 *Exclusion Criteria*

- Newly registered RGN on the An Bord Altranais nursing register who did not graduate from a 4 year degree programme in the Irish Republic
- Nursing graduate from years other than 2007.

### **4.4.2 Sample size**

The total population of 2007 graduate nurses registered at the time of original survey distribution was 1329. There were a number of contacts made by parents and family members of nurses who graduated in 2007 who were apparently travelling since completion of studies and not yet practising; in all 30 were received and these were removed from the sample numbers because they were unavailable at the time to complete the survey. Therefore the questionnaire was distributed to a census sample of 2007 nursing graduates (n=1299). The first survey distribution was March 2008 with a follow up distribution in July 2008. The total number who returned a completed survey was 473, giving an overall responses rate of 36.4%.

#### *4.4.2.1 Maximising response rates*

Systematic error can be caused by poor response rates and representativeness of the sample (Norman and Streiner 2003) and is overcome by the selection of a larger and more representative sample (Warner 2008). Postal questionnaires do present a particular risk for non-response which can reduce sample size and introduce bias (Edwards *et al.* 2002b). The response rate was of particular concern because of its potential to cause a Type 11 error, that is, the potential to reject the null hypothesis and therefore fail to detect significant findings (Warner 2008). The response rate has a direct impact on how well a survey may be generalised as, if the response rate is low, the study will have low precision and the confidence intervals that result

will not be precise (Polit and Beck 2004). A Cochrane systematic review identified a number of strategies to reduce non-response bias including monetary incentives, length and appearance of questionnaire, advance notification, contact with and appeal of subject to participants, free postage, follow up contact and re-distributions (Edwards *et al.* 2002a). Many of these strategies were used in this research in an effort to increase response rate including the care taken with the covering letter to gain participant interest (appendix 9.3) and a thank you statement included at the end of survey. The return address was placed on the back of each survey to ensure undelivered surveys were returned. Advance notice of the study was addressed by a flyer distributed through all of the third level colleges to each final year student in the weeks before the end of final term in college (appendix 9.9). Heads of school also co-operated by displaying flyers in student communal areas within the respective colleges. A short article was included in the Irish Nurses' Organisation 'World of Irish Nursing' magazine (appendix 9.8) to increase awareness among graduating nurses about the forthcoming study. An incentive was offered in the first mail-out to participate in a free draw with book token prizes to the value of €100. A reminder note after 4 weeks and second mailing of the survey was distributed in July 2007 to the sample group through Bord Altranais to help maximise the response rate. It was not possible to send a targeted reminder letter to all non-responders due to the limitations of the sampling service at An Bord Altranais. At time of survey the number of 2007 graduates who had up taken registration stood at 1329. The initial distribution yielded 351 responses (response rate 27%). One reminder letter was sent and the 2<sup>nd</sup> mailing produced a further 122 responses giving an overall survey response rate of 36.4% (n=473). The response rate is somewhat low but was considerably higher than a similar and shorter survey administered by the HSE to this cohort later in 2007, which only succeeded in a 33% response rate (Health Services Executive 2009). McColl *et al* (2001) report that response to postal surveys can be as low as 25%. The profile of participants as reported in the quantitative



findings chapter reflects the demographic profile anticipated in this cohort (An Bord Altranais 2004a). Thirty five percent of college places in psychiatric and intellectual disability nursing are reserved for mature students while 85% of general slots are reserved for school leavers (An Bord Altranais 2009) as evidenced also in the overall proportion of mature respondents (29%) to the survey. The ratio of males to females (7.4%) also reflects the proportions in the overall population of nursing (7.8%). All of the 13 colleges who participate in the undergraduate education of nurses in the Irish Republic were also represented in responses and participants were drawn in good proportions from across the country as illustrated in demographic profiles reported in Chapter 5.

#### **4.4.3 Interview sample**

A convenience sample of volunteers drawn from the survey participants was considered the most practical and efficient means to access participants for interviews. The potential participants for interviews were self selected and voluntary as all participants in the initial survey phase were invited to participate in the qualitative interviews and a proportional stratified sampling strategy was used to select participants purposively (Polit and Beck 2004) for the interviews. Determining sampling size in qualitative research is a matter of judgement (Sandelowski 1995) and this purposive sampling approach enabled me to identify information-rich participants (Patton 2002) those whose particular work characteristics would make them relevant sources of knowledge. Access emerged sequentially as all survey participants were sent information on the interview phase of the study in the research packs and were requested to return their contact details if they wished to participate.

##### *4.4.3.1 Stratification*

In qualitative research, there is a tendency to use participants that are accessible therefore it is more difficult to ensure the sample is

representative (Polit and Beck 2004). A proportional stratified sampling strategy was used to select participants for the interviews, described (Patton 2001) as a sample within a sample, and was designed to access the most productive data sources to meet the aims of the study. The framework for stratification included discipline, region and employment setting to obtain representative numbers from the psychiatric, general and intellectual disability groups with an effort to interview at least one participant across all the thirteen colleges. The procedure yielded a list of 130 contact names of people across the country who expressed willingness to be contacted for an interview and this list was used to stratify proportionally the numbers for each discipline. As each contact came in notes were made of the status on entry to the profession, university attended, discipline, work setting and region of the country in order to arrive at as best a representative sample as possible for the study. Once the critical information was isolated then the survey was not, at that stage, reviewed in detail as it was felt this would minimise the potential for bias in informant selection.

#### *4.4.3.2 Sample size*

Due to the in-depth nature of qualitative research the sample size is typically small and is often determined by data saturation (Sandelowski 1995). As such, the sample size for this phase of the research was not predetermined but data collection did stop when data saturation had been achieved. Creswell (2003) identified that data saturation is usually confirmed after 20 to 30 interviews and in this instance it occurred after 22 interviews had taken place, 14 Registered General Nurses (RGNs), 6 Registered Psychiatric Nurses (RPNs), and 2 Registered Nurses in Intellectual Disability (RNIDs) graduates.

#### *4.4.3.3 Access to interview participants*

These volunteers were asked to participate in an interview after 12 months in practice as this time lapse allowed sufficient opportunity to

settle in and avoid the 'honeymoon' period and 3-6 month peak stress period (Kramer 1974; Macleod Clark *et al.* 1996). The sampling allowed for representation across the country and employment settings as well as drawing on adequate numbers as all graduates were surveyed at a cross sectional point in time. Due to cancellations, Cork University Hospital was not represented so only twelve colleges were ultimately included in the interviews. However, the breadth of the country was included with participants working in Donegal, Mayo, Galway, Kerry, Clare, Laois, Westmeath, Meath, Dublin, Kilkenny, and Waterford. The motivation to participate was quite varied in that most responded to the desire to provide information as they were a new group and they could help others in this way. One participant disclosed the reason for participation as relating to their negative experiences. It was obvious that interviewees were quite discerning and did appreciate the value of research. One participant had already registered for an MSc and empathised with the need to get volunteers.

## **4.5 Data collection**

### **4.5.1 Cross sectional retrospective self-report survey**

Surveys are designed to measure knowledge and behaviour and are a method of data collection that employs either personal interviews or self completion questionnaires (Bowling 2002). The key strength of the self-report questionnaire approach in this study lay in its ability to collect clear and easy-to-compute data to facilitate analysis in an economical way from a large number of participants. However, pre-coded responses do mean that respondents are forced to choose an answer that may not fully reflect their view (Oppenheim 1992) and the data produced will be less reliable than that of interviews as one is unable to probe or clarify responses. Also, it is not possible to control who or how much of the questionnaire is completed. One advantage of the postal questionnaire is that they can assist in overcoming the social desirability and interview bias that can exist with interviews (Bowling 2002). They are reliant on an assumption that they are

designed to be understood by all (Bourque and Fielder 2003) and were thus deemed suitable in this study as it could be assumed that the population of graduating nurses was 100% literate. This study can be defined as cross sectional because the data were collected at one point in time, and retrospective as participants were asked to recall events. The retrospective nature of surveys has been criticised due to the potential for bias caused by selective recall although Bowling (2002) suggests that care in design can assist in minimising this limitation. This may also be described as a cohort study because the population had a common experience of graduating in 2007.

#### **4.5.2 Basic questionnaire NEXT study**

The questionnaire used in the Nurses' Early Exit study in Europe (Hasselhorn *et al.* 2003a) was modified for use and permission was granted on behalf of the NEXT study team (appendix 9.6). The NEXT project conducted throughout the period of 2003 to 2005 was funded by the European Union Fifth Framework and coordinated by the University of Wuppertal in Germany to evaluate the exit patterns of nurses in the European Community. The instrument was selected because of the high levels of reliability ranging from 0.7-0.9 (Van der Heijden and Kuemmerling 2003) as will be reported in section 4.7. A value of 0.8 is considered an acceptable standard for a well established psycho-social instrument (Burns and Grove 2005). This self-report questionnaire was developed using existing validated scales by a group of experts and has been distributed to 77,000 nurses with 38,802 respondents across 10 countries in Europe, not including Ireland, in a study of the working conditions and intent to leave the nursing profession (Hasselhorn *et al.* 2003a). It investigated a number of 'push' and 'pull' factors that influence the retention of nurses including individual working conditions, individual circumstances, job commitment, work and environment demands and intent to leave (Hasselhorn *et al.* 2003b). The NEXT questionnaire is a logically organised self-report instrument and designed in such a way that

questions are grouped according to context and effort is evident to include all reasonable response alternatives (Oppenheim 1992). The survey also includes a number of items that could be interpreted as mixed whereby forced closed ended questions are accompanied by an alternative answer 'other', which allows respondents to fill in words of their choice. There are a small number of contingency questions that direct participants dependent on their personal characteristics e.g. directing them away from items not applicable to them such as care of children (Mc Coll *et al.* 2001).

#### *4.5.2.1 Refining the questionnaire*

The appearance of the self questionnaire is an important factor in determining whether or not the recipient will participate. The degree of relevance of the opening questions will potentially influence the desire of the participants to complete a questionnaire (Mc Coll *et al.* 2001). The front cover included the title of the survey, and brief instructions and researcher's name and funding organisation was included on the back cover (appendix 9.6). As recommended by Dillman (1978), attention was given to the organisation of the questionnaire to ensure both questions and response categories were included on the same page. Care was taken to avoid splitting questions or breaking up related questions to avoid participants being confused or unable to consider all responses. Many of the items within scales were spread around to avoid auto-cueing (Oppenheim 1992). An important consideration included making the questionnaire attractive in appearance and to give a realistic perception of the time and effort it entails. The questionnaire was printed in A5 Booklet format as it enabled ease in reading, turning pages and limited the potential for loss of pages (Dillman 1978). It was estimated that it took about 22 minutes to complete the questionnaire during the preliminary testing of the instrument. A number of items to describe place and type of work were adjusted to reflect the context of Irish healthcare. The original NEXT questionnaire was developed to measure intent to leave

in the nursing population at large, so some items were not applicable for use with new graduates. The *Work ability index scale*, *disability scale*, and *general health scale* were included in the original study and were concerned with the ability of the worker to perform their job, taking into account their individual health resources. There were very detailed questions on health status which were only utilised by one pilot participant and it became apparent that at this juncture in their career that this cohort was relatively young and the impact of health on their ability to perform their job did not feature as a prominent issue. Motivated by the concerns over the length of the questionnaire and the poor response to these scale items in the pilot it was determined by the researcher and the supervisory team that sufficient meaningful data for the new graduate cohort was not generated to warrant their inclusion for the purposes of this study. The modifications and adaptations to the original NEXT questionnaire are further explained in detail later in the section on validity and reliability (section 4.7).

#### **4.5.2. Finalised questionnaire**

The finalised version of the questionnaire used in the study comprised 98 questions organised in sections (appendix 9.6). Each section contained a series of questions on a topic and provided linking for the reader (Bowling 2002). Table 4.1 provides an overview of the main sections and scales that comprised the finalised questionnaire. The syntax relating to the computation of the scales is included in the appendix (9.11). There were a total of twenty scales included and each scale involved a series of items that can be summed to yield a score and by averaging out a more valid measure is produced by overcoming issues of bias that may exist in a single item (Bowling 2002). Guided by Oppenheim's (1992) key principles in wording questionnaires, including simple language, avoidance of jargon and the use of short, specifically worded questions, four additional questions were added to capture unique elements of the new graduate experience.

**Table 4.1: Finalised questionnaire**

<p><b>Section A: Demographics</b></p> <p><b>Section B Work in general</b></p> <p>Job satisfaction</p> <p>Occupational turnover</p> <p>Commitment</p> <p><b>Section C Content of work</b></p> <p>Meaning of work</p> <p>Possibilities for development</p> <p>Influence at work</p> <p>Uncertainty regarding treatment</p> <p>Role conflict/ambiguity</p> <p>Lifting and bending</p> <p>Quantitative demands</p> <p>Emotional demands</p> <p><b>Section D: Work schedule</b></p> <p>Satisfaction with working life</p> <p><b>Section E: Relationships at work</b></p> <p>Quality of leadership</p> <p>Social support</p> <p>Interpersonal relationships</p> <p>Assessment of violence in the workplace</p>	<p><b>Section F: Personal aspects relating to work</b></p> <p>Positive and negative affectivity</p> <p><b>Section G Present occupation</b></p> <p>Effort–reward imbalance (ERI)</p> <p><b>Section H: Private and family life</b></p> <p>Balancing work and family</p> <p>Satisfaction with salary</p> <p><b>Section I: Work and health</b></p> <p>Personal burnout</p> <p><b>Section J: Orientation to professional role</b></p> <p>Career intentions</p> <p>Motivation for nursing</p>
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The questions were organised in sections as follows:

#### **4.5.2. Section A: Demographics**

These questions were concerned with gender, age, place of birth, college attended, employment details and area of residency. Conditions of nursing employment were examined relating to type of

nursing unit, type of organisation, detail of employment contract; and perception of employment opportunities.

### **4.5.3 Section B Work in general**

This section probed informants as to the level of satisfaction and meaning they derived from their work, career intentions and the level of professional and organisational commitment reported by graduates. It included specific questions in relation to fears about being unable to find work or being asked to work on a schedule or in a place that does not suit. The following scales were utilised

#### *4.5.3.1 Job Satisfaction*

This scale derived from the Copenhagen Psychosocial Occupational Questionnaire (Kristensen 2000) (COPSOQ) by the Next study group (Stordeur *et al.* 2003) asked the participants to answer '*how pleased are you with work prospects?; the physical working conditions; the way your abilities are used; your job as a whole everything taken into consideration?*'. Response categories were 1 (very unsatisfied) to 4 (very satisfied). Cronbach's alpha levels for the scale were 0.69 to 0.82 in the NEXT study (Van der Heijden and Kuemmerling 2003).

#### *4.5.3.2 Occupational Turnover*

Occupational turnover intention was measured using the three-item scale developed by the NEXT study research group (Hasselhorn *et al.* 2003b). The items were as follows '*how often in the last year have you thought about giving up nursing?; how often in the last year have you thought about taking further qualification outside nursing?; how often during the course of the past year have you thought of giving up nursing to start a different kind of job?*'. The response categories were 1 never; 2 some-times each month; 3 some-times each week; and 4, every day. The Cronbach alpha previously reported was 0.88 (Hasselhorn *et al.* 2003b).



#### 4.5.3.3 *Commitment*

The NEXT research group included two 4-item scales developed by Allen & Meyer (1990) to evaluate institutional and professional commitment. Participants were asked to indicate their level of agreement on a rating scale of 1 (totally agree) to 5 (totally disagree) with the following statements '*I really feel I belong to this institution; this institution has a great deal of personal meaning for me; I am proud to belong to this institution; I do not feel like a part of the family among this institution*'. The questions for professional commitment were as follows '*I really feel that I belong to the nursing profession; the nursing profession has a great deal of personal meaning for me; I am proud to belong to the nursing profession; I do not feel like part of the nursing profession*'. The Cronbach alpha reported were 0.72-0.85 for 'commitment to institution' and 0.74-0.88 for 'professional commitment' (Kümmerling *et al.* 2003).

#### **4.5.4 Section C Content of work**

This section comprised a number of scales designed to elicit participant views about the content of their work and included the following

##### 4.5.4.1 *Meaning of work*

This was measured using the 3-item scale derived from Copenhagen Psychosocial Occupational Questionnaire (COPSOQ) (Kristensen 2000) by the Next study group (Pokorski *et al.* 2003). The questions asked were '*is your work meaningful?; do you feel your work is important?; do you feel motivated and involved in your work?*' The answers ranged from 1 (a very small extent) to 5 (to a large extent). Cronbach's alpha was previously established from 0.70-0.83 across the 10 European countries in the Next study (Kümmerling *et al.* 2003).

#### 4.5.4.2 *Possibilities for development*

The scale was adapted by the Next Study group from the COPSOQ (Kristensen 2000) and consisted of four items designed to evaluate the possibilities for development in nursing work (Kümmerling *et al.* 2003). The items included '*does your work require you to take initiative?; do you have the possibility of learning new things through your work?; can you use your skills or expertise in your work?; is your work varied?*'. The answers ranged from 1 (a very small extent) to 5 (to a large extent). Cronbach alpha was reported as 0.75 from across the 10 European countries in the Next study (Kümmerling *et al.* 2003).

#### 4.5.4.3 *Influence at work*

The 'influence at work' scale was derived by the Next study team from the Swedish Demand-Control questionnaire (Theorell *et al.* 1988). The items were as follows '*I have a say in what tasks I am asked to fulfil; I can decide for myself what task I am asked to fulfil; I can decide for myself how to fulfil the task given to me; I can set my own work pace; I have a say in when I fulfil the tasks given to me*'. Items were rated on a scale of one to five agreement with the statement from 1 (totally inaccurate) to 5 (totally accurate). The alpha coefficient reported by Kummerling (2003) ranged from 0.76 to 0.84 across the European participating countries.

#### 4.5.4.4 *Uncertainty regarding treatment*

This 5-item scale refers to stressful work-related issues that affect nurses in the workplace and was taken by the NEXT group (Kümmerling *et al.* 2003) from the Nursing Stress Scale (Gray-Toft and Anderson 1981). It asks the participant to estimate how frequently they are stressed by the following: '*inadequate information from a doctor regarding the medical condition of a patient; a doctor ordering what appears to be inappropriate treatment for a patient; a doctor not being present in a medical emergency; not knowing what a patient or a patient's family ought to be told about the patient's*

*medical condition and its treatment; uncertainty regarding the operation and functioning of specialised equipment*'. Response categories ranged from 1 (never) to 4 (very frequently). The alpha levels recorded ranged from 0.62 -0.80 across European countries (Kümmerling *et al.* 2003).

#### 4.5.4.5 *Role conflict/ambiguity*

This 4 item scale was developed by the NEXT study group and pertains to the extent to which staff felt sufficiently informed and prepared for their role (Kümmerling *et al.* 2003). Scale rating for 3 items was 1 (never) to 5 (constantly). Questions asked were: *'how often do you have to perform tasks for which you are not qualified enough?; How often do you receive information late, which is relevant to your work?; How often do you receive conflicting/contradictory orders concerning the performance of you work?'* Finally participants were asked to indicate how often they had to perform tasks that do not belong to their profession. Responses ranged from 1 (never) to 3 (yes - more than 20% of working time). The Cronbach alpha level was established as 0.69 (Kümmerling *et al.* 2003; Camerino *et al.* 2008)

#### 4.5.4.6 *Lifting and bending*

Lifting and bending is an eight-item scale developed by the NEXT study group (Estryn-Behar *et al.* 2003) to quantify the physical demands of nursing work. Items included *'bedding and positioning patients; transferring or carrying patients; lifting patients in bed without aid; mobilising patients; washing, bathing (personal hygiene); clothing patients; helping with feeding; making beds; pushing patient's beds, food trolleys or laundry trolleys; maintaining an uncomfortable posture'*. Items ranged on a 4-point rating scale from 0-1 times per day to more than 10 times per day. Cronbach's alpha has been previously reported at 0.79-0.93 across the 10 European countries (Kümmerling *et al.* 2003).

#### 4.5.4.7 *Quantitative demands*

Quantitative demands were measured by means of a 5-item scale related to the time pressure associated with nursing work and four of those items were derived from the COPSOQ previously referred to as a time pressure scale (Kristensen 2000). Questions were *'how often do you lack time to complete all your work tasks?; can you pause in your work whenever you want?; do you have to work very fast?; is your work unevenly distributed so things pile up?'* One additional item was added by the NEXT study and asked specifically *'do you have enough time to talk to patients?'* (Kümmerling *et al.* 2003). Items were rated on a 5-level rating 1-5 (hardly ever to always). Cronbach's alpha has been previously reported as 0.70 and 0.66-0.75 across the 10 European countries (Kümmerling *et al.* 2003; Camerino *et al.* 2008).

#### 4.5.4.8 *Emotional demands*

De Jonge's (1999) four item scale was used to evaluate the emotional demands of nursing work by the NEXT study team (Kümmerling *et al.* 2003) and was considered of importance to include in a study with new graduates. The patients were asked to respond to the *'frequency with which they face death; illness or any other human suffering, aggressive patients and troublesome patients in their work'*. Response categories were 1 (never) to 5 (always). The Cronbach alpha recorded by the Next study ranged from 0.64-0.74 (Kümmerling *et al.* 2003).

### **4.5.5 Section D: Work schedule**

Questions in this section sought information on the type and nature of shift patterns encountered by graduates in their first employment. Questions also asked related to how the longest number of days worked without a rest day and frequency of night and weekend work commitment experiences.

#### 4.5.5.1 *Satisfaction with working life*

Satisfaction with working life was assessed using a single item (55) with a forced 'yes/no' response to the following question: 'All in all are you satisfied with your working time in respect to your well being and your private life?' (Stordeur et al. 2003).

### **4.5.6 Section E: Relationships at work**

#### 4.5.6.1 *Quality of Leadership*

Derived from the COPSOQ (Kristensen 2000), this scale was used by the Next study group to evaluate the perceptions of nursing staff in relation to quality of nursing leadership where they work (Stordeur et al. 2003). Items were as follows: '*to what extent would you say your immediate supervisor makes sure that the individual member of staff has good development opportunities?; gives high priority to job satisfaction?; is good at work planning?; is good at solving conflicts?'*. Response categories were 1 (very small extent) to 5 (to a large extent). The recorded alpha levels across Europe were 0.87-0.92 (Kümmerling et al. 2003).

#### 4.5.6.2 *Social support*

Social support from supervisor and colleagues was assessed by scales developed by Van Der Heijden (1998) and used by the NEXT study group (Van der Heijden and Kuemmerling 2003). Each scale has four items and asks participants to evaluate the following '*is/are your immediate supervisor/colleagues able to appreciate the value of your work and its results?; do they express an opinion on your work?; do they give supportive advice?; Are they ready to help you with performance of your tasks?'* Response categories were 1 (never) to 5 (often) for the first three items and for the last item 1 (shows little willingness) to 5 (very willing). The alpha for the social support from supervisor ranged from 0.81 to 0.87 across Europe (Van der Heijden and Kuemmerling 2003). For the social support from colleagues the

alphas were a little lower at 0.72 to 0.79 (Van der Heijden and Kuemmerling 2003).

#### *4.5.6.3 Interpersonal relationships*

This was measured using a 7-item scale specifically developed by the NEXT study group (Kummerling et al 2003). The items used a five rating value scale to evaluate the relationships of nursing colleagues: nurses, senior nursing management, clinical nurse manager/charge nurse, doctors, administration colleagues, allied health professionals, nursing support staff. Rating levels went from 1 (hostile/tense) to 5 (friendly/relaxed). Cronbach alpha levels were previously established by the NEXT group at 0.68-0.77 (Van der Heijden and Kuemmerling 2003).

#### *4.5.6.4 Assessment of violence in the workplace*

The assessment of violence in the workplace was evaluated on a 4-item scale with level of harassment measured as 1 (never) to 5 (daily). The Cronbach alpha was 0.57 in the NEXT study (Camerino *et al.* 2008). Participants were also asked to indicate on a Likert scale of 1 (never) to 5 (daily) the frequency with which they are subjected to *'harassment by supervisor, colleagues, violence from patients or relatives or discrimination (sexual, racial, political or religious).'*

### **4.5.7 Section F: Personal aspects relating to work**

#### *4.5.7.1 Positive and negative affectivity*

This scale was used in the NEXT study and was taken from the positive and negative affectivity scale (PANAS) developed by Watson et al (1998). Participants were asked to rate on a scale from 1 (very slightly or not at all) to 5 (extremely) to the following positive terms *'alert, excited, active, interested, attentive, determined, proud, inspired, strong and enthusiastic'*. The negative terms were *'jittery, nervous, irritable, upset, distressed, scared, guilty, afraid, ashamed and*

*hostile*'. Cronbach's alpha for positive affectivity was 0.73-0.89 and for negative affectivity was 0.79-0.87 across Europe (Van der Heijden and Kuemmerling 2003).

#### **4.5.8 Section G: Present occupation**

##### *4.5.8.1 Effort–reward imbalance (ERI)*

This 3-part scale was adapted by the NEXT study group (Hasselhorn *et al.* 2003c) from the work of Siegrist (1996) and consists of effort (5 items), reward (11 items) and over-commitment (6 items). The items for effort were as follows: *'I am under constant time pressure due to the heavy workload; I have many interruptions and disturbances in my job; I have a lot of responsibility in my job; I am often pressured to work overtime; my job is physically demanding'*. One item was left out of this as it was felt that the question was not applicable to new graduates i.e. *'Over the years my job has become more and more demanding'*. Response categories were 'yes' and 'no'. If the participants answered 'yes' they were asked to indicate the level of distress that was caused by that particular item. The 4 response categories were *'no distress at all, moderately distressed; considerably distressed and very distressed'*. In determining the Cronbach's alpha of this item, the dichotomous categories of 'yes' and 'no' were used as it afforded the greatest sample size. Using those who answered 'yes' only would not have provided the global measure of the participant response. Cronbach's alpha was 0.69-0.77 across Europe (Van der Heijden and Kuemmerling 2003).

For reward items participants were asked to indicate their agreement with the following items: *'I receive the respect I deserve from my superiors; I receive the respect I deserve from colleagues; I experience adequate support in difficult situations; I am treated unfairly at work; my job promotion prospects are poor; I have experienced or I expect to experience undesirable change in my work situation; my job security is poor; my current occupational position*

*adequately reflects my education and training; considering all my efforts and achievements, I receive the respect and prestige I deserve at work; considering all my efforts and achievements my job prospects are adequate; considering all my efforts and achievements, my salary/income is adequate*'. The response categories ranged from 1 (strongly disagree) to 4 (strongly agree). The Cronbach's alpha level was 0.70-0.82 across Europe (Van der Heijden and Kuemmerling 2003).

In the last part of this scale 'over commitment' was measured by the participants' agreement with the following statements: '*I get easily overwhelmed by time pressure at work; as soon as I get up in the morning I starting thinking about work problems; people close to me say I sacrifice too much for my job; work rarely lets me go, it is still on my mind when I go to bed; if I postpone something that I was supposed to do today, I'll have trouble sleeping at night; when I get home. I can easily switch off from work.*' This last item was reversed to enable measurements for internal consistency. The Cronbach's alpha level was 0.70-0.82 across Europe (Van der Heijden and Kuemmerling 2003) .

#### **4.5.9 Section H: Private and family life**

##### *4.5.9.1 Balancing work and family*

The work-family and family work-conflicts were assessed in the NEXT study (Simon and Hasselhorn 2003) using 2 five-item scales developed by Netwemeyer et al (1996). These were included in the new graduate study as the changing profile of new graduates included a much older workforce with considerable family responsibilities. Participants were asked to indicate their level of agreement with following statements; '*the demands of work interfere with my home and family responsibilities; things I want to do at home do not get done because of the demands of my job; my job produces strain that makes it difficult to fulfil family duties; due to work related duties I have to*



*make changes to my plans for family activities*'. The family-work scale asked the same questions about work-related activities that are affected by demands of family responsibility. Response categories varied from 1 (total agreement) to 5 (complete agreement). The alpha coefficients reported by the NEXT study group were 0.79-0.93 for the former scale and 0.85-0.90 for the latter (Van der Heijden and Kuemmerling 2003).

#### 4.5.9.2 *Satisfaction with salary*

The 3-item scale was specifically developed by the NEXT study group to ask participants *'how satisfied are you with your pay in relation to need for income, considering the pay of other professionals and comparable professions?; considering the pay of nurses in other institutions?'*. (Van der Heijden and Kuemmerling 2003). The Cronbach's alpha level reported was 0.70-0.84 across Europe (Van der Heijden and Kuemmerling 2003).

### **4.5.10 Section I: Work and health**

#### 4.5.10.1 *Personal burnout*

Burnout was measured using the 6-item scale adapted from the Copenhagen Burnout Inventory (Borritz and Kristensen 2001). The items were as follows: *'do you feel tired?; are you physically exhausted?; are you emotionally exhausted?; do you think: I can't take it anymore?; do you feel worn out?; do you feel weak and susceptible to illness?'*. The Cronbach's alpha reported in the NEXT study was 0.84-0.91 (Van der Heijden and Kuemmerling 2003).

### **4.5.11 Part J Orientation to professional role**

Two items were added to elicit information on the nature of support provided for graduates in their first place of employment. In question 95, graduates were asked to respond 'yes' or 'no' if their area of employment provided a formal programme of orientation for new

graduates. If they answered affirmatively graduates were asked to select from the following six options as to the one that best describes their programme: *'Transition programme; full graduate nurse internship programme; orientation course; preceptorship; mentorship; combination of preceptorship and mentorship.'*

#### *4.5.11.1 Career intentions*

Two additional questions were added to augment information about the career intent of the Irish graduate. The intent was to draw distinction between intention to change job and intention to leave the profession. Participants were asked the following: *'do you expect to leave your place of nursing employment in the near future?'*. Response categories were *'will definitely leave in the near future; it is quite likely that I will leave; the situation is uncertain; the chances are very slight that I will leave; definitely will not leave in the near future.'* The 2<sup>nd</sup> question asked *'what your career intentions are for the next five years'*. Response categories were: *'continue to work in nursing in Ireland; continue to work in nursing abroad long-term; continue to work and pursue further education in nursing in Ireland; take a break from nursing indefinitely; leave nursing.'*

#### *4.5.11.2 Motivation for nursing*

It is suggested that open-ended questions should be used in small amounts in self-complete questionnaires (Mc Coll *et al.* 2001) and therefore only one open-ended question was included to illuminate the reasons why new graduates may have chosen to pursue their career in nursing: *'can you describe what motivated you to pursue a career in nursing?'*. The forced choice format of questionnaire may have limited or constrained the ability of participants and therefore a blank page was included at the end of the questionnaire where participants were encouraged to *'share any further comments in relation to their work and future career in nursing'*. Instructions were also included at the end of the questionnaire requesting respondents to provide contact

details and to sign a letter of consent to be contacted by the researcher if they wished to participate in an interview.

#### **4.6 Survey distribution**

The implementation of the self-administered survey required considerable coordination and attention to detail. Postal distribution and return is the most common method used to administer self-complete questionnaires as they are cost effective and enable simultaneous data collection from a large number of participants (Mc Coll *et al.* 2001). There is no opportunity for the interviewer to bias the participants as they complete the questionnaires (Mc Coll *et al.* 2001). They also reported that the anonymity afforded by postal questionnaires enables participants to report more sensitive opinion than by telephone administration.

Cartwright (1978) found nurses were more likely to respond to mail surveys than other health professionals. In this study, it was important to contact all graduates at the same time, so that the time period that elapsed since graduation to the time of data collection was not unduly influenced by inconsistencies caused by some graduates having more experience than others. Informed by all of these reasons, a postal distribution was considered the most efficient to administer the survey in these circumstances.

Each participant was contacted through An Bord Altranais sampling service and sent a personalised envelope containing a letter of invitation to participate outlining the details of the study, the research instrument and a Freepost envelope. The research packs were assembled by me and forwarded to An Bord Altranais to be addressed and mailed to protect the anonymity of the participants. A sampling fee was charged by An Bord Altranais for access to the sample information.

## **4.7 Validity and reliability**

### **4.7.1 Validity**

Validity is concerned with the capability of an instrument to measure what it is supposed to measure (Polit and Beck 2004). A reliable questionnaire will be capable of generating consistent results but a valid one will mean that those results are accurate, therefore validity is most important (Burns and Grove 2005). A number of steps were taken to ensure the validity of the survey tool including the selection of a previously used instrument, review by experts in the field, and testing of content validity indexes. This NEXT study self-report questionnaire consists of established and validated scales that were developed by a group of nursing and occupational experts and has been distributed to 77,000 nurses with 38,802 respondents across 10 countries in Europe (Hasselhorn *et al.* 2003a). Validity does vary from context to context, therefore validity of the NEXT study instrument was re-examined to determine the relevance and reliability of the instrument to Ireland. My first step was to review it in detail and I did find there were issues around the English translation that needed correction and particular words needed to be changing for the Irish context. The instrument was reviewed in detail again in conjunction with my two supervisors and each item was carefully analysed to determine its relevance to the Irish group. Some items, particularly those in relation to work patterns, work shifts, and descriptions of work places were re-developed to reflect Irish healthcare. The English translation was also evaluated and contextualised for use in the Irish Health Care system through a series of reviews by both nursing academics (n=6) and nurses (n=25) in the field. The questionnaire was further modified and contextualized with additional questions included based on relevant themes from the literature that pertain to the transition of new nursing graduates in Ireland.

A panel of experts was drawn upon to use a logical and expert evaluation to determine the validity of a measurement instrument (Mc

Gartland *et al.* 2003; Polit and Beck 2004). A content validity index (CVI) of the survey instrument was established by asking a sample of nurse experts (n=6); (on ABA register and experience of working as nurses in Ireland for longer than 5 years) to conduct item analysis of the relevance, clarity and representativeness (Polit and Beck 2004) of every item on the modified NEXT instrument used in this study. CVIs for measurement instrument were computed through item analysis and an overall CVI score of greater than 0.80 was considered to be evidence of good content validity (Mc Gartland *et al.* 2003) (appendix 9.12). Participants were asked to rate each item on the instrument on a four point scale (4=very clear; very relevant; very representative to 1=not clear; not relevant; not representative). After calculating a score for each of the three elements, an overall CVI score was computed by averaging the three scores (Mc Gartland *et al.* 2003). The overall content validity indexes ranged between 0.89 and 1.00 for the vast majority of the 126 questions on the original survey instrument indicating a very high level of agreement between the participants as to the validity of the instrument. There were, however, a small number of items where consultation with the experts revealed enhancements that could be made.

The clarity of an item is evaluated on the basis of how clearly it is worded (Polit and Beck 2004). In relation to clarity, CVIs were recorded at 0.83-1.00 for all but 3 items indicating a high level of agreement between the nurse experts. Each of those three items (recorded as 0.66) were below the accepted level of 0.8 and underwent readjustment to enhance the clarity. The majority of items were recorded at 1.00 in relation to relevance indicating nearly total agreement between participants. The participants also rated the representativeness of the instrument in relation to the context of the degree graduate group entering the work environment in the Irish Republic and the range of CVIs were good, ranging from 0.8 to 1.00 for the vast majority of items. Relevance and representativeness yielded a minimum recording of 0.50 on question 2, which pertained to

a description of the work environment. This particular parameter was not capable of responding to all of the potential job descriptions of the graduate nurses, for example, job titles in intellectual disability, so these were also re-developed where appropriate.

Expert validity is subject to bias that may exist among experts and will not identify content that may have been omitted (Mc Gartland *et al.* 2003). The experts contributing to the content analysis (n=6) and the 2006 degree graduates who participated in the pilot (n=25) were asked to contribute any additional information to overcome this limitation. After the data were analysed I made a number of adjustments to the questionnaire following consultation with supervisors to arrive at the final 99 questions used in the main study. The results of the content analysis index and all of the adjustments to the questionnaire that occurred in response to it and the findings of the pilot are summarised in appendix (9.13).

#### **4.7.2 Reliability**

The reliability of an instrument is concerned with the consistency of measurement results (Polit and Beck 2004). Questions are grouped together in scales relating to the same attitude and are preferred as they are more likely to overcome the bias that may be inherent in single items (Mc Coll *et al.* 2001). Two measures of reliability were of particular interest in evaluating the reliability, stability and homogeneity.

##### **4.7.2.1 Stability**

The stability of a questionnaire refers to the extent to which the same results remain stable over time and is often measured using test-retest reliability whereby a person should get the same score on questions if they completed it at two different points of time (Polit and Beck 2004). A draw-back of test-retest reliability is that it is reliant on the assumption that the phenomenon of interest has not changed over

the time interval (Litwin 1995). There are some limitations associated with test-retest in that participants may remember their initial responses, thereby increasing the estimation of reliability (Litwin 1995). High test-retest reliability is not anticipated in measuring those things which may be unstable over time (Warner 2008). Many of the items in this survey are mood related and participants may respond to the test differently, which may produce an underestimation of reliability (Litwin 1995). A test-retest was considered inappropriate due to the large number of attitudinal scales within the questionnaire, which it was estimated would have changed considerably over time (Warner 2008).

#### *4.7.2.2 Internal consistency*

Homogeneity or internal consistency examines the extent to which the items in a scale consistently measure the construct (Polit and Beck 2004). Within a scale if all the items measure the same attitude and all items are scored in the same direction, then the correlation between them should be positive (Warner 2008). The Cronbach's alpha test is advocated for reliability assessment in multiple item scales and is a representation of the proportion of variance (Cronbach 1951). If the coefficient equals 1.00 this indicates that all the scale items are in full agreement (Litwin 1995). The reliability coefficient expresses the proportion of variability; for example, if a coefficient = 0.80, then 80% of scores are indicative of individual differences and the remaining differences could be attributed to chance (Litwin 1995). A coefficient in the vicinity of 0.70 is considered an adequate measure of reliability although coefficient measures of 0.8 -0.9 are considered desirable (Polit and Beck 2004).

Internal consistency was measured by estimation of Cronbach's alpha of all of the subscales. The reliability estimates of internal consistency ranged from 0.73 to 0.91 for the majority of scales, indicating a high level of reliability with two exceptions: 'uncertainty regarding

treatment' borderline for high reliability at 0.68 and 'emotional demands' at 0.54 indicating a moderate level of reliability (Polit and Beck 2004). The psychometric properties for all scales are summarised in Table 2 and are discussed in Chapter 5.

**Table 4.2: Psychometric results**

Scale	Valid N	Minimum	Median	Mean	Maximum	Alpha
meaning of work	N=470	1.00	4.67	4.33	5.00	0.80
possibilities for development	N=472	1.25	4.25	4.05	5.00	0.77
quantitative demands	N=471	1.67	3.00	3.07	4.17	0.82
influence at work	N=469	1.00	2.75	2.84	5.00	0.79
emotional demands	N=470	1.50	3.75	3.65	5.00	0.54
quality of leadership	N=469	1.00	3.25	3.23	5.00	0.91
interpersonal relations	N=470	2.00	3.71	3.69	5.00	0.82
social support from supervisor	N=470	1.00	3.25	3.30	5.00	0.84
social support from colleagues	N=470	1.25	3.50	3.53	5.00	0.74
uncertainty concerning treatment.	N=470	1.00	2.25	2.31	5.00	0.68
lifting and bending	N=471	1.00	2.33	2.30	4.00	0.90
work family	N=470	1.00	3.00	3.04	5.00	0.92



conflict						
family work conflict	N=470	1.00	1.60	1.70	5.00	0.84
satisfaction with payment	N=471	1.00	2.00	2.27	5.00	0.75
Reward	N=457	11.00	42.66	42.64	55.00	0.73
Effort	N=468	6.00	14.33	15.21	25.00	0.82
over commitment	N=472	1.00	2.33	2.40	4.00	0.80
job satisfaction	N=470	1.00	2.75	2.59	4.00	0.74
positive affectivity	N=469	1.67	3.70	3.58	5.00	0.88
negative affectivity	N=469	1.00	1.80	1.97	4.80	0.88
institutional commitment	N=469	1.00	3.00	2.94	5.00	0.77
professional commitment	N=470	1.00	4.00	3.86	5.00	0.85
personal burnout	N=469	1.00	2.33	2.52	5.00	0.90

## 4.7 Interviews

As the transition experiences and career expectations of the Irish degree graduate nurse in Ireland had not been explored there was no suitable survey instrument for this aspect of the study. The advantage of interviews in this study was that I was able to use the semi-structured questions to guide the interviews but had the flexibility to probe or clarify ambiguities and seek more in-depth information where necessary.

#### **4.8.1 Access to interview participants**

A pragmatic approach was taken to select newly registered nurses employed in Ireland (n=22). There was a generally enthused response to the request for interviewees as a large number of survey participants indicated their willingness to be contacted by phone or email (130). I followed up this response with a postal mail out to all potential volunteers thanking them for expressing their interest and support, and explaining the sampling strategy for maximising breadth and depth in findings. The logistics of selecting a group of interviewees across the country did necessitate travel. Participants chose the location for interview and many elected to be interviewed in their own home. Some difficulty did arise in accessing participants who had volunteered for the Cork area as some volunteers had moved or gone abroad and were no longer available to participate and two cancelled at short notice. Interviews were targeted at 12 months in practice to allow sufficient opportunity to settle in and avoid the peak stress period (Kramer 1974; Maben and Macleod 1998) and allow for an appropriate interval for graduates to make a more objective evaluation of their experiences to date.

#### **4.8.2 Interview procedures**

Interviews were undertaken over a period of twelve weeks, at a time and place of mutual convenience with consent (appendix 9.5) and transcribed for later analysis. Parnis et al (2005) recommends that in order to address the researcher-participant power imbalance participants should be asked where they would like to be interviewed. Clarke (2006) spoke of the control that participants may retain over the research process and this was evident in all for the interviews, where participants actively engaged with making arrangements and also extended considerable hospitality also. The venue chosen for

interviews was one that was agreeable to the research participants. Many were happy to be interviewed by me in their own home while a small number chose third party venues. Two individuals, who had graduated from Institutes of Technology, suggested meeting in their respective colleges where they felt they had access to and were able to secure a suitably private and quiet venue in both cases. Some Dublin based participants offered to meet in my office. Interviews were conducted in a systematic yet flexible manner using a semi-structured guide (appendix 9.15) developed from the review of the literature and the findings of the survey. There is potential ambiguity in the spoken word no matter how meticulously the data are recorded, therefore all interviews were audio-taped with participant permission, with the exception of one where the graduate declined. The outcome of any interview is influenced by the social dynamics (Fontana and Frey 2003). Building rapport with participants was initiated in the phone calls to arrange the interviews. One interview was conducted by telephone at the participant's request and I found that the telephone did limit the potential to establish rapport and rendered it more difficult to establish the trust that was evident in other interviews. The interviews were usually about 1 hour long and involved a two-way process where I sometimes found myself giving advice on courses or career opportunities. This exemplified the statement that 'Interviews are not neutral tools of data gathering but active interactions between two (or more) people leading to a negotiated contextually based result' (Fontana and Frey 2003:62). The fundamental concern in qualitative interviewing is to provide a vehicle through which participants can convey their understanding in their own words (Patton 1990). The sharing of information during an interview is not something that is entirely predictable and in the early interviews I found that I was talking too much. In general I did resist the urge to offer my opinion on issues and did make considerable effort to minimise my own role, through using nods and gestures rather than speaking (Patton 2002). During the interviews I was attentive to ask questions in a non-biasing or leading way. The focus of my questions was on exploring the

experiences of these newly registered nurses during the first months of practice and I attempted to elicit information in relation to the factors that facilitated or hindered their transition into practice, their concerns and future career plans. Planning of the interview in advance enabled me to decide on the questions to ask, how much detail to solicit, and how much time to take and how best to word and sequence the questions (Robson 2002). All of the interviews commenced with the same question: *'tell me about your place of work?'* The topic guide prepared in advance provided direction on types and sequencing of questions and assisted me with obtaining all of the information. Six basic types of questions were outlined by Patton (2002) and this was used to evaluate the comprehensiveness of my questioning technique.

1. **Background:** These were the informational or routine questions that elicited information about the personal characteristics of graduates.

2. **Experience behaviour:** Questions were posed to have graduates tell me about the daily routine and the experiences of work.

3. **Opinions/values:** These questions pertained to understanding the thoughts, opinions and desires regarding career opportunities for graduates and how they might like to see the support of graduates occur in the workplace.

4. **Feelings:** These were designed to elicit understanding of the emotional response of individuals in relation to their transition experience and to ensure that feelings and opinions were not mixed up.

5. **Knowledge:** These questions sought to determine the knowledge of graduates in relation to their career opportunities.

6. **Sensory questions:** The purpose of sensory questions is to gain understanding of any sensory stimulation they have experienced when they commenced employment or they may associate with feelings or experiences at work.

Throughout the interview process, probes such as nodding of the head, silence and repeating back what the interviewee said were used to get

participants to expand on information where I intuitively felt they had more to give (Robson 2002). Various notes were generated throughout the process of conducting the interviews. This guided both the interviews and assisted me when I commenced the analysis as it helped me to orient to the major areas. These memos were also incorporated into the NVIVO file. The tapes were listened to immediately after, and there was one early interview when the tape recorder failed and so immediately after I was able to set about reconstructing the interview in as much detail as possible, through hand-written notes. The transcripts were undertaken by another person but prior to analysis each transcript was reviewed to check for quality and to correct mistakes. There were occasions where re-listening to the tapes enabled me to fill incomplete sections where the transcribers could not interpret. The preliminary analysis of interviews through listening back allowed me to refine questions and consider other questions that I should include. As the analysis proceeded I saw a need to place more emphasis on the sources of support and a specific question that developed as a result of the initial interviews was a means to assist graduates to focus on particular elements of their experiences that were memorably helpful or those that could be improved. As a result I adopted the question: *'if you were developing a programme to assist graduates making the transition from the degree programme in to the workplace what would you advise?'*

#### **4.9 Rigor**

There is an argument that it is impossible to guarantee objectivity in qualitative research but this does not mean that there should not be effort to ensure standards (Rolfe 2006). The criteria for establishing trustworthiness in qualitative research evolved from those used in empirical research (Lincoln and Guba 1985; Guba and Lincoln 1989). It is accepted that in the real world one cannot control factors that influence a particular situation due to individual construction of one's own reality, therefore experiences or opinions cannot be quantified or

measured, only interpreted (Mays and Pope 1995). Traditional views of quality in research do need to be reframed within the domain of qualitative inquiry (Sandelowski 1986). Barbour (2001) advocates that it is not necessary to be overly prescriptive in qualitative research and that procedures used must be responsive to the unique circumstances of the study. Specific criteria were offered by Lincoln and Guba (1985) to evaluate the inherent rigor within qualitative research although Cutcliffe and McKenna (2002) posit that their work was influenced by the struggle that permeated nursing research in the 1980s to establish the value of qualitative research in the positivist climate of the time. The criteria outlined by Lincoln and Guba (Lincoln and Guba 1985) of credibility, transferability, dependability and confirmability are used as a framework to consider the care taken to ensure rigor in this project.

#### **4.9.1 Credibility**

This parallels to internal validity in the positivist domain and is contingent on a number of techniques to ensure one adequately represents the reality of respondents, including prolonged engagement with the reality of the new graduate induction experience in addition to peer debriefing, awareness of one's influence on the findings and member checking (Lincoln and Guba 1985). If qualitative research is to be credible it must reflect the multiple realities of participants. Reflexivity acknowledges the influence of the researcher participation in the research and that subjectivity is an inherent and inevitable occurrence (Spencer *et al.* 2003); however, it is also accepted that multiple realities exist and must be effectively conveyed through qualitative research (Patton 1988). Therefore, interviews were continued with a range of graduates until it was felt that their experiences had been fully explored. Peer debriefing can contribute to minimising the risk of research bias (Robson 2002) and this was pursued formally and informally through the conduct of the research. Presentations at PhD support seminars and at conferences in addition to conversations with supervisors and colleagues of emerging findings

stimulated me to consider and explore additional perspectives at various stages in the process of data collection and analysis.

The approach to member checking can be formal or informal. At the end of each interview I did review and verify what was discussed with each participant. Respondent validation or member checking was not formally pursued here as it was determined that the experience of graduates and responses to these will greatly change in the intervening period. The agreement to participate involved a once off data collection exercise and although I did discuss with participants if they wished to review findings, it was considered impractical given the transient nature of the group. None of participants actually wanted to review their transcripts and as participants had already made considerable time contribution to the completion of the survey and then subsequently in making themselves available for interviews, I felt it was an excessive demand on their time to have them conduct a review also. Also I felt that by the time the transcribed interviews were ready for review all of the participants had moved on in their careers and their initial recall and feelings about transition experiences would not be the same.

#### **4.9.2 Transferability**

Transferability may be interpreted as parallel to generalisability and is reliant on thick description of the context and reality of participants (Lincoln and Guba 1985). Qualitative data produced are unique to the situation or context to which they are produced so it cannot be reproduced to demonstrate repeatability (Sandelowski 1986). In qualitative research, there is often a necessity or tendency to use those participants that are accessible; therefore it is more difficult to ensure the sample is representative (Lincoln and Guba 1985). The procedure for inviting participants yielded 130 contact names of people across the country who expressed willingness to be contacted for an

interview and afforded me considerable latitude to explore if the findings made sense between cases across the country.

### **4.9.3 Dependability & Confirmability**

Dependability is parallel to the reliability of the research process in the positivist domain as it is concerned with the stability of data (Lincoln and Guba 1985). Confirmability is concerned with objectivity of the research process and assuring that interpretations are rooted in findings so assertions can be traced to the sources (Lincoln and Guba 1985). Both of these criteria are evidenced in a visible audit trail essentially a combination of confirmability and dependability audit (Sandelowski 1986). The purpose of an audit trail is to ascertain if the findings and inferences are both logical and grounded in the data, therefore as an independent assessment of the evidence can enable confirmation of the findings (Lincoln & Guba 1985). They do argue that this process should be carried out with the assistance of a 'fiscal auditor'(Lincoln and Guba 1985). It has been countered that the position of the individual researcher and the auditor are so polarised that are they are not going to be in a position to arrive at the same findings (Cutcliffe and McKenna 1999). Patton counters that an external audit is essentially the role of the doctoral or graduate committee (Patton 2002). Cutcliffe and McKenna (2002) argue that an audit trail may stifle the creative process and may not effectively capture findings that are derived from intuition that is enabled in an expert researcher. An audit trail was considered prudent in the study given the novice experience in qualitative research. This audit trail incorporates evidence of the decision-making and of the sequence of data collection and analysis as laid out in the research report (Sandelowski 1986). The principal methods by which I was able to demonstrate the dependability and confirmability of the analysis was to record the process in detail and to make meticulous records of interviews (Bazeley 2007). The study data have been retained and the process of coding and analysis is illustrated in detail through the



NVIVO printouts generated through the process of analysis (appendix 9.17). All information relating to each participant is traceable through the NVIVO case notes, and audio tapes of interviews were uploaded in addition to relevant survey data (Bazeley 2007). Credibility is also demonstrated by the inclusion of a transcript in the appendix (9.16) providing additional transparency as to evidence of data (Spencer *et al.* 2003)

#### **4.10 Pilot Study**

The pilot study enabled me to evaluate the suitability of the methods of data collection, appropriateness of the sampling frame, the adequacy of questionnaires, the efficiency and accuracy of the instructions, and response rates (Polit and Beck 2004). The adequacy of the questionnaire was of critical importance in particular in relation to the clarity and efficiency of the questions (Mc Coll *et al.* 2001). The pilot assisted not only with improving the clarity of particular questions items but also enabled me, in conjunction with the supervisory team, to re-consider the applicability of each questionnaire item and its relevance to the new graduate population. The pilot also enabled a determination of the coding system employed for analysis and afforded insight into the cost and duration of the main survey and its various stages. Pilot participants were asked to comment on any questions where the meaning was not clear or which they did not find relevant. Exploratory work on the survey was undertaken with a sample of 2006 graduates (n=140) representative of 10% of the anticipated sample size across disciplines using the An Bord Altranais sampling strategy to gain access to participants. Descriptive statistics were generated on those responses and an in-depth analysis and review of the responses and the way the items were answered was conducted by the researcher in conjunction with her supervisors. A number of alterations and modifications to survey arose from the pilot (9.10). As previously mentioned some items in relation to health and physical wellbeing did not provide any useful information, so it was determined that it might

be better to condense and omit some of those questions to reflect the context of the new graduate experience and to get that information in a more distinct way. There was some feedback that suggested that the instrument was time consuming so there was effort made to try and rationalise the number of items.

The response rate in the pilot was relatively low (n=32, 23%) and therefore it was determined that the sample for the main study would be a census one to maximise response rates. At this time negotiation took place with ABA as I wished to use a numerical code to identify those who had responded so they could be removed from the distribution list so that follow-up communications could be specifically targeted at those who did not respond. However, the ABA sampling service was unable to facilitate this which would have entailed an additional numerical identifier on the envelope. As a result there was the additional cost of re-mailing to the entire 2007 cohort in both the reminder letter and the subsequent re-distribution of the questionnaire 2 months later.

The suitability and feasibility of interview guides and procedures was tested prior to the main study with the assistance of 2 volunteers from the group. It also afforded the opportunity to test and become familiar with audio equipment. The timing of the interview was given consideration and 9-12 months following graduation was considered appropriate as the graduates would have had the opportunity to understand their work environment fully and had time to overcome the initial high anxiety period (Maben and Macleod 1998).

## **4.11 Analysis**

### **4.11.1 Quantitative Data analysis**

#### *4.11.1.1 Data preparation*

The initial step to organise the quantitative data included editing and cleaning it up and ensuring it was appropriately labelled. The task of

data entry was facilitated by the placement of codes and the coding formats were included on the questionnaire. The code book is a log book of all the research decisions (appendix 9.14) taken during the data collection and analysis and was kept throughout the process, a task assisted by the saving of all syntax generated through the statistical software. All quantitative data were coded and entered for analysis into the SPSS computer programme (version 16) (Pallant 2007). A system file was created in SPSS and all variables and response choices were labelled, which proved to be a time consuming exercise. Missing data are problematic in survey research and effort is necessary to minimise the amount (Litwin 1995). Missing items were dealt with by assigning the average value of the completed item or by excluding cases from the analysis. The open ended questions on *motivation for nursing* were coded by hand directly on the paper questionnaire.

#### *4.11.1.2 Data analysis*

Descriptive statistics were generated to illustrate the characteristics and employment profiles of newly graduated nurses. An alpha coefficient of 0.05 was set to control for Type 1 error (Warner 2008). Differences between the groups including status on entry to profession, discipline, age, third level college attended, and gender are explored where applicable. Two sample t-tests were used to compare means for different groups and Chi-square tests were used to compare proportions.

#### *4.11.1.3 Ordinal regression model*

Ordinal multiple regression models were constructed to explore and examine the relationships between career expectations of new graduates and a number of explanatory variables. Multiple regression enables the prediction of an outcome, response or dependent variable by the combination of a number of explanatory, independent or predictor variables (Mc Cullagh 1989; Rothberg *et al.* 2005). When

there are more than two categories of outcome they can be nominal (without order) or ordinal (with order) (Norman and Streiner 2000). Regression is a statistical process that enabled the fit of a predictive model to the data and to allow us to predict the dependent value of intent to leave from a number of independent variables (Tabachnick and Fidell 2007). The purpose of ordinal regression is to enable the study of the effects of the explanatory variables on all levels of the ordered categorical outcomes (Tabachnick and Fidell 2007). A backwards logistic analysis method was used to evaluate the predictor factors in career intentions. Three dependent or outcomes variables were examined in three separate regression models to determine the relative influence of the independent variables on the career intention of new graduates. There are a number of assumptions in ordinal regression. Only one dependent variable may be included at a time and there must be adequate cell counts (Tabachnick and Fidell 2007). The adequacy of the cell counts for each independent variable was evaluated using the case processing summaries for each variable generated through SPSS. Initially, I attempted to run a separate regression model for each of the three disciplines but it quickly became apparent that the numbers in the psychiatric and intellectual disability cohorts were insufficient in some cells. There should not be any cells with 0 counts and 80% of all cells should have at least 5 (Mc Cullagh 1989). The larger the number of cells with insufficient cell counts, the less reliable the goodness of fit of the regression model (Rothberg *et al.* 2005). Given the smaller number of the psychiatric and intellectual disability cohort, the disciplines were entered into the models rather than running the regression model for each discipline. This approach succeeded in ensuring that numbers were adequate in each cell.

Three measures of career expectation were used as dependent variables in the analysis presented: intent to leave; career intention for next five years and intention to leave nursing. There were a number of scales (independent or predictor variables) included in the survey questionnaire (see table 4.3) and the relationship between the

mean score on the scale and the dependent variables was examined through ordinal logistical regression. This enables the prediction of effect on categorical outcomes using predictor variables that are continuous or categorical so one is able to predict the probability of X given any known value of Y. Regression does not just measure the relationship between two variables but can assist in predicting the intent to stay outcome based on the independent or predictor variables of the scales used.

The primary focus of the regression model was (a) to identify significant explanatory variables that influenced the ordinal outcomes, overall intent to leave nursing, change job and career intent over the next five years; (b) to estimate intercepts and regression coefficients (c) to describe the direction of relationship between the explanatory variables (Tabachnick and Fidell 2007). In this way it was hoped to gain insight into how individual items influenced career intent of new graduates. The models controlled for the following 5 factors: status on entry to college, discipline, third level college and age. Factors are categorical independent variables and are coded numerically in SPSS (Field 2009). The 20 explanatory scales or co-variables continuous independent variables, are interrelated and may be classified as follows, demands of work content/work organisation; demands of private life and health/individual factors (Table 4.3).

Logistic regression offers flexibility to enable the prediction of response variables as not all explanatory variables need to be normally distributed (Tabachnick and Fidell 2007). Stepwise regression continuously evaluates which, if any, of the predictors can be removed without having substantial effect on the goodness of fit of the model to the observed data (Field 2009). Stepwise is particularly useful in exploratory investigation and backwards is preferable to forwards as it reduces the possibility of suppressor effects where one predictor effect only has an effect when another is held constant (Field 2009). The initial model included all of the variables included in Table 4.3 and a

backwards stepwise approach was used to determine which of the predictor variables to include in the final ordinal regression model. In this backwards stepwise logistic regression model, explanatory variables are removed based on the Wald statistic test as defining criteria. If the slope coefficient is significantly different, the predictor is making a significant contribution to the response variable (Field 2009) and the level of significance set here was 0.05.

**Table 4.3. Scale (co-variates) and factors used in ordinal regression model**

Scale/factors grouping	Scale/factors
➤ Demands of nursing work	<ul style="list-style-type: none"> <li>○ Meaning of work</li> <li>○ Possibilities for development</li> <li>○ Emotional demands</li> <li>○ Lifting and bending</li> </ul>
➤ Work conditions	<ul style="list-style-type: none"> <li>○ Influence at work</li> <li>○ Quality of leadership</li> <li>○ Interpersonal relationship</li> <li>○ Social support from colleagues and supervisor</li> <li>○ Uncertainty regarding treatment</li> <li>○ Provision of programme to initiate new grads</li> </ul>
➤ Demands of private life ( co-variates)	<ul style="list-style-type: none"> <li>○ Work family conflict</li> <li>○ Family work conflict</li> <li>○ satisfaction with pay</li> </ul>
➤ Individual factors (co-variates)	<ul style="list-style-type: none"> <li>○ Over commitment</li> <li>○ Job satisfaction</li> <li>○ Positive affectivity</li> <li>○ Negative affectivity</li> <li>○ Institutional commitment</li> <li>○ Professional commitment</li> <li>○ Personal burnout.</li> </ul>

The positive and negative signs of the regression coefficients were evaluated to gain insight into the effects of the individual's predictor variables on the ordinal outcome. The positive regression coefficient values indicate a positive relation between the response and explanatory variables, while a negative one illustrates a negative relationship between the two. The chi square statistic was assessed to determine how well the model predicts the outcome variable and it was found to be statistically significant (Chi-square  $\chi^2$  152.89, *df* 19,  $\rho < .001$ ) for the ordinal variable 'intent to change job' (Chi-square  $\chi^2$  64.769, *df* 19,  $\rho < .001$ ) for 'career intention for next five years' and (Chi-square  $\chi^2$  179.21, *df* 3,  $\rho < .001$ ) for 'intent to leave the profession'.

#### **4.11.2 Qualitative data analysis**

##### *4.11.2.1 Data preparation*

Qualitative data for the study comprised responses to the open ended individually completed surveys, interviews and field notes. Transcription involves a trade off between the demands of the analysis and the research process and the significant time and resource demands. Meticulous data cleaning was undertaken to remove personal identifiers and care was taken to select quotes where it was not possible to identify participants. Not all identifiable data could be removed; for example, references to discipline as this would alter the meaning as it was important contextual information to assist in interpreting the data. I chose two particular interviews to work through first as they contrasted greatly. The first reading of the interview was designed to get a sense of the whole and notes were taken to record my ideas and thoughts for further expansion.

##### *4.11.2.2 Data Analysis*

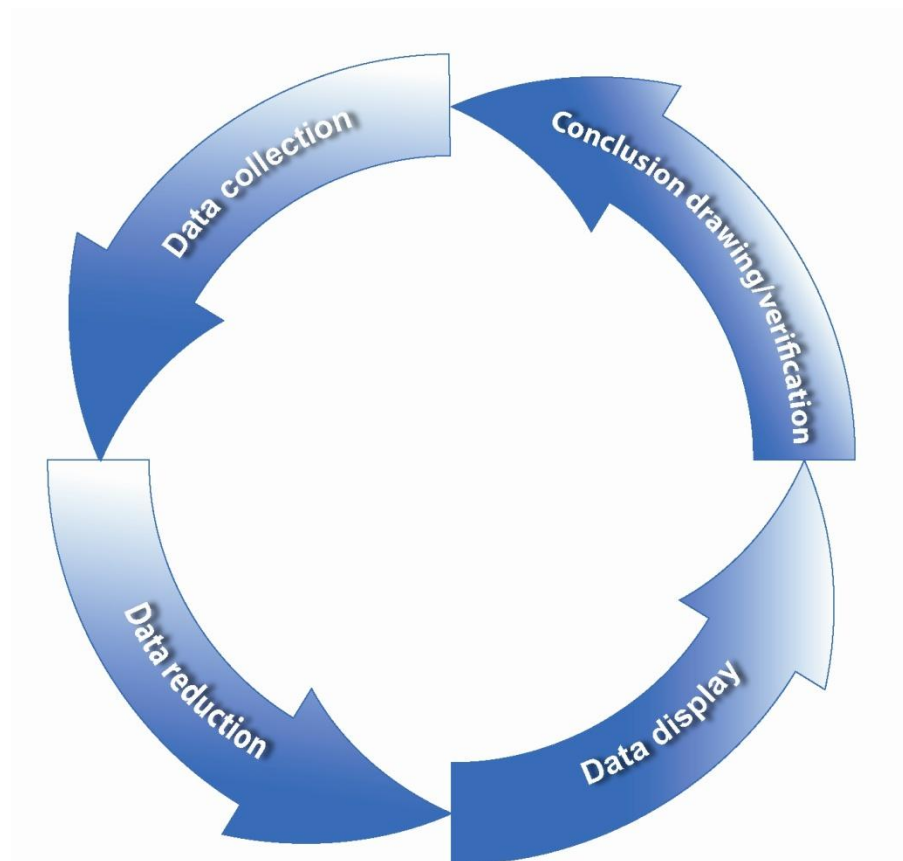
The process of analysis undertaken enabled me to break up the research data into manageable units to look for patterns and to arrive

at meaningful conclusions about what the graduates had to say. One difficulty with breaking down data in this way is the potential for meaning to be conveyed by the individual to be lost, so through the process I consistently referred back to original interview tapes and transcripts to clarify and check context. The written word can lose the nuances and emotional overtones of the spoken word, so it was very useful to review the transcript when listening to the recording. The context was not just the adjacent text but the larger context of the transition experience of that graduate.

All qualitative data from open comments invited at the end of the the survey were transcribed and subjected to content analysis, coding and thematic analysis (Spencer *et al.* 2003). The challenge in the analysis of interview data was identifying text segments across the data (Hardy & Bryman). It is a widely held belief that collection and analysis should happen simultaneously and Miles and Huberman's (1994) framework for qualitative data analysis incorporates activities that are happening concurrently (Robson 2002). The activities that contributed to analysis occurred simultaneously and in a somewhat cyclical process as illustrated in the diagram (Miles and Huberman 1994). Coding was the process used to identify segments or passages of text, attaching a label to convey a theme. The steps in this framework assist in illustrating the series of analytic choices I took as I read and re-read the transcripts to determine which section of data to code, which to highlight, the patterns seen and eventually the conclusions drawn. A second computer copy of the interviews was kept for reference purposes.



**Figure 4.1 Components of Data Analysis: Interactive model**



#### *4.11.2.3 Data reduction*

Data reduction, my first step in the analysis, occurred throughout the coding process as I organised the data into themes, and was accomplished through multiple reads to select, focus, and simplify the data. A provisional start list of codes or categories were used to start the process of coding, these were informed by the conceptual framework, the research questions and the main areas discussed in the interviews. It also incorporated elements of inductive coding (Strauss 1987). It must be acknowledged that anticipatory data reduction occurred even as I determined the conceptual framework and the research questions and the methods to be employed, as the process of reduction is not separate but an inherent part of analysis

(Miles Huberman 1994). Barbour (2001) argues that in the real world of research it is unlikely that one could successfully derive all explanation from the data set from a previously set theoretical viewpoint although one is undoubtedly influenced by the preparatory work in reviewing literature. They pre-suppose that the findings would reflect the data rather than the questions in the interview guide and I found myself identifying new themes in addition to those I anticipated from the outset.

I read through all transcripts and field notes, making notes as to the general themes and comments in the margins. The aim here was to identify the major topic areas discussed in the interviews including their stories of recruitment, working conditions and transition experiences in addition to their future career plans. Data were reviewed line by line and beside each segment of text labels were attached. At this stage of open coding, the major categories were freely generated and referred to general descriptors of the data. This enabled me to outline a sense of the broad topics that could be taken forward and provide some initial organisation. Transcripts were read through again and as many headings as necessary were written down to describe all aspects of the content. Data reduction continued through the coding and organising of the data and themes. This process allowed me to sort, organise the data and exclude the dross to assist me to arrive at final conclusions. Dross (Morse and Field 1996) refers to all that is not related to the core topic under investigation and all of this information was excluded.

#### *4.11.2.4 Nvivo*

In order to organise, store and retrieve data I used a qualitative analysis computer programme called Nvivo (Bazeley 2007). The process of data display, as will be discussed later, was facilitated by the use of NVIVO as it provided a reliable vehicle to illustrate the reduced data in a compressed and accessible way. There are

considerable advantages in using a computer programme to organise data as it enables quick and easy access to data, and can handle large amounts of data and in particular facilitate consistency in coding (Bazeley 2007). The disadvantage may be the amount time it takes to gain proficiency (Polit and Beck 2004). I created a case node for each participant within NVIVO and each case node brought together data from both parts of the study enabling me to access everything I knew about a particular participant including the recorded interviews. Various notes were generated throughout the process of conducting the interviews and these guided both the interview process and the analysis. This assisted me when I commenced the analysis as it helped orient me to the major topic areas.

#### *4.11.2.5 Data display*

The list of categories was analysed using Nvivo and categories broken down were grouped together to form higher order headings or tree nodes (more defined codes) and then further sub-divided into child nodes or sub-themes, which has been described as second level coding (Miles and Huberman 1994). The type of approach enabled me to assemble or organise information and formed a significant step in the process of analysis (Miles and Huberman 1994). Transcripts were re-read alongside the finally agreed list of categories and sub-headings to determine that the codes comprehensively covered all aspects of the interview and adjustments were made as necessary. Categories were subdivided into the child nodes; for example, 'Socialisation to nursing experience' was divided into *reality* and *expectations*. Organising all of the passages under the various tree nodes allowed me create multiple files and copies enabling me to check back on the broader context of individual statements. Nvivo software also meant that categories could be easily collapsed together and moved around as the analysis advanced (Bazeley 2007). Despite best efforts periods of time did occur between opportunities of concentrated analysis, which was to some extent overcome by the programme which allowed me to track

the data more effectively. Gaps were difficult as it meant one has further delays getting back into the analysis but the gaps did enable me to come at the data with fresh insight. The list of categories and sub-headings were re-worked to streamline and remove similar headings. As per the guidance of Burnard (2004), my supervisor assisted by independently coding two interviews. There was considerable similarity in the interpretation of the codes, providing evidence of the validity of the coding (Robson 2002). Multiple coding enables one to act as 'devil's advocate' and assists in the minimisation of researcher bias (Barbour 2001; Burnard 2004). What was of ultimate value here was the insight that was produced from the discussion of the coding with my supervisor. Transcripts were re-read alongside the finally agreed list of categories and sub-headings to determine if the codes comprehensively covered all aspects of the interview. Adjustments were made as necessary and as I coded and reduced the data into chunks, I came up with new ideas to display the data in comprehensive ways. This led to further reduction as I progressed and enabled me to draw conclusions.

#### *4.11.2.6 Conclusion & verifications*

The final activity in the process of analysis involved extracting the meaning from the findings. A process of constant comparison (Strauss 1987) was used to compare codes seeking consistencies, patterns or differences and was essential to ensure that codes were structurally and conceptually sound and that they did not end in a catalogue of disjointed descriptors. Pattern coding at this stage was useful as it reduced a large amount of data into a number of units and provided a cognitive way to guide analysis (see chapter 6). Throughout the process I consistently compared and evaluated emerging categories until I reached a point of saturation. This was used to represent the concepts associated with career intent and transition experiences and enabled me to show relationships and clarify my ideas. This is where I

discovered patterns within the data and sought explanations that enabled me to draw conclusions.

#### **4.12 Integration of methods**

Success in mixed method design requires careful attention to the integration of methods throughout the project. The complementary use of survey and interviews enabled the project to pose related but different research questions in relation to graduate intent to leave and transition experiences. The first obvious integration of the methods was demonstrated when the survey facilitated access to a purposeful and embedded sample for interviews. This approach allowed me to find explanation for survey findings through the close up inquiry with a sub-sample of participants. The demographic data of survey participants was accessed in the early stages, and facilitated the stratification approach used to access the interview sample. Preliminary analysis of survey findings shaped the development of the interview guide.

The main process of integration occurred through the interpretation of the findings is reported in Chapter 7. The interview findings were used to interpret, contextualise, and expand understanding of survey findings. This approach allowed some findings to be corroborated, while at the same time provided related but separate explanations in relation the transition experience, work conditions and career intent of the graduate participants. For example, survey findings such as the demands of nursing work and insufficient time to complete work were corroborated in the verbal accounts of interviewees. However, the full implication of the impact of such pressures only manifested as these findings were considered in conjunction with verbal accounts of fears associated with mistaking mistakes due to insufficient time. This approach enabled greater diversity and ultimately provided greater strength to inferences made. The survey also contributed to integration through the free-text responses to open-ended questions

as these provided considerable illustration and expansion of the interview findings. Nvivo provided a useful vehicle to integrate both survey and interview findings. Key quantitative descriptors were exported from SPSS into Nvivo and this enabled cross reference and expansion of understanding of individual interviewee's responses as I advanced the qualitative analysis. The presence of both types of data within Nvivo meant I was able to pose queries and expand my understanding of interviews through cross checking on significant quantitative findings. For example in analysing the interviews I was surprised that so few participants expressed intent to leave. I was concerned that perhaps they were reluctant to disclose their intentions. Cross checking of the survey findings meant I was able to confirm that those who stated they did not intend to leave in the interview also expressed similar in their survey responses. Therefore, integration throughout the process of interpretation allowed the project to find answers to questions that could not be fully answered if the two findings have been interpreted separately.

#### **4.13 Summary**

Mays and Pope (1995) remind us that research by its very nature is selective and that all approaches will have both strengths and weaknesses, that they are not in fact opposing but rather different means to collect information about aspects of life or works of interest. This chapter illustrates the decision making undertaken through this research project as I integrated two very different research approaches to fulfil the research aims. The NEXT questionnaire was adapted successfully for use in the Irish context and was an appropriately comprehensive tool to explore the working conditions of the new graduates. The transition experience could not have been fully interpreted from the information secured through the survey, therefore the interviews proved to be a suitable means to capture a fuller understanding of the experiences and sources of support for new graduates as they entered the profession in the Irish Republic. The pilot did uncover a number of modifications and adjustments needed in

the survey and did raise awareness as to the need for attention to strategies to maximise response rate. Miles & Huberman's (Miles and Huberman 1994) framework reflects the concurrent nature of many of activities associated with qualitative analysis and the process of navigating the large amount of qualitative data was facilitated as I gained competence in using NVIVO software.

## **Chapter 5: Survey findings**

### **5.1 Introduction**

This chapter presents the findings generated from the national survey of nursing graduates. The first section of the chapter explains An Bord Altranais (ABA) statistics for the 2007 cohort, demographic details, and employment profiles of new graduates surveyed. A number of explanatory variables thought to influence the career expectations of graduating nurses are analysed to evaluate their individual and relative influence on the career decisions of new graduates. New graduate perceptions of the meaning of nursing work, the physical/emotional demands of nursing work and possibilities for development are considered in detail. Aspects of graduate nursing employment such as influence, quality of communication, sources of support, and interpersonal relationships are examined to evaluate the work conditions to which emerging graduates are exposed. A number of individual factors that may influence aptitude to sustain a career in nursing such as motivation to pursue nursing, job satisfaction, commitment, negative/positive affectivity and personal burnout are analysed. The nature of personal demands and opportunities for new graduates including current employment prospects and formal support on transition are also detailed. The aspects of career expectations of new graduates examined in this survey include intent to stay in the profession, intention to change job and career intention over the next five years. These three measures of career expectation were used as dependent variables in the analysis presented throughout this chapter. Differences between the groups including status on entry to profession, discipline, age, third level college attended, and gender are explored where applicable. The differences between means of groups were calculated using independent t-tests and one way analysis of variance. Differences in prevalence were measured using Chi  $\chi^2$  tests. The level of significance was set by alpha  $<.05$ . Finally, a backwards stepwise ordinal regression model was used to



analyse the relative influence of the multiple explanatory variables on the career expectations of the new graduates.

## **5.2 Nursing Degree Graduates**

### **5.2.1 An Bord Altranais statistics**

In 2003, 1788 staff entered the candidate register of An Bord Altranais, representing the total number of students who commenced the nursing degree that year. This was a higher number than was sanctioned the previous year to compensate for the shortfall that occurred due to administration difficulties that presented in the first year of the move to degree education. In the previous year only 1453 out of the 1640 places in undergraduate nurse education in the Republic were allocated. At the time of data collection in March and July 2008, 1329 (74%) of the original cohort had completed the degree course successfully and had taken the opportunity to be admitted to the register. There is no central record of the exact number of degree graduates who complete the degree and do not uptake registration. Statistics obtained from the HSE in October 2008 (Mc Mahon, 2008) recorded a total number of 1369 completed degrees. However, the number of graduates who had registered had risen to 1458 (80%) in February 2009 with another 112 (6%) recorded as still in the system. Table 5.1 below provides a breakdown of the summary of ABA statistics for the 2003 group as they appeared when data collection was first initiated in summer of 2008 and then in the early part of 2009. The numbers who commenced a nursing degree were distributed as follows: General 1165; Psychiatric 389 and Intellectual Disability 234. The numbers who were entered onto the register were General 965; Psychiatric 315 and Intellectual Disability 178; respectively. The percentages of each discipline that made it to the register from the 2007 cohort are as follows General 83%; Psychiatry 81%; and Intellectual Disability 76% (Table 5.2).

**Table 5.1. An Bord Altranais statistics- 2003 nursing degree intake**

Year	2003	Registered	Still in college	Discontinued	Deferred	Transferred
	n %	n %	n %	n %	n %	n %
2008	1788	1329 74	222 12	183 10	48 3	8 0
2009	1788 100	1458 80	112 6	179 10	31 2	8 0

The 2003 graduates become eligible for registration throughout the summer of 2007 and the main body of graduates (74%) entered the register within the anticipated time frame. A further 222 (12%) remained in the education system 6-9 months past the anticipated time frame after the initial graduation period. There are 112 (6%) students of the original 2003 4-year degree programme as yet incomplete up to 18 months after the anticipated graduation date. In the event that all those who are still within the education system complete the degree and take up registration, the total number of those who initiated nursing degrees in 2003 could reach a maximum of 1570 (88%).

**Table 5.2: Registered nurse graduates per discipline**

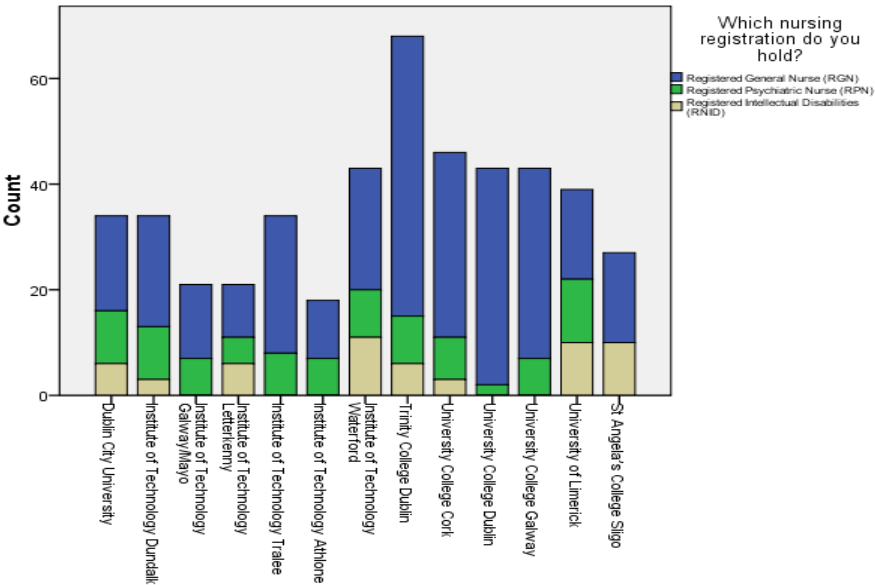
Discipline	2003	Register 2009	%
General (RGN)	1165	965	83
Psychiatry (RPN)	389	315	81
Intellectual Disability (RNID)	234	178	76
Total	1788	1458	80

### 5.2.2 Demographics

Four hundred and seventy three graduate nurses responded to the survey, RGNs (n=323, 68%); RPNs (n=94, 20%); RNIDs (n=56, 12%). The mean age of participants was 27 years (*SD* 6.95; *range* 22-58 years). The largest proportion of graduates was aged between 22 and 24 years (64.7%). Only 8% (n=37) of participants were aged more than 41. The sample was composed of mainly female respondents (n=436, 93%) with males accounting for 7% (n=35). The proportion of men was highest in psychiatry at 14% (n=13), while in general nursing it was 6% (n=20) and in intellectual disability nursing 5% (n=3). The majority of participants entered the nursing profession as school leavers (n=319, 68%) while the remaining accessed the nursing degree course through the mature student route administered through An Bord Altranais (n=145, 31%) or as a care assistant on a mature student stipend (n=7, 1%).

All of the third level colleges engaged in nursing education were represented in the sample (Figure 5.1), as follows: Trinity College Dublin (n=68, 14%); University College Cork (n=46, 10%); Waterford IT (n=43, 9%); University College Dublin (n=43, 9%); University College Galway (n=43, 9%); University of Limerick (n=39, 8%); Tralee IT (n=34, 7.2%); Dublin City University (n=34, 7%); Dundalk IT (n=34, 7%); St. Angelas Sligo (n=27, 6%); Galway/Mayo IT (n=22, 5%); Letterkenny IT (n=21, 4%); Athlone IT (n=18, 4%).

**Figure 5.1. University & discipline of nursing graduates**



**5.2.3 Employment profiles**

The vast majority of graduate nurses are working in urban locations, in the greater Dublin area (n=186, 39%) and in other main city or large towns (n=223, 47%) with relatively few working in rural locations (n=59, 12%). The majority of general nurses (n=321) are working in medical/surgical environments (n=220, 69%); with a smaller number working in nursing homes or long term residential (n=21, 7%); operating room (n=16, 5%); and A&E (n=14, 4%); (Table 5.3).

The majority of psychiatric nurses (n=92) are working in acute psychiatry (n=52, 56.5%); and the remaining worked in the following, long-term care/residential dedicated to psychiatry clients (n=18, 20%); other long term residential settings such as nursing homes or intellectual disability residential care sites (n=6, 7%) ; community or home care (n=4, 4%); medical ward (n=4, 4%); forensic psychiatry (n=4, 4%); rehabilitation (n=2, 2%); day clinic (n=1, 1%) and practice nurse (n=1, 1%) (Table 5.4). The majority

of registered nurses in intellectual disability (n=56) were working in long-term residential care settings (n=45, 86%) with a small number working in acute psychiatry (n=2, 4%); early intervention child development centres (n=2, 4%); special pre-school (n=1, 2%); other long-term residential care settings (n=1, 2%); day centre dedicated to intellectual disability clients (n=1, 2%) and palliative care for the intellectually disabled (n=1, 2%) (Table 5.5).

**Table 5.3. RGN-Area of employment**

<b>Area of work</b>	<b>RGN</b>	<b>%</b>
Medical surgical	220	69
Nursing homes / long-term care/residential	21	7
Operating department	16	5
Accident & emergency	14	4
Oncology/palliative/hospice	8	3
care of the elderly ward in a hospital	8	3
Critical care	7	2
Paediatric ward	7	2
Agency	7	2
Day clinic	3	1
Community / home care	2	1
Rehabilitation	2	1
Obstetrics	2	1
Technical/ laboratory	2	1
Other	2	1
<b>Total</b>	<b>321</b>	<b>100</b>

The vast majority of respondents (n=473) were employed in staff nurse positions (n= 461, 98%) with remaining graduates employed as agency (n=7, 1%); an acting clinical nurse manager II (n=1, 0%); assistant director of nursing (n=1, 0%); a house parent (n=1, 0%); and as student midwives (n=2, 0%). The majority of participants worked in environments with 5 or more colleagues (n=214, 45%); a smaller proportion with 2 or more colleagues

(n=187, 40%); with one colleague (n=53, 11%); and a relatively small number worked alone (n=15, 3%). The mean number of patients or clients for whom the graduate is responsible during a shift was 10 (CI 9.5-10.5, SD 5.25) with 2 extreme outliers removed. The minimum was 1 and the maximum was 28.

**Table 5.4. RPN-Area of employment**

<b>Area of work</b>	<b>RPN</b>	<b>%</b>
Acute psychiatry	52	57
Psychiatry - long term care residential	18	20
Nursing homes/other long-term care/residential	6	7
Community / home care	4	4
Medical ward	4	4
Forensic psychiatry	4	4
Rehabilitation	2	2
Day clinic	1	1
Practice nurse	1	1
Total	92	100

**Table 5.5. RNID-Area of employment**

<b>Area of work</b>	<b>RNID</b>	<b>%</b>
Intellectual disability- long term care residential	48	84
Acute psychiatry	2	4
Early intervention child development	2	4
Special pre-school	1	2
Nursing homes/other long-term care/residential	1	2
Intellectual disability day centre	1	2
Intellectual disability Palliative care	1	2
Total	56	100

Participants were asked if they had any other paid work outside of their professions and the vast majority did not (n=453, 96%) with only 17 (4 %) reporting that they did. Those who did reported they undertook an average of 6.67 hours (*SD* 4.5) per week of other paid work. Participants were also asked if they had any other caring responsibilities apart from their job, but not including childcare. The large majority (n=434, 92%) did not, with only 36 respondents (8%) reporting that they had additional responsibilities such as caring for other relatives. Those who had responsibility reported they spent an average of 9.6 hours (*SD* 7.79, minimum 1 & maximum 30) per week on such activities.

The majority of participants were born in the same city or area in which they work (n=241, 51%) or in another part of Ireland to where they work (n=181, 38%). Forty one participants (9%) were born in another European country and eight (2%) in a non-European country. Graduates primarily take up employment in institutional care settings as illustrated in Table 5.6.

**Table 5.6. Graduate employment-type of healthcare organisation**

Type	RGN n %	RPN n %	RNID n %	Total n %
Band 1 hospital	114 36	14 15	3 5	131 28
Band 2 hospital	47 15	3 3	0 0	50 11
Band 3 hospital	76 24	5 5	0 0	81 17
Band 4 hospital	38 12	4 4	2 4	44 9
Band 5 hospital	15 5	9 10	1 2	25 5

Private hospital	14	3	0	17
	4	3	0	4
Nursing Home	2	1	1	4
	1	1	2	1
Community Care services	1	3	39	43
	0	3	70	9
Institutional Intellectual disabilities services	1	2	8	11
	.0	2	14	2
Community Intellectual disabilities services	1	32	0	33
	0	34	0	7
Institutional Psychiatric services	0	8	0	8
	0	9	0	2
Community Psychiatric services	8	8	2	18
	3	9	4	4
other	0	1	0	1
	0	0	0	0
Total	317	93	56	466

#### 5.2.4 Contractual status of new graduates

The majority of respondents were on temporary contracts (n=326, 69%). There was a statistically significant difference in the proportion of graduates in the three disciplines who were employed on a permanent contract (Pearson's Chi square  $\chi^2 = 7.873$ , 2 df,  $p = 0.02$ ) (Table 7). The proportions of graduates on permanent contract were 27% in general; 37% in psychiatry; 43% in Intellectual Disability. The odds ratio for permanent contract was 1.4 greater (Confidence Interval (CI) 1.11-1.88) for those employed in Psychiatry and Intellectual Disability combined than for those working in general. The respondents were employed fulltime for a mean of 38 hours (median 39 hours). A small minority of graduates were working for a nursing agency in addition to their full-time job (n=39, 8%).



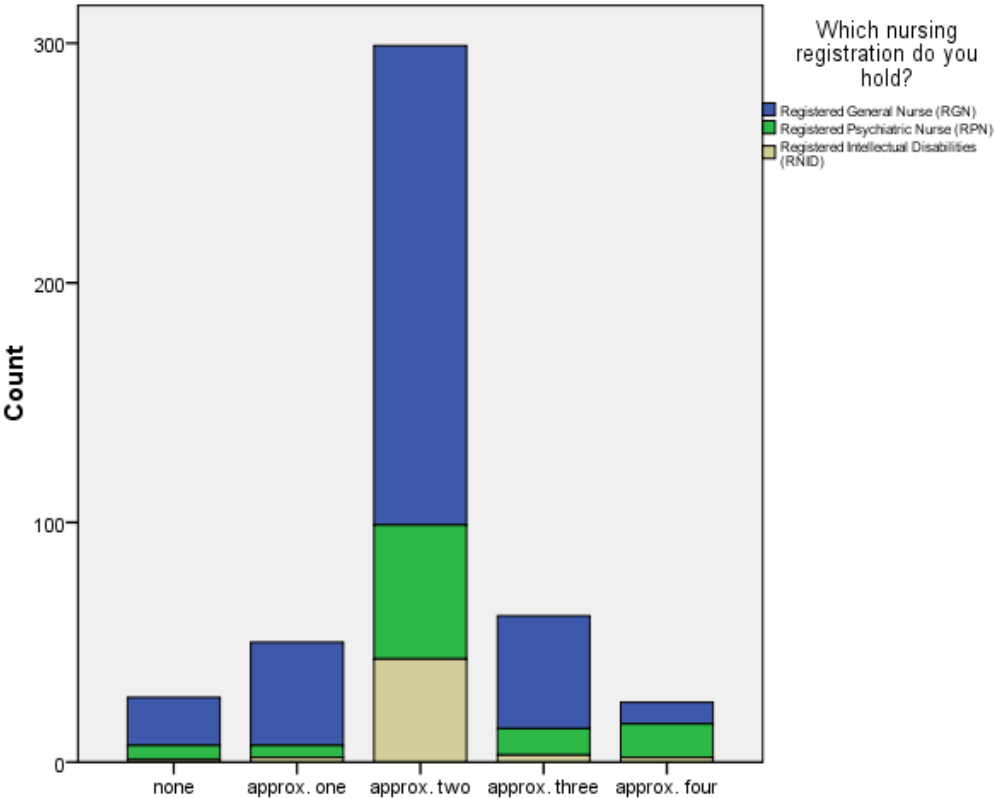
**Table 5.7. Contractual status of new graduates**

<b>Contract</b>	<b>RGN n %</b>	<b>RPN n %</b>	<b>RNID n %</b>	<b>Total n %</b>
Permanent	87 27	35 38	24 43	146 31
Temporary	235 73	59 62	32 57	326 69
Total	322	94	56	472

### **5.2.5 Shift patterns of new graduates**

The most common shift pattern worked by graduating nurses was 3-4 shifts per week including nights (n=273, 52%). A significant portion of graduates are working long day shift patterns with or without nights (n=100, 21%). Seventy five graduates (16%) are working alternating shifts that do not require night shift. A very small number of graduates are working an exclusive shift pattern of morning only (n=2, 0%) or nights only (n=2, 0%). A small number of graduates describe themselves as working irregular hours but not in a shift (n=27, 6%). A significant number of graduates (n=157, 33%) regularly working alternating shifts, i.e. late shift followed by early morning shift. There are a small number of graduates who are required to work split shifts across all disciplines (n=61, 14%). Working weekends is a common occurrence for new graduates with the majority working two per month (n=299, 65%); Very frequent weekend work commitment is a requirement for a portion of graduates with 61 (13 %) working three every month and 25 (5%) working every weekend. A small proportion have no weekend commitment (n=27, 6%) or are required to work only one (n=50, 11%) (Fig.5.2).

**Figure 5.2: Weekend work commitment per month of new graduates**



The majority of all graduates are required to do night shifts (n=370, 78%). Of those who work nights 57% (n=211) work at least seven consecutive nights and a further 37% (n=137) work between three and five nights in a row. When working nights the large majority of participants do not have the opportunity to lie down to rest (n=282, 72%) but in some workplaces such opportunities do exist on some (n=61, 13%) or almost all nights (n=51, 11%). Some graduates report that swapping shifts is quite easy in their place of work (n=150, 32%) but for significant numbers of others, it is difficult to do (n=192, 41%) or not possible (n=114, 24%). Taking shifts at short notice is a fairly common occurrence for a large number of graduates (n=296, 64%) but a minority are never required to do so (n=164, 36%). In the last three months the commonest number of days that participants had to work without a rest day was less than six (n=255, 64%) but a significant number worked seven or more

(n=201, 36%). A significant number of graduates have moderate (n=131, 28%) or considerable influence (69, 15%) over, or can decide, the shifts they work (n=20, 4%) but the majority have no or little influence on the shifts they work (n=248, 53%). Nearly two thirds of graduates (n=297, 64%) would like to change the way they work shifts. However, overall 60% (n=308) of graduates reported they were satisfied with their working hours in relation to their well-being and 48% (n= 221) were satisfied in respect of their private lives.

## **5.3 Nature of nursing work**

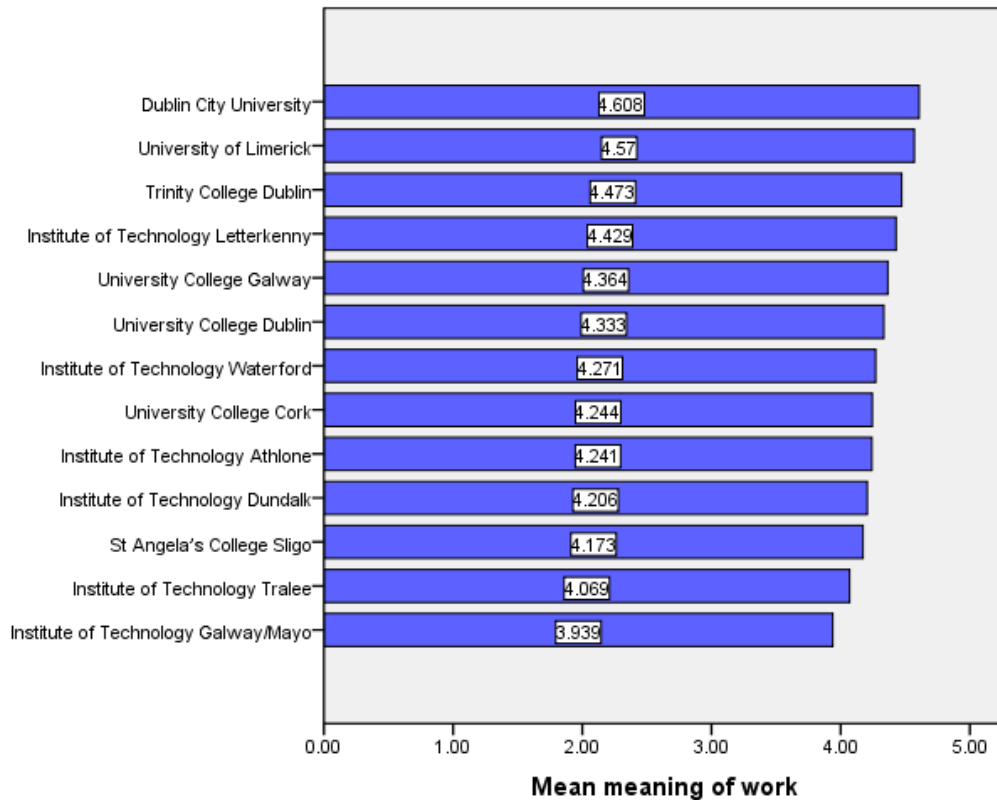
### **5.3.1 Meaning of work**

The meaning of work scale sought to elicit participant feelings about their work, and the Cronbach's alpha was 0.80, demonstrating a high level of reliability, and implying that 80% of the measured variance is reliable and 20% may be attributed to random error (Cronbach 1951) The mean score for meaning of work 4.67 (*SD 0.70*) was high for new nursing graduates (*minimum 1; maximum 5; median 4.67*) and no significant difference was detected between disciplines, gender or status on entry to profession. A one way analysis of variance conducted to explore the impact of college attended detected a statistical difference in the meaning of work mean scores per college attended ( $f 2.29, df 12,455 p =.003$ ). The lowest mean score was among graduates of Galway/Mayo Institute of Technology (*Mean 4.00, SD 0.86*) and highest among those from Dublin City University (*Mean 4.61, SD 0.58*).

The large majority of graduates believe their work is important (n=463, 88%), find their work to be meaningful (n=459, 97%), and feel motivated and involved in their work (n=439, 84%). There was a relationship detected between higher scores on the graduates' perceptions of the meaning of nursing work and career expectations of new nursing graduates (see table 5.8). The relationships are illustrated in figures 5.4 & 5.5 and demonstrates a relationship between high meaning of work scores and reduced frequency in

thinking of leaving the profession (*Wald ratio*  $\chi^2$  42.06, *df* 1,  $\rho$   $<.001$ ). Also a weaker, albeit positive, linear relationship was found between meaning of work score and increased likelihood of changing job (*Wald ratio*  $\chi^2$  30.41, *df* 1,  $\rho$   $=.002$ ).

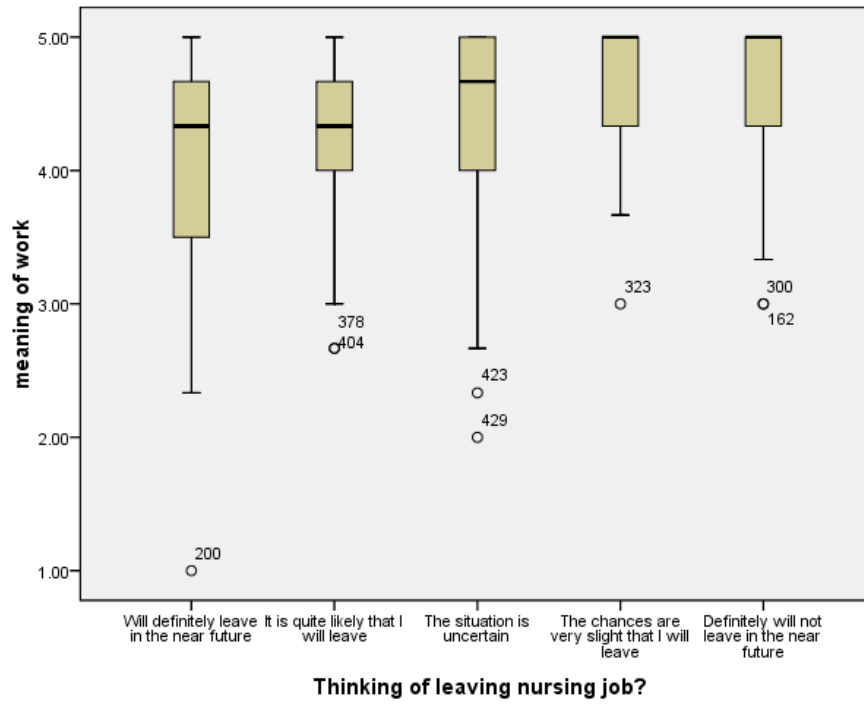
**Figure 5.3: Meaning of work mean scores per college attended**



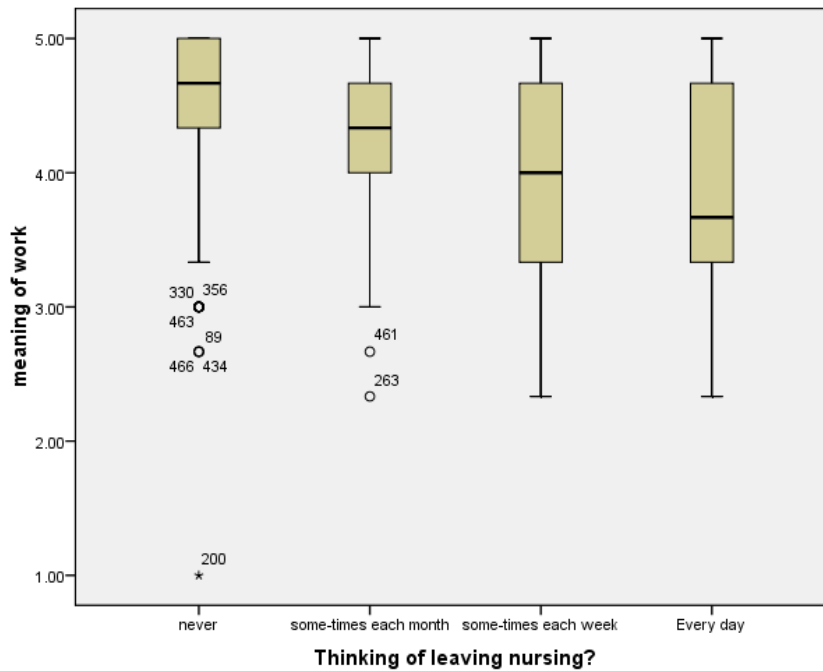
**Table 5.8. Relationship between meaning of work and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.691	.125	30.411	1	.000	.445	.936
Intent to leave nursing	-.853	.130	43.058	1	.000	1.107	-.598

**Figure 5.4. Meaning of work and intent to change job within nursing**



**Figure 5.5. Meaning of work and intent to leave nursing**



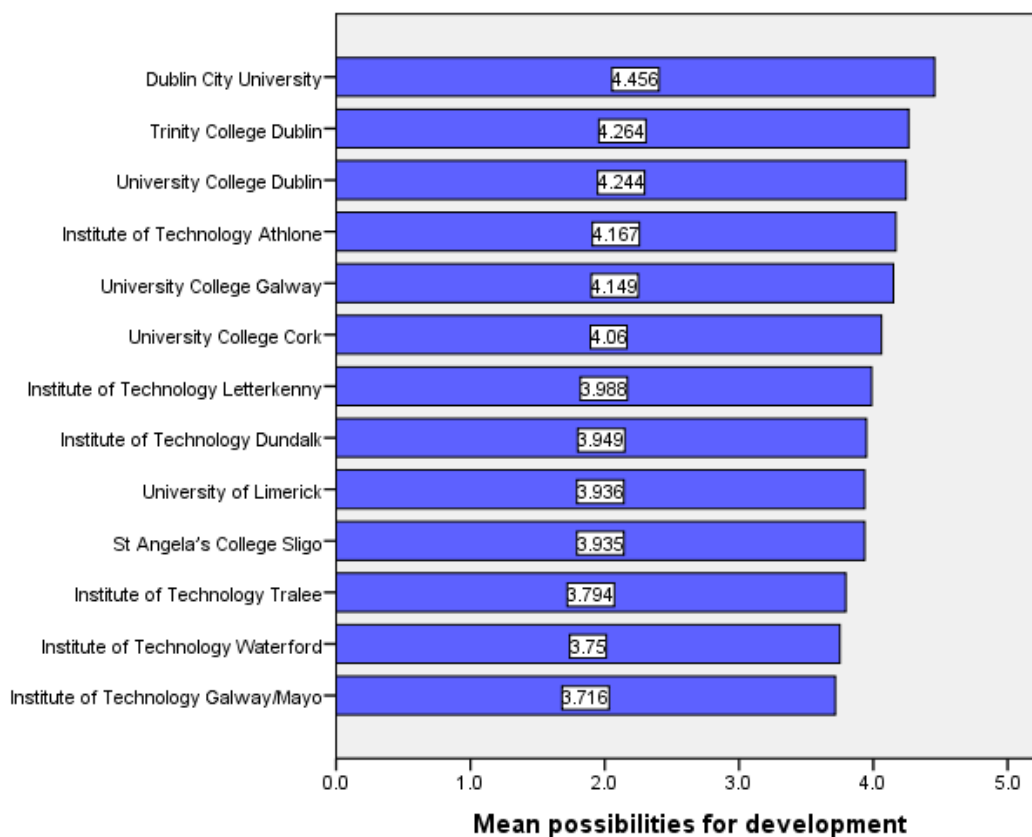
### 5.3.2 Possibilities for development

The Cronbach's alpha for the possibilities for development was 0.77 above the accepted level standard for scale reliability (Cronbach 1951). The mean score for nursing graduates on the meaning of work scale was 4.05 (*SD* 0.75; *minimum* 1.25; *maximum* 5; *Median* 4.25). A one way analysis of variance was conducted to explore the effect of discipline on the possibilities for development and there was a statistically significant difference in the mean score of the three disciplines ( $f$  5.69,  $df$  2, 468  $\rho$  =.003). The mean score was statistically higher in general nursing at 4.14 (*SD* 0.69) than in psychiatry at 3.86 (*SD* 0.82) and intellectual disability at 3.92 (*SD* 0.87). The impact of college attended demonstrated a statistically significant difference ( $f$  3.055,  $df$  12,457  $\rho$  <.0001) between the mean scores (see figure 5.6).

Post hoc comparisons using Tukey HSD method indicated that the mean score for possibilities of development for DCU was 4.46 (*SD* 3.96) and was significantly different than the Institutes of Technology in Waterford (*Mean* 3.7, *SD* 0.74) and Tralee (*Mean* 3.79, *SD* 0.87). An independent-sample t-test conducted to compare possibility of development scores based on mature or school leaver status on entry to the profession also demonstrated significance.

There was a statistical difference ( $t$  2.48,  $df$  225.74  $\rho$  =.014) between the higher possibility scores of mature graduates (*mean* 4.13, *SD* 0.69) and school leaver (*mean* 3.92, *SD* 0.85). However, when the effect of age was examined the mean possibility for development score in the younger graduates aged between 21-30 years (*mean* 4.13, *SD* 0.70) and in the older graduates >41 (*mean* 3.93, *SD* 0.90), was found to be statistically different and higher than the mean in the 31-40 age range (*mean* 3.70, *SD* 0.87).

**Figure 5.6: Possibilities for development mean score per college attended**



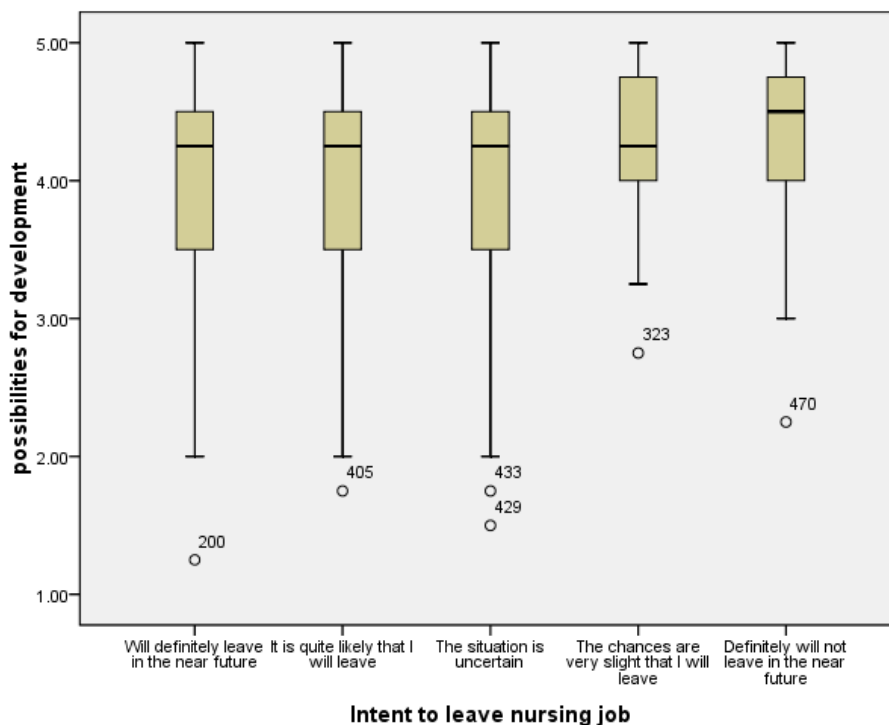
Respondents were asked to report the amount of initiative their job required of them on a five point scale and a greater majority of them reported that it did require initiative to some or a large extent ( $n=399, 84\%$ ). The large majority believed that they have the opportunity to learn new things at work ( $n=432, 91\%$ ) while only a very small number found that their job provided not very much or only a small extent of learning opportunities ( $n=38, 8\%$ ). Again the large majority found their work sometimes or always varied ( $n=392, 84\%$ ) and reported that they had the opportunity to some, or to a large, extent to use their skills and expertise in the workplace ( $n=442, 95\%$ ). There was a relationship detected between higher scores of the possibilities of development and career expectations of new nursing graduates (See table 5.9). A weak relationship was found between higher mean possibilities for development scores and reduced likelihood of changing job (*Wald ratio*  $\chi^2 4.67, df 1, p$

=.029) (Figure 5.7). A stronger relationship was detected between a higher possibility for development and reduced likelihood of leaving the profession (*Wald ratio*  $\chi^2$  42.06, *df* 1,  $\rho$  <.0001) (Figures 5.7 & 5.8).

**Table 5.9. Relationship between possibilities for development and career expectations**

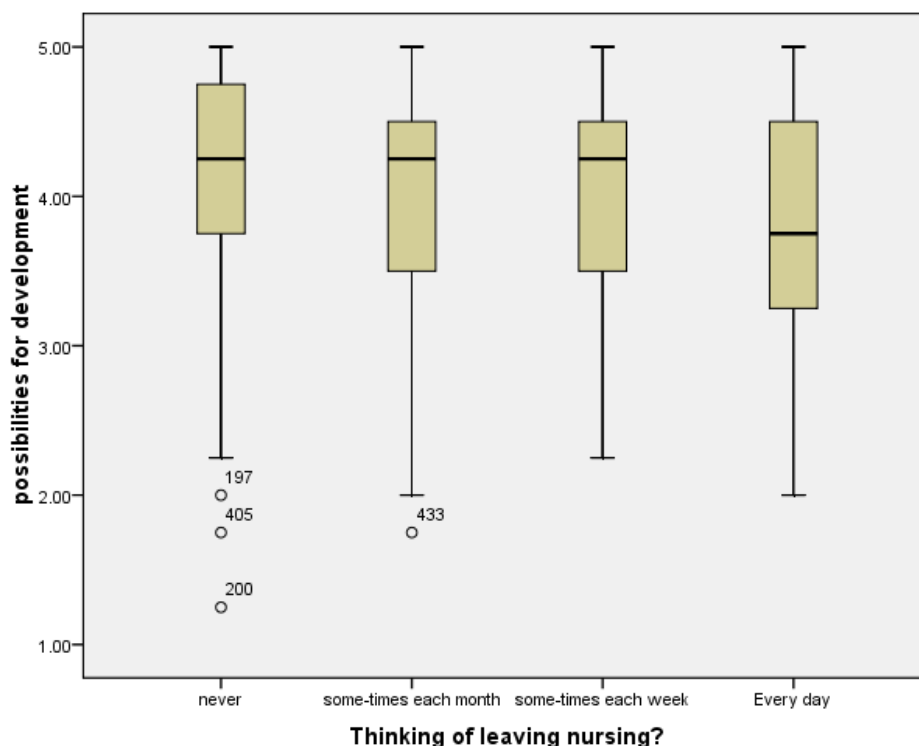
Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.242	.111	4.769	1	.029	.025	.459
Intent to leave nursing	-.853	.130	43.058	1	.000	-1.107	-.598

**Figure 5.7. Relationship between possibilities for development and intent to change nursing job**





**Figure 5.8. Relationship between possibilities for development and intent to leave nursing**



### 5.3.3 Quantitative demands

The Cronbach's alpha of the quantitative demands of nursing work was 0.82 demonstrating a high level of internal consistency (Cronbach 1951). The mean score on quantitative demands of nursing work 3.07 (SD 0.75) across all disciplines (*minimum* 1.67 & *maximum* 5.00 *median* 3.00). A one-way analysis of variance among groups conducted to explore the impact of discipline on the quantitative demands of nursing work found a statistically significant difference in the mean score of the three disciplines ( $f = 68.94$ ,  $df$  2, 467  $\rho < .0001$ ). Post hoc analysis using Tukey HSD test indicated the mean score was highest in general nursing at 3.6 (SD 0.66) and statistically different from both intellectual disability (mean 3.07, SD .58) and psychiatry, the lowest, at 2.79 (SD .0.67) (Table 10). The effect of age was also found to be statistically significant ( $f = 4.83$ ,  $df$  2, 466  $\rho = .008$ ). The mean score for quantitative demands of nursing in the >41 age range (*mean* =3.04, *SD* 0.85) was found to

be statistically different and lower than those in the 21-30 (*mean* =3.44, *SD* 0.75) and the 31-40 (*mean* 3.43, *SD* 0.78) age ranges.

**Table 5.10. Quantitative demands of nursing work**

<b>Registration</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
RGN	320	1.33	5.00	3.65	0.67
RPN	94	1.17	4.33	2.79	0.68
RNID	56	1.67	4.33	3.07	0.58
All	471	1.67	5.00	3.07	0.75

Participants were asked to comment on a 5-point scale if they had sufficient time to talk to patients and clients at work. There were statistically significant differences in the proportions of three disciplines who felt they never, seldom or only sometimes had enough time to talk to clients or patients (Chi-square  $\chi^2$  55.18, *df* 2,  $p < .0001$ ). This appeared to be a more significant problem for general nurses where only a minority reported they often or always had enough time to talk to patients or clients ( $n=61$ , 19%) compared to larger proportions in psychiatry ( $n=49$  52%) or intellectual disability ( $n=30$ , 54%). The large majority of general nurses reported they hardly ever, seldom or only sometimes have enough time to talk to patients or clients ( $n=259$ , 81%) (Table 5.11).

**Table 5.11. Enough time to talk to patients/clients at work**

Have enough time to complete work tasks	Registered General Nurse (RGN)	Registered Psychiatric Nurse (RPN)	Registered Intellectual Disabilities (RNID)	Total
	n %	n %	n %	
Hardly ever, seldom or only sometimes	259	45	26	330
	81	48	46	70
Always or often	16	49	30	140
	19	52	54	30
Total	320	94	56	470

There was a statistically significant difference in the proportions of three disciplines who often or always lacked time to complete work tasks (*Chi-square*  $\chi^2 17.51$ , *df* 2,  $p < .0001$ ). This appeared to be a more significant problem for general nurses where a larger proportion ( $n = 132$ , 42%) always or often lacked time to complete work tasks compared to smaller proportions in psychiatry ( $n = 17$ , 18%) or intellectual disability ( $n = 17$ , 30%) (Table 5.12).

**Table 5.12. Lack of time to complete work tasks**

Have enough time to complete work tasks	Registered General Nurse (RGN)	Registered Psychiatric Nurse (RPN)	Registered Intellectual Disabilities (RNID)	Total
	n %	n %	n %	
Hardly ever, seldom or only sometimes	187	76	39	302
	59	82	70	65
Always or often	132	17	17	166
	41	18	30	35
Total	319	93	56	468

There was a statistically significant difference in the proportions of three disciplines who are unable to pause in their work whenever they want (*Chi-square*  $\chi^2$  14.51, *df* 2,  $\rho < .001$ ). This appeared to be a slightly more significant problem for general nurses where a larger proportion (n =306, 97%) hardly ever, seldom or only sometimes are able to pause in their work whenever they want compared with psychiatric (n=81, 87%) or intellectual disability nurses (n=49, 88%) (Table 5.13).

**Table 5.13. Ability to pause during work**

<b>Able to pause in their work</b>	<b>RGN n %</b>	<b>RPN n %</b>	<b>RNID n %</b>	<b>Total n %</b>
Hardly ever, seldom or only sometimes	306 97	81 87	49 88	436 94
Always or often	11 3	12 13	7 12	30 6
Total	317	93	56	466

There was a statistically significant difference in the proportions of three disciplines who often or always worry about making mistakes at work (*Chi-square*  $\chi^2$  31.95, *df* 2,  $\rho < .001$ ). This appeared to be a more significant problem for general nurses where a larger proportion (n =179, 56%) always or often worried about making mistakes compared to smaller proportions in psychiatry (n=25, 27%) or intellectual disability (n=17, 30%) (Table 5.14).

**Table 5.14. Worry about making mistakes**

<b>Worry about making mistakes</b>	<b>RGN n %</b>	<b>RPN n %</b>	<b>RNID n %</b>	<b>Total n %</b>
Hardly ever, seldom or only sometimes	140	68	39	247
	44	73	70	53
Always or often	179	25	17	221
	56	27	30	47
<b>Total</b>	<b>319</b>	<b>93</b>	<b>56</b>	<b>468</b>

There was a statistically significant difference detected in the proportion of three disciplines who often or always have to work very fast (*Chi-square*  $\chi^2$  11.18, *df* 2,  $\rho < .0001$ ). It appears that having to work very fast is a particularly demanding aspect of the work in general nursing (n=254, 80%) compared to psychiatry (n=21, 23%) and intellectual disability (n= 27, 48%) (Table 5.15).

**Table 5.15 .Requirement to work fast**

<b>Have to work very fast</b>	<b>RGN n %</b>	<b>RPN n %</b>	<b>RNID n %</b>	<b>Total n %</b>
Hardly ever, seldom or only sometimes	65	72	29	166
	20	77	52	35
Always or often	254	21	27	302
	80	23	48	65
<b>Total</b>	<b>319</b>	<b>93</b>	<b>56</b>	<b>468</b>

Difficulties in relation to the quantitative demands of nursing work also manifested itself in the tendency for things to pile up at work due to uneven distribution of work with differences evident across the disciplines (*Chi-square*  $\chi^2$  12.19, *df* 2,  $\rho = .002$ ). Again, this

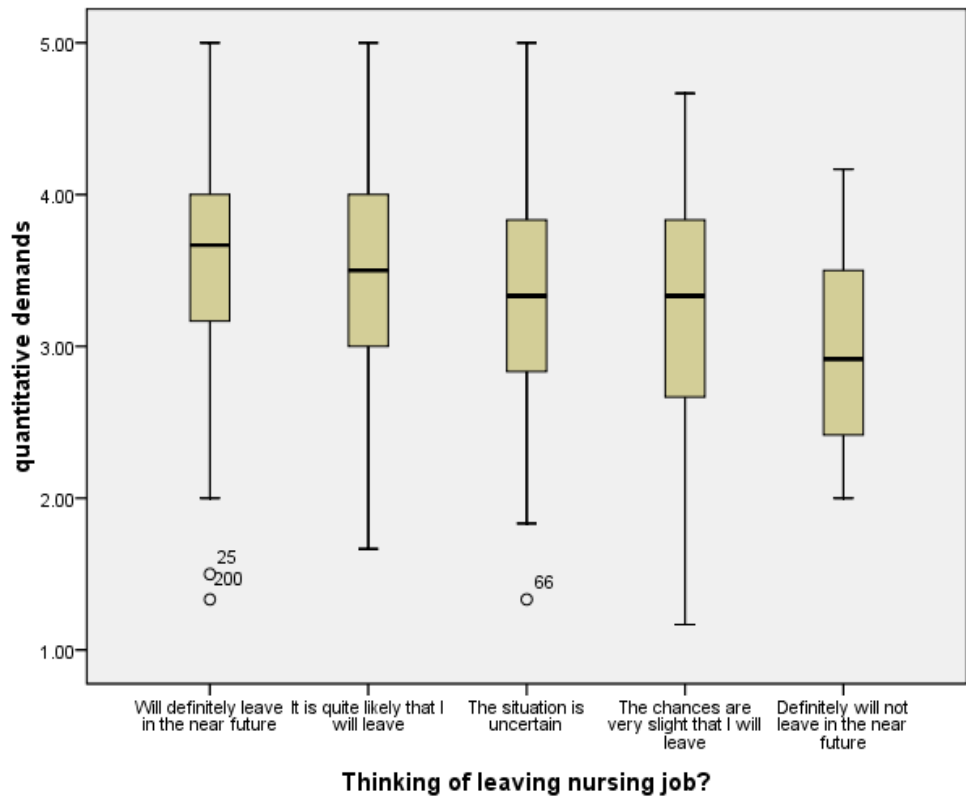
was a more significant problem for graduates in general nursing who experienced this phenomenon often or always ( $n=107, 34\%$ ), compared to psychiatry ( $n=16, 17\%$ ) and intellectual disability nursing ( $n=11, 20\%$ ).

The quantitative demands of nursing work were found to have a positive relationship with increased likelihood of intent to change job (Wald ratio  $\chi^2 22.99, df 2, p < .001$ ) increased likelihood of taking a break from or leaving nursing (Wald ratio  $\chi^2 6.70, df 2, p = .008$ ) and increased likelihood of expressing thought about giving up the nursing profession (Wald ratio  $\chi^2 27.87, df 2, p < .0001$ ) (Table 5.15 and Figures 5.9, 5.10, 5.11).

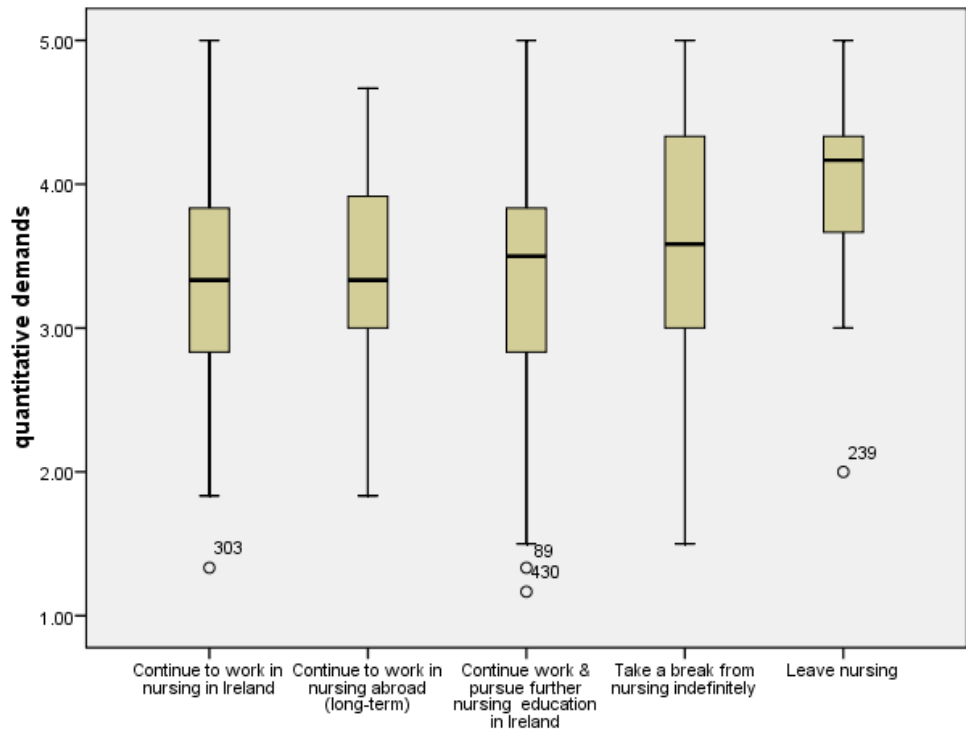
**Table 5.15. Relationship between quantitative demands of nursing**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	-.544	.114	22.999	1	.000	.767	-.322
Career intention over next five years	.313	.119	6.953	1	.008	.080	.546
Intent to leave nursing	.674	.128	27.866	1	.000	.424	.924

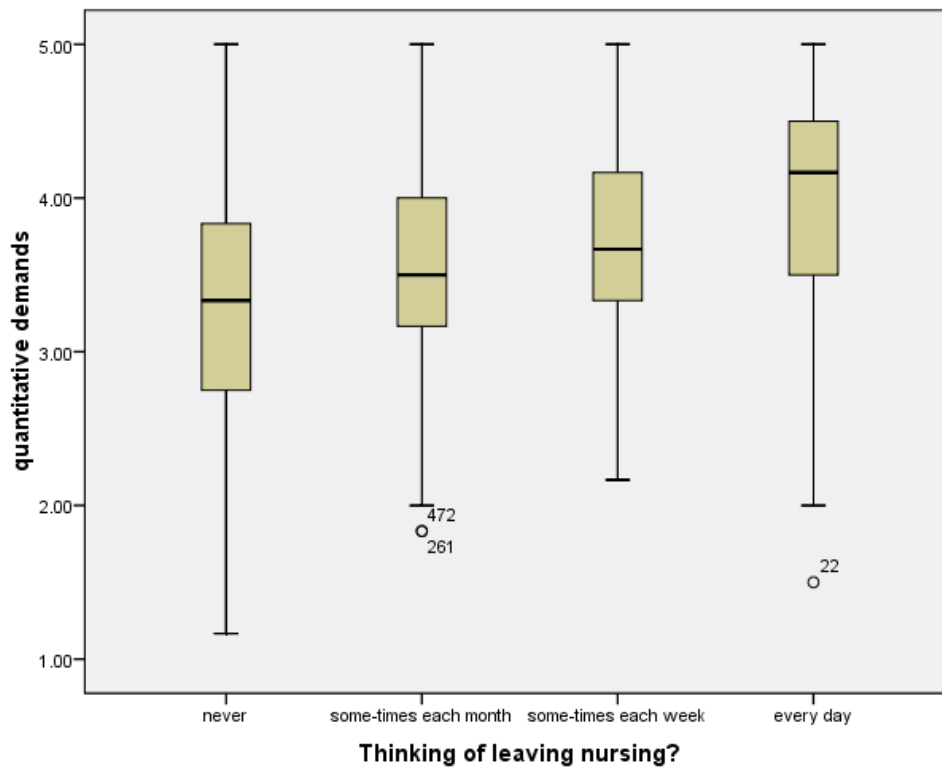
**Figure 5.9. Quantitative demands of nursing work and intent to change job within nursing**



**Figure 5.10. Quantitative demands and career intentions for next 5 years**



**Figure 5.11. Quantitative demands of nursing and intent to leave nursing**



### 5.3.4 Physical work demands

A variety of physical nursing work tasks (Table 5.16) were combined in the scale entitled 'lifting and bending', which had a Cronbach's's alpha of 0.90, demonstrating a high level of internal consistency (Cronbach 1951). The mean score was 2.33 (*SD* 0.76) across all disciplines (*minimum* 1.00; *maximum* 4.00; *median* 2.33). Participants were asked to document on a four point scale the frequency they undertook a variety of physical tasks associated with nursing work. These were collapsed into two for the purpose of analysis, 0-5 times per day (infrequent) and greater than 6 times per day (frequent). The mean lifting and handling score differed significantly among the three disciplines ( $f$  45.03,  $df$  2,467  $p$  <.0001). Post hoc analysis using Tukey HSD test indicated statistical differences between all three, highest in general (*Mean* 2.45, *SD*, 0.71) lower in intellectual disability (*Mean* 2.16, *SD*, 0.63) graduates and lowest for those working in psychiatry (*Mean* 1.74, *SD*, 0.66).



**Table 5.16: Frequency of physical tasks undertaken per discipline**

Physical nursing task	Frequency	RGN	RPN	RNID	Total
		n %	n %	n %	n %
bedding and positioning patients	<i>Infrequent (0-5 times per day)</i>	115 36	73 79	38 68	226 49
	<i>Frequent (6-10+ times per day )</i>	202 64	20 21	18 32	240 51
Total		317	93	56	466
transferring or carrying patients	<i>Infrequent (0-5times per day)</i>	142 45	77 86	34 61	253 55
	<i>Frequent (6-10+ times per day )</i>	176 55	13 14	22 39	211 45
Total		318	90	56	464
lifting patients in bed without aid	<i>Infrequent (0-5times per day)</i>	217 68	84 92	52 96	353 76
	<i>Frequent (6-10+ times per day )</i>	101 32	7 8	2 4%	110 24%
Total		318	91	54	463
washing, bathing (personal hygiene)	<i>Infrequent (0-5times per day)</i>	154 49	77 84	27 49	258 56
	<i>Frequent (6-10+ times per</i>	161 51	15 16	28 51	204 44

	<i>day )</i>				
Total		315	92	55	462
washing, bathing (personal hygiene)	<i>Infrequent (0-5times per day)</i>	168 53	70 77	29 52	267 54
	<i>Frequent (6-10+ times per day )</i>	149 47	21 23	27 48	197 43
Total		317	91	56	464
clothing patients	<i>Infrequent (0-5times per day)</i>	181 57	70 79	31 55.	282 61
	<i>Frequent (6-10+ times per day )</i>	218 43	19 21	25 45	181 39
Total		399	89	56	463
Helping with feeding	<i>Infrequent (0-5times per day)</i>	229 73	74 83	36 64	339 74
	<i>Frequent (6-10+ times per day)</i>	85 27	15 17	20 36	120 26
Total		314	89	56	459
Making beds	<i>Infrequent (0-5times per day)</i>	119 38	66 72	36 66	221 48
	<i>Frequent (6-10+ times per day)</i>	192 62	26 28	19 34	237 52
Total		311	92	55	458
pushing patient's	<i>Infrequent</i>	172	75	45	292

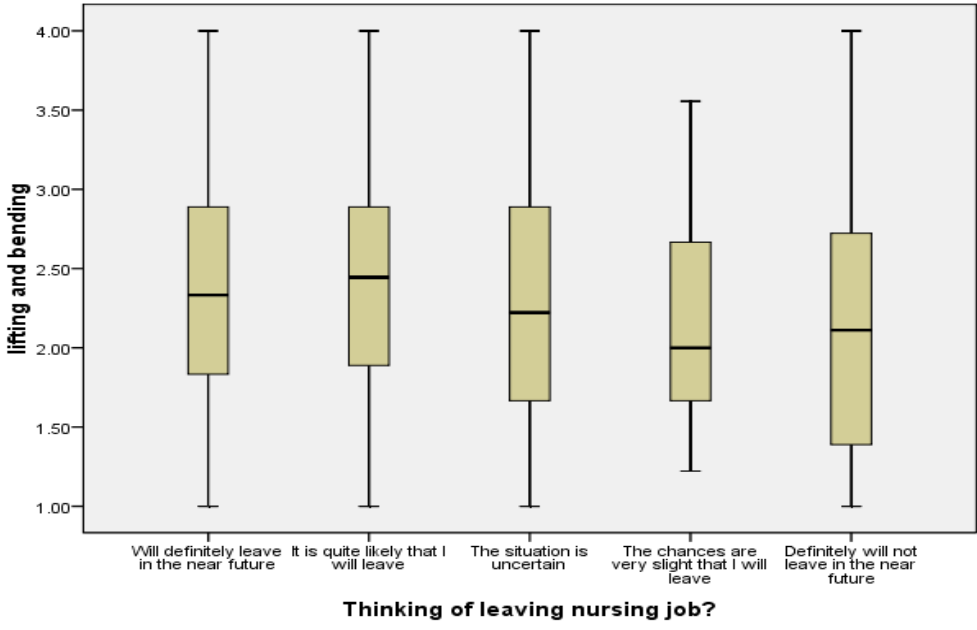
beds, food trolleys or laundry trolleys	(0-5times per day)	56	82	82	64
	Frequent (6-10+ times per day )	138 44	16 18	10 18.2	164 36
Total		310	91	55	456
maintaining an uncomfortable posture	Infrequent (0-5times per day)	149 47	76 84	41 75	266 58
	Frequent (6-10+ times per day )	168 53	14 16	14 25	196 42
Total		317	90	55	462

The physical demands of nursing work were found to have a weak but positive relationship with increased likelihood of intent to change job (Wald ratio  $\chi^2$  7.65, *df* 2,  $\rho$  =.006) and increased likelihood of expressing thought about giving up nursing profession (Chi-square  $\chi^2$  13.26 , *df* 2,  $\rho$  <.0001) (Table 5.17 & Figures 5.12, 5.13,5.14).

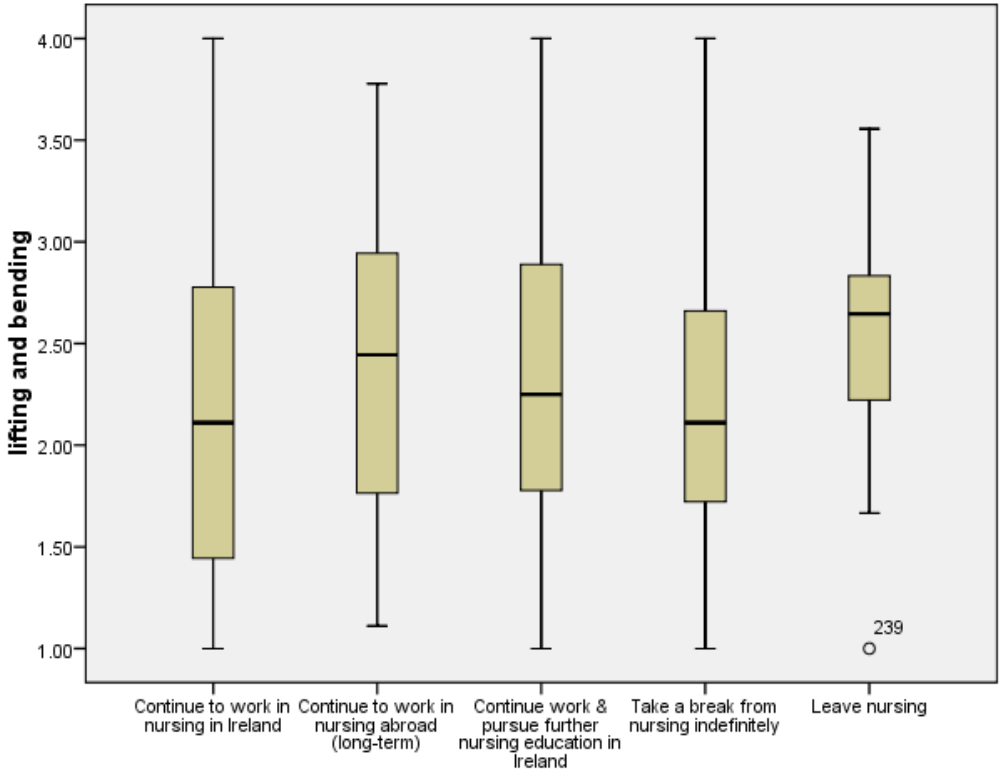
**Table 5.17. Relationship between lifting/bending scale and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	-.306	.111	7.65	1	.006	-.523	-.089
Intent to leave nursing	.437	.120	13.26	1	.000	.202	.672

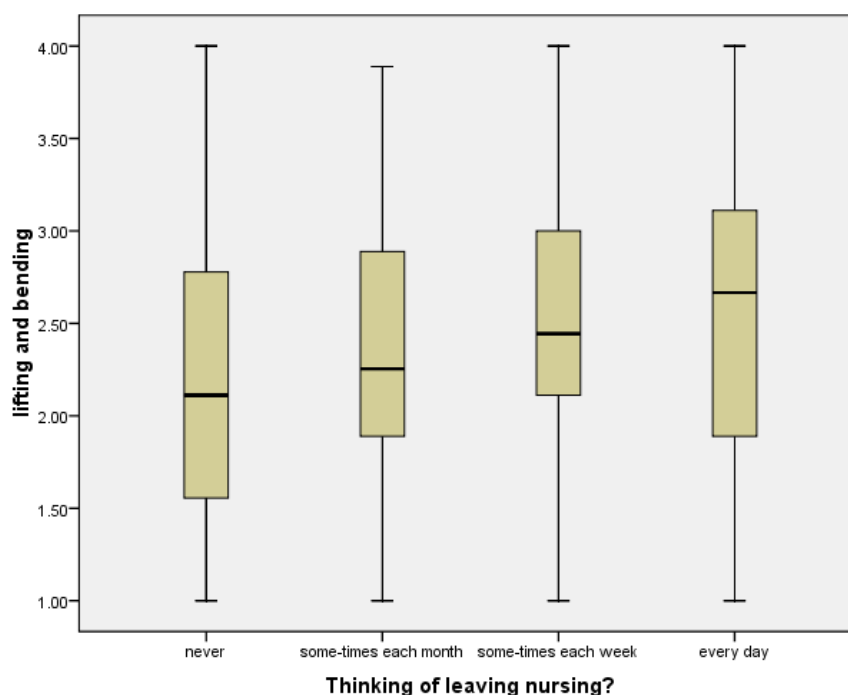
**Figure 5.12. Lifting/bending & intent to change job within nursing**



**Figure 5.13. Lifting/bending and career intentions for next 5 years**



**Figure 5.14. Lifting/bending and intent to leave nursing**



Standing for long periods at work is common across all disciplines. Eighty-six percent of general nursing ( $n=276$ ) graduates are standing for 6 hours or more at work. Prolonged standing at work is also a common aspect of working in learning disability nursing ( $n=37$ , 66%) and in psychiatry where approximately 64% ( $n=60$ ) of graduates are required to stand for periods in excess of 4-5 hours each day (Table 5.18).

### **5.3.5 Emotional demands**

The emotional demand scale has four items, was used to examine the particular demands of nursing including exposure to death, illness/human suffering, aggressive or troublesome patients, and had a Cronbach's's alpha of 0.54, demonstrating a moderate level of internal consistency reliability (Cronbach 1951). The mean score across all graduates was 3.65 ( $SD$  0.65) (*minimum* 1.50; *maximum* 5.00; *median* 3.75). A one-way analysis of variance among groups conducted to explore the impact of discipline on the mean emotional demands of nursing work found a statistically significant difference

in the mean score of the three disciplines ( $f$  3.16 ,  $df$  2, 466  $\rho$  <.0001). Post hoc analysis using Tukey HSD test indicated the mean score was statistically significantly different in general (Mean, 3.68, SD 0.70) and psychiatry (Mean, 3.66, SD 0.54) when compared with intellectual disability (mean, 3.44, SD 0.57).

**Table 5.18. Length of time in standing position at work per discipline**

Time standing at work	Registered General Nurse (RGN)	Registered Psychiatric Nurse (RPN)	Registered Intellectual Disabilities (RNID)	Total
	n %	n %	n %	n %
< 2 hours	6	17	4	27
	2	18	7	6
2-3 hours	21	17	5	43
	6	18	9	9
4-5 hours	18	23	10	51
	6	24.	18	11
6 hours or >	276	37	37	350
	86	39	66	74
Total	321	94	56	471
	100	100	100	100

There was a statistically significant difference among the three disciplines in relation to their exposure to death (Chi-square  $\chi^2$  1.13,  $df$  4,  $\rho$  <.0001). The majority of general nurses are exposed to death either sometimes (n=96, 30%) or often/always (n=153, 48%) in the course of their work. The majority of RPNs (n=64, 69%) and RNIDS (n=36, 64%) and a minority of RGN (n=70, 22%) are never or seldom exposed to death. The proportions across the disciplines also varied that describe themselves as often or always exposed to illness or human suffering (Chi-square  $\chi^2$  72.64,  $df$  4,

$\rho < .0001$ ) . Eighty-eight percent (n=282) of general graduates and only 58% (n=54) of psychiatry and 47% (n=26) intellectual disability described themselves as such. Differences were also noted between the disciplines as to the proportions who are often or always exposed to aggressive patients in their work (Chi-square  $\chi^2$  55.23, *df* 4,  $\rho < .0001$ ), with larger proportions of those working in psychiatry (n=80, 85%) and in intellectual disability (n=42, 75 %) experiencing this type of emotional demand than those in general (n=149, 49%) (Table 5.19). There were similar differences noted between the disciplines as to the level of exposure they experience from troublesome patients at work (Chi-square  $\chi^2$  25.31, *df* 4,  $\rho < .0001$ ). Again larger proportions of RPNs (n=79, 85%) and RNIDs (n=40, 71%) than general graduates (n=185, 58%) describe themselves as often or always exposed to troublesome patients at work.

**Table 5.19. Exposure to aggressive patients at work**

<b>Frequency of exposure to aggressive patients at work</b>	<b>RGN n %</b>	<b>RPN n %</b>	<b>RNID n %</b>	<b>Total n %</b>
Never/seldom	63	0	4	67
	20	0	7	14
Sometimes	107	14	10	131
	33	15	18	28
Often/always	149	80	42	271
	47	85	75	58
Total	319	94	56	469
	100	100	100	100

The emotional demands of nursing scale was found to have a weak inverse relationship with intent to stay (increased likelihood of intent to change job) (Wald ratio  $\chi^2$  6.57, *df* 1,  $\rho = .010$ ) and a weak relationship between a higher score on emotional demand and

increased likelihood to be thinking of taking a break or giving up nursing (Wald ratio  $\chi^2$  17.12, *df* 1,  $\rho < .0001$ ) (Table 5.20).

**Table 5.20. Relationship between emotional demands & career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						upper	lower
Intent to change nursing job	-.326	.127	6.571	1	.010	-.575	-.077
Intent to leave nursing	.595	.144	17.105	1	.000	.313	.877

## 5.4 Conditions of work

### 5.4.1 Influence at work

Influence at work was measured on a four item scale exploring the degree of influence graduates have over their work and the Cronbach's alpha was recorded as *0.79*, demonstrating a high level of internal consistency reliability (Cronbach 1951). The mean score for influence at work across disciplines was *2.84 (SD 0.82)* across all disciplines (*minimum 1.00; maximum 5.00; median 2.75*). There was a statistically significant difference in the mean score of the three disciplines ( $f$  11.16, *df* 2,465  $\rho < .0001$ ). Post hoc analysis using Tukey HSD test indicated the difference was statistically different in psychiatry than in the other two disciplines. The mean score was lower in general nursing at *2.72 (SD 0.83)* and intellectual disability at *2.83 (SD 0.83)* and higher in psychiatry at *3.19 (SD 0.75)*.

The majority of graduate nurses describe the following statements as either partially or totally accurate; that they have a say in the tasks they are asked to fulfil ( $n=288$ , 62%); and they can decide how to fulfil those tasks ( $n=371$ , 79%). There was no significant



difference among the disciplines in relation to the say graduates have over the type of task they are asked to fulfil. Fifty-one percent of graduates either partially or totally agreed that they can set their own work pace, although there was a statistical difference in the proportions across the disciplines (Chi-square  $\chi^2$  16.98, *df* 2,  $\rho < .0001$ ). A higher proportion of graduates in psychiatry ( $n=59$ , 63%) and intellectual disability ( $n=38$ , 68%) compared to general nursing graduates ( $n=143$ , 45%) can set their own pace at work. The proportion of graduates of nursing who feel they partially or totally agree that they have a say when they complete tasks was forty-nine percent although differences were noted in the proportions across the disciplines (Chi-square  $\chi^2$  9.03, *df* 2,  $\rho < .0001$ ). A higher proportion of RPNs ( $n=45$ , 52%) and RNIDs ( $n=36$ , 66%) have a say when they fulfil work tasks, compared to general nursing graduates ( $n=141$ , 43%).

#### **5.4.2 Exposure to hazards at work**

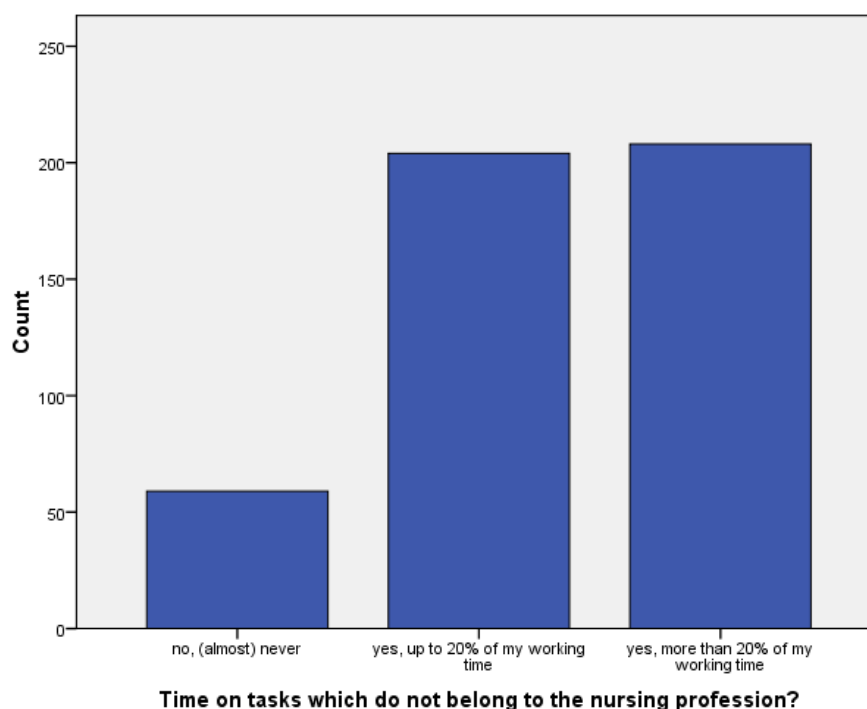
Only a small proportion of RGNs ( $n=52$ , 17%) reported hazardous exposure to toxic substances in their workplace, but for the majority of graduates across the disciplines this was not a hazard ( $n=402$ , 89%). A larger number of graduates are exposed to a regular risk of infection at work ( $n=253$ , 54%). Differences were noted among the disciplines (Chi-square  $\chi^2$  71.57, *df* 2,  $\rho < .0001$ ) and infection risk was a bigger concern for the general nurses ( $n=215$ , 68%) compared to psychiatry and intellectual disability who reported lower levels of exposure, 25% ( $n=24$ ) and 26% ( $n=14$ ) respectively. There were differences also among disciplines in relation to perception of exposure to hazardous levels of noise (Chi-square  $\chi^2$  15.37, *df* 2,  $\rho < .0001$ ). Intellectual disability nurses reported higher levels of exposure to noise with 59% ( $n=32$ ) compared to 38% ( $n=35$ ) in psychiatry and 32% in general nursing work places ( $n=100$ ).

Disciplines differed (Chi-square  $\chi^2$  22.26, *df* 2,  $p < .0001$ ) as to perceptions of exposure to hazardous temperature levels in the workplace. Temperature was a notable concern for RGN graduates as 38% ( $n=120$ ) reported this as a significant hazard at work compared to much smaller proportions in psychiatry and intellectual disability 16% ( $n=15$ ) and 16% ( $n=9$ ) respectively. Exposure to hazardous levels of physical and verbal abuse was a significant issue for a majority of nurses across the profession, but significant differences were evident in the proportions among the disciplines (Chi-square  $\chi^2$  40.57, *df* 2,  $p < .0001$ ). Physical and verbal abuse is a more prevalent hazard for those who work in psychiatry ( $n=76$ , 81%) and intellectual disability fields ( $n=40$ , 71%) compared to smaller proportions ( $n=148$ , 47%) in general nursing work environments. The majority of staff in all disciplines have access to lifting aids and hoists in their working area ( $n=367$ , 78%) and of those the majority of graduates use them ( $n=290$ , 62%).

### **5.4.3 Non-nursing duties**

The graduates were asked to estimate how much of their working day is devoted to tasks that do not belong to the nursing profession (Figure 5.15). There was no statistical difference across the professions and only a minority of staff felt that they almost never performed non-nursing duties (59, 12%). Nearly equal proportions of graduates estimated that they spend up to ( $n=204$ , 43%), or greater than 20% ( $n=209$ , 44%) of their time engaged in tasks that do not belong to the nursing profession.

**Figure 5.15. Time each day spent on non-nursing tasks**



#### **5.4.4 Uncertainty regarding treatment**

The uncertainty at work scale has a Cronbach's alpha of 0.68 and indicates a moderate to high level of internal consistency (Polit and Beck 2004). These questions asked participants to estimate how often they were stressed at work by a variety of common work situations that can occur in nursing. The mean score across all graduates was of 2.31 (*SD* 0.68; *minimum* 1.00; *maximum* 5.00; *median* 2.2). Discipline was found to have an effect on mean uncertainty regarding treatment score as the mean for general graduates (mean 2.35, *SD* 0.66) was higher and statistically different from those working in psychiatry (*mean* 2.19, *SD* 0.69) and intellectual disability (*mean* 2.11, *SD* 0.84).

The large majority of all graduates ( $n=346$ , 73.9%) reported they rarely or seldom have to perform tasks for which they are unqualified. Likewise the majority of graduates reported that they never or rarely received relevant information too late to enable

them to do their work ( $n=306$ , 65%). Twenty four percent ( $n=118$ ) report that receiving information too late occurs with some regularity, about 1-5 times per week, while a small proportion reported that this was an everyday or constant aspect of their workplace ( $n=45$ , 10%). The large majority do not or rarely receive conflicting or contradictory orders concerning the performance of their work ( $n=372$ , 79%) although for a significant number of graduates this appears to be a common occurrence ( $n=97$ , 21%).

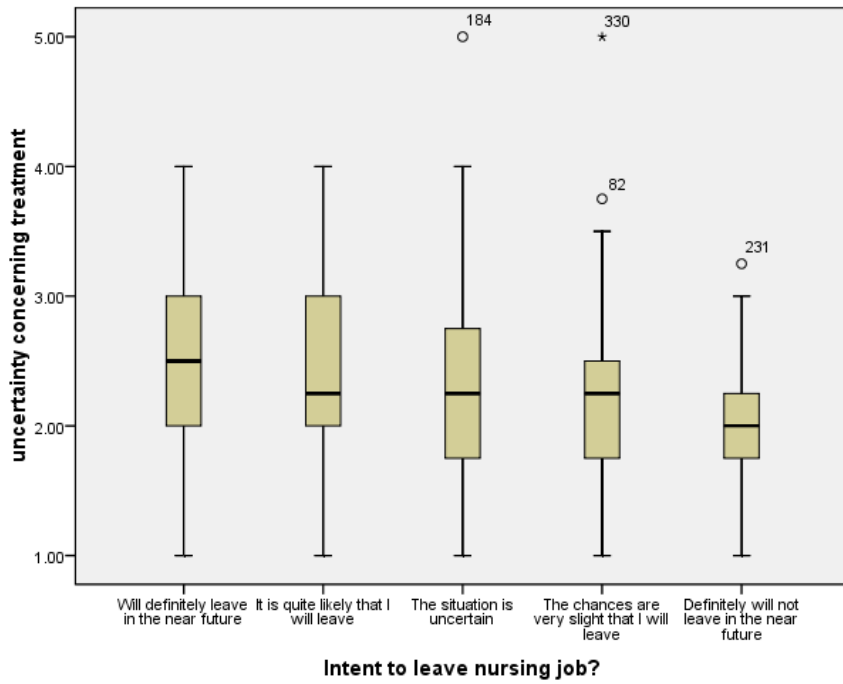
There was a statistical difference between the professions as to the proportions who reported they frequently or very frequently receive inadequate information from a doctor regarding the medical condition of a patient (Chi-square  $\chi^2$  16.5 ,  $df$  2,  $p$  <.0001). The proportions of graduates working in general nursing who reported difficulty with inadequate information was 51% ( $n=164$ ) compared to 35% ( $n=33$ ) in psychiatry and 27% ( $n=15$ ) in intellectual disability. There was no difference among the professions as to the proportions who reported frequent or very frequent difficulty with a doctor ordering inappropriate treatment ( $n=100$ , 24%). The absence of a doctor during a medical emergency was a source of work difficulty for 29% ( $n=16$ ) of learning disability graduates and 30% ( $n=96$ ) of general graduates but was not a common concern for those working in psychiatry ( $n=11$ , 1%). Another common source of uncertainty for nursing staff is about what a patient or patient's family should be told and differences were noted here between the three disciplines (Chi-square  $\chi^2$  35.00 ,  $df$  2,  $p$  <.001). Over fifty percent of general nursing graduates reported they are frequently or very frequently uncertain what should be told to a patient or their family about their medical condition or treatment compared to only 23% ( $n=22$ ) and 20% ( $n=11$ ) in psychiatry and learning disability respectively. The large majority of graduates reported that uncertainty was not, or was only rarely, due to inadequate support from senior nursing staff ( $n=247$ , 74%). Although there was no difference across the disciplines this was a source of uncertainty frequently or very frequently for a number of new graduates ( $n=118$ , 26%).

The uncertainty regarding treatment scale was found to have a negative relationship on intent to stay (increased likelihood of intent to change job) (Wald ratio  $\chi^2$  14.55, *df* 1,  $\rho$  =.006) and weak relationship with increased likelihood of expressing thought about changing nursing job (Wald ratio  $\chi^2$  5.05, *df* 1,  $\rho$  .001), taking a break or giving up the nursing profession (Wald ratio  $\chi^2$  43.9, *df* 1,  $\rho$  <.001) (Table 5.21 and Figures 5.16, 5.17, 5.18).

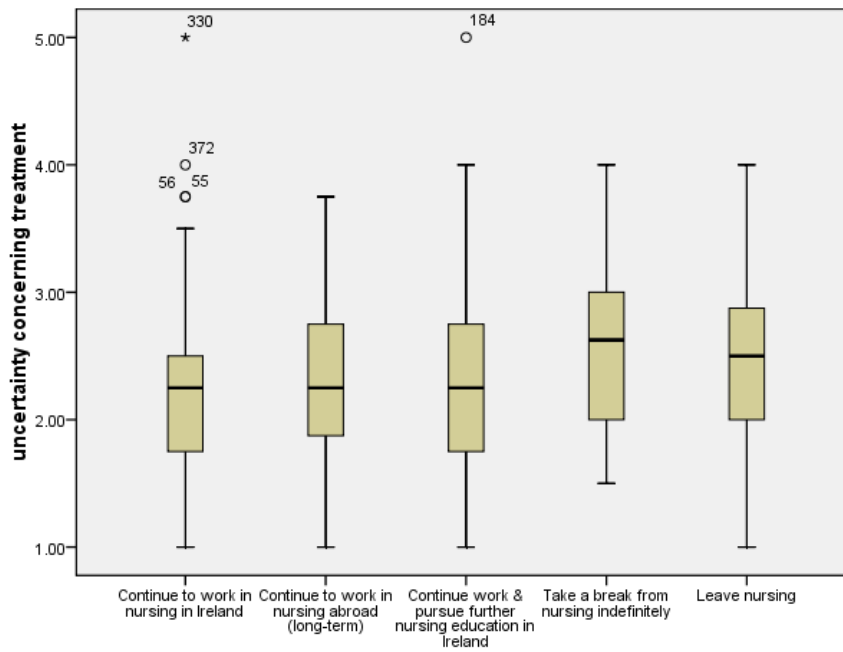
**Table 5.21: Relationship between uncertainty regarding treatment and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						upper	lower
Intent to change nursing job	-.473	.124	14.551	1	.000	-.716	-.230
Career intent over next five years	.296	.131	5.085	1	.024	.039	.552
Intent to leave nursing	.910	.138	43.499	1	.000	.640	1.181

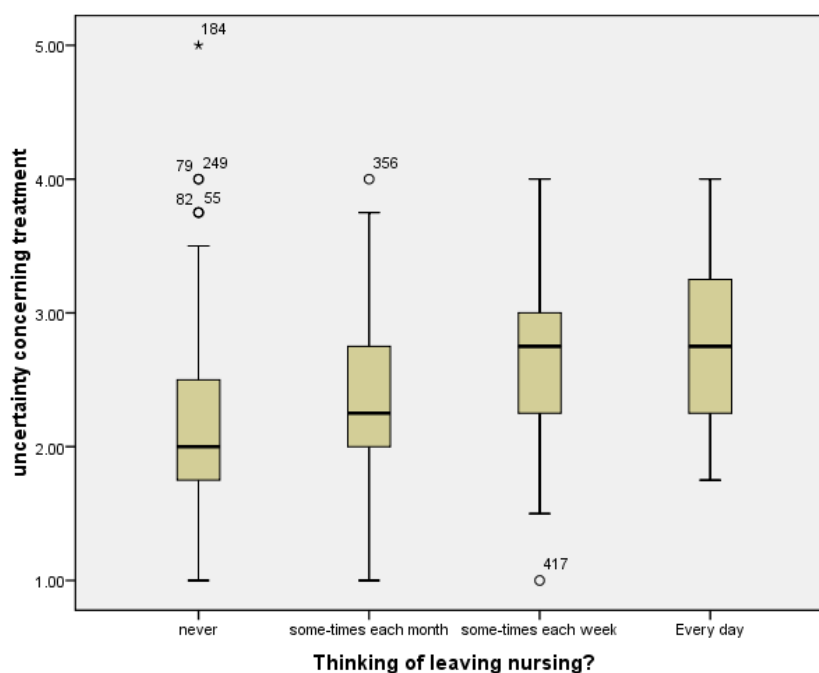
**Figure 5.16. Relationship between uncertainty regarding treatment and intent to change job within nursing**



**Figure 5.17. Uncertainty regarding treatment and career intention over next five years**



**Figure 5.18. Uncertainty regarding treatment and intent to leave nursing**



### 5.4.5 Quality of leadership

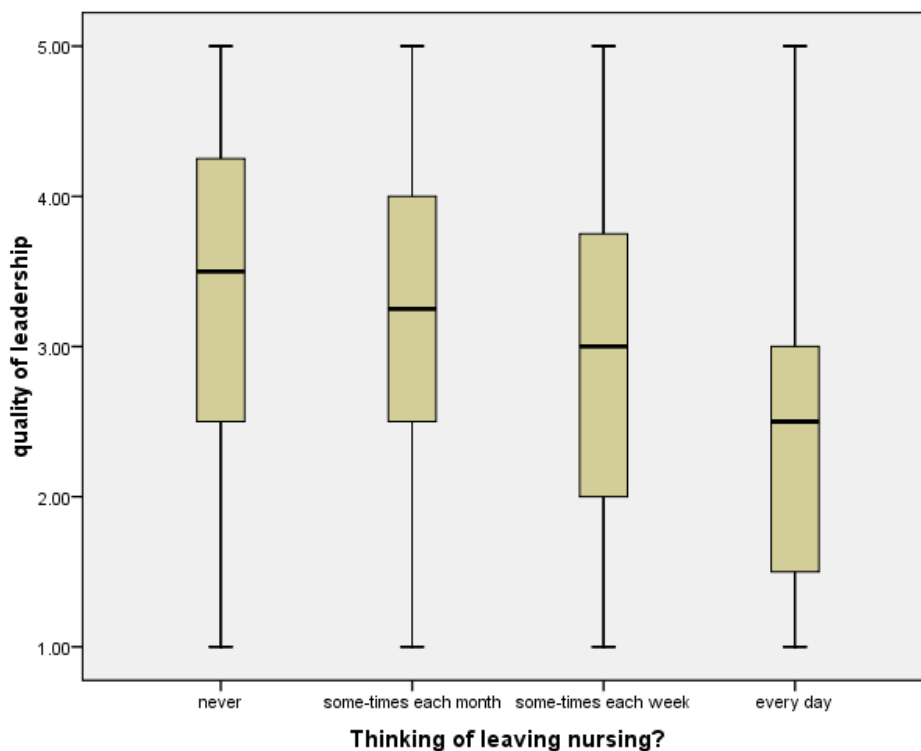
The quality of leadership scale had a Cronbach's's alpha of 0.91, demonstrating a high level of internal consistency reliability (Cronbach 1951). This five-item scale afforded participants the opportunity to evaluate aspects of leadership behaviour in their work place. The mean score was 3.23 (*SD 1.12 minimum 1.00; maximum 5.00; median 3.25*). There was no statistical difference between groups and participants largely evaluated leadership behaviours in their workplace well with 71% (n=333) reporting that their immediate superiors, to some or to a large extent, make sure that individual staff members receive good development opportunities. A further 64% (n=299) reported that their immediate superiors give high priority to job satisfaction, to some or a large extent. Finally the majority again reported that their managers are, to some or a large extent, good at work planning (n=353, 75%) and resolving conflict (n=324, 69%). Quality of leadership was found to have an inverse relationship with both intent to change nursing job

(Wald ratio  $\chi^2$  24.80, *df* 2,  $\rho$  <.001) and intent to leave nursing (Wald ratio  $\chi^2$  17.09, *df* 2,  $\rho$  <.001). Those who recorded a higher mean score on quality of leadership were less likely to consider changing their nursing job or leaving the profession (Table 5.22 and Figures 5.20 & 5.21).

**Table 5.22: Relationship between quality of leadership and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.380	.076	24.800	1	.000	.231	.530
Intent to leave nursing	-.338	.082	17.086	1	.000	-.498	-.177

**Figure 5.21 Quality of leadership and intent to leave nursing**





### 5.4.6 Handovers

There was a statistical difference among the disciplines as to their level of satisfaction with staff handovers (*Chi square*  $\chi^2 = 14.27, 2 df, p < 0.001$ ). A larger proportion of general nurses (141, 44.9%) were not satisfied compared to those working in psychiatry (n=23, 25%) or intellectual disability (n=16, 30%). Of those who were unsatisfied the following reason or reasons for dissatisfaction was noted: insufficient time (n=74, 41%); insufficient room (42, 23%); bad atmosphere (n=23, 13%); insufficient information (103, 57%) and too many disturbances (n=99, 55%).

**Table 5.23: New graduate satisfaction with handovers.**

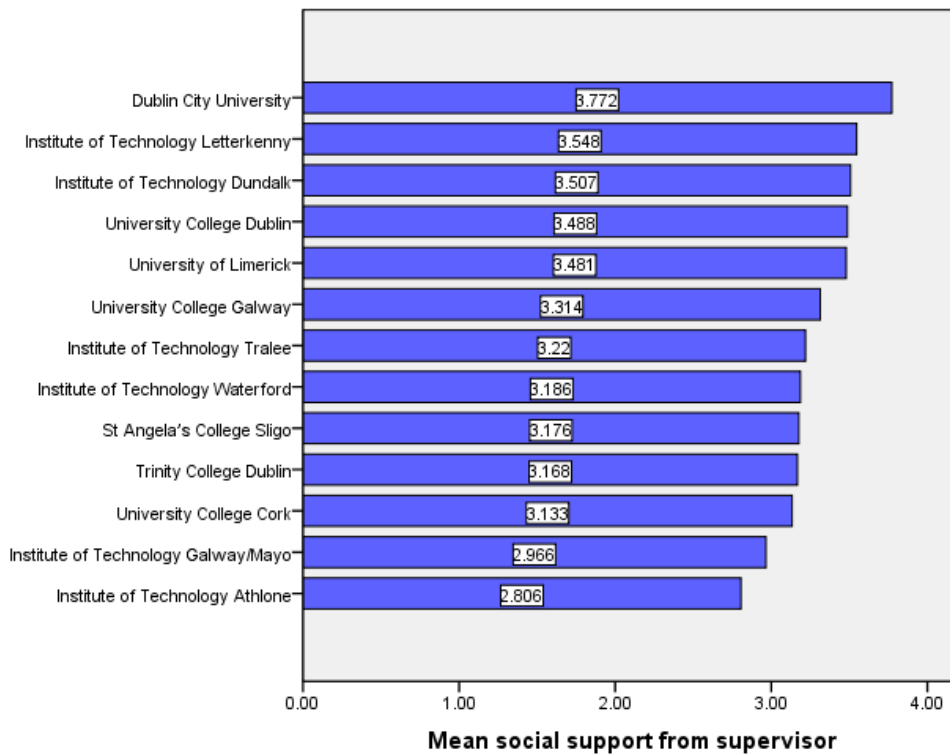
<b>Are you satisfied with staff handovers when shifts change?</b>	<b>RGN n %</b>	<b>RPN n %</b>	<b>RNID n %</b>	<b>Total n %</b>
Yes	173 55	70 75	37 70	280 61
No	141 45	23 25	16 30	180 39
Total	314 100	93 100	53 100	460 100

### 5.4.7 Social support from supervisor

The 'support from supervisor' scale has a Cronbach's alpha of 0.84, demonstrating a high level of internal consistency reliability (Cronbach 1951) and asked participants to assess the nature and quality of support they receive from their supervisor at work on a Likert scale of 1-5. The mean score across all graduates was 3.30 (*SD 1.01*) (*minimum 1.00; maximum 5.00; median 3.25*) and no statistical difference was detected between the disciplines. Some statistical difference was detected between the mean scores per

college linked with the graduates' place of work ( $f$  1.952  $df$  12, 465  $\rho$  =.029) (Figure 5.22).

**Figure 5.22 Social support from supervisor**



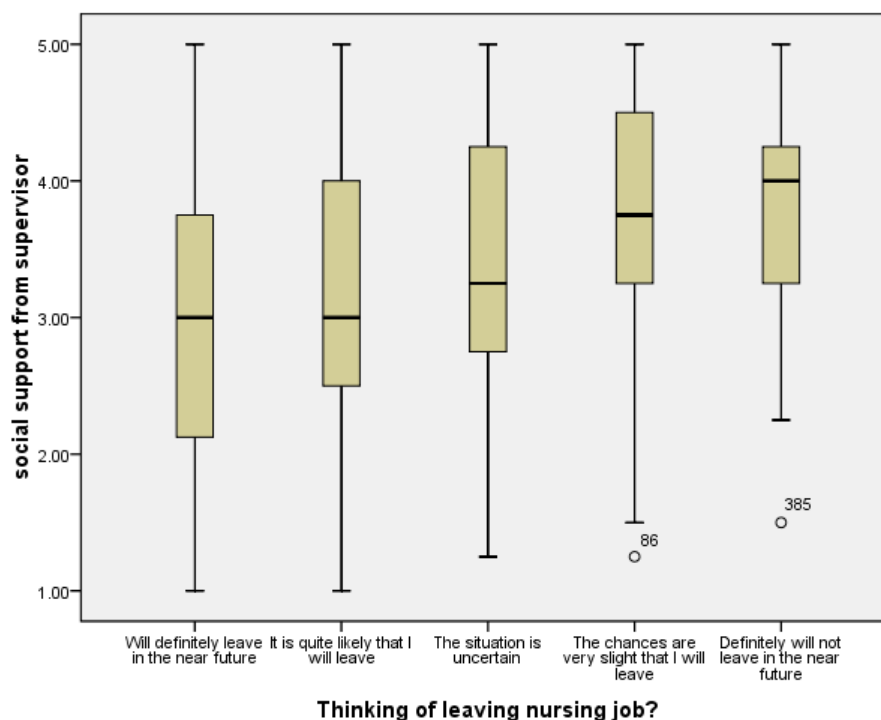
Fifty percent of all graduates ( $n=234$ , 50%) agree that their clinical supervisor appreciates the value of their work, 30% ( $n=141$ ) are uncertain and a further 20% do not believe their work is valued ( $n=92$ ). Nearly equal proportions of graduates ( $n=172$ , 37%), report that their supervisor often expresses an opinion, to those ( $n=170$ , 37%) who find their supervisor seldom or never expresses an opinion. A further 27% ( $n=124$ ) are uncertain. Supportive advice from their supervisor is readily provided to 47% ( $n=217$ ) of graduates, 24% were uncertain, and further 30% ( $n=140$ ) believe their supervisor seldom or never gives them supportive advice. The majority of graduates find their immediate supervisor is ready to help them with performance of their tasks as required ( $n=254$ , 54%), 21% ( $n=99$ ) are uncertain and a substantial number ( $n=115$ , 35%) seldom or never find their supervisor willing to help them with tasks. A positive relationship was found between a higher level of

social support from supervisor and reduced likelihood of changing nursing job (Wald ratio  $\chi^2$  28.62, *df* 1,  $\rho < .001$ ). There was also a relationship between reduced likelihood of thinking about leaving nursing and higher levels of social support from supervisor (Wald ratio  $\chi^2$  14.67, *df* 1,  $\rho < .001$ ) (Table 5.24 and Figures 5.23 & 5.24).

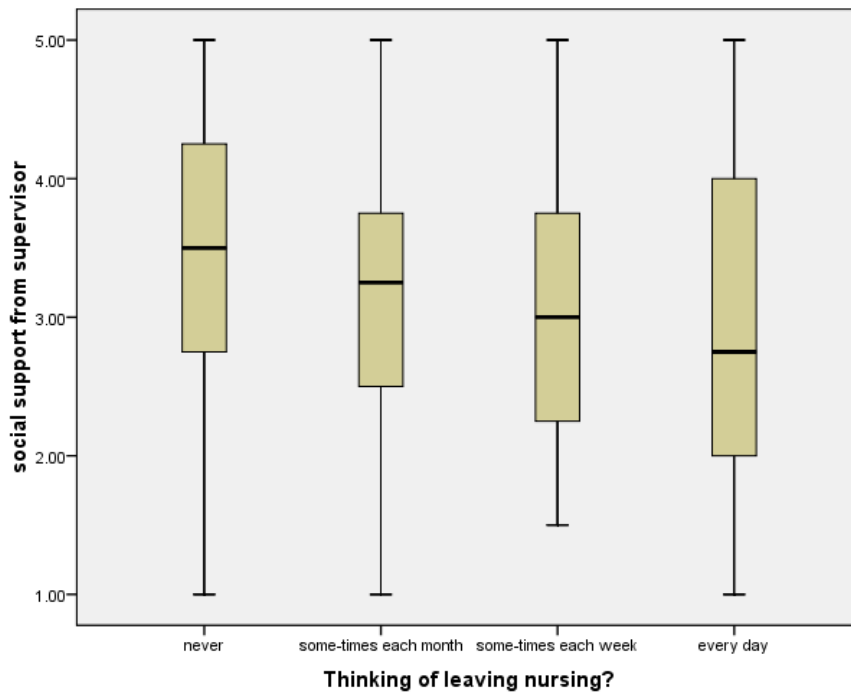
**Table 5.24 Relationship between social support from supervisor and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.455	.085	28.816	1	.000	.289	.621
Intent to leave nursing	-.345	.090	14.674	1	.000	-.522	-.169

**Figure 5.23 Relationship between social support from supervisor and intent to change job within nursing**



**Figure 5.24 Social support from supervisor and intent to leave nursing**



### 5.4.8 Social support from colleagues

The social support from colleagues scale has a Cronbach's alpha of 0.84, demonstrating a high level of internal consistency reliability (Cronbach 1951), and asked participants to assess the nature and quality of support they receive from their colleagues at work on a Likert scale of 1-5. The mean score across all graduates was 3.53 (*SD* 0.78) (*minimum* 1.25; *maximum* 5.00; *median* 3.5) and no differences across groups was apparent. The majority of graduates do find their colleagues appreciate the value of their work, 31% (*n*=147) are uncertain and a minority (*n*=55, 12%) believe they do not. Only a minority (*n*=140, 30%) of graduates report that colleagues express an opinion of their work, 34% (*n*=159) are uncertain and 36% (*n*=168) find their colleagues seldom or never express a view. The majority of graduates often receive supportive advice from their colleagues (*n*=282, 60%); some are uncertain (*n*=112, 24%) and a small number do not receive such support (*n*=74, 16%). Most graduates (*n*=332, 71%) are working with

colleagues who are willing to assist them, some are uncertain (n=103, 29%) and a small number are working with staff who show little willingness to help them with the performance of tasks. A positive but weak relationship was found between higher levels of social support from colleagues and reduced likelihood of changing nursing job (Wald ratio  $\chi^2$  4.44, *df* 1,  $\rho$  <.001). There was also a weak relationship between reduced likelihood of thinking about leaving nursing and higher levels of social support from colleagues (Wald ratio  $\chi^2$  5.30, *df* 1,  $\rho$  <.001).

**Table 5.25: Relationship between social support from colleagues and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.226	.107	4.436	1	.035	.016	.437
Intent to leave nursing	-.268	.116	5.300	1	.021	-.496	-.040

Participants were asked if their department afforded them the chance to discuss professional matters which they believe are important, and the majority reported they had either brief (n=287, 62%) or in detail (n=119, 26%) opportunities made available to them. Only a minority of staff reported that they did not have opportunity (n=59, 13%) to discuss professional matters.

#### **5.4.9 Interpersonal relationships**

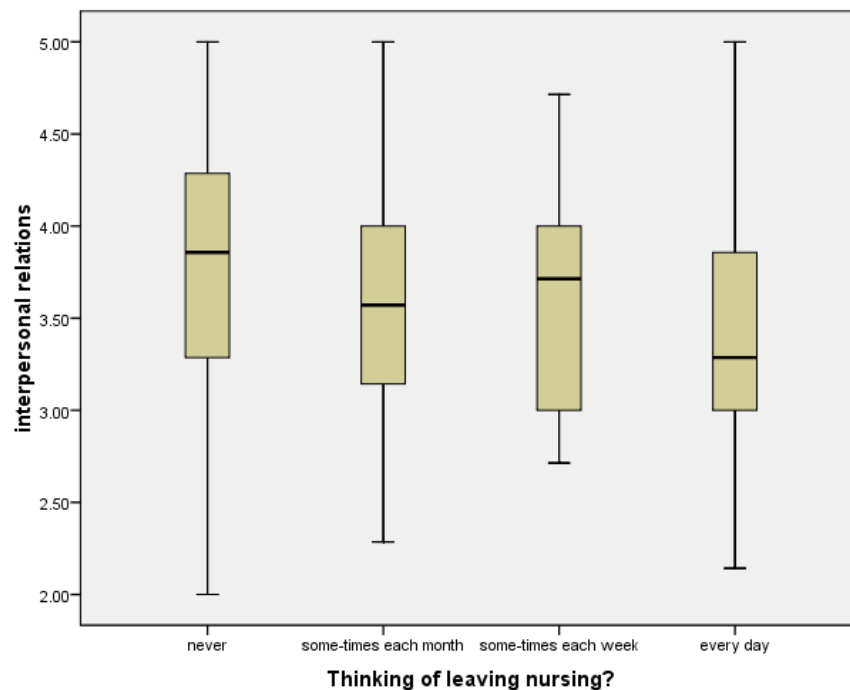
A 7-item interpersonal relationship scale was used to evaluate the participants' perception of relationships with management, nursing colleagues, doctors, administration, other allied health professionals and support staff and had a recorded Cronbach's alpha of 0.82 indicating a high level of internal consistency reliability (Cronbach

1951). The mean score was 3.69 (*SD* 0.66; *minimum* 2.00; *maximum* 5.00; *median* 3.71) and there were no statistical differences across the groups. Nearly 36% (n=167) of graduates report that relations with senior management are hostile and tense, 33% (n=154) are uncertain and a smaller proportion (n=145, 31%) report dealings to be friendly and relaxed. Relations are good with clinical nurse managers for most graduates (n= 280, 50%) some are uncertain (n=118, 25%) and a small proportion find them to be hostile and tense. Only a very small number of graduates do not have good relations with colleagues (n=12, 3%), 13% (n=62) are uncertain, and the large majority work in friendly and relaxed relationships with other staff in their area. Relationships are friendly and relaxed with doctors for 57% (n=266) of graduates, 33% are uncertain, and a minority (n=46, 10%) find their dealings with doctors to be hostile and tense. Relations with allied health professionals are somewhat better with over two thirds reporting them to be friendly and relaxed (n=304, 65%) and 28% (n=128) are uncertain and a minority (n=33, 7%) find their relations to be negative. Relations with administrative staff are good for 57% (n=262) of graduates, 31% (n=144) are uncertain and 13% (n=58) find them to be hostile and tense. Two thirds of graduates (n=309, 67%) find their relations with support staff are friendly and relaxed, 26% (n=122) are uncertain and a small minority (n=33, 7%) find them to be hostile and tense. The lower interpersonal relationship scores were found to have a weak but positive relationship with increased likelihood of intent to change job (Wald ratio  $\chi^2$  15.51, *df* 2,  $\rho < .001$ ) and a weak relationship with increased likelihood of expressing thought about giving up nursing (Wald ratio  $\chi^2$  14.01, *df* 2,  $\rho < .001$ ) (Table 5.26 and Figure 5.25).

**Table 5.26 Relationship between interpersonal relationships and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.494	.127	15.151	1	.000	.245	.743
Intent to leave nursing	-.517	.138	14.010	1	.000	-.787	-.246

**Figure 25 Interpersonal relationships and intent to leave nursing**



The vast majority of participants reported they were never or very infrequently exposed to harassment from superiors (n=441, 94%), or from colleagues (n=454, 97%). Overall participants reported that the majority of all graduates are never or infrequently exposed to violence from patients (n=326, 70%). There were differences also among disciplines in relation to perception of exposure to violence

from patients (Chi-square  $\chi^2$  56.03, *df* 2,  $\rho < .001$ ). Those working in psychiatry (n=52, 60%) and intellectual disability (n=27, 49%) nursing reported they were exposed to violence from patients on a weekly or daily basis compared to a much smaller proportion of general nursing graduates (n=62, 19%) who reported this higher frequency. The majority of graduates reported they were never or very infrequently exposed to discrimination in their workplace (n=446, 95%).

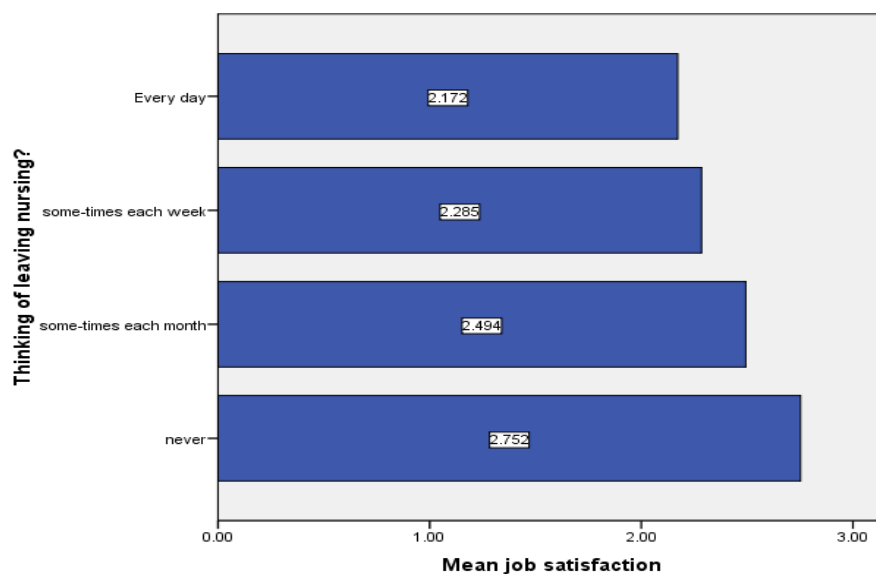
## **5.5 Individual resources**

### **5.5.1 Job satisfaction**

The Cronbach's's alpha for the job satisfaction scale was recorded at 0.74, demonstrating a high level of internal consistency reliability (Cronbach 1951). Overall mean score for job satisfaction for new graduates was computed across the 4 items of the COPSQ (Kristensen 2000) and for new graduates was found to be relatively high with a mean score of 2.59 (*SD* 0.55; *minimum* 1; *maximum* 4; *median* 2.75). A one-way analysis of variance did not find that discipline had an effect on mean job satisfaction but age did demonstrate a small statistical effect (*f* 3.07, *df* 2,465  $\rho = .045$ ) between groups. The mean job satisfaction was higher in the younger 21-40 (*mean* 2.61 *SD* 0.53) and older >41 graduates (*mean* 2.70 *SD* 0.57) than it was in the midrange aged graduates 31-40 (*mean* 2.44 *SD* 0.61). An association was evident between a higher mean satisfaction score and reduced likelihood of leaving the profession (Figure 5.29).

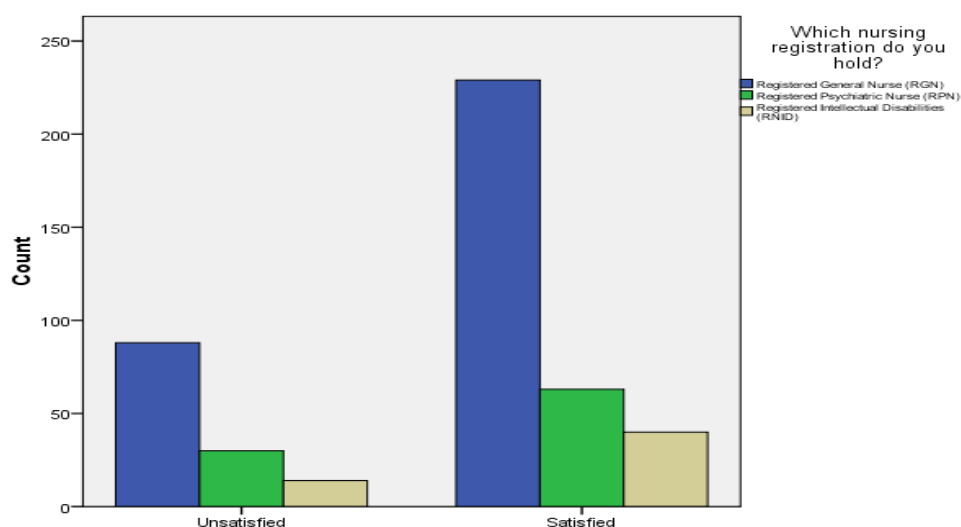


**Figure 5.29. Mean job satisfaction scores/intent leave nursing**



Respondents largely reported satisfaction with their work prospects in comparable proportions across the disciplines (n=332, 72%) and a smaller number overall described themselves as either unsatisfied, or very unsatisfied, with their work prospects (n=168, 28%) (Figure 5.27).

**Figure 5,27 Satisfaction with work prospects per discipline**



Respondents were asked to report their level of satisfaction with their physical work conditions on a 4-point scale and a greater proportion of RPNs and RNIDs reported themselves to be satisfied or

very satisfied, 71% (n=67) and 65% (n=35), respectively, compared with only 44% (n=138) in RGNs. There was a statistically significant difference in the proportion of RGNs who reported dissatisfaction when compared with RPNS and RNIDs (*Chi-square*  $\chi^2$  26.6, 2 *df*,  $p < 0.001$ ). A majority proportion of RGNs reported they were either unsatisfied or very unsatisfied with their physical work conditions (n=179, 57%). Respondents were asked to rate on a 4-point scale their level of satisfaction with the way their abilities are used at work and just under a third reported they were unsatisfied or very unsatisfied (n=148, 32%). However, the majority reported that they were very satisfied or satisfied with use of their abilities in the workplace and the proportions were not statistically different across the groups.

Respondents were asked to rate their satisfaction with psychological support at work and a narrow majority reported they were very unsatisfied or unsatisfied with the psychological support they receive at work (n=243, 53%). However, a large proportion reported that they were very satisfied or satisfied (n=219, 47%) and the proportions were not statistically different across the groups. Respondents were asked to rate their satisfaction with opportunities they have at work to give patients or clients the care they need and, overall, the majority reported they were very unsatisfied or unsatisfied (n=243, 52.9%). However, there was a statistically significant difference in proportions (*Chi-square*  $\chi^2$  8.59, 2 *df*,  $p = 0.014$ ) across the three disciplines with a higher proportion of RGNs (n=175, 56%) and RNIDs (n=32, 60%) than RPNs (n=36, 40%) reporting they were unsatisfied or very unsatisfied with their opportunities to provide the care patients need at work.

**Table 5.27 Satisfaction with opportunities to give care**

Rating	RGN n %	RPN n %	RNID n %	Total n %
Unsatisfied	175 56	36 40	32 60.	243 53
Satisfied	140 44	55 60	21 40	216 47
	315	91	53	459

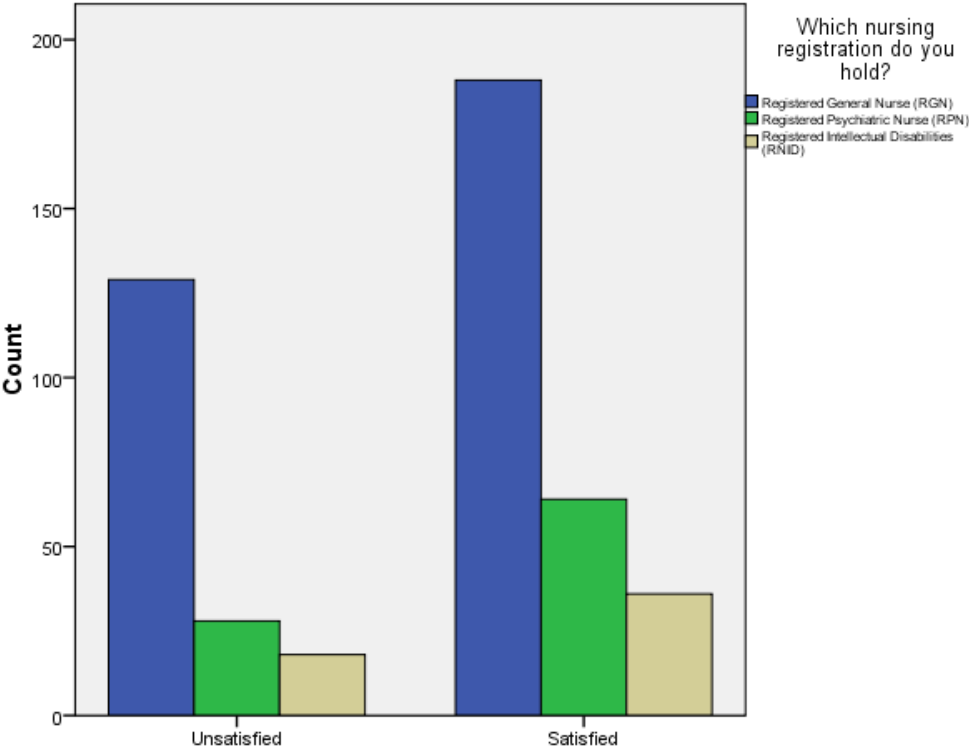
A majority proportion of RGNs reported they were unsatisfied or very unsatisfied with their work conditions (n=179, 57%).

**Table 5.28: Satisfaction with physical work conditions**

Rating	RGN n %	RPN n %	RNID n %	Total n %
Unsatisfied	179 56	27 29	19 35	225 48
Satisfied	138 44	67 71	35 65	240 53
Total	317	94	54	465

A greater number of graduates reported they were satisfied or very satisfied with their job as a whole (n=288, 62%) but a substantial minority described themselves as unsatisfied or very unsatisfied with their job (n=175, 38%) (Figure 28). There was no difference in the proportion of overall satisfaction ratings among the three disciplines. Job satisfaction was found to be negatively associated with intent to change current job (*Wald ratio*  $\chi^2$  52.65, *df* 1,  $\rho$  <.001) and with intent to leave the profession (*Wald ratio*  $\chi^2$  18.05, *df* 1,  $\rho$  <.001), which suggests that those graduates who scored lower on job satisfaction were more likely to consider leaving their job or taking a indefinite break/ leaving nursing (Table 5.29).

**Figure 5.28. Overall job satisfaction per discipline**

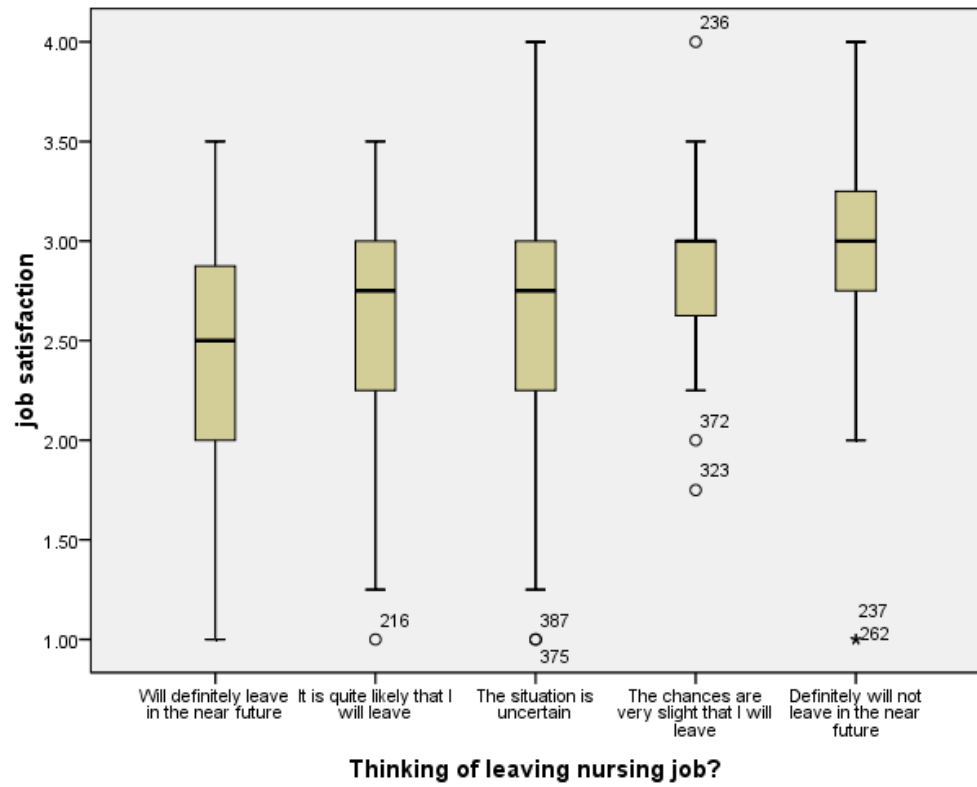


**Table 5.29 Relationship between job satisfaction and career expectations**

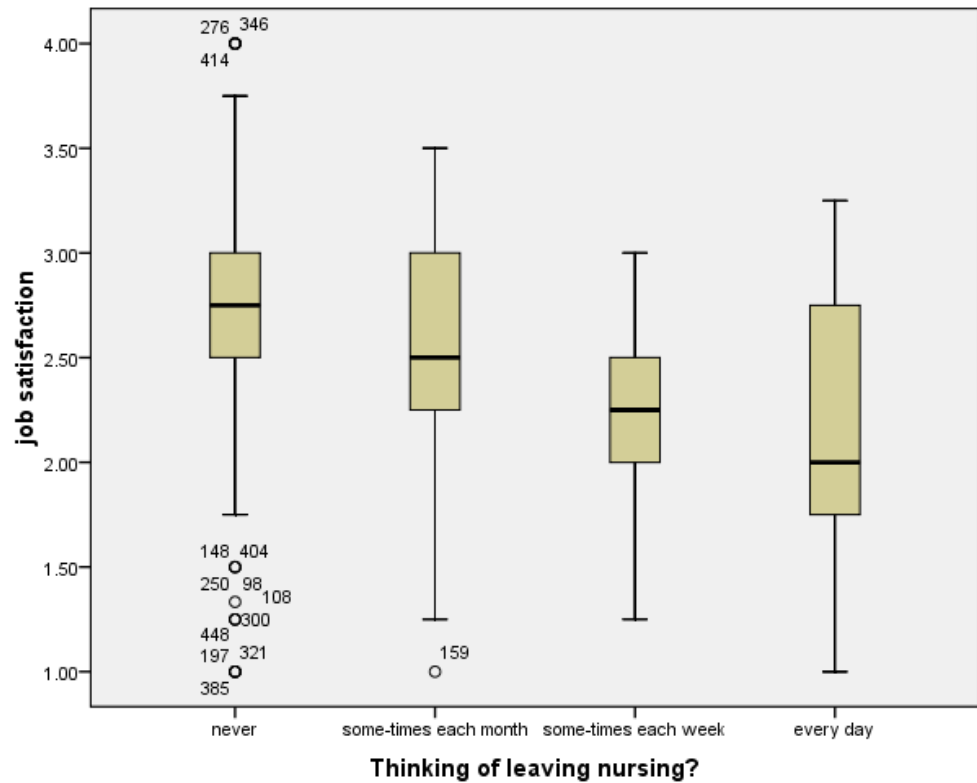
Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.512	.188	7.4	1	.000	.143	.881
Intent to leave nursing	-.790	.186	18.059	1	.000	-1.154	-.426

The box plots in figure 5.29 & 5.30 illustrate a positive relationship between a higher job satisfaction score and reduced likelihood that the new graduate will change job or consider giving up nursing.

**Figure 5.29 Job satisfaction and intent to change job within nursing**



**Figure 5.30. Job satisfaction and intent to leave nursing**



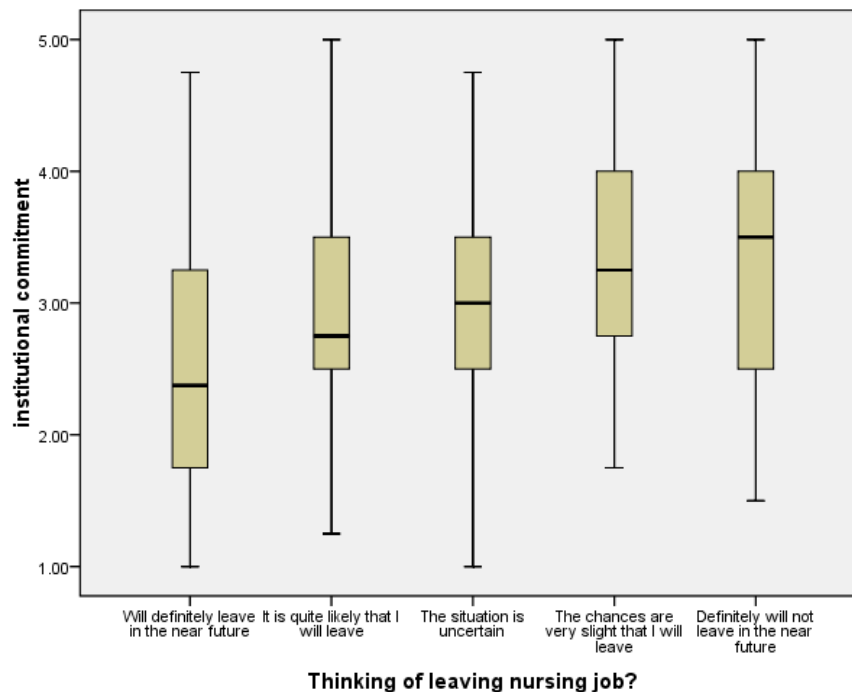
### 5.5.2 Institutional commitment

The Cronbach's's alpha for the 4-item institutional commitment scale was 0.77, demonstrating a high level of internal consistency reliability (Cronbach 1951). The mean score (3.86 *SD* 0.88) for institutional commitment in new graduates was relatively high (*minimum* 1; *maximum*, 5; *median* 2.33). A one-way analysis of variance conducted to explore the impact of college attended detected a statistical difference in the institutional commitment mean scores per college attended ( $f$  2.474,  $df$  12,464  $\rho$  =.004). No significant differences were found between other groups in relation to institutional commitment. The majority of graduate nurses describe the following statements as either partially or totally accurate: that they feel like they belong to the institution (69%,  $n=326$ ); the institution has personal meaning for them (54%,  $n=251$ ); they are proud to belong to the institution (72%,  $n=337$ ). When asked if they did feel like part of the family of the institution the majority agreed (69%,  $n=272$ ). There was a positive relationship between reduced likelihood of changing nursing job and institutional commitment (*Wald ratio*  $\chi^2$  63.85,  $df$  1,  $\rho$  <.001). This is illustrated in the box plot capturing the relationship between intent to change nursing job and institutional commitment. A very weak relationship (Figure 5.32) was found between institutional commitment and career intention over next five years (*Wald ratio*  $\chi^2$  5.80,  $df$  1,  $\rho$  =.016). A negative relationship between institutional commitment and intent to stay is demonstrated, implying that those with higher scores on institutional commitment are more likely to never or infrequently think about giving up nursing completely (*Wald ratio*  $\chi^2$  42.85,  $df$  1,  $\rho$  <.001) (Table 5.30 & Figures 5.31, & 5.32).

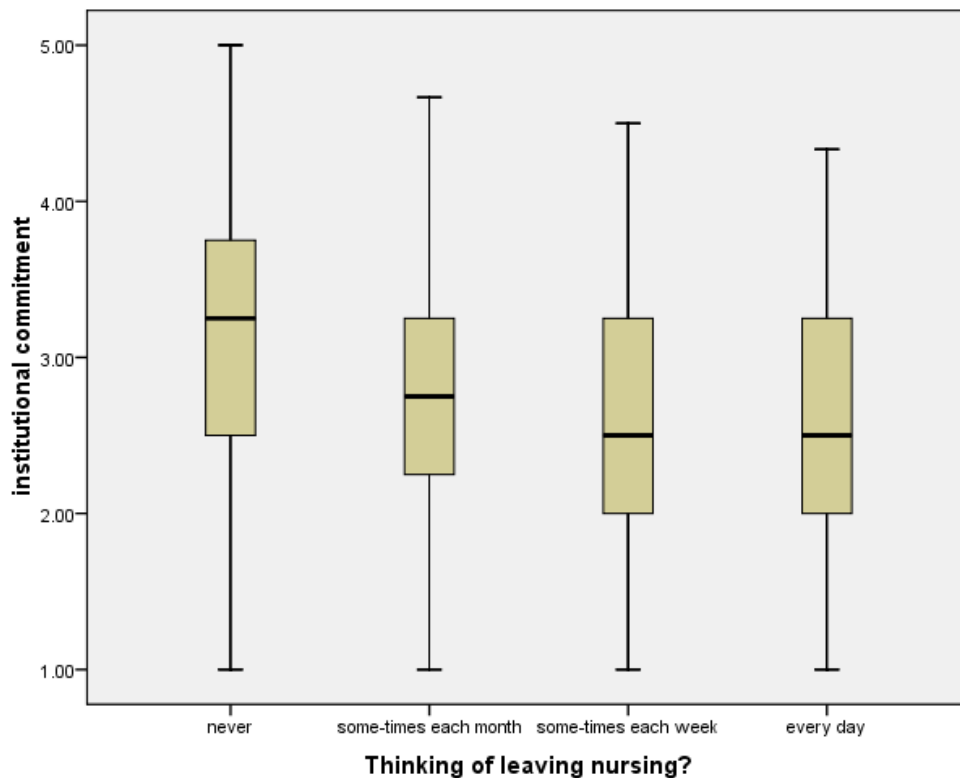
**Table 5.30 Relationship between institutional commitment and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.700	.088	63.850	1	.000	.528	.872
Career intention over next five years	-.214	.089	5.798	1	.016	-.388	-.040
Intent to leave nursing	-.672	.098	46.625	1	.000	-.864	-.479

**Figure 5.31 Institutional commitment and intent to change job within nursing**



**Figure 5.32 Institutional commitment and intent to leave nursing**

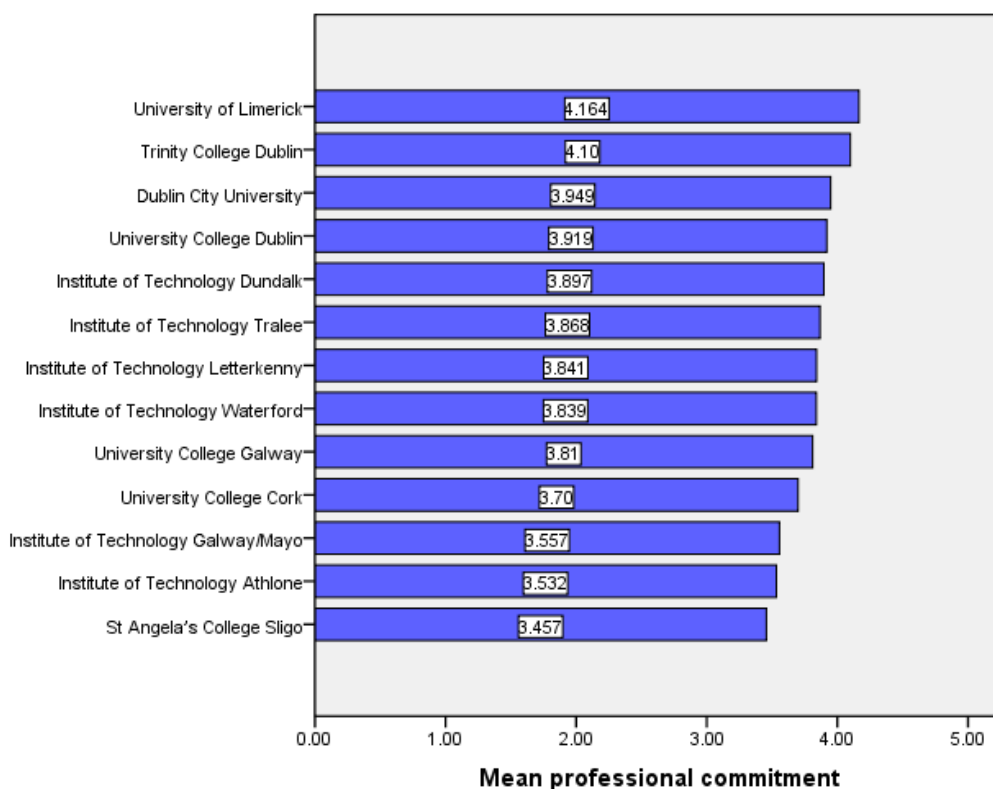


### 5.5.3 Professional commitment

The mean score for professional commitment of new graduates was relatively high at 3.86 (*SD* 0.80; *minimum* 1, *maximum* 5; *median* 4.00). The Cronbach's alpha for the scale was 0.85 demonstrating a high level of internal consistency reliability (Cronbach 1951). A one-way analysis of variance was conducted to explore the impact of third level college attended on levels of professional commitment. There was a statistically significant difference between the third level organisations ( $f$  2.38,  $df$  12,455  $p$  =.006). The means are illustrated in Figure 5.33 and show that the professional commitment scores of graduates from St. Angela's College, Sligo is the lowest at 3.46 (*SD* 0.97) and highest are from University of Limerick (*mean* 4.16 *SD* 0.65).

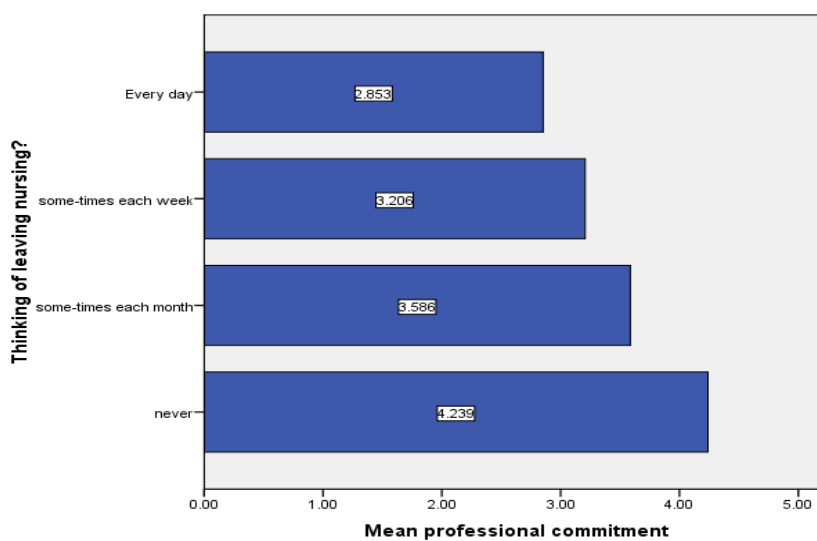


**Figure 5.33 Mean professional commitment score per third level institution**



There is also some association between intent to leave and a lower mean score for professional commitment (Figure 5.34)

**Figure 5.34. Mean professional commitment per intention to leave nursing**



The majority of graduate nurses describe the following statements as either partially or totally accurate; that they feel like they belong to the profession (67%,  $n=314$ ); the nursing profession has personal meaning for them (73%,  $n=340$ ); they are proud to belong to the profession (78%,  $n=361$ ). The majority of graduates agreed they were part of the family of the institution (81%,  $n=382$ ). Professional commitment was found to be highly statistically significant in predicting the career intention of new graduates on the three criteria: intent to change job within profession; career intention over next five years and intent to leave nursing (Table 5.31).

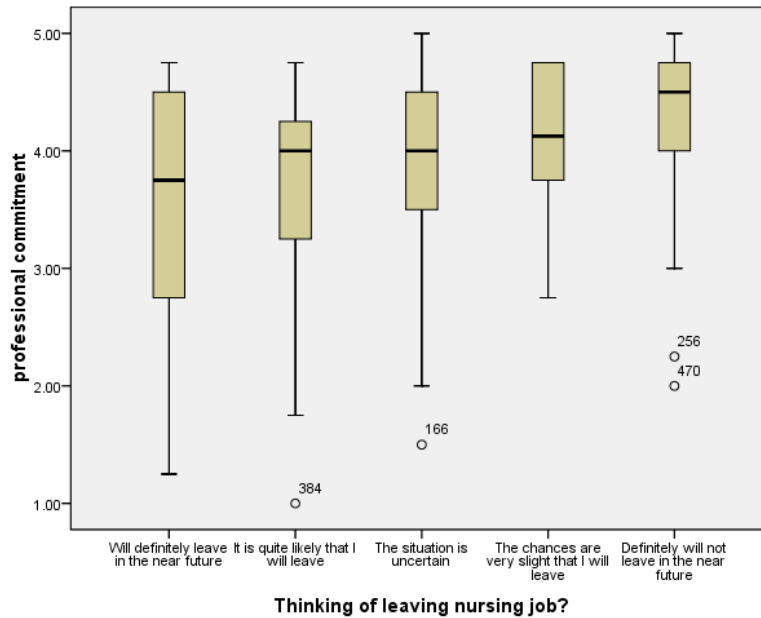
**Table 5.31 Relationship of professional commitment to career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.654	.110	35.274	1	.000	.438	.870
Career intention over next five years	-.666	.117	32.356	1	.000	-.896	-.437
Intent to leave nursing	-1.459	.132	122.351	1	.000	-1.717	-1.200

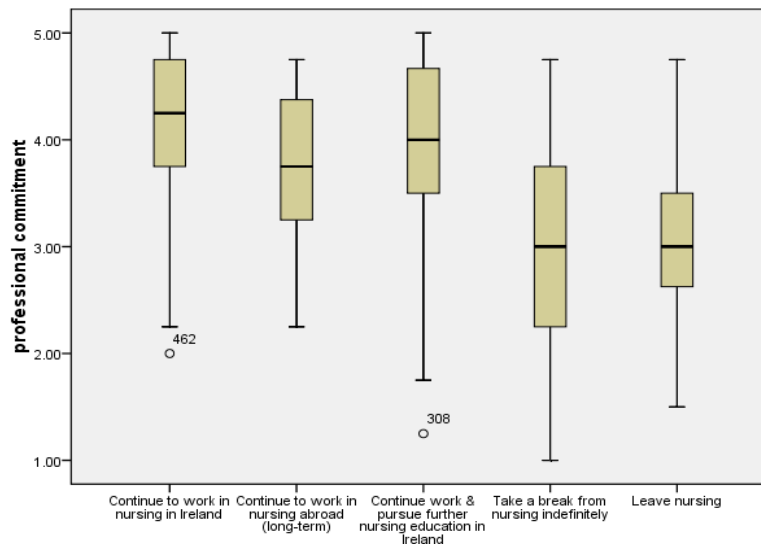
A statistically significant relationship was found between the intention of new graduates and intent to change job within the profession (*Wald ratio*  $\chi^2$  35.27, *df* 1,  $\rho < .001$ ). Those graduates who scored higher on professional commitment were more likely to stay in their current nursing job. Those who were more professionally committed were less likely to be thinking of taking a break or leaving nursing in the next five years (*Wald ratio*  $\chi^2$  32.56, *df* 1,  $\rho < .001$ ). A negative relationship between professional commitment and intent to stay was found, implying that those with

higher scores on professional commitment are more likely to never or infrequently think about giving up nursing completely (*Wald ratio*  $\chi^2 122.35, df 1, p < .001$ ) (Figures 5.35, 5.36, & 5.37).

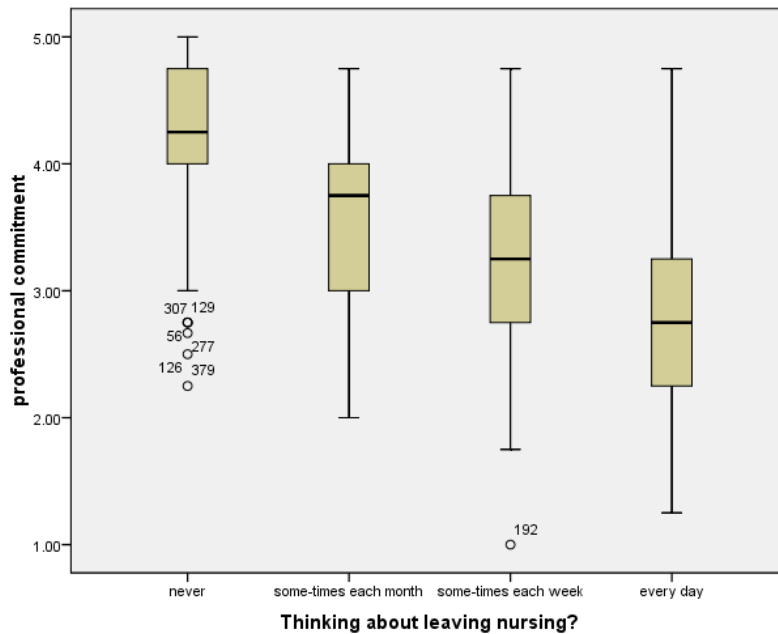
**Figure 5.35. Professional commitment and intent to change job within nursing**



**Figure 5.36 Professional commitment and career intentions for next 5 years**



**Figure 5.37. Professional commitment and intent to leave nursing**



### 5.5.4 Over commitment

Over commitment was evaluated using a 6-item (Siegrist 1996) scale, which had a Cronbach’s alpha of 0.80 indicating a high level of internal consistency reliability (Cronbach 1951) and sought to examine how participants react to the pressures of work. The mean score for over-commitment across all participants was 14.39 (*SD* 3.64 *minimum* 6.00; *maximum* 24.00; *median* 14.00). An independent samples t-test found that gender had an effect on over-commitment ( $t$  2.17 *df* 461,  $\rho$  =.030). Females (*mean* 14.49, *SD* 3.62) had higher scores than males (*mean* 13.09 *SD* 3.70). A one-way analysis of variance found discipline to be statistically significant ( $f$  32.42, *df* 2,461  $\rho$  <.001). Post-hoc analysis found a statistical difference between the three disciplines with the lowest levels in RPNs (*mean* 12 *SD* 3.25), higher levels in RNIDs (*mean* 13.85, *SD* ) and highest in RGNs (*mean* 15.19, *SD* 3.49). Only a minority of those working in psychiatry but a significant proportion

of those working in general nursing (n=177, 55%) and intellectual disability (n=26, 46%) reported they agreed or strongly agreed that they are easily overwhelmed by time pressure at work (Chi-square  $\chi^2$  25.89, *df* 2,  $\rho < .001$ ). A larger proportion of general nursing graduates (n=134, 42%) agreed or strongly agreed that they find they think about work problems in the morning compared to relatively smaller proportions in psychiatry (n=15, 16%) or intellectual disability (n=17, 30%) (Chi-square  $\chi^2$  21.70, *df* 2,  $\rho < .001$ ). Fifty-two percent of graduates in general nursing (n= 166) reported they agreed or strongly agreed that work rarely lets them go and is still on their mind when they go to bed compared to smaller proportions in psychiatric (n=26, 28%) and intellectual disability nursing (n=22, 39%) (Chi-square  $\chi^2$  18.17, *df* 2,  $\rho < .001$ ). The proportion who agreed or strongly agreed that others close to them have told them they sacrifice too much for their job was significantly smaller in psychiatry (n=22, 23%) than in either general (n=124, 39%) or intellectual disability (n=25, 45%) (Chi-square  $\chi^2$  9.20, *df* 2,  $\rho = .010$ ). A greater proportion of general graduate nurses reported that they have difficulty in postponing something they were supposed to do today (n= 177, 55%) than in either psychiatry (n=23, 25%) or in intellectual disability (n=22, 40%) (Chi-square  $\chi^2$  29.74, *df* 2,  $\rho < .001$ ). A majority of graduates (n=245, 52%) did agree or strongly agree that they can relax and switch off at night but again differences were evident between the professions. A greater proportion of those working in general nursing (n=183, 57%) disagreed or strongly disagreed that they can easily relax when they get home from work than those working in psychiatry (n=36, 38%) and intellectual disability (n=26, 46%) (Chi-square  $\chi^2$  10.99, *df* 2,  $\rho < .001$ ).

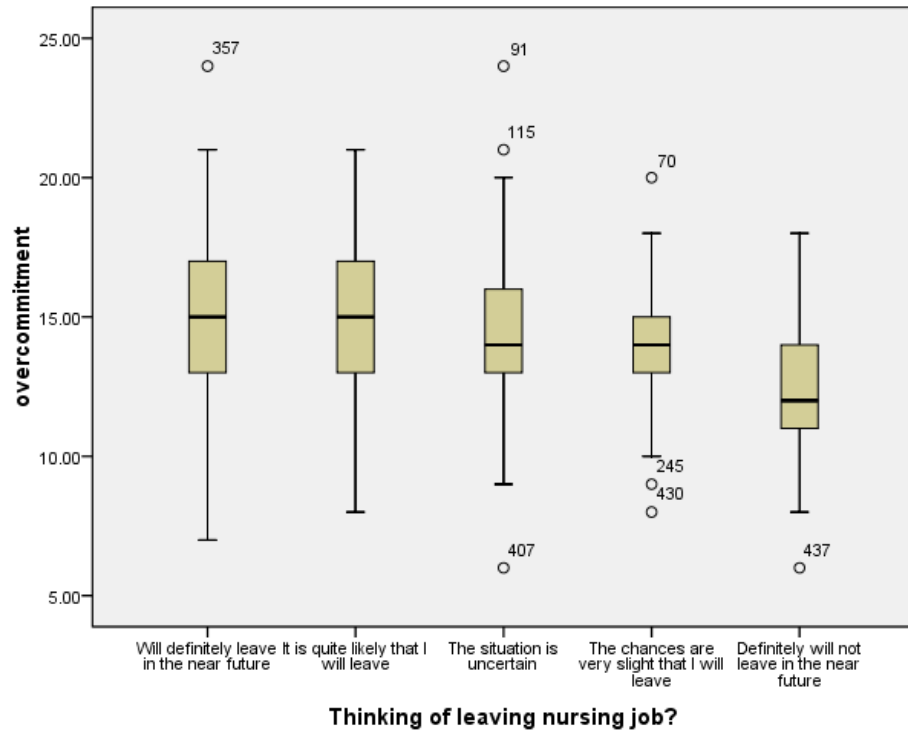
A positive relationship between over commitment and intent to stay was found, implying that those with lower scores on over-commitment are less likely to think about giving up nursing completely (*Wald ratio*  $\chi^2$  34.03, *df* 1,  $\rho < .001$ ). A weak relationship

was found between over-commitment and career intention over the next five years (*Wald ratio*  $\chi^2$  8.74, *df* 1,  $\rho$  =.003) implying there may be a relationship between higher over commitment scores and thinking about taking an indefinite break or leaving nursing. There was a negative but weak relationship between increased likelihood of changing nursing job and over-commitment (*Wald ratio*  $\chi^2$  24.45, *df* 1,  $\rho$  <.001). These relationships are illustrated in the box plots capturing the relationship between career expectations and over commitment (Figures 5.38 & 5.39).

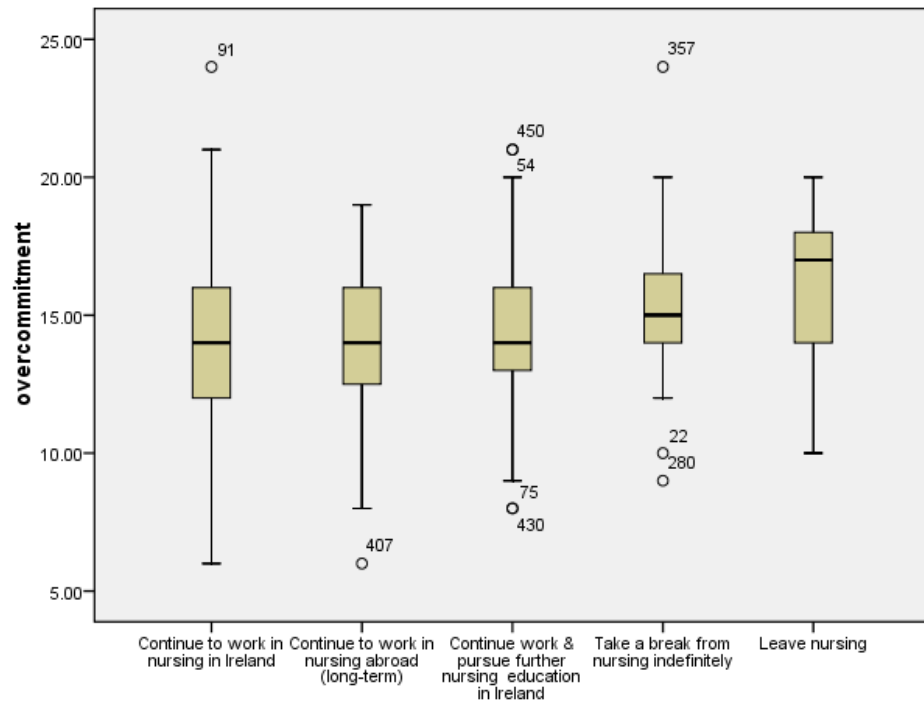
**Table 5.32 Relationship between over commitment and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	-.120	.024	25.657	1	.000	-.166	-.074
Career intention over next five years	.073	.025	8.728	1	.003	3.282	4.995
Intent to leave nursing	.153	.026	33.778	1	.000	.101	.204

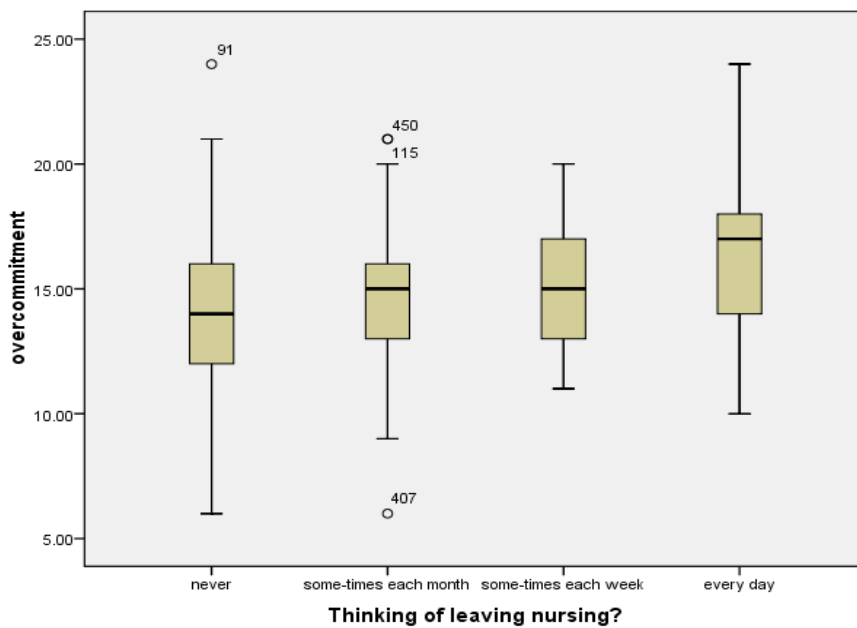
**Figure 5.38 Over-commitment and intent to change job within nursing**



**Figures 5.39 Over-commitment and career intention over next five years**



**Figure 5.40 Over-commitment and intent to leave nursing**



### 5.5.5 Positive affectivity

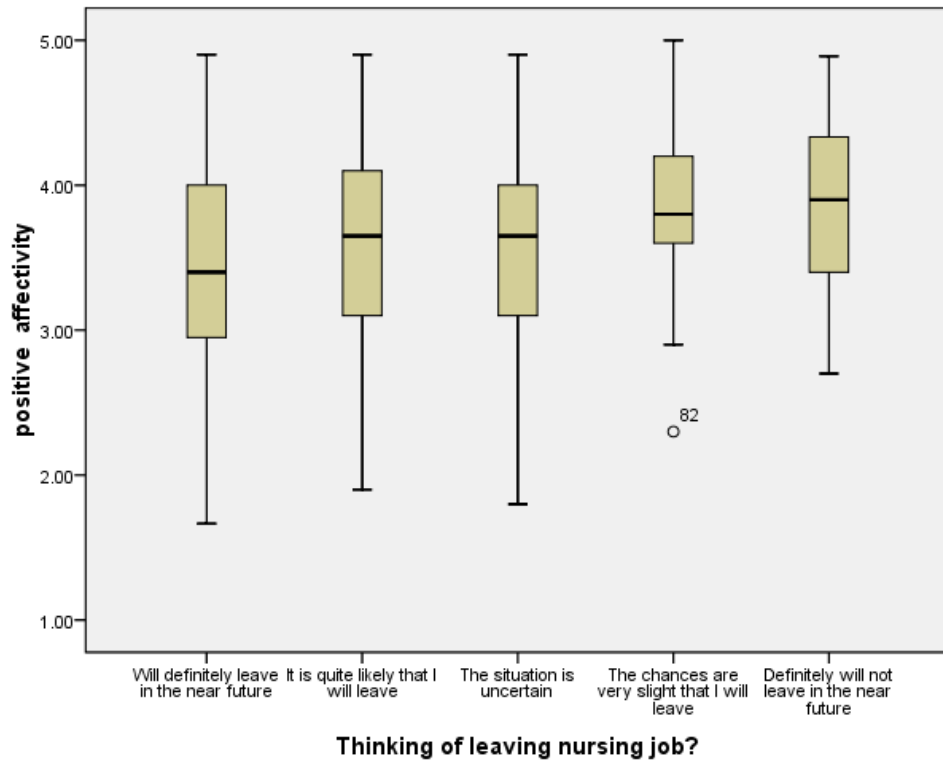
The Cronbach's alpha for positive affectivity scale was 0.88 demonstrating a high level of internal consistency reliability (Cronbach 1951) and the mean score for all participants was relatively high at 3.58 (*SD 0.67 minimum 1.67; maximum 5.00; median 3.70*). The scale was found to be positively associated with reduced likelihood of changing nursing job (*Wald ratio  $\chi^2 19.88, df 1, \rho < .001$* ) and increased likelihood of staying within the profession (*Wald ratio  $\chi^2 56.31, df 1, \rho < .001$* ) (Table 5.33 and Figures 5.41 & 5.42)

**Table 5.33 Relationship of positive affectivity to career expectations**

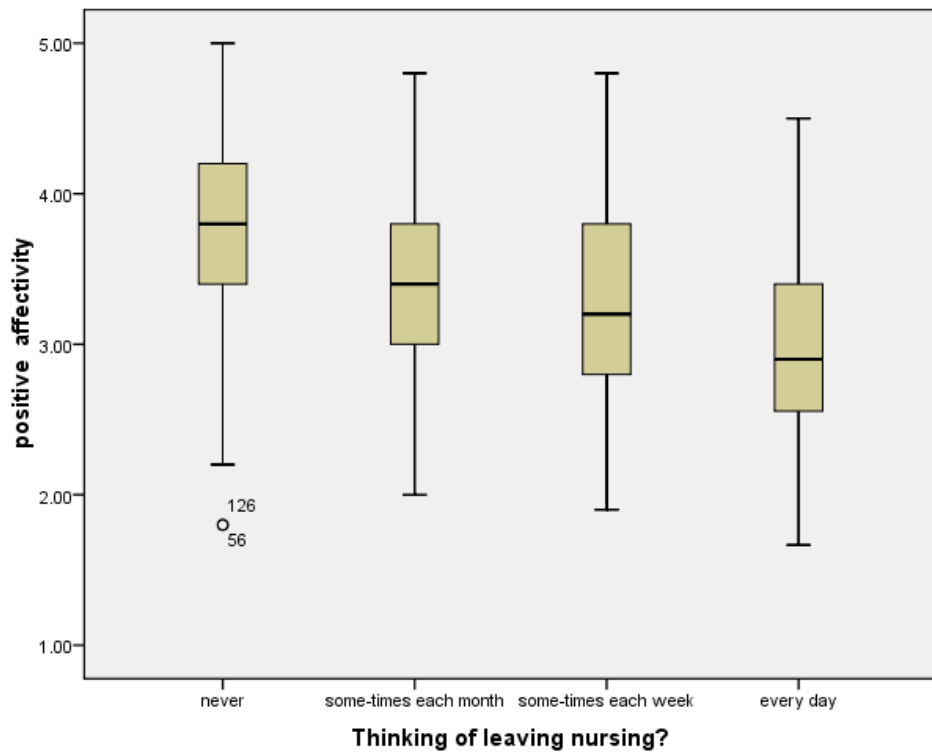
Response	Estimate	Std. Error	Wald	df	Sig.	95% CI	
						Upper	lower
Intent to change nursing job	.567	.127	19.878	1	.000	.318	.817
Intent to leave nursing	-1.095	.146	56.310	1	.000	-1.381	-.809



**Figure 5.41 Positive affectivity and intent to change job within nursing**



**Figure 5.42 Positive affectivity and intent to leave nursing**



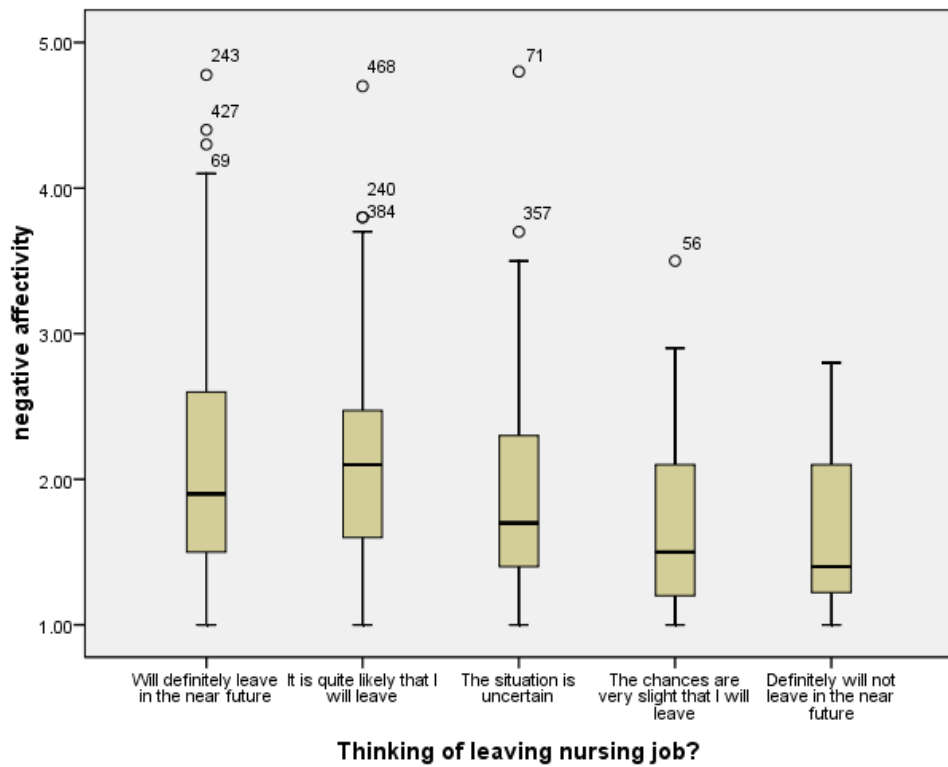
### 5.5.6 Negative affectivity

The Cronbach's's alpha for the negative affectivity scale was 0.88 demonstrating a high level of internal consistency reliability (Cronbach 1951) and the mean score for all participants was relatively low at 1.97 (*SD 0.78 minimum 1.00; maximum 5.00; median 1.80*). A relationship was found between higher negativity scores and increased likelihood of changing nursing job (*Wald ratio  $\chi^2$  27.21, df 1,  $\rho <.001$* ). A weak relationship was detected between higher negativity scores and increased likelihood of taking a break from or leaving nursing (*Wald ratio  $\chi^2$  13.71, df 1,  $\rho <.001$* ). Higher negativity scores were found to be related to increased frequency of thoughts of leaving nursing (*Wald ratio  $\chi^2$  36.70, df 1,  $\rho <.001$* ). Figure 5.46 demonstrates the association between mean negativity score and expression of intent to leave nursing.

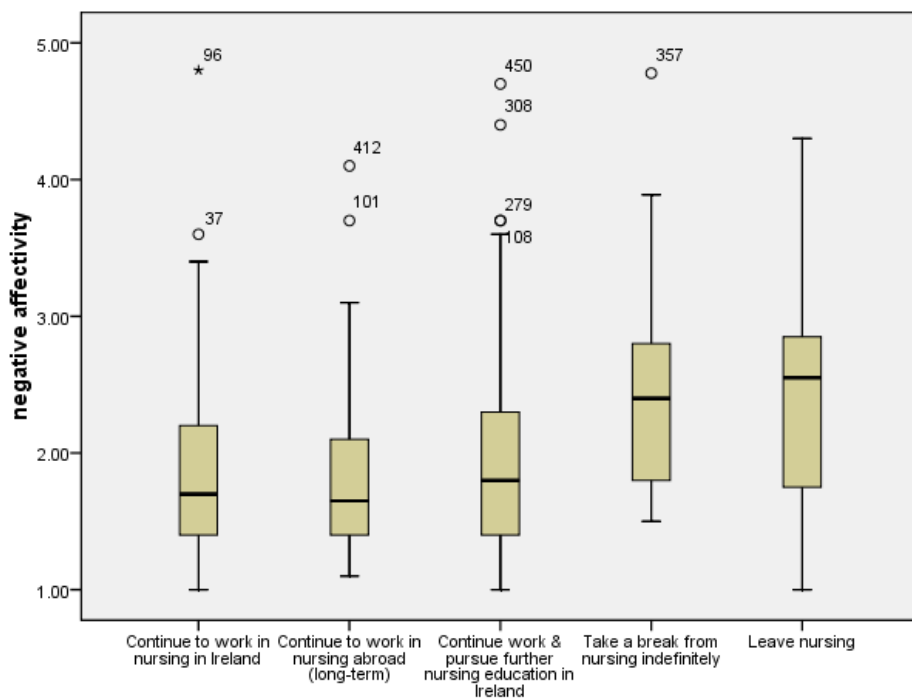
**Table 5.34 Relationship between negativity score and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	-.646	.124	27.206	1	.000	-.889	-.403
Career intent over next 5 years	.480	.130	13.711	1	.000	.226	.734
Intent to leave nursing	.775	.128	36.704	1	.000	.524	1.025

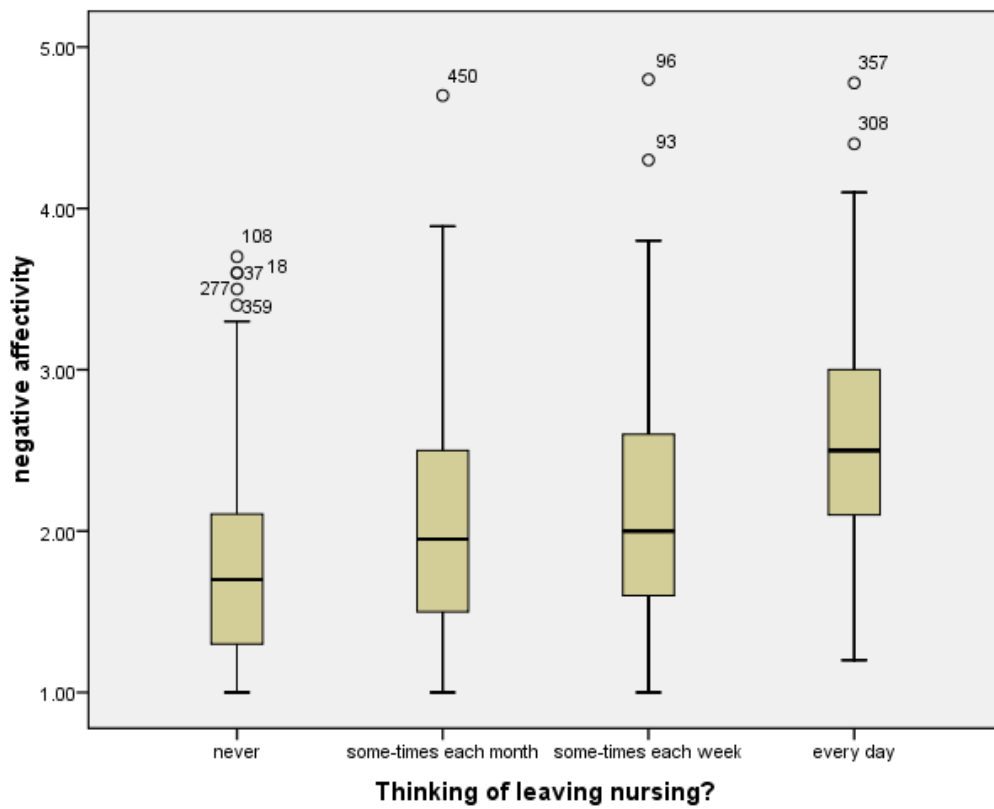
**Figure 5.43. Negative affectivity and intent to change job within nursing**



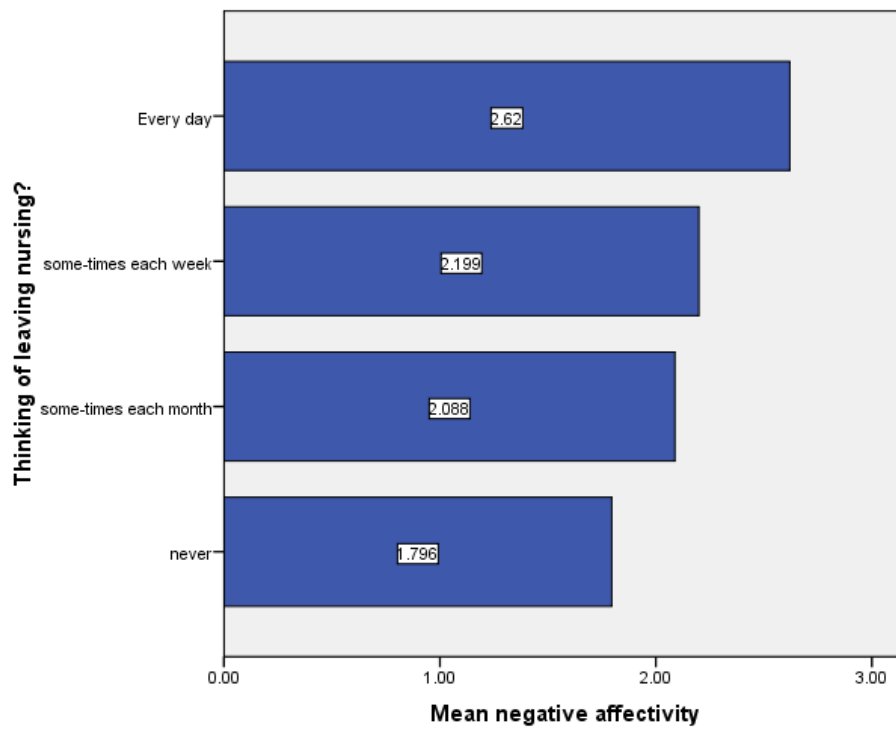
**Figure 5.44. Negative affectivity and career intention for next five years**



**Figure 5.45. Negative affectivity and intent to leave**



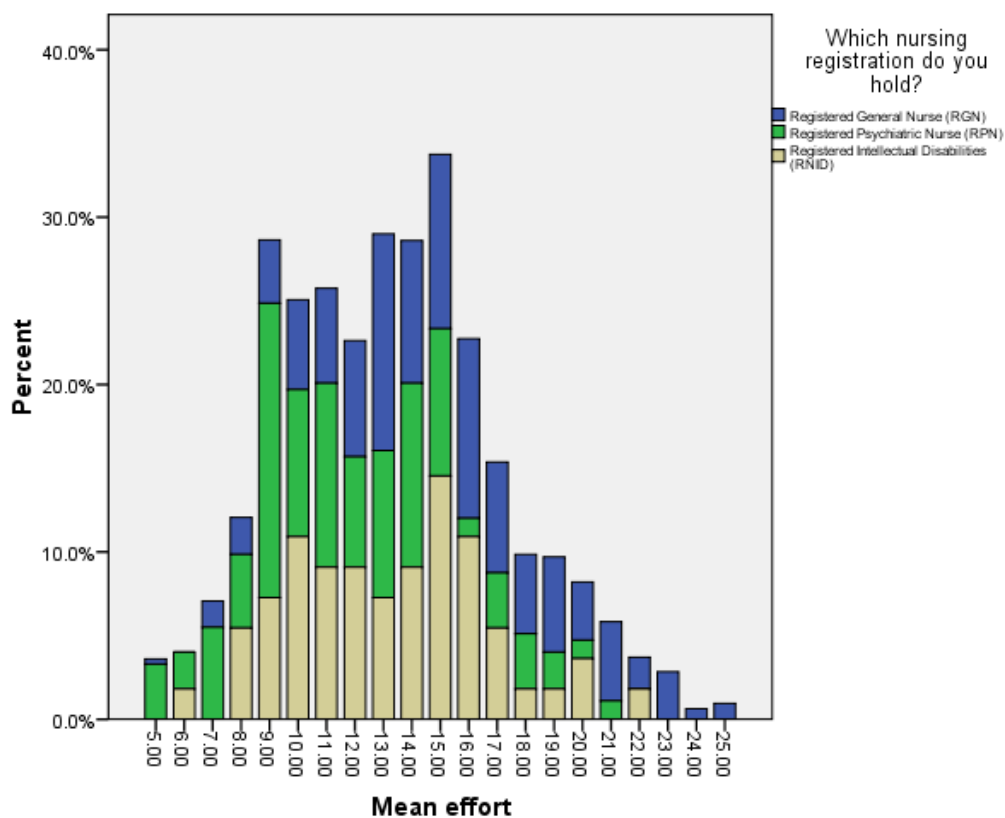
**Figure 5.46 Mean score for negative affectivity per intent to leave**



### 5.5.7 Effort & reward at work

The Effort Reward Instrument (ERI) instrument (Siegrist 1996) is designed to evaluate the appropriate balance between the effort required of a nurse and the reward they receive at work (Hasselhorn et al 2006). The Cronbach's alpha for the 5-item effort part of the effort reward scale was 0.54, demonstrating a moderate level of reliability (Cronbach 1951). The Cronbach's alpha for the 11-item reward part of the effort reward scale was 0.73, which shows demonstrating a high level of internal consistency reliability (Cronbach 1951). These findings were similar to those reported in the NEXT study (Section 4.7) The effort reward ratio was calculated by finding the ratio between the two and multiplying by a correction factor (0.4545) for the different number of items in the two parts of the scale (Siegrist 2009). The mean effort score across all disciplines was 14.14 (*SD 4.05 minimum 5.00; maximum 25.00; median 14.00*).

**Figure 5.47 Mean effort score per discipline**



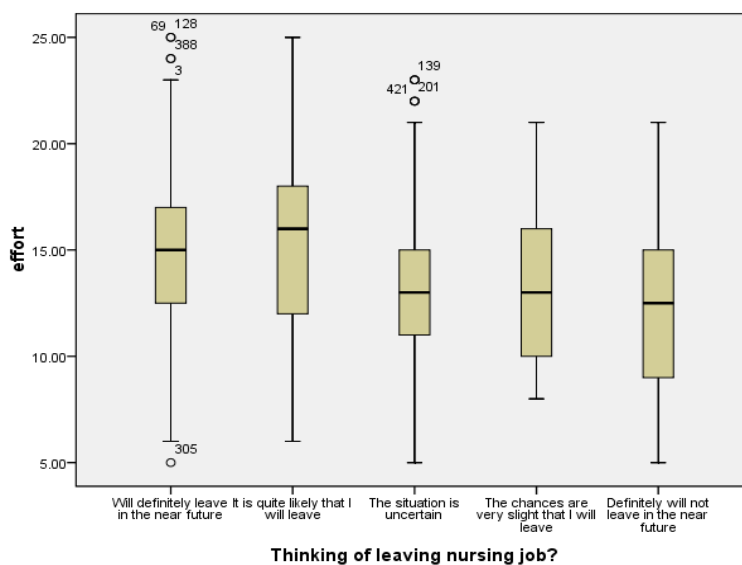
The majority of graduates reported that they were under constant time pressure at work (n=340, 72%) and of those 39% (n=186) reported it did not or only moderately distressed them. However, a significant number of that group did report that constant time pressure at work distressed them considerably or very much (n=154, 45%). Differences were evident across the disciplines. (*Chi square*  $\chi^2$  61.73, *df* 1,  $\rho < .001$ ). A larger percentage of general graduates experience constant time pressure (n=264, 82%) than their colleagues in psychiatry (n=39, 41 %) and intellectual disability (n=36, 64%). The majority of graduates also reported that they have many interruptions and disturbances in their work (n=415, 88%) and for the majority of those this was not, or was only a moderate, source of distress for them (n=271, 65%). A significant proportion did report that interruptions and disturbances in their work distressed them considerably or very much (n=144, 30%). No significant differences were evident among the three disciplines.

Nearly all graduates reported that they have a lot of responsibility (n= 451, 95%) and the majority of those are not, or are only moderately, distressed by this (n=193, 65%). A minority of those who felt they have a lot of responsibility believed it distresses them considerably or very much (n=155, 35%). Some small differences were noted between the disciplines (*Chi square*  $\chi^2$  8.53, *df* 1,  $\rho < .001$ ) as a slightly smaller proportion of those working in psychiatry (n=84, 90%) feel their job entails a great deal of responsibility than the proportions in general (n=311, 97%) and intellectual disability (n=55, 98%). The majority of graduates are not pressured to work overtime (n=262, 56%). Of those who are pressured, the majority of them are not, or are only moderately, distressed by this (n=151, 73%). A slightly larger proportion of those working in psychiatry (n=52, 56.5%) are pressured to work overtime than those in general (n=130, 40.5%) and intellectual

disability (n=24, 43.6%), but these differences were not significant (*Chi square*  $\chi^2 7.54$ , *df* 1,  $\rho = .024$ ).

The majority of graduates did report that their job is physically demanding (n=412, 88%) and significant differences were found between the disciplines in this regard (*Chi square*  $\chi^2 59.22$ , *df* 1,  $\rho < .001$ ). A higher percentage of those working in general (n=303, 94%) and intellectual disability (n=48, 88%) than those working in psychiatry (n=60, 65%) report their job as physically demanding. Of those graduates who find the job physically demanding the majority do report this does not or only moderately distresses them (n=158, 63%). A substantial minority of graduates report that they find the physical demands of the job distress them considerably or very much (n=152, 37%). A very weak relationship was detected between higher mean score on effort at work and increased likelihood of changing nursing job (*Wald ratio*  $\chi^2 5.70$  *df* 1,  $\rho = .017$ ). Higher effort mean scores were found to be related to increased frequency of thoughts of leaving nursing (*Wald ratio*  $\chi^2 17.18$ , *df* 1,  $\rho < .001$ ).

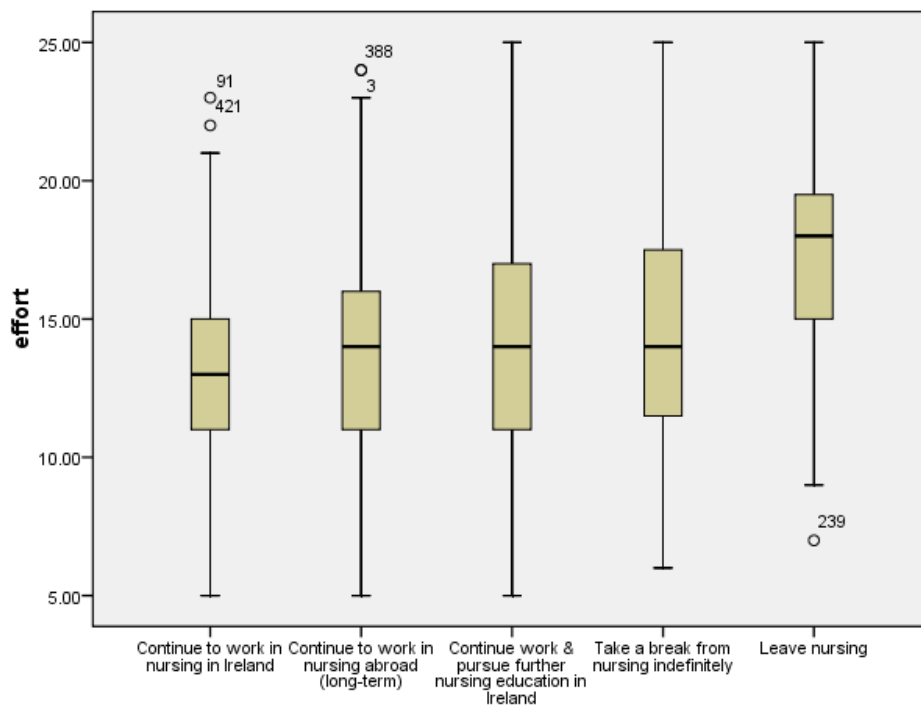
**Figure 5.48 Effort at work and intent to change job within nursing**



**Table 5.35 Relationship between effort at work and career expectations**

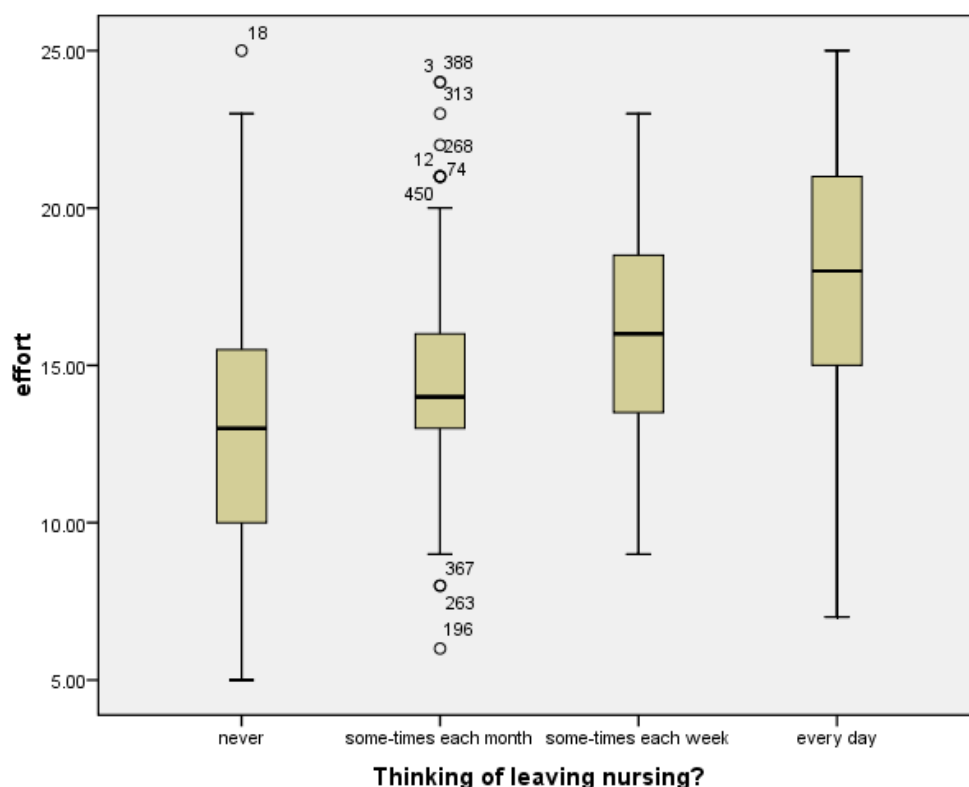
Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	-.085	.021	16.105	1	.000	-.126	-.043
Career intentions for next 5 years	.076	.023	11.401	1	.001	.032	.121
Intent to leave nursing	.144	.023	37.795	1	.000	.098	.190

**Figure 5.49 Effort at work and career intent for next 5 years**





**Figure 5.50 Effort at work and intent to leave nursing**



### 5.5.8 Reward at work scale

The mean score of the reward at work across all disciplines was 21.39 (*SD 0.24 minimum 11.00; maximum 55.00; median 19.00*). A reasonably high percentage of graduates ( $n=262$ , 56%) believe they receive the respect they deserve from their superiors at work and no significant difference was noted between the disciplines. However 44% ( $n=206$ ) of graduates believe they do not receive the respect they deserve and for a small minority of those this distresses them considerably or very much ( $n=76$ , 37%). The large majority of graduates believe they receive the respect they deserve from their colleagues ( $n=376$ , 80%) and no significant differences were found between the disciplines. Of the small proportion who do not receive the respect they deserve from colleagues a small number report that it distresses them considerably or very much ( $n=34$ , 7%). A higher percentage of graduates believe they receive adequate support at work in difficult situations ( $n=330$ , 70%) and no significant difference was found between the disciplines. Of those

participants who do not receive adequate support (n= 139, 30%), a significant number report that it distresses them considerably or very much (n=68, 49%). The majority of participants reported they were not treated unfairly at work (n=383, 81%). Of those who believe they are treated unfairly, a large minority (n=38, 45%) find it distresses them considerably or very much.

A narrow majority disagreed when asked if their job promotion prospects are poor (n=237, 50%) and no differences were found between the disciplines. Of those who believe their job promotion prospects are poor, the majority of those were only moderately or not all distressed by the fact (n=137, 60%). A majority reported they have not experienced or do not expect to experience an undesirable change in their work situations (n=289, 62%) and no differences were detected across disciplines. Of those who reported they have experienced or will experience an undesirable change, the majority believed it does not or only moderately distresses them (n=82, 57%). A majority of graduates (n=288, 61%) do not believe their job security is poor although some differences were noted in the proportions across the professions (*Chi square*  $\chi^2 14.01$ , *df* 2,  $p <.001$ ). A somewhat higher percentage of graduates in general nursing (n=179, 38%) report that they believe their job security is poor than their counterparts in psychiatry (n=27, 29%) or intellectual disability (n=12, 22%). Of those who believe their job security to be poor (n=179, 38%) a significant proportion do report that this distresses them considerably or very much (n=103, 58%).

Over two-thirds of graduates (n= 330, 70%) believe their current occupational position reflects their education and training and no differences were detected between disciplines. Of those who believe their positions do not reflect their training (n=138, 29%), the majority are only moderately or are not distressed by this (n=78, 57%). Over half the graduates believe they receive the respect and prestige they deserve considering all their efforts and achievements (n=264, 56%) and no differences were detected between

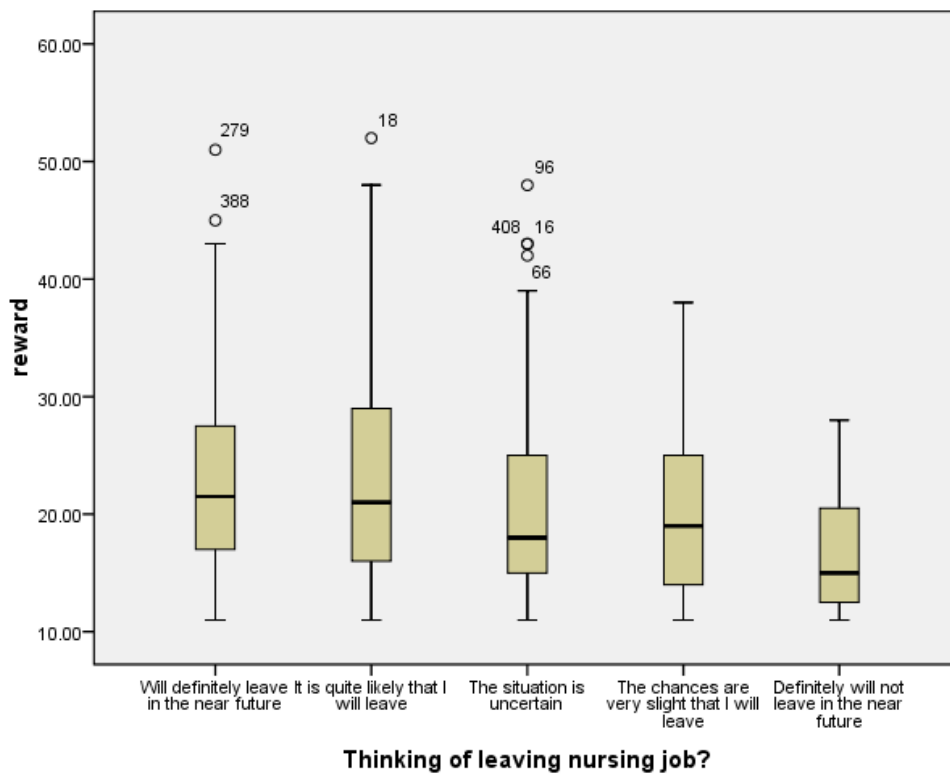
disciplines. Of those who believe they do not receive the respect they deserve (n=203, 44%), the majority (n=128, 63%) report they are not or are only moderately distressed by this. Close to two-thirds of graduates (n=307, 66%) believe their work prospects are adequate given their efforts and achievements and no significant differences were detected between the different disciplines. Among those who believe their work prospects are not adequate (n=160, 34%), a larger proportion report they are not or are only moderately distressed by this (n=91, 57%). The majority of graduates do not believe their salary is adequate given all their efforts and achievements (n=303, 64%) with some differences detected between disciplines (*Chi square*  $\chi^2 7.01$ , *df* 2,  $\rho < .001$ ). A somewhat larger proportion of those working in general (n=219, 68%) and in intellectual disability (n=33, 60%) believe their salary is inadequate than those working in psychiatry (n=50, 54%). Of those who believe it is inadequate the majority (n=176, 59%) report the inadequacy in their salary distresses them considerably or very much.

The relationship between reward at work and career expectations, indicated a relationship between higher score on reward and increased likelihood of changing job (Wald ratio  $\chi^2 22.55$ , *df* 1  $\rho < .001$ ). The career intention at work was also found to have a weak positive relationship with increased likelihood of thinking about taking an indefinite break or leaving nursing in the five years. A positive relationship was evident between higher reward at work score and increased frequency of thoughts of leaving the profession (Wald ratio  $\chi^2 119.74$ , *df* 1  $\rho < .001$ ) (Table 5.36 and Figures 5.51, 5.52, & 5.53).

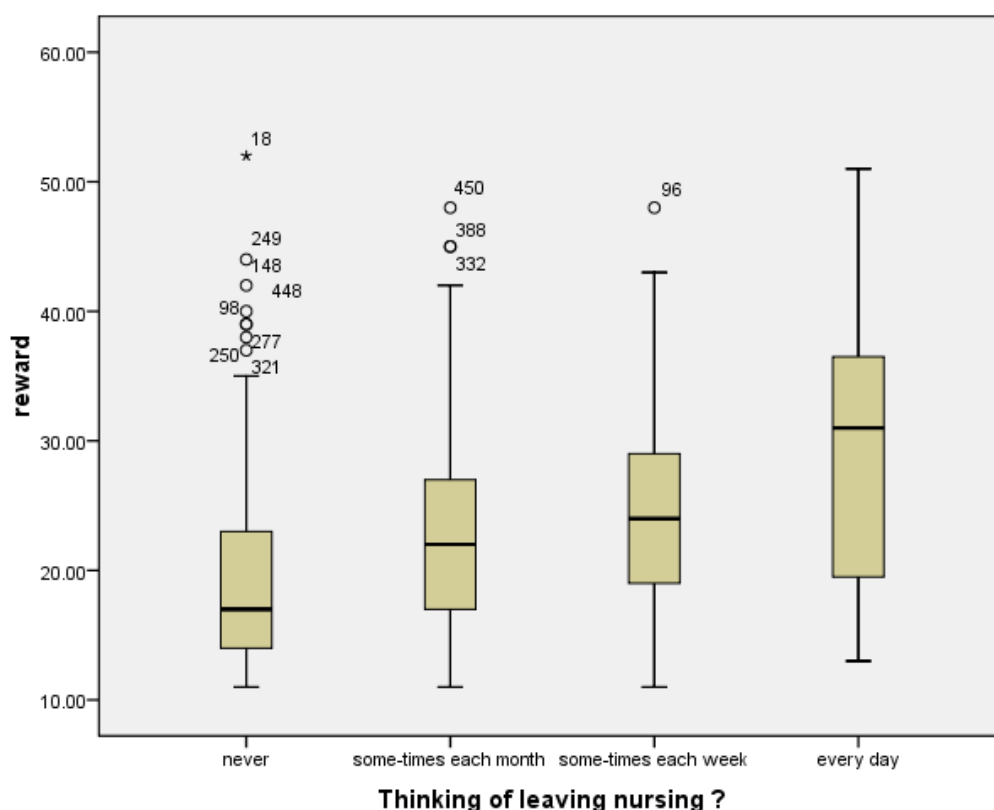
**Table 5.36. Reward at work scale and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	-1.677	.353	22.555	1	.000	-2.369	-.985
Career intention over next five years	1.088	.367	8.764	1	.003	.368	1.808
Intent to leave nursing	4.168	.381	119.738	1	.000	3.421	4.914

**Figure 5.51 Reward at work and intent to change job within nursing**



**Figure 5.52 Reward at work and intent to leave nursing**



### 5.5.9 Effort-reward ratio

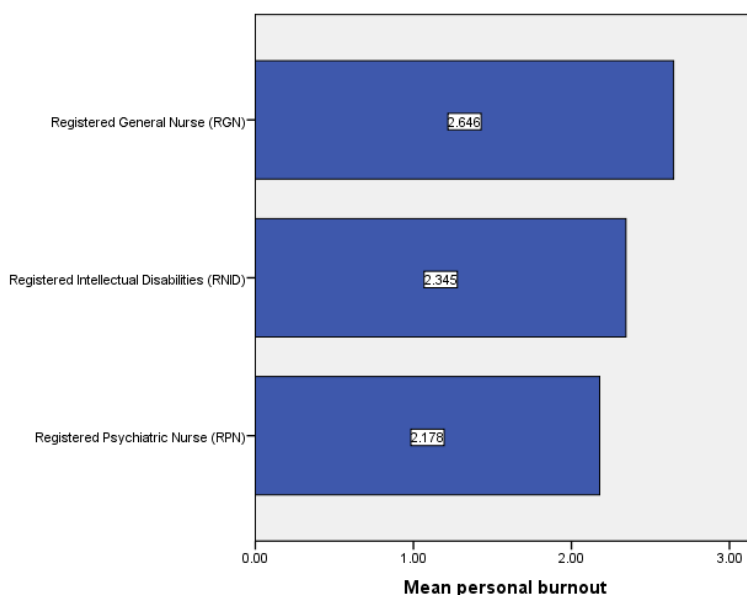
A one way analysis of variance conducted to explore the effect of discipline detected a statistical difference in the effort-reward ratio ( $f 4.35, df 12,435 p = .014$ ). Effort-reward ratio was lowest among graduates in psychiatric nursing (*mean 0.65, SD 0.25*) and there was a statistical difference between it and the effort/reward ratio of RGNs (*mean 0.74, SD 0.25*). There was no statistical difference between RGNs and RNIDs (*mean 0.70, SD 0.27*) detected. No significant relationship was detected between the effort-reward ratio and the career expectations of graduate nurses. An effort reward ratio close to 0 indicates an appropriate balance between effort made by graduate nurses and the rewards received (Siegrist 1996). Overall the mean effort reward ratio was 0.72 (SD 0.26; minimum 0.19; maximum 1.46; median 0.65). If the ratio exceeds 1.0 it suggests that efforts are not appropriately balanced with reward

(Hasselhorn et al., 2006). In this sample the majority of all respondents (n=382, 87%) reported an effort/reward ratio of less than 1.0. The percentage of participants with an effort/reward ratio above '1' indicating an adverse effort reward imbalance was 13% (n=56) and no statistical difference between groups was detected.

### 5.5.10 Burnout

The 6-item Copenhagen Burnout Inventory has 6 items designed to measure personal, work and client burnout (Van Der Shoot et al., 2005) and the Cronbach's alpha recorded was 0.91, indicating high level of internal consistency reliability (Cronbach 1951). The mean score across all disciplines was 2.52 (*SD 0.1 minimum 1.00; maximum 5.00; median 2.33*) and there were statistically significant differences detected between mean scores of the three disciplines ( $F=12.19, p <.001$ ) The mean burnout score among those working in general nursing was 3.67 (*SD 1.05*) somewhat higher than that of psychiatry 3.23 (*SD 0.98*) and learning disability 3.31 (*SD 1.07*).

**Figure 5.53 Mean burnout score among disciplines**

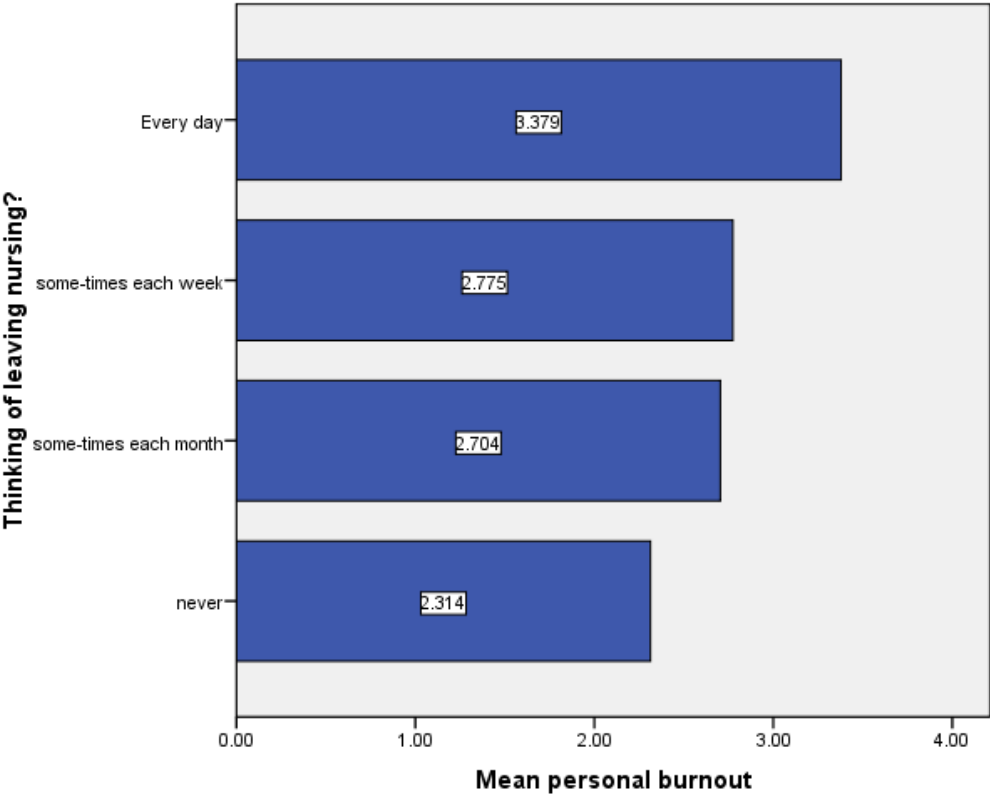


There was a statistically significant difference in the proportions across disciplines in relation to the degree of tiredness they reported ( $Chi\ square\ \chi^2\ 21.87, df\ 8, p =.005$ ). A larger proportion of general nurses (n=85, 27%) described themselves as tired almost every

day than RPNs (n=11, 12%) and RNIDs (n= 8, 14%). Higher proportions of RPNs (n=25, 27%) and RNIDs (n=13, 24%) describe themselves as almost, never or very infrequently tired than general nurses (n=47, 15%). Differences in frequency (*Chi square*  $\chi^2$  20.66, *df* 8,  $\rho$  =.008) were also detected between the proportions of graduates in each discipline who report physical exhaustion. Just over 10% of general nurses describe themselves as physically exhausted almost every day (n=33, 10.4%) compared to 1.1% of RPNs (n=1), and 5.4% of RNIDs (n=3).

Higher proportions of RPNs (n=55, 58%) and RNIDs (n=28, 50%) describe themselves as never or very infrequently physically exhausted (n=125, 39%). Differences (*Chi square*  $\chi^2$  16.58, *df* 8,  $\rho$  =.035) were also evident between the three professions as to the frequency they feel emotionally exhausted as a larger proportion of RGN graduates report they always or very frequently feel emotionally exhausted (n=89, 28%) compared to 13% (n=12) in psychiatry and 16% (n=9) in intellectual disability. A higher percentage of RPNs (n=84, 89%) and RNIDs (n=49, 87%) report they never or very infrequently feel as though they cannot take it anymore (*Chi square*  $\chi^2$  22.69, *df* 8,  $\rho$  =.004) compared to RGNs (n=245, 77%). A higher percentage of RGNs (n=33, 10.4%) and RNIDs (n=6, 11%) than RPNs (n=4, 4%) describe themselves as frequently or always emotionally exhausted. There were also apparent differences (*Chi square*  $\chi^2$  22.70, *df* 8,  $\rho$  =.004) between the three disciplines in relation to the frequency with which they report they feel worn out. Larger numbers of RPNs (n=72, 77%) and RNIDs (n=40, 62%) than RGNs (n=179, 56%) report they never or very infrequently feel worn out. A higher proportion of RGNs (n=40, 14%) report that they feel weak and susceptible to illness compared to smaller proportions of RPNs (n=2, 2%) and RNIDs (n=4, 7%) (*Chi square*  $\chi^2$  23.68, *df* 8,  $\rho$  =.003). An association was evident between a higher mean burnout score and increased frequency of thinking of leaving nursing (Figure 5.54).

**Figure 5.54. Personal burnout per intent to leave nursing**



**5.6 Personal demands**

**5.6.1 Satisfaction with pay**

The satisfaction with pay scale has three items and has a Cronbach’s’s alpha of 0.75 demonstrating a high level of internal consistency reliability (Cronbach 1951) Participants were asked to express their satisfaction with their pay on a Likert scale from 1 ‘not at all’ to 5 ‘very satisfied’. The mean satisfaction with pay score across graduates was relatively low at 2.27 (*SD 0.88 minimum 1.00; maximum 5.00; median 2.00*). Forty five percent of graduates (n=215) describe themselves as dissatisfied with their pay in relation to need for income, while 32% (n=150) were uncertain, with only 22% (n=106) classifying themselves in the range of satisfied. A large majority of graduates (n=383, 82%) believe their pay to be inadequate considering the pay of other comparable professions, with a further 10% (n=47) uncertain and only 8% (39)

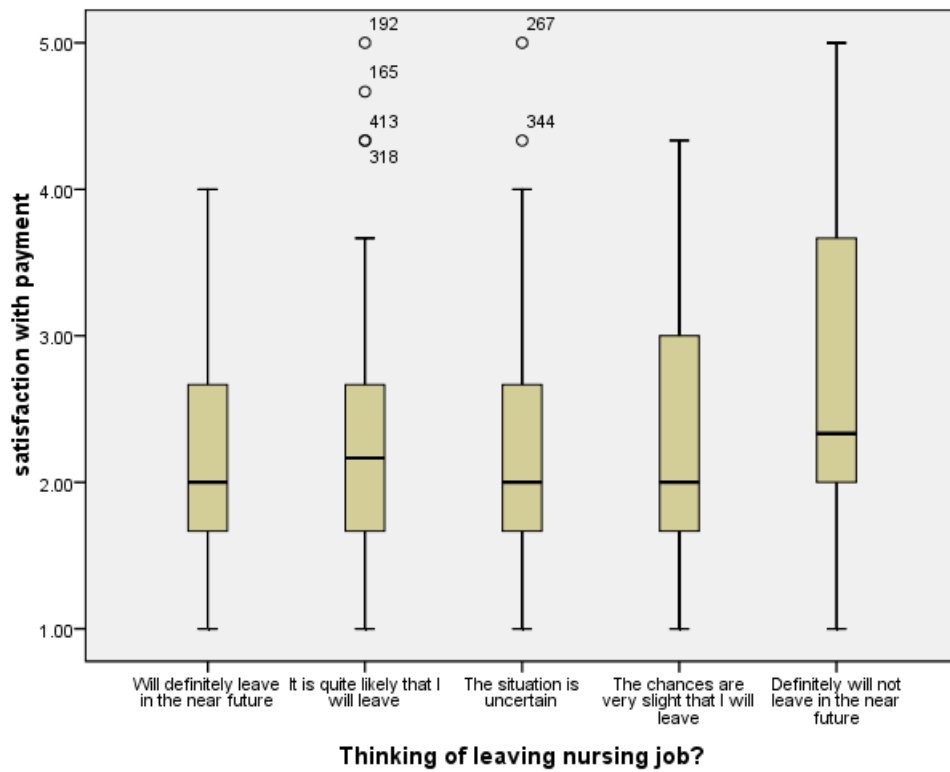


expressing satisfaction. Considering the pay of nurses in other institutions a significant number (n= 230, 50%) were dissatisfied, 34% (n=158) were uncertain and a minority again describe themselves as satisfied (n=79, 16%). Affordable housing is a substantial problem for a significant number of graduates (n=222, 48%). A strained economic situation is a concern for a number of new graduates (n=113, 24%), but a larger proportion describe their economic situation as good or very good (n=168, 36%). The largest proportion of graduates report their economic situation to be not good or bad (n=190, 40%). Weak relationships were found between satisfaction with pay and increased likelihood of changing job (Wald ratio  $\chi^2$  5.86, *df* 1  $\rho$  =.016) and of thinking about giving up nursing (Wald ratio  $\chi^2$  4.90, *df* 1  $\rho$  =.027) (Table 5.37 and Figures 5.55 & 5.56).

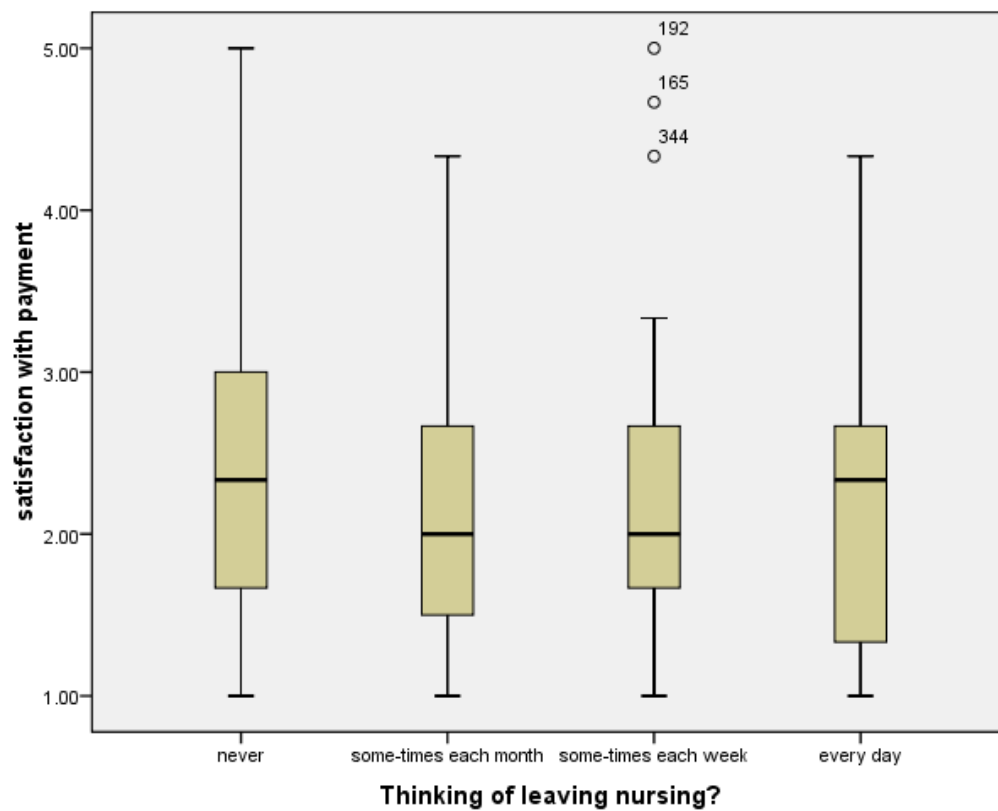
**Table 5.37 Relationship between satisfaction with pay and career expectation**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to change nursing job	.229	.095	5.855	1	.016	.044	.414
Intent to leave nursing	-.233	.105	4.903	1	.027	-.440	-.027

**Figure 5.55. Satisfaction with pay and intent to change job within nursing**



**Figure 5.56. Satisfaction with pay and intent to leave nursing**



### 5.6.2 Other responsibilities

The majority of graduates are living with another adult (n=322, 68%) or with another adult and children (n=77, 17%). A small number live alone (n=37, 7.8%) or as the only adult with children (n=20, 4%). Of those who have children (n=71), 36 take care of one child, and 35 take care of between 2 and 4 children. Most graduates (n=51, 71%) who have children report they have enough opportunity for childcare while a minority of graduates do not have sufficient (n=20, 29%). A significant number of graduates evenly share household chores with someone else (n=198, 43%) although a high proportion do most of the household chores themselves (n=209, 45%). A small number of graduates have their household chores done by someone else (n=57, 12%). As illustrated in Table 38, for most participants commuting time each day is under 60 minutes to and from work (n= 446, 95%).

**Table 5.38 Estimated commute time for graduates to and from work**

Time	Frequency	%
Upto 15 mins	175	37.2
Upto 30 mins	141	30.0
Upto 45 mins	85	18.1
Upto 60 mins	44	9.4
Upto 75 mins	13	2.8
Upto 90 mins	3	.6
Upto 105 mins	3	.6
Upto 2 hours	6	1.3
Total	470	100

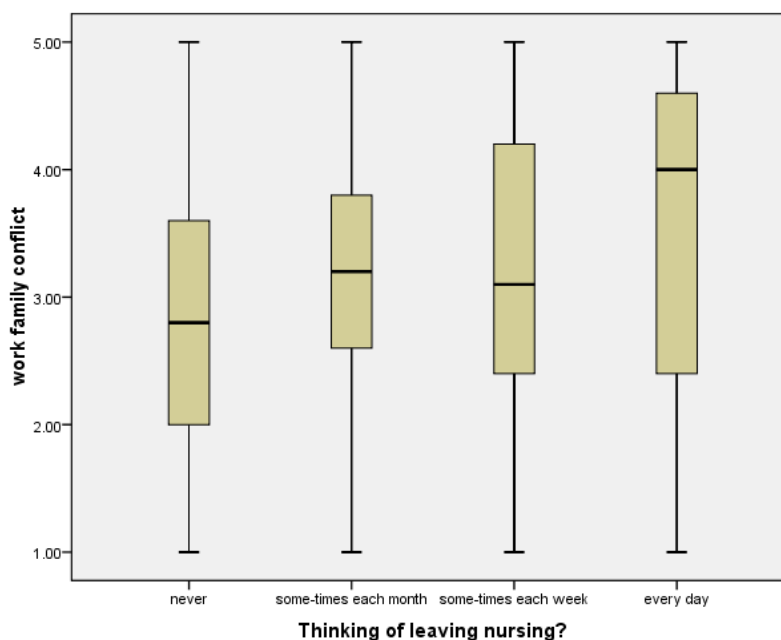
### 5.6.3 Work family conflict

The work family conflict scale asks participants how often the demands of work interfere with family commitments and recorded a Cronbach's alpha of (0.91) demonstrating a high level of internal consistency reliability (Cronbach 1951). The mean score across all disciplines was 3.04 (*SD 1.09 minimum 1.00; maximum 5.00; median 3.00*) and there was no difference detected between disciplines. Nearly 40% (n=185, 39%) of graduates were in agreement when asked if the demands of work interfere with their home and family life and one third (n=156, 33%) agreed that amount of time work takes make it difficult to fulfill their family responsibilities. A significant number of graduates disagreed that work interferes (n=146, 31 %) or renders it difficult to fulfill responsibilities (n=182, 39%). Over two-thirds of graduates(n=172, 37%) report they do not get things they want to get done at home because of work and a smaller number believe their job produces strain that makes it difficult to fulfill family duties (n=138, 29%). However, a larger proportion of graduates disagreed that work prevents them from getting things done at home (n=179, 38%) or produces strain that limits fulfillment of family duties (n=209, 45%). Over half the graduates (n=239, 51%) were in agreement when asked if they make changes to their plans for family activities to accommodate work-related duties but a significant proportion do not make changes (n=127, 27%). A positive relationship between a higher work family conflict score was found to be associated with increased likelihood of thoughts of leaving the profession (Wald ratio  $\chi^2$  13.99, *df* 1  $\rho < .001$ ) (Table 5.39 and Figure 5.57).

**Table 5.39. Relationship between work family conflict and career expectations**

Response	Estimate	Std. Error	Wald	df	Sig.	95% confidence interval	
						Upper	lower
Intent to leave nursing	.317	.085	13.991	1	.000	.151	.483

**Figure 5.57. Work Family conflict and intent to leave nursing**



#### **5.6.4 Family work conflict**

The family work conflict scale asks participants how often the demands of family interfere with work commitments and recorded a Cronbach's alpha of 0.84 demonstrating a high level of internal consistency reliability (Cronbach 1951). The mean score across all disciplines was 1.70 (*SD* 0.76 *minimum* 1.00; *maximum* 5.00; *median* 1.60) and there was no difference detected between disciplines. The majority of graduates disagreed that the demands of their family interfere with work related activities ( $n=307$ , 65%), and that they have to put off things at work due to demands of family ( $n=383$ , 83%); only a minority of graduates agreed that the demands of family do interfere ( $n=78$ , 17%) or that they do have to put things off at work because of family commitments ( $n=36$ , 8 %). Again a large majority disagreed that things they want to do at work are put off because of family demands ( $n=413$ , 88%) or that their home life interferes with work responsibilities ( $n=406$ , 87%) or work performance ( $n=410$ , 88%). Only a small number of graduates agreed that family commitments interfere with things they want to get done at work ( $n=18$ , 4%), their work responsibilities ( $n=17$ ,

3.6%), or performance (n=12, 3%). There was no statistically significant relationship found between career expectations of new graduates and family-work conflict.

The majority of graduates spend time with their partner/family (n=362, 78%) daily or a few times per week; some a few times per month (n=91, 20%) and a small number only once a month (n=12, 3%). A significant number of graduates get to spend time with friends and relatives daily or at least a few times per week (n=227, 48%) and for some contact is less, a few times per month (n=178, 38%) or once a month or less (n=64, 14%). Half of all graduates get time for relaxation daily or a few times per week (n=232, 51%); 31% get time a few times per month and a minority only get relaxation times once a month or less (n=94, 20%). One third of graduates engage in sport or hobbies frequently (n=154, 33%), daily or a few times per week; 35% (n=165) get the opportunity a few times per month. Seventeen percent (n=81) only engage in sport or hobbies about once a month and some (n=69, 15%) never do.

## **5.7 Opportunity**

### **5.7.1 Support on transition for new graduates**

Two thirds of graduates are working in an employment site that provides a programme to initiate new graduates (n=314, 67%). Participants (n=285) offered a description of the programme they underwent as outlined in Table 40. There was a statistically significant difference in the proportions of employment sites that offer a formal programme of orientation for new graduates (*Chi square*  $\chi^2$  12.80, *df* 8,  $p = .002$ ). A higher proportion of general graduates (n=228, 71%) are working in employment sites where such programmes are delivered than in psychiatry (n= 59, 64 %) and intellectual disability (n=26, 47 %). The types of programmes (n=285) provided are illustrated in Table 5.40 and the most frequent type of programme provided to graduates is 'orientation,'

described as one that includes a brief period of sessions on health and safety and organisational issues.

**Table 5.40. Formal support on transition**

Programme of initiation	Frequency	%
<b>Transition programme</b> <i>Informal support during the initial 1-3 months of employment</i>	61	21
<b>Full graduate nurse internship programme</b> <i>Formal programme of orientation usually 6-12 months with support from specifically designated clinical educators</i>	31	11
<b>Orientation course</b> <i>Brief period of sessions over a few days or weeks mainly on organisational &amp; health/safety issues</i>	132	46
<b>Preceptorship</b> <i>Formal programme of supervision and support provided by members of nursing staff</i>	16	6
<b>Mentorship</b> <i>More informal programme of supervision and support provided by specifically prepared experienced nurses</i>	18	6
<b>Combination of preceptorship and mentorship</b>	27	10
Total	285	100

### 5.7.2 Employment prospects

A significant proportion of participants had been offered another job in the health sector in the last 6 months (n=103, 22%) and a smaller proportion from outside the health sector (n=32, 7%). The majority of respondents reported it was not that easy or difficult to get a job in nursing currently (n=363, 77%), while a smaller number believed it to be easy or very easy to get a job (n=106, 22%). The majority of respondents across all disciplines were reasonably secure about their employment prospects and were not worried about becoming unemployed (n=307, 67%) or being unable to find work if they were unemployed (n=285, 62%). A slightly higher proportion of RGNs (37%) were worried about becoming unemployed than their RPN and RNID colleagues (27% and 20%

respectively). In all, one third (n=153, 33%) of respondents expressed worry about becoming unemployed and 38% answered affirmatively when asked if they were worried about being unable to find work if they became unemployed (n=176, 38%). Internal work prospects were a higher concern among all disciplines with 54% (n=245) expressing concern about an unwanted transfer or new work schedule (n=259, 56%) that would not suit them.

**Table 5.41. Worry about unemployment among new graduate nurses**

Worried	RGN n	RPN n	RNID n	Total n
Yes	196	67	43	306
%	63	73	80	67
No	117	25	11	153
%	37	27	20	33
Total	313	92	54	459

## 5.8 Career expectations of new graduates

### 5.8.1 Motivation to pursue a career in nursing

The foremost reason cited by participants that inspired them to pursue a career in nursing was the desire to help or care for people and to work in a caring environment (n=154, 37%). The next most common reason was life long interest or desire to be a nurse (n=82, 19%). Other influential factors motivating individuals for a career in nursing was family in the profession (n=31, 7%) or previous exposure to nursing work (n=56, 13%). The desire for personal achievement (n=33, 8%) or to be engaged in meaningful work (n=37, 9%) where one could have contact with others (n=28, 6%) was also important. Graduates also reported that a nursing degree offered a respected profession with good prospects (n= 4, 6%) with the possibility for job satisfaction (n=25, 6%) and a variety of job



opportunities (n=34, 8%). Entrants to the profession also reported that a natural aptitude for nursing work (n= 24, 6%) or a natural interest in the subject area (n=23, 5%) influenced their decision to pursue a career in nursing. Entrants were also attracted by the desire to work in a challenging job (n=20, 5%) with opportunities for travel (n=23, 5%).

**Table 5.42. Motivation for a career in nursing**

Factor	Frequency	%
Desire to work in a caring profession or to care for/help others	154	37
Life long interest/desire/ambition	82	19
Previous related work or family experience	56	12
Desire for fulfilment/meaningful work/to make a difference	37	9
Variety of job/career opportunities	34	8
To attain degree/qualification/further education/achievement	33	8
Family in nursing or related profession/family advice	31	7
Desire for contact/work with people	27	6
Job satisfaction	25	6
Respected profession/good job/prospects	24	6
Natural aptitude/skills for job	24	6
Interest in the subject/associated subjects	23	5
Desire for travel	23	5
Work in dynamic/exciting/challenging job	20	5
Job security	13	3
Inspired by the observation of nursing care	12	3
No other interest	11	3
Miscellaneous	8	2
Opportunity for continuous or lifelong learning	7	2
Do not know	7	2

Economic advancement	7	2
Variety within job	7	2
Opportunity for further education	8	2
Unhappy in previous job/course	6	2
Desire to work locally	3	1
Did not get points for what I wanted	3	1
Got enough points for nursing	1	0
Paid during final year of course	1	0

### **5.8.2 Career intention of graduates over next five years**

Career expectation was measured using items designed to gather more information on the career intentions in the near future (specifically to capture intent to change job within nursing) and over the next 5 years. There were no discernible differences between the proportions of graduates in the three disciplines in relation to expressed intent to changing job in the near future. Respondents were also asked if they had thought of changing to a different department or employment site with the same employer or within nursing and the majority answered that they had never or infrequently thought of changing (n=368, 80%) and only slightly less, never or infrequently thought of changing job within nursing (355, 76%). When asked if they will be changing jobs, 48% of graduates (n=230) do anticipate they will definitely or are likely to be changing job in the near future with a further 30% (n=143) describing the situation as uncertain. Only 20% (n=95) of graduates reported that the chances are unlikely or they will definitely not leave their job in the near future. The large majority of graduate nurses express their intent to continue to work in nursing in Ireland or to continue and to pursue further education (n=344, 76%). Overall 12% of new graduates (n=52) expressed their intent to take an indefinite break or leave nursing. The proportions were different among the disciplines in relation to their intention to leave nursing.

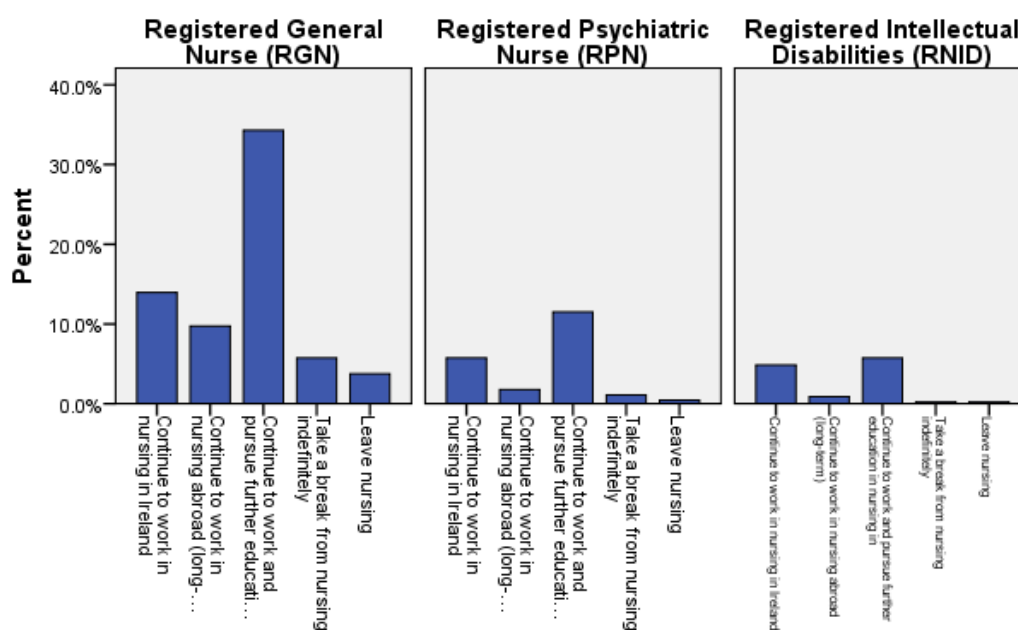
The percentage of RGNs (14% n=430) was relatively higher than in the psychiatric field (8% and 4% respectively).

**Table 5.43. Career intention for next five years**

Career intention	RGN	RPN	RNID	Total
	n	n	n	n
	%	%	%	%
Continue to work in nursing in Ireland	63	26	22	111
	21	28	41	25
Continue to work and pursue further education in nursing in Ireland	155	52	26	233
	51	60	48.	52
Continue to work in nursing abroad (long-term)	44	8	4	56
	14	9	7	12
Take a break from nursing indefinitely	26	5	1	32
	8	5	2	7
Leave nursing	17	2	1	20
	6	2	2	4
Total	305	93	54	452
	100	100	100	100

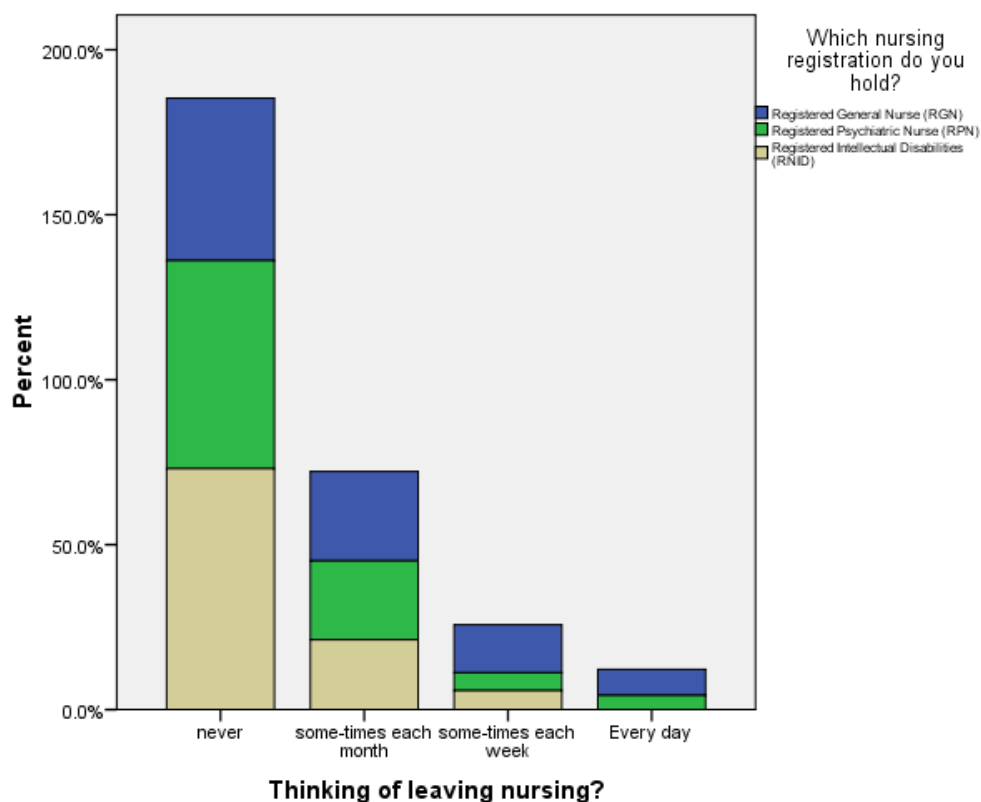
**Figure 5.58.**

**Career intent of new graduates over the 5 years**



Intent to leave was measured on a 4-item scale exploring career intentions and the Cronbach's alpha was recorded as 0.74 indicating a high level of reliability (Cronbach 1951). A large proportion of graduates in all disciplines think about further education in nursing frequently (n=275, 59%). Frequently may be interpreted as sometimes each week or every day. The large majority of graduates do not or infrequently think of further qualification outside of nursing (n=318, 69%). Infrequently may be interpreted as sometimes each month. The majority of new graduates are not considering giving up nursing (n=378, 81%) or giving up nursing and pursuing another career (n=277, 83%). The breakdown of career intention per discipline in Table 5.43 highlights that there are differences in the proportions among the different disciplines. In relation to thinking about further education in or outside nursing there was relatively little difference between the disciplines. There were differences in the proportion of graduates in general nursing who are think about giving up nursing at least a few times per week or every day (Chi-square  $\chi^2$  23.38 , *df* 6,  $\rho < .001$ ). The proportion of RGNs who think about giving up nursing frequently, at 21% (n=65), is considerably higher proportionately to the other disciplines, 9.7% (n=9) in psychiatry and 4% (n=2) in intellectual disability nursing. The difference in proportions are similar (*Chi-square*  $\chi^2$  20.56, *df* 6,  $\rho = .002$ ) among those graduates who are considering giving up nursing altogether and pursuing a different career with 23% (n=71) for RGNs; 10% (n=9) for RPNs and only 6% (n=3) for RNIDs .

**Figure 5.59. How often new graduates think about giving up nursing?**



**Table 5.44. Career intention of new graduates per discipline**

How often you think about leaving	Never n %	Sometimes each month n %	Sometimes each week n %	Every day n %	Total n %
<b>RGN</b>					
Further qualification in nursing	20 6.3	104 32.8	130 42	63 19.9	317 100
Further qualification outside nursing	113 35.9	94 29.8	66 21.0	42 13.3	315 100
Giving up nursing	145 47	101 33	38 12	27 9	311 100

Giving up nursing completely & starting a different job	159 51	85 27	46 15	25 8	315 100
<b>RPN</b>					
Further qualification in nursing	0 0	45 48	33 36	14 16	93 100
Further qualification outside nursing	42 46	28 30	10 11	12 13	92 100
Giving up nursing	61 66	23 25	4 4	5 5	93 100
Giving up nursing completely & starting a different job	62 67	22 24	4 4	4 4	92 100
<b>RND</b>					
Further qualification in nursing	4 7	22 39	19 34	11 20	56 100
Further qualification outside nursing	28 53	13 25	9 17	3 6	53 100
Giving up nursing	37 74	11 22	2 4	0 0	50 100
Giving up nursing completely & starting a different job	38 73	11 21	3 6	0 0	52 100

### 5.8.3 Career expectations-relative influences

#### 5.8.1 Intent to change nursing job

The outcome variables for intent to change job within nursing were measured on an ordered, categorical five point-Likert scale: will definitely leave in the near future; it is quite likely that I will leave in the near future; the situation is uncertain; it is quite unlikely that I will leave; I will definitely not leave in the near future. Nurses were more likely to not leave their place of work in the near future if they had positive scores for the following scales: social support from supervisor (Wald ratio  $\chi^2$  6.93, *df* 1,  $\rho$  =.008); satisfaction with pay (Wald ratio  $\chi^2$  4.62, *df* 1,  $\rho$  =.032); job satisfaction (Wald ratio  $\chi^2$  7.4, *df* 1,  $\rho$  =.007); institutional commitment (Wald ratio  $\chi^2$  11.33, *df* 1,  $\rho$  <.001); and professional commitment (Wald ratio  $\chi^2$  6.70, *df* 1,  $\rho$  <.01). Nurses that entered college to study nursing as school leavers were more likely to leave their place of work (Wald ratio  $\chi^2$  30.40 *df* 1,  $\rho$  <.001) than mature students. The regression model did predict that graduates of both UCC and UCG colleges were more likely to leave their place of work compared to nurses that graduated from other colleges. No other variables tested were significant.

**Table 5.45. Relative influences on intent to change job within nursing**

Explanatory variable	Estimate	Std. error	Wald	df	Sig.	95% Confidence interval	
						Lower	Upper
Social support from supervisor	.262	.100	6.933	1	.008	.067	.458
Satisfaction with pay	.224	.104	4.620	1	.032	.020	.428

Job satisfaction	.512	.188	7.400	1	.007	.143	.881
Institutional commitment	.424	.126	11.332	1	.001	.177	.671
Professional commitment	.336	.130	6.698	1	.010	.082	.590
School leaver	-1.099	.199	30.397	1	.000	-1.489	-.708
Mature	0(a)	.	.	0	.	.	.
Dublin City University	.120	.493	.060	1	.807	-.846	1.086
Institute of Technology Dundalk	.148	.493	.091	1	.763	-.817	1.114
Institute of Technology Galway/Mayo	.654	.560	1.362	1	.243	-.444	1.752
IT Institute of Technology Letterkenny	-.525	.559	.884	1	.347	-1.620	.569
Institute of Technology Tralee	-.468	.500	.877	1	.349	-1.448	.512
Institute of Technology Atlongue	.592	.580	1.041	1	.308	-.545	1.729
Institute of Technology Waterford	-.134	.469	.081	1	.775	-1.053	.786
Trinity College Dublin	-.244	.444	.301	1	.583	-1.115	.627



University College Cork	-1.112	.480	5.373	1	.020	- 2.05 2	-.172
University College Dublin	-.421	.470	.805	1	.370	- 1.34 2	.499
University College Galway	-.959	.483	3.948	1	.047	- 1.90 6	-.013
University of Limerick	.119	.492	.058	1	.809	-.845	1.083
St. Angela's College Sligo	0(a)	.	.	0	.	.	.

Link function: Logit.

### 5.8.2 Career intentions for the next five years

The outcome variables for career intention for the next five years was measured on an ordered, categorical 5-point Likert scale as follows; continue to work in nursing in Ireland; continue to work in nursing abroad (long-term); continue to work and pursue further education in nursing in Ireland; take a break from nursing indefinitely; and leave nursing. The Wald ratio for the coefficient associated with family work conflict (Wald ratio  $\chi^2$  7.28, *df* 1,  $\rho$  =.007) was statistically significant. This means that those nurses who had greater levels of family-work conflict have greater likelihood of continuing to work in the nursing profession. Statistical significance was also evident in the coefficient associated with greater professional commitment (Wald ratio  $\chi^2$  18.58, *df* 1,  $\rho$  <.001) and indicated a greater likelihood of continuing to work in nursing in Ireland. Higher negative affectivity scores was a predictor of greater likelihood to leave nursing (Wald ratio  $\chi^2$  6.26, *df* 1,  $\rho$  =.012). Nurses holding a RGN registration were more likely to leave Ireland (Wald ratio  $\chi^2$  6.53, *df* 1,  $\rho$  =.019) compared to nurses with

a RPN or RNID registration. School leavers were more likely to leave nursing than mature entrants (Wald ratio  $\chi^2$  7.07, *df* 1,  $\rho$  =.008). Of the colleges attended, graduates of Athlone IT (Wald ratio  $\chi^2$  4.26, *df* 1,  $\rho$  =.039) and University of Limerick (Wald ratio  $\chi^2$  4.13, *df* 1,  $\rho$  =.042) who responded to this survey were most likely to leave nursing. No other variables tested were significant.

**Table 5.46. Relative influences on career intention for next five years**

Explanatory variable	Estimate	Std.error	Wald	df	Sig	95% Confidence interval	
						Lower	Upper
Family work conflict	-.346	.128	7.278	1	.007	-.598	-.095
Negative affectivity	.366	.146	6.275	1	.012	.080	.652
Professional commitment	-.561	.130	18.577	1	.000	-.816	-.306
RGN	.751	.319	5.534	1	.019	.125	1.377
RPN	.569	.359	2.518	1	.113	-.134	1.273
RNID	0(a)	.	.	0	.	.	.
School leaver	.542	.204	7.073	1	.008	.143	.941
Mature	0(a)	.	.	0	.	.	.
Dublin City University	1.029	.537	3.677	1	.055	-.023	2.081
Institute of Technology Dundalk	.328	.530	.385	1	.535	-.710	1.367
Institute of Technology Galway/Mayo	.825	.631	1.708	1	.191	-.412	2.062
IT Institute of Technology	.544	.585	.866	1	.352	-.602	1.690

Letterkenny							
Institute of Technology Tralee	.866	.544	2.536	1	.111	-.200	1.931
Institute of Technology Atlone	1.342	.650	4.256	1	.039	.067	2.616
Institute of Technology Waterford	.941	.510	3.409	1	.065	-.058	1.940
Trinity College Dublin	.659	.487	1.833	1	.176	-.295	1.613
University College Cork	.430	.518	.690	1	.406	-.585	1.446
University College Dublin	.400	.518	.596	1	.440	-.616	1.416
University College Galway	.586	.520	1.267	1	.260	-.434	1.606
University of Limerick	1.088	.534	4.143	1	.042	.040	2.135
St. Angela's College Sligo	0(a)	.	.	0	.	.	.

Link function: Logit.

a This parameter is set to zero because it is redundant.

### 5.8.3 Thinking of giving up nursing

The outcome variables for intent to stay in the profession were measured on an ordered, categorical 4-point Likert scale which asked 'how many times have you thought about leaving?'- 'never, few times per month; few times per week; every day.' Intent to

leave the profession was significantly associated with 3 explanatory variables, uncertainty regarding treatment; job satisfaction and professional commitment. The Wald ratio for the coefficient associated with uncertainty regarding treatment was statistically significant ( $\chi^2$  12.70,  $df$  1,  $\rho < .001$ ). This means that nurses that scored higher on the uncertainty scale were more likely to be thinking of leaving nursing. The Wald ratio for job satisfaction was also significant ( $\chi^2$  18.06,  $df$  1,  $\rho < .001$ ). This implies that those graduates who reported higher job satisfaction in nursing had not thought about leaving the profession. Statistical significance was also evident in the Wald score of the coefficient associated with professional commitment ( $\chi^2$ ,  $df$  1 = 91.72,  $\rho < .001$ ). This implies that if graduates have higher levels of professional commitment one can predict there will be greater likelihood that they had not thought about leaving nursing. No other variables tested were statistically significant.

**Table 5.47. Relative influences on intent to leave nursing**

Explanatory variable	Estimate	Std. Error	Wald	df	Sig.P	95% Confidence Interval	
						Lower	Upper
Uncertainty about treatment	.527	.148	12.669	1	.000	.237	.817
Job satisfaction	-.790	.186	18.059	1	.000	-1.154	-.426
Professional commitment	-1.278	.133	91.719	1	.000	-1.539	-1.016

## **5.8 Summary**

The desire to care is the primary motivation to a career in nursing. Eighty percent of graduates (n=1458) who commenced nursing education in 2003 made it to the register by 2009 although a further 8% remained within the educational system 2 years after the anticipated graduation date. The majority of those are working in acute care services and only a very small minority of general nurses commence employment in community or specialised settings. Sixty percent of graduates are working on a temporary contract. Differences in work conditions and demands of nursing work are evident across the three disciplines where stressors reported are not uniform. Effort/reward ratio scores suggest that a balance does exist between the effort expended and reward achieved at work. Job mobility is anticipated in this cohort as forty-eight percent of graduates do anticipate changing nursing job. Only 12% expressed intent to leave the profession although 17% reported thinking about it frequently which was the measure used in the NEXT study to assess intent to leave. Very high proportions of graduates express a desire to pursue further education in nursing. The majority of graduates are not considering leaving nursing (n=277 83%), although more RGNs think about leaving frequently than in the other two disciplines. Seventy six percent (n=344) of graduates express intent to pursue further education in nursing. School leavers are more likely to leave jobs than mature entrants to the profession. Multiple explanatory variables thought to influence the career expectations of graduating nurses have been presented in this chapter to determine their relevance to the career expectations of graduating nurses including the nature of nursing work, conditions of work, individual factors, personal demands and opportunities for new graduates. A number of explanatory factors have been shown to have a push or pull influence on intent to leave the profession. The logistic regression conducted enabled the determination of the relative influences on the career expectations of new graduates and demonstrated that a number of individual explanatory variables did not emerge as strong influences on career expectation once all of

the multiple variables were examined through the model of regression. Professional commitment, organisational commitment, satisfaction with pay and social support from supervisor were all found to be predictive of increased intent to stay in a nursing job. Job satisfaction and professional commitment were found to be predictive of intent to stay in the profession while only uncertainty regarding treatment was found to be predictive of intent to leave the profession. Inadequate information to do their job and the absence of doctors during medical emergencies were notable indicators of uncertainty and this was an issue of greater concern to RGN graduates. Variation was evident in the formal support of new graduates nationally. Two thirds (n=314) received some kind of formal support on transition to the profession but this was confined a brief period of orientation sessions for most graduates.

## Chapter 6: Qualitative findings

### 6.1 Introduction

This chapter presents the qualitative findings of the study generated from interviews with 22 new graduates about their experiences of transition into employment as registered nurses. The demographics of participants are first detailed followed by the findings presented in five themes. The first theme relates to the socialisation to the nursing environment and is followed by a theme illustrating the support encountered by graduates during this early stage of their career. Graduate perceptions of the work conditions they encountered on transition are considered next. The final two themes relate to the career expectations of graduate nurses and their reflections on the adequacy of their preparation for nursing work following completion of the degree. The data presented in this chapter include the open ended responses to the final question on the quantitative survey asking participants to comment freely on their transition experience and career expectations. This question was answered by 134 participants. An overview of the main findings is illustrated in Table 6.1.

**Table 6.1 Transition experience, work conditions and career expectations of degree graduate nurse**

Sub categories	Categories	Theme
Increased responsibility Knowing what to expect	<b>Reality of being a staff nurse</b>	<b>Socialisation to nursing</b>
Graduate expectations Expectations of others Attitude to the degree Traditional ways of doing	<b>Expectations of being a staff nurse</b>	
Building confidence Gaining familiarity Finding one's feet	<b>Knowing what to do</b>	
Support from colleagues	<b>Sources of</b>	

<p>Organisation support</p> <p>Formal &amp; informal feedback</p> <p>Support form managers</p>	<b>support</b>	<b>Support on transition</b>
<p>Building relationships</p> <p>Learning to fit in</p>	<b>Relationships at work</b>	
<p>Meaningful aspects of the work</p> <p>Being able to help</p>	<b>Feelings on nursing work</b>	<b>Conditions at work</b>
<p>Pressure and fear of mistakes</p> <p>Embargo issues</p> <p>Staffing &amp; workload</p>	<b>Job satisfaction</b>	
<p>Delegating</p> <p>Inability to influence care</p>	<b>Influence at work</b>	
<p>Negotiating time off</p> <p>Uncertainty in employment</p> <p>Effect on quality of care</p>	<b>Contractual Status/agency</b>	
<p>Regional variation</p> <p>Reduction in career opportunities</p>	<b>Recruitment process</b>	
<p>Dictated by job availability</p> <p>Intent to travel</p>	<b>Career intent</b>	<b>Career expectations</b>
<p>Career opportunities</p>	<b>Job prospects</b>	
<p>Desire to specialise</p> <p>Access to professional development</p> <p>Mixed motivation</p>	<b>Desire for learning</b>	
<p>Importance of clinical experience</p> <p>Deficit in pharmacology</p>	<b>Preparation for the job</b>	<b>Reflections on degree</b>
<p>Deficits in skills</p>	<b>Skills acquisition</b>	



## **6.2 Demographics**

Twenty two nurses participated in the interviews for this study, 14 who were registered general nurses (RGNs), 6 registered psychiatric nurses (RPNs) and 2 registered nurses of people with intellectual disability (RNIDs). Of those, 20 were female (91%) and 2 (9%) male. The mean age of interview participants was 27 (*SD* 6.95 *range* 22-58) years and the majority were school leaver status (n=14, 67%) upon their entry to nursing education with the remaining participants classified as 'mature entry' (n=8, 33%). The majority of interviewees were working in acute care services (n=14, 67%). The majority of RGNs worked in the public sector for academic teaching hospitals (n=12, 88%), and the remaining RGNs (n=2, 12%) in the private sector. Both RNID participants were working in long term residential care settings within their discipline. Three RPNs (50%) were working in acute care services, 2 in the private sector and one in the public sector. One RPN (17%) was employed in home care psychiatric services in an urban area while the remaining two mature RPNs (33%) were in private nursing homes. The qualitative data include the 134 opened ended responses to the survey and the demographics of the group are reported in chapter 5.

## **6.3 Socialisation to nursing environment**

This theme details the findings that relate to the reality of becoming a registered nurse and adapting to the nursing work environment. The transition from student to staff nurse is a defining moment in the career of a registered nurse and those initial weeks as a full member of the profession were a challenge for this cohort of graduate nurses. Becoming a staff nurse was characterised for many graduates by independence in decision-making and direct responsibility for both the delivery and organisation of nursing care. The nursing environment that new graduates transitioned into varied considerably and in some instances the nursing environment was less supportive and graduates were expected to be more self-sufficient than they had anticipated.

### 6.3.1 Reality of being a staff nurse

The extensive clinical exposure that students receive during their undergraduate education means that they are reasonably well socialised to what is expected of them. While they are not overly shocked by the experience of transition to a staff nurse, there is undoubtedly some adjustment to be made. Many reported the initial strangeness they felt around the reality of assuming the responsibilities of a registered nurse. Most graduates did report feeling fear on the first day at work although this was felt more acutely by some than others:

*RGN-0285: Yes, I remember the first day .... I remember I was terrified, I was petrified... I think it just scared me, the responsibility, especially if there was somebody really, really sick or somebody got sick really quickly, that really petrified me.*

The following account from one graduate illustrates the sharp contrast between seemingly similar work days where, one day, one is a student and the following day one is the responsible staff nurse and this realisation takes time to sink in:

*RGN-0285: I think it is a huge transition from being a student, everything has to be co-signed, and then all of a sudden there is like this massive drop off and you give it out. You know the day before you were giving two paracetamol and somebody had to co-sign for them. ...I think it is a huge sort of drop off instead of kind of tapering off. I don't know what the solution is to it but everything was co-signed and I'd be signing my initials and putting a line underneath it waiting for somebody to sign it like!*

Graduates reported they had to adjust to the competing demands of the staff nurse role. As students they would have been able to concentrate on patient care delivery and some did report the shock they felt on initiation now they had left the protection of their college course. Throughout the rostered placement prior to graduation, individuals would have developed a certain resilience

and capacity for the hard work of nursing care, but responsibility for the drug administration and managing care were new elements of stress that came with their first position. Graduates spoke of pressure they felt in taking up the work due to increased responsibility compounded by issues such as staffing, pace of work and the volume of activities expected. They also reported that they found it difficult to switch off in those first days as their minds tend to race after they came off duty thinking about the shift they had completed and double checking their actions in their head. It was not uncommon for new graduates to call the unit following a shift to clarify or report on something, a practice they felt was usually well understood and received in the wards. Tiredness in those first days was very common as they struggled to concentrate and figure out the job. Some remarked on missing the support of friends now they were staff nurses. They no longer all went to coffee together as they did as students and they found this lonely. Others mourned the loss of the relaxation they had experienced as a student where they had more time and were seeking to maximize time with patients rather than minimize it:

*RGN-0025: Yes you don't think of all the responsibility that you have and as a student you could enjoy, well not enjoy your work more but you could relax more and speak to the patients more now because as a staff nurse you kind of feel you don't have time really, you are trying to sort out your time and you are checking blood pressure and you are asking them everything, all the things so that you don't have to go back. Whereas as a student you could take your time.*

The reality of their transition manifested in many of the small things that defined their changed status. The change in uniform is a significant milestone and one that they associated with the some anticipation of the responsibility they now faced:

*RGN-0025: It was a big change like it was the first day in uniform and all of a sudden you were expected to know the same things that other people in the uniform know that kind of way. And there was no really gradual, you weren't eased in, you were just thrown in the deep end.*

The security blanket of being a student was gone and they no longer had some one to double check what they did:

*RGN-0285: Like there is always that sort of safety net with your uniform, you have that, your student uniform to me was your safety net. If something goes wrong, well I am a student. You still take the same responsibility like, hindsight is a great thing, you still do take the same responsibility but you do have a 'get out of jail free' card with this*

Graduates reported similar experiences in coming to terms with the reality of being a staff nurse, although the magnitude of associated trauma differed depending on the work environment. This relationship was inextricably linked with the degree of support that the graduate perceived in their first employment, which is discussed later. The term being thrown in at the deep end occurred with frequency but it has deeper meaning for some participants than others. For some graduates it was a description of their change in circumstances:

*RGN-0025: It was good, more good points than bad points but it was very difficult, the transition as going to a staff nurse or whatever, you are away from a lot of your friends, they were placed different places in the hospital and you never really see them because you were always working different shifts and that. So you were kind of just thrown into the deep end.*

The 'deep end' was considerably 'deeper' for graduates who started out their first shift on night-duty or on wards where the skill mix was limited and such occurrences did produce some additional stress for those individuals:

*RGN-0275 so it was just my first ever shift was a night..... So I obviously hadn't worked or hadn't been trained in.....So that was my first shift and basically, there is your drug trolley, there is your patients, there is hand over and...Absolutely daunting at first*

The level of support given to new graduates did vary considerably across the country. These types of occurrences were not commonplace but were more likely to be reported by RGN participants working outside the greater Dublin area.

### **6.3.2 Expectations on being a staff nurse**

Many students have worked as a care assistants through their educational process and now they had qualified, expectations of their work performance changed and there was some adjustment to be made to come to terms with the role differentiation.

#### *6.3.2.1 Graduate expectations*

Among graduates was a strong realisation that they are accountable in their own right for their decisions and actions in relation to patient care and it is no longer permissible to check automatically with another designated individual who shared responsibility for their activities to date:

*RGN-0326: It was just suddenly knowing that I was the one accountable for what was happening to the patients, that if I did something wrong it wasn't going to go, well why didn't you ask your preceptor, it was, why didn't you check yourself and then go and ask someone more senior to you. It was no longer a fact of my preceptor getting into trouble for something I did*

Another realisation for new graduates was that work as a staff nurse entails continual responsibility to adapt and learn new things. While one had learned all that was necessary to gain access to the nursing register professional responsibility had brought with it a new reality - to learn all the time on the job. There was an acceptance that the transition is a challenge and that some difficulty in the early days was inevitably part of the process:

*RGN-0278 I still feel that regardless of what ward you go to you have a three -month hell probably because you are stepping up, you are suddenly taking responsibility and I think even as a student there is a certain fall back because*

*you can say, 'oh I made a mistake but I am learning.' But the reality is even when you are a staff nurse you are always learning and you will make mistakes*

Graduates were particularly cognisant of the increased responsibility they now faced as a registered nurse and were genuinely fearful about some things in particular in those initial days. The reality of their new status as staff nurse manifested also when the graduate became aware that they were now seen as the point of contact for family members or when they overhear someone referring to them as staff nurse. Many of the tasks they had performed as students but now, as staff, they assumed greater responsibility for outcomes of care. Many graduates remarked that the working day includes more emphasis on documentation than when they were students. Insight into their changed status as a staff nurse was also defined by the anxiety of ensuring the safety of patients and this reality is illustrated in the following account that captures some of the critical concerns for new graduates, such as drug administration, communicating with medical personnel and most importantly responsibility for care decisions taken

*RGN-0073: I suppose just on a day to day the drugs and that ....and the responsibility of even having the keys, that is the big thing that would have stood out a bit. And just the fact that everyone comes to you then, doctors come to you, you are taking telephone enquiries, not that you have no-one to fall back on, but as a student you'd do a blood pressure, if it was off you'd tell the staff nurse and that was the way it was. Now you are the one who has to take all the action, you know you can always call and ask for advice and that but it is the kind of decision-making has gone up a lot.*

They worried considerably about the possibility of making mistakes and in some instances they suspected that colleagues anticipated they would make mistakes. Responding appropriately in the case of medical emergency also occupied the thoughts of new graduates. This fear was accompanied by an objective understanding that this fear may be overcome when the first emergency situation is faced

but interim anticipation anxiety was common among the graduates who were particularly concerned they would not be able to respond appropriately when the time came.

*RGN-0275: Yes, but it is frightening, the first one is always frightening. Then after that it becomes less frightening but if it hasn't happened for a while, when it happens again it is kind of like a new experience all over again but you are more familiar, you don't think how you act on your feet, you are just doing it.*

The transition to the work place was characterised by a change in expectations for new graduates and it was evident throughout the responses that expectations of new graduates from themselves were quite high in relation to the knowledge and competency base required for the job. Graduates did report that they were fearful as they did not always know what they were doing in the first days upon transition. They were not only concerned about checking on themselves but were simultaneously very anxious about how they are perceived by their colleagues and others. Upon reflection, when questioned, graduates did observe that they were quite demanding of themselves and placed even greater demands on their performance than perhaps their colleagues did.

### *6.3.2.2 Expectations of others*

The opinion of colleagues is of great significance to them influencing their transition experience considerably as nursing is such a team orientated profession. New graduates identify very quickly with their colleagues and are very concerned if their neophyte stage in the workplace impacts negatively on the workload experience of their more senior colleagues. Sometimes settling in was impacted by staff turnover where they are working and there was awareness of how their performance may well negatively impact on the overall workload:

*RGN-0025: You know like I don't think you should be counted in the numbers directly as part of the ward, you*

*should have the extra staff nurse on or the extra care assistant even just for backup on the ward.*

There is a perception that lack of experience is a problem for both graduates and their nursing colleagues; that there is a requirement to hit the ground running and new graduates as part of the numbers are expected to deliver the same performance as any other staff nurse. In some sense there was an expectation from new graduates themselves that they would get on with it to some extent particularly if they had trained in that hospital:

*RGN-0025: so much that was expected of you when you were busy and you kind of felt they would be thinking, 'God can she not do this, I can't believe she is qualified, can't do such and such a thing,' you know that kind of way*

Acceptance by colleagues was an important milestone for many graduates and understanding was evident among graduates that it takes time to feel part of the team and to get to know colleagues. For some graduates there was a sense of isolation and there was a sense that as a new graduates that you have to do your time and wait to be accepted. However there was some exasperation among new graduates in relation to the expectation that they perform to the same level as their more senior colleagues as soon as they commenced initial employment. This expectation that one should be able to manage the same workload as everyone else was more prominent in the accounts of RGNs

*RGN 126: There were times when I felt that it was forgotten that I was newly qualified and the tasks expected of me were beyond my scope of practice.....3 months previously everything was co-signed by registered staff nurse. Then I was expected to do everything myself. The pressure was immense not to make mistakes, it was assumed because you received a slip of paper to say you qualified and register, all of a sudden you were supposed to know everything, stress levels were high.*

Managing the workload produced additional burden for some of those making the transition and new graduates found on occasion



they were unable to complete work quite as effectively or efficiently as their colleagues and they are very aware that they are sometimes late in leaving work. One of the greatest contrasts for the new graduates in making the transition was the differences in what is determined to be acceptable work activities now they were a staff nurse. As a student sitting to read up something or talking to a patient was viewed as a positive behaviour but as a staff nurse there was a perception that maybe this was viewed as avoiding work in some instances as illustrated

*RGN-0089 But I think when you are a student it is great that you can sit down and pull them out but I think as a staff nurse there is kind of the thing where it is not really seen as, like you are kind of dossing as such if you are doing this. I suppose at night it is ok but you do have to do it on your own time.*

A small number of graduates also commented that there was a possibility that sitting down chatting to patients may be viewed negatively by relatives also. There was some frustration for new graduates in sometimes not knowing what was expected of them and there was some suspicion that people are not always forthcoming with information. There was some acknowledgement that one has to develop understanding of the people one is working with and to some extent play the game in order to fit in with the group. There was a keen understanding among graduates of what they need to do in order to fit with the team and they are unlikely to assert themselves very strongly in those initial months

*RPN-0339: but you'd have to be very discrete in the way you say things, you couldn't cut across one's authority, you know the way. Say if you didn't like the way some nurse was doing something, you just simply say, 'oh no we actually do it like this instead that ,' there is no need to be bossing them about, that is what I mean*

There was a sense that one must do one's time as a new graduate and there were things that one could do to assimilate in but not always. In some organisations there are different perceptions as to

whom work is allocated and indeed the degree of influence for the new graduate. Graduates exhibited a strong sense of survival instinct and resilience at work and were likely to identify quickly who they needed to avoid and who may provide them with help at work. The nature of nursing work does require a certain level of negotiation and that can occasionally be accompanied with conflict. Some reported that the conflict they experienced at work had increased probably caused by the greater advocacy role they are now required to play. Graduates reported the things that helped them through and many reported that resilience was required to work as a nurse.

*RGN-0128: Yes a lot of resilience. You have to be able to take a few knocks and stand back up and say, right it doesn't matter, forget about it, it happened, you have done what you know is best, if anything ever happened about it you know you asked, you told, and if nothing is followed through then that is their fault because you left it to the next port of call or seniority to follow through.*

There were instances where some staff provided less support than was desired and working with difficult people occurred for some graduates across all disciplines. There does appear to be a common understanding that such behaviour was to be expected although not commonplace. Graduates were able to distinguish when this lack of support did descend into bullying and reported a variety of strategies to deal with this when it did occur including ignoring it, challenging it directly, referring to unit manager with varying degrees of success. Most appeared to favour avoidance of such unhelpful individuals but the impact could not always be estimated. Some just shrugged it off and vented their feelings to independent individuals where possible. Graduates did report that they were prepared to address the bullying using the nurse manager in some isolated instances:

*RPN-0052: Yes, not all the time and not all nurses are like that, some of them are very supportive.....Yes some of them can be very difficult and you can get that anywhere you work*

*and we were trained that we should not be a bully and we should not be allowed to be bullied but there is no way you can prevent being bullied. If you try to prevent being bullied then you are rocking the boat and that is not good.*

### 6.3.2.3 Attitude to degree

Graduates did encounter pockets of resistance in the workplace to the degree with some suspicion among staff they were not as well prepared for the job as graduates of previous years:

*RPN-0052: They think the degree graduates are not well trained, that we are not prepared to go out there and start practising, that is their fear.*

Some reported a lack of appreciation, or perhaps awareness, of the skills that graduates had attained through the degree but appear to focus more on the perceived deficits as these individuals may not have been as well equipped to hit the ground running as previous graduates of the apprenticeship model would have been:

*RPN-0052 Oh yes, when it comes to everyday practice because as new grads we expect to do some research on anything we do not know. There is an aspect of our training that involves looking to the literature reviews, anything you don't understand and you get the best solution to it, and that I bring with me to work. That attitude of using our skills and I find it very, very useful. But sometimes they don't acknowledge it, sometimes they don't acknowledge our strengths it is just the weaknesses. We were trained when you go to work to acknowledge your weaknesses and our strengths so that will make you grow.*

There was some suggestion that this type of concern was more likely to be among those who were not regularly exposed to nursing students. There are pressures in areas for graduates to conform to the status quo and some reported they were unable to use skills as effectively as they would have liked at this stage:

*RGN-108 I have found it difficult to bring anything of myself/education to my new workplace. We are expected to conform to current practices and routines instead of bringing new ideas and at the beginning I found some fellow staff*

*nurses did not trust me with even the simplest tasks even though I am a registered nurse and trained in the hospital I am now working in. The best support I got was from my classmates who started working at the same time as me.*

New graduates also worried about how they were perceived by relatives and they are anxious to appear competent and knowledgeable about patients in their care. Initially graduates feel a lot of discomfort about their ability to get the job done and there was particular concern about getting it done on time. Sometimes, they acknowledged that thoughts and fears they had about how others might evaluate their performance or decisions at work were irrational.

*RGN-0025: I still would never be finished on time.....there are certain things that some people could leave out, an experienced nurse could leave out but you'd feel that if it was you that left it out that people would be saying, 'God I can't believe she left it out.' Even though they wouldn't but in my head.*

The participants reported their socialisation to the nursing environment was, in a variety of ways, influenced by a number of factors in the work setting. Becoming a registered nurse also enhanced awareness of other service providers in the organisation and the contribution they make, as graduates become less focused on their individual performance and begin to adapt to a more team orientated work environment. This also brought increased awareness of the differences in the priorities that exist within the health system that as students they may not have been aware of or perhaps not as focused upon. Responses across the disciplines as illustrated exemplify the difficulties that were encountered as they grappled with the challenge of being the 'new kids on the block'. The professional values of the graduate can be divergent with those of their colleagues and as experience is valued it does seem that new graduates must put in their time in order to be taken seriously. New graduates can feel disenfranchised as they find the influence they

anticipated upon transition has not materialised and this can manifest in disenchantment with the profession.

#### *6.3.2.4 Traditional ways of doing*

Graduates are entering work environments that are sometimes rigid in their work practices and this was helpful for many new graduates as they knew what was expected of them and when to do it. However, graduates have a variety of clinical experiences during their time in college and can have been exposed to more innovative or flexible patterns of working than they find in their initial place of employment. Many participants commented on the negative effect traditional ways of doing things had on their work experiences. Through their career to date graduates will have developed their own values about how nursing work should be; however, on transition they had to find a way to reconcile their own beliefs and internalised professional values with those of the organisation and people around them. In particular the task orientation of nursing work can appear to contradict the patient centred care values that graduates may have developed over the course of the undergraduate educational experience. This was not commonly reported by those participants working in acute care services but was a frustration commented on by those who were working in long term residential care settings across all the disciplines. One of the other difficulties particularly expressed by individuals in long term residential settings was the disparity between idealized computer generated patient centred plans of care and the actual task orientated approach to care that was operant in some work places. There is some pressure on new graduates to conform to the accepted standards of care that exist in the workplace even if that falls short of that which the graduate anticipates should be the accepted standard. If they are to be accepted as a member of the team there is a culture of loyalty to colleagues anticipated. There is a perception among a minority of graduates that they would not be supported by their colleagues if they made a mistake:

*RPN-0052 So if a junior nurse makes a mistake then it will be a big deal, they will be to watching all the time, reminding you and that makes you feel bad and incompetent. But it is all right for a senior nurse does the same...yes sometimes medications are not given to the patients and nurses throw it in the bin and sign for it as being given .... But for us to say something they would think is wrong. You feel like you have to cover up things, you can't be open and you can't learn from your mistakes...*

Other graduates observed that decisions in relation to patient care can be impacted by the predetermined traditions of the timing of care activities. Compression of work activities into particular timeframes does mean that work can be physically demanding at particular junctures of the day. Graduates can find themselves at odds and sometimes frustrated with the degree of inflexibility in their working day. There is a strong sense among graduates that they must conform to the social order of their respective units and competency was defined exclusively in some instances by speed and getting tasks done to time:

*RGN-0284: It could be organised a lot differently. I think that was the biggest challenge as a staff nurse, because as a student we never had this system where we had to have, up, washed, dressed, fed, drugs, obs, wound dressings, back to bed. ....It could have gone on around us but ... in theory we were always taught to individualise patient care, spend as much time as that patient needs, not get the patient up, pull them out of the bed... 'oh we can't wait for the hoist, no time to wait for the hoist.'*

### **6.3. Knowing what to do**

Participants were quite specific about the significance of gaining confidence in those initial days and weeks. Confidence is indeed fragile among new graduates and for some it was easily destabilised by the actions and commentary of colleagues around. In some instances the lack of confidence was reported as a positive thing as it made one more careful in the course of their work. Confidence is a valuable commodity and the reactions of colleagues have a large part to play in nurturing new staff:

*RGN-0331: My confidence would have gone up a lot in the last year because my first couple of months I was kept working with the more senior staff nurses all the time which did me a world of good to be honest. I wasn't a big fan of nursing when I left college but there are two staff nurses in particular that kind of nudged me along for the first couple of months and after that then I was flying.*

Graduates are quite resourceful and adept at using all available sources of support to their advantage. They will actively seek out assistance or refer to policy and textbooks resources for guidance. Surprisingly few reported they had purchased a drug book but many spoke of accessing the MIMs in their area of work when they were unfamiliar with drugs. In many instances graduates looked to nursing colleagues as a quick fix when they came upon a drug with which they were unfamiliar. Gaining familiarity was a very important aspect in the arsenal of tools that new graduates drew upon in those initial weeks. Respondents varied as to how long it took them to find their feet. At some point, although not terribly aware of when, graduates found things did slot into place and a certainty and ease with the work began to emerge.

*RGN-0284 I think it has got to the stage where it is just routine, you don't have to stop and think about what you are supposed to do. It is an automatic, it is like the automatic switch is on, you just go in, you know what you are doing in the morning.*

An important coping strategy for new graduates lay in the familiarity they had with the unit in which they worked. There was a sense that those who had worked as an attendant or care assistant during undergraduate education found it a bit easier. Many of the respondents spoke of the speed of the initial days and establishing a certain comfort in one's daily work. Some graduates were still developing their confidence and continued to worry that they did not know as much as they should in their workplace

*RGN-0089: I do, I mean it is not developed yet and I really still feel like I am down here. I mean the other day this*

*student, she is 3rd year, and she comes up to me and she said, 'when did you qualify?' I said, 'last year.' And she said, 'how do you know so much?' And I am like, 'I don't', I was just oh my God this girl thinks I know so much but I don't, you know.*

Many graduates, although fearful along the way, have adapted well to the transition, have swum at the deep end, quite relieved to be beyond those initial days of exposure to the reality of the responsibility of nursing and were enjoying their new found confidence in their abilities. It was disappointing for many graduates that the influence they thought they would have on moving into the profession was not possible

*RPN -304I feel that when I left college to work as a staff nurse we were taught about change and how by going into the workplace we can basically change things; however like a lot of a things we were taught were idealistic and also that way to educate us on change. Since being in the workplace, I have noticed how resistant staff is to change and that many of my colleagues are quite old school.*

Graduates were relatively powerless to overcome such traditional ways of doing but did seem to be able to reflect effectively on the way work is organised and approached. Many were willing to voice opinions and make use of whatever avenues were available to them to express their views in relation to the ongoing improvement of care. However, new graduates were sensitive to work environments that were resistant to change and were more likely to favour more innovative work environments.

## **6.4 Support upon transition**

The section details the nature and sources of support provided to new graduates following initial employment as a staff nurse. It also includes findings that relate to graduate perceptions of the attitude to the degree and their advice to improve the support on transition experience for others.

### **6.4.1 Sources of support**



#### 6.4.1.1 *Organisation support*

There was some disparity across the country as to the type and nature of support offered to new graduates as they entered the workforce. It does appear at organisational and local level there is considerable effort and resources devoted to ease the transition of graduates. The larger academic teaching hospitals do appear to have greater resources to devote to the induction and orientation of new graduates. Some of the reported features of these more bountiful resources included formal preceptorship programmes, designated clinical facilitators, week-long classroom orientations, direct supervision or observation and shadowing by more by experienced staff. Those participants who received a formalised classroom induction received lecture and practical updates on areas such as hospital policy, tissue viability, infection control, ethics, CPR, and moving and handling in addition to human resource information. In some workplaces Intravenous (IV) training was included in the formal induction week but in other organisations it had to be negotiated and attendance secured through the off-duty after commencement of employment. There did appear to be flexibility in some larger hospitals to tailor aspects of the induction support mechanisms to individual need. A small number of general nurses who commenced employment in highly specialised areas such as the operating room did receive a longer supernumerary period on commencement of employment. In some smaller hospitals there does not appear to have been similar resources applied and in many instances graduates received little or no formal support. However even in those facilities where skill mix and staffing was not as plentiful, there was an effort to make provision for graduates in those early days, whereby they would be allocated a team to work with the support of more experienced staff to provide guidance as and when required. Many clinical areas operate a team-based approach to organising nursing work which facilitated the placement of graduate nurses with more senior staff to offer guidance and mentorship

*RGN-0020: I was part of the numbers and what we did was one of the staff nurses and myself took two wards but basically I went with her into the first ward and then I went with her into the second ward, so I wasn't actually given my own ward on the first day and whatever had to be done we did it together. But obviously it was doubling up her work or whatever.*

For some graduates notification of uptake of employment was short and for some graduates formal induction was confined to directions to the ward they were working

*RGN-0284: I was actually the first person to start because the other girl started the week after me so basically I went in on the Monday and I was basically shown where my ward was and that was it, off you go. Yes my ward sister came, one of the ward sisters, told you where the fire exit was and we have three, came around and showed me where the fire exists were, did basically the lay out of the ward and then, 'ok in you go now and wash some patients.'*

With relatively few exceptions, graduates interviewed were part of the allocated workforce from the first day of employment in the clinical area (excepting the week of formal classroom induction provided by some larger academic hospitals). Even in those organisations that provided a formalised induction week there was not usually a formal process of orientation on the ward or unit where they commenced employment. For some initiating employment in the private sector a brief period of supported supernumerary status was provided to enable new employees to find their feet. In some larger teaching hospitals provision for new graduate induction included formalised documentation of professional development attainment and included details of generic skills and unit specific skills that the new graduates could get signed off with their ward manager. In some larger organisations there were dedicated nursing personnel to both conduct the induction week and follow up with graduates on an individual level in their respective units to review competency attained, to supervise through particular skills attainment and to complete documentation. It does appear that where this experience was the norm it was

interpreted by graduates as a supportive tool designed to assist them. Individuals who are designated to support new graduates were seen as well placed to evaluate and determine the individual needs of graduates. Graduates value knowing how they are performing and feedback is integral to that process. In some instances support nurses are available on pager to come to assist a graduate nurse at short notice. There was a general appreciation among those who had experienced this type of resource with acknowledgement that, should an individual experience difficulty, this system does have flexibility to evaluate individual need and respond appropriately, although none of the graduates interviewed reported that they received additional help above that received by their peers.

*RGN-0285: I don't know, it has never really come up, I don't think anyone has ever really come up against that but they do have kind of plans in place that if they feel you are not able they can do something about it, give you extra support. That is what the clinical support nurse is there for, she will come up and shadow you for however long and see how you are going.....at first I didn't realise why she was there but then you quickly cop on when she is picking up on things around the place that need to be done or should be done. You know she is saying to people, 'I am just going to come in with you to check that dressing' but in actual fact she is looking at your whole dressing technique. And she'll tell you afterwards rather than make you feel nervous beforehand, she'll tell you afterwards that your aseptic technique is good. So that was good to have her around.*

There was a report of a formal support group for new graduates in ID circles that was positively evaluated

*RNID-222 For the first 12 months as a newly qualified nurse I attend a programme for 1 hour every month with the CNM3, ADN and NPDC of the service I work with along with 15 other newly qualified nurses. We discuss problems we have encountered and how to overcome them and we also are educated on common topics. This is very helpful when the staff allow you time off to go.*

Those who had not received any kind of formal support when probed expressed preference for having formalised support systems for their transition period. Some employees did not receive an induction to the organisation for a variety of reasons, for example, commencing employment at short notice or being out of synchronisation with the organisation-established dates for formal induction

*RGN-0037: No we didn't have an induction week. They basically said can you start in the morning, right come in, you were let alone. So I rang my mother, 'get me a uniform quick.'*

Therefore they were missed and may have been overlooked for subsequent days. There were instances where employees had worked as care attendants and therefore did not receive a repeat induction:

*RGN-0275: I have not had induction at all and when I started I remember saying that I had to get my induction and, 'oh yes we will schedule you in there.' And I have said it numerous times. Because I had induction as an attendant six years previous, I don't know whether they think that suffices. But even just things like for pensions and all that kind of thing because they do go through more than just the layout of the ward and the layout of the hospital. And because I was familiar with the hospital I think it was kind of overlooked a little bit. Like we did do our IV course and they would have been all separate and your trainings but I didn't have...*

Greater difficulty in making the adjustment to the staff nurse role emerged in the conversations with graduates working outside of their discipline for example RPNs working in long-term residential settings, where skill mix was insufficient to provide the support needed. In areas with low staff turnover familiarity with long established routines occasionally produced resistance to the trouble of orientating new staff.

Ways to improve support for new graduates were offered freely by many participants and included advice such as the implementation

of a national strategy for the induction of new graduates and a formalised system of feedback so graduates have more detailed understanding of individual strengths and weaknesses.

*RGN-068 I feel there should be a specific time allowed for orientation into the work force for every graduate in the country with evaluations from your fellow nursing staff as an indication for how well you may or may not be getting on.*

There appear to be a general acceptance that the transition should be a gradual uptake of responsibility rather than the immediate immersion that is currently the norm in many work settings. Graduates would have preferred a period of employment where they were not part of the workforce or indeed that the workforce was supplemented in some way to compensate for the effect their inexperience may have on colleagues. They develop a certain comfort in their initial place of employment; there are occasions when new graduates are re-deployed to overcome staff shortages and were reluctant to rotate to others but most report that some diversification in placement during the first year is to be recommended

#### *6.4.1.2 Support from colleagues*

Other staff nurse colleagues were identified as the primary source of support and reported to be very generous in terms of the provision of guidance and support either formally or informally across disciplines and workplaces. The willingness, approachability and generosity of other colleagues was commented upon frequently and bringing others along appears to be a well established custom and practice in the working life of registered nurses in Ireland across all disciplines. Respect from colleagues and good team relationships characterised a positive learning environment for many new graduates. While some staff do exhibit a less than favourable attitude to the degree, they were still generally supportive of graduates and provided them with appropriate levels of support as

they found their feet. There were relatively few exceptions where graduates felt they were not able to gain the appropriate support from other staff although when it occurred it had considerable effect on the individual graduate. In some psychiatry settings there was effort to set up peer support although for many this did not actually materialise. Familiarity with staff enabled acceptance into the group as a junior staff nurse and this was a mutually positive relationship as it appeared that staff liked to get back their own students. There were reports that staff were successful at finding the balance between encouraging graduate independence while at the same time providing support and close supervision that the graduate required. The terms 'looking out for you' or 'keeping an eye' were used repeatedly by graduates as they describe the ongoing support of having someone more experienced on shift that they could go to for guidance. Some graduates reported that direction and guidance came from other sources such as the health care assistant:

*RGN-0025: No you just kind of got on with it, you done your OBs and obviously you ask questions as you'd go along about the routine in the ward, but I kind of knew it as a student, but you just kind of got on with it and it was the health care assistant as well, it was kind of, 'ok we will do the round now'.*

There was a general acceptance that it is necessary to learn from those who are already on the job, that they are more uniquely placed to show you how the job is done rather than tell you how it is done. While the availability of policy and guidelines were adjunct to the guidance offered by professional colleagues, they were not comparable to the hands on guidance of someone showing one what to do in the workplace:

*RGN-0291: Exactly yes, I mean you can't really put on a newly qualified nurse with another newly qualified nurse and expect them to be fine, it is not fair. So really if the staff were available it should be really experienced with less experienced. I think that... I realise that all the protocols and guidelines are there in folders on the wards but I think that it*

*is not really physically shown to you, what you can do and what you can't do.*

Other staff nurses were the primary resource for graduates as they negotiated the first weeks of employment and for the majority who had a seamless transition this type of support was adequate. Incidences of unwillingness to assist were reported across all disciplines but were not commonplace. Support is widely offered and generously provided but there is a certain level of self-sufficiency anticipated and a sense that graduates should not require excessive coaching or guidance and would be capable of getting on with it and perhaps only need to be shown once. There was an understanding that one had to figure out which staff are supportive and who is less helpful:

*RGN-0285 But a lot of people aren't approachable, I find that it differs, and that is just personality and I completely understand that but when you are in a teaching hospital I think people forget like that it is a teaching hospital, you are taking on new recruits and you have to... But you kind of suss out who are the ones that you can go to and who are the ones that you can't go to basically.*

There was acknowledgement that all nurses, despite being good at their job, were not automatically equipped to enhance a positive learning environment for new graduates

Graduates for the most part felt able to ask for help and guidance but disclosing when they do not know or felt unable to handle something at work was sometimes challenging in the early days as graduates are very concerned with how they will be perceived but as they find their feet and get more comfortable they are more likely to be more forthright:

*RGN-0025: At the start I found it hard to say that [I couldn't do something], but I think with more experience you kind of realise that you have to say that, you are digging a hole for yourself if you are leading people on and pretending, thinking that you can do something that you can't.*

Graduates reported they felt very free to ask questions of nursing colleagues but did express mixed feelings about the approachability of senior medical staff. Graduates did not report that they had made many major mistakes since commencing the job although many did worry about the prospect. Where individuals disclosed mistakes, which were all of a moderate nature, this appears to have had a powerful negative impact on confidence from which it did take considerable time to recover

*RGN-0025: I made a mistake with a drug, I think it was a diabetic drug; the name was right but... I think it was Dymicron or something and if it was a slow release or not a slow release and I think I gave the wrong one, nothing fatal but...Terrible, just your whole day comes crashing down. It took ages to get over that, that you could have given the wrong thing to the patient.*

Those who disclosed a mistake at work did report that they found staff to be supportive, putting things in perspective and taking the appropriate precautions in alerting medical staff and completing the necessary documentation to report.

#### *6.4.1.3 Formal & informal feedback on performance*

Graduates were asked how they received feedback on their performance or how they knew they were doing a good job. There was consensus among graduates that feedback on performance was desirable as was a designated individual to provide guidance as required:

*RGN-0128: Yes and that is one of the things we were always told as students, get feedback. And I always did as a student but now it seems like they don't have the time to give it. And that is what I always say to students as well, get your feedback.*

Many participants commented on the contrast in feedback they experienced as students through the formal assessment of competency and the informality and variability they experienced as staff nurses. A key difference reported now they had transitioned



was the absence of formalised feedback, which for some was a difficulty:

*RGN-0128: Yes and that is one of the things we were always told as students, get feedback. And I always did as a student but now it seems like they don't have the time to give it.*

Graduates reported that positive feedback motivated them to perform better and was forthcoming but in some instances they had to ask for feedback as they would not receive it otherwise:

*RPN-0052: Number one we have to ask, I ask them from time to time. I am a newly qualified staff nurse, I have to say that to them, I need to be reviewed.*

It may be a cultural tradition within the Irish nursing workforce to withhold praise as many graduates remarked that they had not received good nor bad commentary on their performance. In a number of instances graduates did not receive formal feedback but interpreted the absence of negative feedback on their performance as meaning that they were doing a good job:

*RGN-0025: It depends; I suppose I think maybe it could be local to that unit in a way. You know the manager would never be, not that they'd be hateful or anything but they wouldn't be fond of praising you too much*

Graduates appear to accept constructive feedback as being in their best interest particularly if delivered in a manner that they find acceptable. In a small number of instances there was a formal process for giving feedback to some new graduates on their performance. A source of positive support reported by graduates in psychiatry were formal debriefings following major incidents. Formalised systems of preceptorship and assessment can present some challenges as illustrated in the account of this new graduate who was aware of a certain level of scrutiny of her performance while she was in the probationary period, but welcomed the opportunity to get feedback:

*RGN-0003: What they do is they have an assessment that is carried over the first six months so you are assigned a preceptor and then you do an initial meeting, a mid-way and final. So it is with one of your managers or one of the senior staff and they kind of feed back to you how you are getting on. I remember my first line manager said, 'like everyone will be watching.' And I was like, oh my God and I was getting a bit paranoid, everyone watching me! But you kind of get a sense anyway, what they think of you, you just know.*

Expectations have a strong bearing on the transition experiences of graduates and will also influence their perception of the support they are offered. Awareness of monitoring of their performance by other staff can be interpreted as a supportive or as a punitive process. Graduates for the most part appreciate feedback but believe that it must be matched with a realistic measure of the performance of the new graduates. From a minority of graduates across all disciplines there was a sense of worry that mistakes will not be tolerated and if they do not match up to the high expectations of performance of other staff they will not be accepted into the team.

Taking charge was seen by graduates as a significant milestone in their professional development as a staff nurse. In those instances where skill mix was not an issue, to be selected to be in charge was interpreted by the graduate as a positive endorsement of their performance. Depending on the available skill mix and staffing availability, there was variability as to when new graduates took charge of either a group of patients or a unit. In smaller hospitals or long term residential settings with human resource constraints being in charge of either a group of patients or a unit from very early in the employment and some from the first day was common. For many graduates they had yet to experience taking charge in these early months of their career as they were working in environments where opportunity had not presented itself as staff resources had not demanded it.

Respect and admiration for nursing colleagues was the norm for most graduates and therefore in those instances where graduates witnessed standards of care from staff they did not find acceptable, the contrast was a source of conflict and anxiety. In these instances they were resentful of negative feedback from such individuals who had not earned their respect. It does appear that those individuals who did not interpret their environment as supportive were sometimes at odds with what was going on around them. Confronting established norms of practice at a stage of one's career where one is most reliant on the good will and support of professional colleagues means that one will be less able to challenge the prevailing social order. In a small number of instances, particularly in long term residential settings across all the disciplines, graduates experienced less support from their colleagues if they were perceived to be questioning the care going on around them, they were in effect punished and to some extent labelled as being a trouble maker. There was a sense from those participants in psychiatry who had been unable to get jobs in their discipline and had taken work in long term residential settings that they were not as supported and that staff were indifferent as to whether they stayed or not:

*RPN-0052      Yes if you can't be bothered, if you want to leave, if you want to work it is up to yourself just give them two weeks notice, they can't be bothered to ask you to stay*

#### *6.4.1.4 Support from managers*

At a local level unit nurse managers also had a pivotal role to play in the support offered to new graduates. A common source of support for graduates were night managers who provided a catch all open door policy to answer queries as they arose:

*RGN-0331:      XXXX was fantastic, he was lovely, he was really nice. And there were two staff nurses who stood beside me for the first two months. But having said that every other member of staff was helpful, there was nobody you couldn't go to and ask a question to or if you weren't sure about*

*something there was nobody who would make me feel that I couldn't ask. Because I mainly do nights now as well the night sisters are fine as well. If I went and did overtime in the main part of the hospital, they would all make sure I was all right. I was always looked after since the day I started.*

Creating relationships where staff feel enabled to seek support appears to be a key element in the successful integration of junior staff. Generally graduates are eager to learn and aspired greatly to emulate the staff with whom they work. It did appear that on those units where the manager was approachable and sensitive to the needs of neophyte staff that this permeated down through all the ranks:

*RGN-0089: I always feel myself that if the CNMs really have a policy of no tolerance against anything like that, I feel like that does pass down the staff because I feel like if you are in a ward where the CNM does tolerate that it is going to pass down. Now I was very lucky where I was in a ward where that kind of thing wouldn't be tolerated.*

When a graduate does not reach the anticipated performance level it falls to a ward manager to provide the necessary additional support required. There was evidence of disenchantment in relation to the management of staff and a suggestion that senior level nursing management were somewhat removed from this cohort of graduates and therefore did not always make a significant contribution to supporting them.

*RGN 098-Do not get any support at all from nursing admin, ADON etc. We are all terrified of them, they try their best to intimidate us. We get no praise from them about doing a good job, handling a situation well etc. If you tell them something about a situation on ward, you get the head bitten off. You are on tenterhooks ringing them because all you get is abuse, no support from matron or ADON just abuse and criticism. Very tough to deal with when you are trying your very best.*

#### **6.4.2. Relationships at work**

Relationships at work are very important to graduates and it does appear they have considerable impact on the adjustment to nursing work. The term 'clique' was frequently used as graduates attempted to explain the relationship they had with colleagues at work. Building and retaining strong relationship with colleagues is extremely important to new graduates and those who felt isolated from the team were more likely to be unsure of a future in nursing even though they felt inclined towards the job. The adjustment was definitely more difficult for those graduates who commenced employment in areas in which they had not been exposed to when they were students. Establishing relationships with staff that one had not met before may be problematic and meant that it was somewhat difficult to penetrate the group and gain acceptance as a member of the team.

Even when reporting the difficulties they encountered with excess workload in their work places, graduates frequently comment on the solace and support they receive from colleagues at work. Finding a good fit in one's workplace is a significant step in any career, but had greater significance in a team-orientated profession such as nursing. Graduates were particularly aware of the group dynamics that may be at play where they work:

*RGN-0326: It is a very good environment. ... I know I have only worked in four or five hospitals, but it is the only hospital I have worked in that there is no in-ward bitchiness, there is everyone helping each other and it is just so nice to see an environment where I feel like I am growing every day.*

Familiarity with staff as a result of clinical placement as a student was interpreted by many graduates as an advantage as they already knew the lie of the land and where to go for support and guidance. Graduates were mindful that their reputations may well have been earned before they commence employment and their first job placement would be positively influenced by having good relationships with staff when a student. Graduates do learn quickly

how to adapt into their work environment, and appear to exercise a great deal of intuition about how to fit in and not to rock the boat

*RGN-0073: But there'd be one or two that I just find that I don't get on with as well but I'd never fight with them or that, I'd just go in and do my work, they are nice but you know to kind of keep your distance or what certain things to stay away from them or that.*

Some graduates were aware of unsupportive behaviour but had to a large extent decided to ignore it rather than confront such activities. For a small number of graduates insufficient respect from colleagues and other professionals was a potential detractor from the profession for some graduates.

*RGN-068 I feel there is not enough respect from fellow professionals or most definitely not from our government about the jobs we do. This would be a prime reason for leaving the profession.*

Those graduates who were unable to fit for whatever reason did report that they did not have the freedom to change job given the current economic circumstances. Many graduates reported on the lack of autonomy they experience when as new graduates they would be bypassed by medical colleagues in relation to patient care decisions. This absence of communication with medical colleagues was reported primarily by those working in acute general setting and was not a feature of the conversations of those who were working in psychiatry or learning disability settings. There were reports of disgruntlement among some graduates who felt they were asked to be in charge at an early stage in their career even though they might have been working with more senior staff available. Good relationships with colleagues are key to the adjustment and this can be complicated in settings where there is high staff turnover or large numbers of part-time staff.

## **6.5 Conditions at work**

This theme presents graduates' feelings and perceptions about nursing and the conditions of work that impacted on them as they went through their first months in the profession. As this cohort of graduates began work during a period of financial recession and with an embargo on recruitment, the constraints on the health service did receive some prominence. Findings that relate to the contractual status and experience of working agency/relief as the first work experience are also presented.

### **6.5.1 Feelings about nursing work**

Many graduates had found their niche and were deriving immense satisfaction from their job, and working in nursing had afforded them the opportunity to make a meaningful contribution. Many graduates spoke of the gratifying aspects of the job, the privilege of being able to help, the sense of achievement in being able to provide a quality service, and to use their skills to make a real difference for patients in their care. In contrast, other graduates who expressed considerable interest and aptitude for nursing work found that working conditions detracted from the aspects of nursing that gave them satisfaction. Relatively few nurses spoke of monetary incentives in the job but spoke passionately about the human aspects of nursing work. Some graduates felt let down and deeply worried about the potential to make a mistake in the present circumstances. Graduates report that they are routinely filling out forms to alert management to risk to patient safety caused by inadequacy in workload and staffing but feel they or their colleagues are not taken seriously:

*RGN 122- It seems like I don't have time to stop and think about what I am doing. I have less time speaking with patients while concentrating on tasks (physical), writing up notes and organising where a patient is to stay, procedures, what other nurses, doctors and management want me to do in A & E. ... very often I make mistakes or I miss things that I wouldn't have if I had time to think or do things well. In the pressure to get things done I often have to cut corners with*

*correct hospital protocol as there is simply no time to do otherwise. I worry about the time I might make a bad mistake that could potentially harm a patient or myself... most of the experienced nurses are having difficulty with the workload too. I have sleepless nights over things I have done or things I should have done but couldn't because I was too busy. I hate being too tired at work because of this.*

Fear of mistakes was detracting from the job and rendering it difficult for many graduates primarily in acute care services but also in some private long term residential settings with insufficient staffing::

*RGN-189 ... lack of staff and increasing pressure to empty beds asap constantly takes away from our ability to change patients' lives, empower them, give time to listen and above all make their hospital experience as comfortable and stress free as possible. My daily battle is not being able to give my patients enough time as I would like to fulfil the tasks and nursing care to the best of my ability and to the standard I have been trained.*

### **6.5.2 Job satisfaction**

The demands of nursing work are often compounded by staffing and workload issues that are so prevalent in health care today. There was evidence of some despondency among graduates at this early point in their career, no doubt influenced by their experiences of work overload and staff shortages in the current climate. There is a commonly held perception in the profession that graduates may well leave nursing as a result of work conditions, yet none of the participants in these interviews expressed any serious desire to exit the profession.

*RGN 330 I enjoyed working as a student nurse. I hate my job as a staff nurse at the moment. There is a lack of staff, managements have stated they will no longer replace sick leave and will cut one of our members of staff from the weekend. One week day there were 3 staff nurses for 30 patients! My back is constantly sore as there is so much lifting involved in the job. I spend my day running around yet senior management are trying to blame the busyness of our ward on the poor organisational skills of the nurses. I strongly feel this*



*is not the case. It is due to low staffing levels and a high amount of very high dependent patients.*

Commonly graduates were satisfied with the intrinsic elements of nursing work where time was spent in the delivery of nursing care. They were dissatisfied with extrinsic elements such as short-staffing, excess workload, completing documentation and tracking down medical staff:

*RGN-111 I thought I would like it, had a completely different idea of what nursing was like. I thought nurses just care for patients and got to spend time with patients, however in reality that doesn't happen. You spend the majority of your day chasing doctors to do things and not with your patients.*

There was some discussion of the contrast in monetary remuneration for some participants now they were registered and that pay differentiation was inadequate between unlicensed personnel who had not undertaken a third level degree and did not assume the responsibility of work as a staff nurse:

*RPN-099 I earned €2 less per hour as a care assistant, I had no responsibility and enjoyed the work a lot more. The nursing salaries have to increase. People with a lot less responsibility are on better money. It doesn't add up at all.*

There was some frustration as to the range of tasks incorporated into nursing and many graduates spoke of frustration with the volume of non-nursing duties that included a variety of house keeping and administrative tasks in addition to duties that were within the remit of medical staff. As a result staff can feel overstretched and less able to focus on the core areas of nursing responsibilities:

*RGN-133 I get very frustrated at the fact nursing covers a whole range of duties. This involves organising curtains for isolated rooms, emptying bins, making beds, doing drug round, documentation. I feel we, as nurses, don't complain. I feel like I often have to do doctors' jobs therefore my salary does not correspond to the amount of responsibility I have when I speak to other people i.e. care assistants/home helps*

*and they are paid the same amount as me, a fully registered general nurse with a 4 year degree. I feel nursing is a lot more work than I ever thought, physically & mentally.*

Graduates are attracted to the variety that nursing offers and aspects of the work appeal to different people. There was an inherent understanding that it was necessary to overcome difficult aspects of nursing work and this is an ongoing challenge but by and large graduates were focusing on the positive aspects of the work in order to cope.

#### *6.5.2.1 Embargo issues*

The embargo on recruitment was foremost in the mind of graduates and there was a great deal of insecurity for graduates due to ongoing rationalization within the health service resulting in a certain amount of uncertainty and confusion for graduates as to their career choice. The effect of budgetary restraint on working conditions was reported by the majority of participants across all disciplines. Insufficient staffing and workload related stress were features of the conversations with RGNs primarily, and to a lesser extent with RNIDs and RPNs. There was frequent commentary in both the survey responses and the interviews of the extreme working conditions that had been commonplace since the embargo on recruitment.

There was a pattern of concern expressed by individuals working in private long-term residential settings as to the quality of care they are able to provide in such settings due to inadequate skill mix and short staffing. With frequency, graduates working in acute care services spoke of the stress they felt in work due to work load and short staffing.

*RGN-260 Nursing, at the moment, is very stressful as we are working under stressful conditions due to staff shortages. There are some days when I honestly feel that I can't continue with this career purely due to being physically and mentally stretched to the limit, due to the lack of staff. I look*

*forward to the day when we have the required number of staff and working won't feel as dangerous as it does at the moment. There are some days when it is utterly embarrassing to work in our health system.*

Some worried about the risk of being re-deployed to another area or in fact losing their job altogether. There was resentment that even though they were working full-time, and may have interviewed successfully they find themselves maintained on a panel without a permanent job when the units they worked on were routinely using agency staff and had vacancies.

### **6.5.3 Influence at work**

In general new graduates were able to assert themselves appropriately but many graduates did suggest that they had relatively little influence on the clinical environment:

*RGN-0025: You would talk about them yes, they would be brought up in meetings but there is nothing that I could say that I would see to change that hasn't already been spoken about before and nothing has been done*

A small number of graduates did express disappointment that once qualified they did not have the ability to make care decisions in the way they had hoped and were regretful that they did not have the influence they anticipated on registration:

*RNID-0030: I think as a student or before even going into it I thought you would be able to make more changes in relation to the people you are caring for. Because you had this knowledge and that you would be able to do things just to help them more, that was my initial hope... Like once you become a nurse you notice that it is not totally what you expected. Like you do wonder, you ask yourself, you do everything you can just to make sure that they are having a good day and that they are happy and that they are treated with dignity and respect and yet I can not really change the ways things are done around here*

This inability truly to influence the quality of care in a meaningful way was commented upon by participants in all disciplines but

appeared to be more acutely felt by graduates working in long term residential care settings across all disciplines. There was resistance among some staff to making changes to long established patterns of care and there was less than enthused tolerance for junior staff nurse graduates who viewed things differently as evidenced in the conflict noted in the account of this RNID graduate working with a majority of RGNs in her workplace:

*RNID-222 However in the last 3 months I've noticed none of the staff are willing to make small changes in the care they provide, they are also uninterested in new ideas. I work in an ID setting, out of 10 staff I am the only RNID. I find this extremely difficult as both professions have very different training techniques. Also as the majority of staff are senior members and RGNs, my opinion is always overruled. Out of 5 nurses only 2 are Irish. I find there is a huge communication barrier, which affects the quality of care delivered.*

There does appear to be some difficulty in intellectual disability settings for new RNIDs to have their perspective on care decision taken into account particularly if working in an environment where there is a high proportion of RGNs with some reporting that their views and opinions on care planning are not given sufficient attention.

#### **6.5.4 Delegating**

There was considerable evidence that graduates are gaining comfort in delegating work to others but are conscious that they are never perceived as giving orders to others. In some instances it does seem the criteria they use for delegating is not always logical:

*RGN-0037: But if I was busy myself I might get them to check but I would never be sitting down, but I would never say you go and do that. I would never really ask somebody to do something I could just do myself, but if we were busy and working together it wouldn't be a big deal just to say 'could you...?'*

With frequency graduates reported that they would not delegate an activity that they could do if they had the time to do it themselves

even if a task be well within the job description of support personnel and may have freed them up to do a more suitable task to their profession. One of the solutions to delegator resistance that emerged was for the graduate to compromise or indeed compensate the delegatee as illustrated in the following account:

*RGN-0297: Well care assistants, I suppose it goes on in every hospital, a couple of carers, if they are there 30 odd years and they have this chip of their shoulder, 'you don't tell me what to do, you were in a student's uniform five minutes ago and now you are practically running the place....' So that was quite tough. I would have got to know them quite well as a student and they find it quite hard to adapt...I would say it was about three months into when I started, and I asked for help and the care assistant was sitting in the nurses' station doing nothing and there was another junior staff nurse up to her eyes doing IVs and she was really busy. And she said, 'do you mind going with \*\*\* and giving her a hand?' She said, 'no I have got stores to do.' I said, 'well this patient is going to fall out of bed, there is a student in with her now, I need a hand'...she got on with it ...but the fact that I was going to be working on the ward for another three months, I didn't want to make enemies, so I went and I gave her a hand putting away the stores afterwards when I had all my work done.*

There were instances of conflict with experienced staff as they come to terms with the graduate expectations of care delivery, which may be different from established norms. In some isolated incidences graduates found their clinical assessment superseded by unlicensed support staff familiar with established routines and perhaps more accepted members of the team. There is evidence that new graduates are questioning the world around them but across the disciplines there were isolated instances where graduates did feel that their decision making was sometimes overruled and ability to negotiate their scope of practice was superseded by more experienced registered nursing staff who failed to respect their professional abilities. It is hard for graduates to overcome this without being plummeted into a position of conflict:

*RPN-268 I feel that as a 26 year old nursing graduate it is easy to allow yourself to be ordered about the unit and some senior staff imagine that even after a period of time working*

*in the same unit you are unable to make decisions within your scope of practice and will quite willingly overrule you, regardless if they work in your department or not. It is hard to get some respect, even with our degree. I hope we don't all go the same way in 25 years*

### **6.6.5 Off-duty/Contractual status**

There were mixed responses from graduates as to their perceived level of control over their off duty. While graduates work nights and weekends with regularity they do seem to negotiate off-duty requests favourably if done in advance. Negotiating days off at short notice was more problematic but most found other staff accommodating and that their areas of work were flexible as long as skill mix was not compromised. Those who were assigned to permanent relief or pool positions did report that they were able to make off duty requests but had more difficulty in negotiating time off at short notice. A small number of hospitals had split shifts, which new graduates were not favourably disposed to and for some these were an unacceptable condition of employment. One group of general nursing graduates in the midlands were engaged in industrial dispute at the time of data collection, where offers of full-time work in one hospital that had been offered were not subsequently available and there was considerable inconsistency in the availability of hours:

*RGN-073 Before I graduated the Director of Nursing from xxx was in the college guaranteeing us stable jobs in xxx where I subsequently got a job. However due to what they claim is the embargo I feel we have been treated like no more than a number. We are currently 8 new graduates bringing a case in the labour court against xxx Hospital in relation to our 'if and when contracts' which according to INO are illegal. When I began work in xxx in July I was put into a nursing pool where I was given weekly duty. Although I was getting more than 30 hours I did not get enough notice of duty. During the embargo we were not guaranteed any work. We would be rang at 3 o'clock in the day to come in for night duty that night. Eventually I had to tell them I was unavailable for work due to the unpredictability of what they were offering. I did go onto social benefits and work part time in a pub. We had one meeting with DON in this time in which she guaranteed*

*us our jobs were safe. However I have financial commitments and could not work from September to January in the hospital due to unstable duty. I have been back in the hospital since January not because I feel I have a commitment to it but because I need to build up experience. I am getting approx 36 hours per week. I feel disheartened, angry and disappointed by this situation and am seriously considering leaving a career which, before qualifying, I was enthusiastic and excited about.*

Uncertainty in employment was more common for RGNs working in acute care services. Relatively few of the graduates interviewed were on permanent contracts (of the 22 persons interviewed only 6 had a permanent job) and were therefore concerned that should any further budgetary constraint dictate, they would be let go. Another cohort who graduated from a different hospital also found the work they had understood had been offered did not materialise

*RGN-071 Shortly after registration, I along with 44 other newly qualified nurses were subsequently let go due to budget constraints. A HSE recruitment embargo swiftly followed making it almost impossible to find work within the nursing profession, as the 45 of us had zero post-reg experience to put on our CVs. We felt rejected and unwanted. I along with many of my colleagues spent many months unemployed and suffering multiple rejections from job applications; many returned home to their part-time jobs. I eventually gained employment in a private nursing home which, I have to say was a very nice environment to work in. However, I saw no prospects in staying there so with 3 months nursing home experience under my belt I began applying for jobs again. After a bleak and career questioning period I am now working in a large Dublin hospital, in a department which I am very enthusiastic and excited to be working in. I can finally see a future in this after such a challenging start.*

### **6.5.6 Agency/relief/bank**

Some graduates did commence their career as agency nurses and found challenging clinical situations without appropriate levels of support and expressed concern about the potential for risk to patient safety:

*RGN-318 When I first qualified I had no choice but to do agency work like the rest of my class. ..I had to leave as I was extremely stressed on quite a number of occasions, there were mainly junior staff, and just one senior nurse in charge, the rest of us had just qualified that year and were looking after patients in a medical ward of an acute hospital. ... I probably would have ended up leaving Ireland to work elsewhere if I didn't get a job in an organisation with a proper graduate programme where I am more settled and comfortable. I am glad I moved out of the area. I am more supported now.*

There was acknowledgement that one does not engage with the work as deeply when one is working in a temporary capacity as the incentive to invest in the patients is not the same if you are somewhere else on the next shift. Quality of care is affected as illustrated in this account where the participant acknowledges they do not have the same interest in discharge planning:

*RGN-0037: I don't be thinking of the long term, you know, if I had a patient I'd be like thinking, I wonder how he copes at home, I had better look into the public health nurse or ask his family, you know, you wouldn't if you were on another ward because you are just there for the day. You don't think the long term with the patient at all, well I don't.*

Commencing employment as permanent relief staff was a considerable challenge for junior staff as they were responding to crisis or emergent situations where wards were particular busy. Once a unit had stabilised the new graduate would be re-deployed to another unit in an extreme busy state with the result that the entire shift could be spent in a state of heightened activity without opportunity to advance in any way. Sometimes graduates felt that their underdeveloped skills were more of a hindrance than a help:

*RGN-0291: I didn't like being put in there on relief because I was sent there quite a bit when it got busy, you'd be on like female medical and then you'd be sent up there at 3:00 in the morning, road traffic accident came in. And then you get sent back down to the wards as soon as they were quiet. So I didn't enjoy that at the start because I just didn't know where anything was and everything happens so fast there that they don't have time to tell you where everything is and you are*



*kind of arriving at a busy time anyway. So sometimes you felt like you were in the way a bit...I personally found it quite stressful to go in the morning and not know where I was going to end up or to be put on a ward and not know when I was going to get a phone call to go somewhere else. But when I was left somewhere for a number of days I kind of got into a routine and felt more confident in what I could do and what I couldn't do...I felt I could cope with more.*

Some new graduates felt somewhat sidelined when recruited as permanent relief or pool as they do not have a sense of belonging and have little opportunity to develop relationships. The inability to support themselves was a particular concern for those graduates who participated from regional locations where they were unable to get adequate hours on a bank contract

## **6.6 Career expectations**

This section details the findings in relation to the recruitment experiences, career intentions and job prospects among new graduates

### **6.6.1 Recruitment process**

New graduate recruitment experiences varied across the country. Few graduates applied for nationally advertised jobs while many were interviewed by their respective employers before they had completed their undergraduate education. Partner institutions recruited new staff by accessing graduates directly through their university or third level college. In many, but not all, areas graduates were automatically interviewed by their training hospital. In some instances prospective employers advertised directly in their respective partner third level college before completion of course and interviews in some instances were held in the colleges. Some voluntary and private sector employers travelled to meet with prospective graduates before they completed their final year and in a small number of instances jobs were sourced informally. There was quite a lot of regional variation as to the perceived availability

of jobs. There was evidence in both general and psychiatric disciplines that political and economic events at a national level were contributing to limitations in employment opportunities. Graduates of third level institutions in the regions outside the Greater Dublin area reported more difficulty in accessing jobs; most appear to have desired employment in their locality but were often unable to secure this. However, some younger graduates reported that they were anxious to re-locate to Dublin for their first job as they wanted to get away from home.

The profile of graduates in psychiatric nursing indicated that a greater proportion of them were 'mature status students' and there were reports that those who undertook degrees in this discipline in Letterkenny, Tralee, Galway and Waterford had greater difficulty in accessing work in acute psychiatry in their area. General nursing graduates in Mayo, Athlone, Sligo and Dundalk appear to have had particular difficulty in securing jobs within the services in which they completed their clinical experiences. It does appear to have been commonplace for graduates of these third level institutions to re-locate to Dublin to access work. Participants seeking employment with the HSE spoke of being placed on panels following success at interview. This was not a feature of the experience of those seeking recruitment in the voluntary or private hospitals in the Dublin area.

There was a lot of variation in the approach to interview taken by prospective employers but by and large they appear to have been supportive of new graduates. There was a perception among some graduates that recruitment was also influenced by relationships one had with Clinical Practice Coordinators (CPCs) during one's undergraduate education:

*RGN-0128: Slightly in that they kind of looked at you and then depending on, like they'd be listening and talking to the CPCs...Well through the CPCs they would, I mean I think the CPCs are slightly on the interview panel as well.*

### **6.6.2 Career intent**

In general the career intent of new graduates was dictated more often than not by the position that they were offered rather than by any pre-determined career planning by the individual. Options were dictated on job availability in their area at that time, which was a bigger issue for graduates outside of the larger area academic hospitals in this period. The opportunities for career development for this cohort of graduates were in no small way affected by the embargo. Information was not always forthcoming on job availability as there was considerable confusion during this time period across the health service as to the nature and application of the embargo and some graduates spoke of their luck at getting into jobs before the embargo. When asked about their career intent for the next five years some were uncertain about what they would do while others were clearer about their career priorities. Surprisingly few graduates expressed intent to leave the profession throughout the interviews and in the qualitative responses to the survey:

*RPN-313 I am very satisfied with my present work department...My current department gives me responsibility and opportunities to use my own initiative with the added support of a CNM2 and allied professionals.*

*RGN-0089: I knew it would be hard, I knew you would have your good days and your bad days but I can't see myself doing anything else. I mean yes there are frustrations and everything kind of gets to you but there are the good days and I definitely would see myself staying in nursing yes I would. I just feel that this is what I was meant to do.*

In general, graduates appear to be well informed about their options. However, they are quite mindful of the potential influence of economic conditions and job opportunities on the future directions of their career. Decision making in relation to their career was, for some graduates, influenced by work conditions that were not all that they desired, where the ability to provide the service was perceived to be negatively impacted by their perception of insufficient staff and resources:

*RGN 265: I do enjoy nursing but it's not a career I could be happy in for the rest of my life due to pressure and stress caused by poor staffing levels; poor pay rate in relation to work; little or no recognition/respect by other allied professionals.*

#### **6.6.2.1 Intent to travel**

The motivation to travel is very prevalent in this cohort and variety of motivators expressed by graduates, particularly in general nursing, as to intent to travel in the near future. For many the desire to travel was inspired by the perception of enhanced career opportunities and work conditions in other countries and, indeed, job offers of work in Australia, London, and USA were a draw for graduates in general nursing.

*RGN-213: Due to what I perceive as a lack of options, career advancement, salary and working practices in this country, I fully intend to continue my nursing career abroad, probably in USA or Australia. When compared to these countries, Ireland seems to fare behind in many areas. I certainly won't be staying in the institution I am in at present which appears to be a mismanaged disaster, hugely in debt and with no leadership.*

For some graduates nursing is a passport to travel as illustrated in this response:

*RGN -0278: Nursing helps, I can go anywhere, I could go to Australia, New Zealand, the States, Dubai if I fancy it.*

Other graduates have taken an optimistic viewpoint on the pressure to travel to gain experience believing that on their return it will place them favourably for job opportunities.

#### **6.6.3 Job prospects**

A significant proportion of graduates appear disappointed in their career prospects. There was less flexibility in employment

opportunities for this cohort of graduates with reduced requirement for employers to meet individual's needs and this dictated the intent to change job in some instances. There was some disappointment among graduates as to the reduction in career opportunities available to them as a result of the unforeseen economic circumstances that had overtaken the health services since their initial college entry to pursue a career in nursing. For some graduates, particularly those who were transitioning into the larger teaching hospitals, there was a sense of greater diversity and possible career opportunity even though choice had been considerably curtailed as a result of the embargo

There was some conflict evident amongst the graduates in learning disability nursing as to the nature of the work anticipated in this area

*RNID-153: I am qualified in intellectual disability nursing and I have 6 months' experience. I have just started a conversion course in Adult General Nursing. I chose to do this course because I didn't feel I was appreciated as an ID nurse. I felt more like a social or care worker (or an accountant sometimes).*

*RNID-225 Nurses in the ID field are not commended enough for the work we do. ID has come a long way over the last 10 years but has a long road ahead to meet normalisation. Working conditions and staff levels are in the majority of places very poor. A lot of work a nurse does is care assistant level. On a personal level I plan to leave this profession unless I see change in the working environment and conditions. So I think that says it all about nursing.*

Some graduates outside of Dublin found the jobs they were offered did not materialise or that the conditions of employment were very unpredictable. New graduates believed there was an obligation for the hospitals that you had trained with to provide some opportunity to get experience upon graduation. There was disappointment for some graduates who found themselves with little notice of where they were to go and in fact found themselves working as bank, agency, or relief on their first day of work:

*RGN-0285: Very first job, and didn't find out until the morning of induction the very first day, they were given a letter, a brown envelope and they were told that they were on bank that there was no ward for them to go to.*

*RGN-257 although it is good experience to see other hospitals/wards and how they work, I found there was a huge lack of support, training and guidance given to me as an agency staff nurse. No orientation/probationary period given. I chose to join agency out of desperation....I feel frustrated and continuously questioning whether or not I want to stay in nursing and Ireland as a result of my experience. I would love to pay back my education to my health service provider but have not been given the option to do so... as all jobs require 2 years experience. I ...feel I have been given no support at all in the transition from student to staff nurse and feel hopeless to career expectations and intent to stay as a nurse in Ireland.*

There was a particular disappointment for mature graduates in regional locations outside Dublin as evidenced very clearly in the account of the following graduates

*RPN 0305: I worked really hard during the four years of the degree and got first class honours; but now I cannot get a job in psychiatry. When I started the course in \*\*\*\*\* I did believe that there were going to be jobs locally. But in fact nearly of all us has had to go to Dublin to get jobs. Loads from my year are not working at all.*

*RPN-0052: Yes I did an interview, out of 300 I got 161 from the panel and the panel only took 22 or 23 and out of the 22 most of them were, like, working as staff nurses there for years or they have four or five years' experience and they would be the first to be taken in before me, they have been working there. So the possibilities of getting a job there on that panel are very low.*

*RGN-0105: Before we came out we knew from the class before us, they were the first lot of the four years of the honours degree to qualify, we knew that only about 8 or 9 of them had got jobs locally in the Kerry area and the rest had gone to Dublin, England, Australia.*

Such accounts were indicative of the dilemma faced by graduates who had undertaken nursing degrees in regional locations, believing

that there were going to be jobs available locally when they qualified. Many regional graduates in psychiatry relocated to secure positions in health care institutions in the Dublin area, often in private sector hospitals. However, relocating to Dublin for work was not a viable financial proposition for many mature graduates given their current financial constraints and family commitments

*RPN-0305 I have made a decision to really put my psychiatric nursing career on hold and I am going to try and maintain myself working in nursing homes in the hope that I will get a break on a psychiatric nursing job locally.*

#### **6.6.4 Desire for learning**

Graduates place a lot of emphasis on what they consider to be good quality experience and there is a general appreciation among them of any clinical or educational opportunities that enable them to advance in their chosen discipline. There is an acceptance among the majority of graduates that this is a period of their career where the emphasis is on maximising their clinical exposure and building confidence and competency in their chosen field.

*RGN-0089: It is a bit soon yet because I feel I need to build on my foundation now and kind of building up to 1st floor before I go to the roof.*

Many of the graduates were thinking about their future career but were enjoying their positions and intend on maximizing their clinical experiences. There was a considerable amount of agreement among graduates as to their intent to pursue further education. Across all disciplines graduates reported their intent to pursue diverse pathways to enable future specialisation and educational advancement in (sometimes outside) their chosen field but within nursing. The desire to specialise was a particular feature of the responses of RGNs. The RNID graduates expressed disappointment that their ongoing educational opportunities appear to be confined to challenging behaviour or care of the elderly. There was a perception that in order for them to advance in their chosen field it

was necessary for them to qualify in another discipline. A number of RNIDs demonstrate a desire, not to leave ID nursing, but to enhance their skills through education in general nursing:

*RNID-267 As an ID nurse, I would to purse a course for general nursing but will have to go to England to study same which I find disappointing. I couldn't see myself working as an RGN just to have a more knowledgeable background. I do hope to pursue a masters but I feel I need more experience as a staff nurse*

*RNID-194 I want to do children's nursing in order to become an early intervention nurse. I will never leave nursing. I also hope to work abroad for a while.*

### **6.6.1 Access to professional development**

There was a great deal of variability across workplaces as to the availability and access to continuing educational opportunities in the workplace. For some, information about continuous professional opportunities was forthcoming, the process was transparent and study days were a common feature of their working lives. In other workplaces information about study days was less available:

*RGN-0025 But it would never be said, there is a study day for such and such a thing. You know, it would never be brought to your attention or whatever; you'd have to go and look it up.*

This is a cohort that appears to be very committed to professional development and in general demonstrated keen awareness of the professional requirement to remain up to date in practice. Some did express some frustration with the limited opportunities available in their workplaces, which had been further amplified in recent times by the embargo. Others worked in areas where professional development opportunities were not limited but access was often dictated by the constraints of staffing and workload in their respective units:

*RGN-103: There is little opportunity to undertake study leave as staffing levels will not allow for same.*



There were also economic constraints affecting availability of access to professional development opportunities with instances of managers determining the value for money in investing in professional development opportunities.

*RGN-0037: Yes but there was a good stamp down on it when the embargo came in because they won't pay for you to do it*

Motivation to attend study days was mixed, with many reporting that they were happy to use their own time to avail of professional development opportunities and others who were not inclined to attend due to lack of time allowed

*RGN-0275: I actually love the days but I have actually done them on my own time because I haven't been sanctioned. Like there would be documentation ones, there would be wound care, a lot of wound care and back therapy and ones on the ward which is great, they come up for an hour but any of the day ones I would have gone on my actual day off to do them. I feel it kind of very unfair that you don't get the days back.*

*RGN-0073: I would like to do other stuff, I am not exactly sure what. Like I am looking into infection control because I find it interesting, I'd like to do courses even if I don't get time back, I just like to do stuff.*

## **6.7 Reflections on the degree**

This section presents the thoughts of new graduates as they reflect on their degree education and on the adequacy of their preparation for the job and includes their suggestions on how it should be developed to enhance entry to the profession.

### **6.7.1 Preparation for job**

A large number of graduates did feel they were adequately prepared for the role as a staff nurse and valued the extensive clinical placement that is central to the four year nursing degree in the Ireland. Graduates for most part reflected positively on the degree

while acknowledging that it was an intensive third level course. They are generally pleased to have undertaken a degree programme to facilitate entry to the profession affording both a professional qualification and an honours degree, and spoke of the opportunities that were open to them as a result.

*RGN-0285: I'd say I was prepared, I don't think anything will prepare you for that hands-on sort of patient... you know, you can do all the theory in the world but until you are in that situation you will never know what it feels like. But I mean I felt 95%, I had the theory to back me up, you know that sort of way, and I could fall back on what I had learned. Clinical placement wise, yes I think it all stands to you, you do learn... yes, I think four years definitely does stand to you.*

Now that they are working in nursing, graduates did reflect on their education more critically and found that their perspective on educational preparation had adjusted to some extent:

*RGN-0020: I do find as a student God I did a lot of moaning, 'God how do they expect me to study this and write this' and all this kind of thing. But I find now that a lot of stuff that I had been taught that I thought was gone or irrelevant or whatever comes to me, it is in the brain, you are not using it every day but as soon as if you asked me a question or if I needed to do something... like I found that law was very boring going to law lectures ...But now I am going, 'it is so relevant',*

Most graduates reflected favourably on the degree, particularly mentioning the range and variety of subjects and clinical experiences they had been exposed to throughout the four years. Those graduates who attended colleges with rostered clinical placements timetabled in third year rather than fourth year reported some greater difficulty in making the adjustment to work as a staff nurse.

*RGN-0291: I think that if I had gone... I did a year of placement in 3rd year and if I had gone from that year straight onto the wards I would have been absolutely fine. But the fact that in 4th year you go back to college and you are doing exams and you are off the wards, then you are*

*thrown back out as a qualified nurse, your confidence is kind of back down low again and you don't feel ready for it.*

Graduates who had graduated from colleges attached to smaller regional hospitals did comment that exposure to clinical experiences and innovation in health care for students in the larger academic hospitals is superior as it is possibly more diverse with greater levels of acuity. There was some discussion of the adequacy of clinical exposure for some students on the degree due to constraints in placement availability with the result they may not have got the desired breadth and depth of clinical experience they anticipated:

*RGN-0331: Yes a lot have, a lot of ours would have been the care of the elderly, like they were classifying the District Hospitals as medical placements for us, which really they weren't but they classified them. So in my fourth year, my last medical ward was a District Hospital where you had no doctors around, there was just the nurses. The GP came in maybe every two or three days for an hour and that was it. So it wasn't really much of a medical placement.*

Conversation across all disciplines emphasized the importance of their educational experience in preparing them to work in the reality of health care delivery. Some reflected that to some extent the organisation of the degree had protected them from the harsh reality of managing workload, that they had not really been fully exposed to the effects of politics and staffing issues on daily working lives. There was a realisation among graduates that the educational preparation could never fully prepare one to navigate the reality of practice that confronted staff.

The importance of preparation in pharmacology in the degree was emphasized by many graduates as they recognised that related activities occupied a large part of the every day work. However there was awareness that educational preparation in relation to drugs was not going to suffice in practice and graduates were keenly aware of their responsibility to stay up to date. Graduates overcame their inexperience by taking considerable time and care exercising

extreme caution, using drug books and other staff as reference points.

### **6.7.2 Skill acquisition**

Medication administration is indeed a very large component of the work of any registered nurse and it was a primary concern in those initial weeks. There were several reports of dissatisfaction from general nursing graduates as to the level of preparedness they felt to administer to prepare and administer intravenous drugs. They had observed throughout the degree excess caution exercised to minimise the risk to patients in relation to IV drugs with the result they did not get the level of required exposure. Even the skills that they had attained during the degree caused difficulty as they had not had an opportunity to do them repeatedly and therefore had more difficulty in trouble-shooting them when they were responsible.

*RGN-0020: No, the exams were over before we did the calculations, our exam days were over. That I thought... we had not a clue because we had CPCs out on the ward and said, 'if I see you near a drip I'll cut your hands off.' And fair enough, if you haven't qualified you can't touch them so you automatically should... today I was doing it, I've done my exams, I got my results and now I am going out and I haven't a clue, not a clue.*

*RGN-0128 IVs and working the pumps and stuff like that, not a clue how to work the IV pumps because we were never shown as students because we weren't allowed touch IV pumps as students, except press the silent alarm button, that was all we could do. And that was only just to keep them quiet.*

Throughout the degree, graduates reported that there is a significant fall off in the skills training in the latter two years of the degree which they found unsatisfactory. Some graduates felt inadequate or not quite fit for purpose if they did not have skills they interpreted as essential on the first day. New graduates do appear to favour concrete examples of their competency such as

attainment of proficiency at procedures, successful completion of the IV course rather than the less tangible aspects of nursing education such as competency in communication, clinical assessment, and principles of safety. There was some frustration evident that aspects of work as a nurse that graduates believe are core to purpose are not automatic outcomes of the degree. Issues highlighted by RNID participants lay around the requirement to manage a unit and to complete documentation when they transition to the staff nurse role, even though they had not had adequate exposure and practice in doing the same during undergraduate education. Practical skills specifically mentioned by general nurses were male catheterisation, IV therapy, cannulation, and venepuncture as these were considered by 2007 graduates as being essential in contemporary healthcare. No skills were specifically mentioned by participants in the other disciplines

A small number of participants spoke of the requirement to prepare graduates for the process of seeking a job and in particular interview skills now that graduates were no longer likely to gain employment in their link hospital. A very small number of graduates reported dissatisfaction with the overall preparation for the job they received on the degree and that the expectations of the profession were not consistent with what could be expected of them from such a programme.

*RPN-099 This seems to be the general feeling of all recent graduates, the degree programme is pathetic. We cover a lot of irrelevant material in college and don't cover at all what we should. We are allowed no transition period, we are expected to know everything and take on huge responsibility straight away*

## **6.8 Summary**

### **6.8.1 Socialisation to nursing environment**

The reality of transition to staff nurse was defined differently in different places across workplaces but was characterised by the freedom to organize one's own work and the direct responsibility for patient care decisions and delivery. Exchanges with relatives and medical personnel took on greater importance as the graduate comes to terms with their new role. The things that worried graduates most in the initial days were drug administration, being responsible for care decisions taken and responding appropriately in an emergency situation. The transition experience was cushioned to a certain degree by the nature of support available in the working environment to which the graduate first takes up employment. The expectations that graduates have of their own performance are quite high and they demonstrate a keen enthusiasm to fit in with and please their colleagues. For the most part graduates take the transition in their stride but the trauma of the experience is contingent greatly on their perception of ability to fit in with the team. This is why they may overly identify with the socialisation to the nursing environment during the period of initiation and will not be ideally placed to influence care. They have relatively little influence on their environment as the nursing profession does appear to value experience over education at this time. The socialisation to nurse environment is of critical importance to new graduates and they adapt to the expectations and social norms of the environment around them with some exceptions.

### **6.8.2 Support**

The nature of formalised induction and support for new entrants to the profession varied considerably across the country and is organised according to the custom and tradition of individual organisations rather than any national agreed standard. Sources of support for new graduates do differ but staff nurse colleagues are identified as the primary source of support. New entrants to the

profession do differ as the degree of support they need and the process of supporting a new graduate into practice is indeed an interactive one, reliant and influenced by all parties including the graduate. Local leadership provided either through senior staff, clinical nurse managers or dedicated support nurses all appear to be variables that positively impact the quality of support provided to new graduates. Across all disciplines the qualities of the supportive work environment appear to include attention to skill mix in allocation of patients or clients, the approachability of clinical staff to queries in addition to formalised feedback on performance. Mobility in the profession is an important feature that is interpreted as necessary to keep people motivated and avoid burnout. Given that such job mobility is to be anticipated graduates did express the need for standardising induction procedures across the country. New graduates do value the opinion and respect of their immediate colleagues and without exception they were happy to have undertaken a degree as the entry point to the nursing profession. While they report consistently that staff nurse colleagues are supportive they are however sensitised to the opinion of some staff within their own profession who believe their training or education is not as good as the apprenticeship model of previous years. The transition period for new graduates does not end when they have found their feet on their particular unit, but is a gradual and incremental process where confidence and competence are simultaneously acquired.

### **6.8.3 Conditions of work**

Unanticipated economic events significantly influenced the working conditions of this cohort of graduates as they transitioned to the workplace. It did appear that most graduates are favourably disposed to the intrinsic work of nursing but are considerably impacted by extrinsic factors such as short staffing, workload and skill mix. Graduates have limited influence on the care decisions around them and are selective in delegation to ensure they are

accepted in the team. Uncertainty and insecurity in employment is the norm for many nursing graduates. Contractual arrangements as agency and relief staff are not uncommon and produce additional stress to graduates and risk to patient safety during the transition period.

#### **6.8.4 Career expectations**

The findings indicate that career mobility is a feature of the Irish nursing graduate workforce with an expectation of changing job both within and across employment sites. This is augmented with a strong desire among graduates to diversify experience, avail of continual educational opportunities and/or to travel. For a significant proportion of graduates uptake of their first job was a seamless process upon graduation with real opportunity to contribute to decision making in relation to career direction. For some graduates in the general and psychiatry disciplines, securing employment was a more difficult proposition. Decision making as to the speciality area, if any, pursued by new graduates was influenced by the jobs they were offered and the constraints of the embargo as they graduated. Many graduates took their first position guided in no small part by the allocation of new positions by nursing administration in their respective organisations. Graduates in the large teaching hospitals were able to express more preference for where they wanted to work and many of were enabled to seek diverse experiences. There was evidence of frustration and disappointment among graduates in relation to the limited employment and educational opportunities at their disposal as they enter the nursing workforce in the latter part of the 2000s. Commencing employment on relief or as agency nurses did have some advantages as it provided opportunity to experience a variety of work environments and gave them time to consider the suitability of particular areas to them. However, agency work as a first point of entry to the profession was largely viewed negatively as it lacked formalised support and guidance. Among graduates of regional third



level colleges there was intense disappointment that anticipated jobs in their locality did not materialise.

#### **6.8.5 Reflections on the degree**

Graduates are generally satisfied with the education they received on the honours degree programme and believed it has prepared them to uptake employment in nursing. As they entered practice, there is a greater appreciation for the diversity and applicability of many of the subjects covered in the curriculum. Pharmacology was one subject area that graduates do believe required more emphasis in the degree as it had such an impact on the everyday work of a nurse. There was acknowledgement that not all learning could be obtained through educational preparation and that there is professional requirement to keep oneself up to date. Deficits in the skill preparation for the job were more frequently reported by general and learning disability graduates but not commonly reported by RPNs. The deficits identified by general nurses primarily centred on their responsibilities in relation to drug administration, venepuncture and IV therapy while RNIDs focused on general inadequacy to take care of clients with more acute physical care needs.

## **Chapter 7: Discussion**

### **7.1 Introduction**

Twenty first century nursing graduates embark on their careers in a health care environment defined by a multitude of factors that did not impact on previous generations of Irish nurses, including changing demographics, increased survival rates with chronic illness, and diverse career opportunities in a time of growing fiscal restraint, consumer activism and global nursing shortage (Kimball and O' Neill 2002; Aiken 2004; Oultan 2006; Buchan and Aiken 2008). Turnover among new graduates is high both nationally and internationally (DOH&C 2002b; Buchan and Aiken 2008) and the estimated cost of turnover of new nursing graduates is 1.2 or 1.3 times the cost of a typical 1<sup>st</sup> year staff nurse salary (Jones 2005). While at the time of writing this final report a reprieve from the nursing shortage is currently being experienced in the Republic of Ireland (ROI), it is anticipated that retention of nursing graduates will re-emerge as a prominent manpower and fiscal concern for the Irish health services. This mixed method study investigated the factors that influenced the transition and career expectation of new graduates of the recently implemented 4 year honours degree in nursing in the ROI and this chapter seeks to extract the critical findings, and compare and discuss those in the context of relevant and contemporary literature. Relevant findings that shaped the discussion from Chapter 5 and 6 are signposted throughout the chapter. Effort is made to integrate both survey and interview findings and, as will be illustrated the strength of the mixed methods design emerges as the qualitative and quantitative data serve to corroborate and supplement one another. The transition and socialisation experiences, work readiness, and adjustment on entry to nursing practice are discussed. The nature and quality of support given to new graduates and perceptions of their working conditions on entry to practice are compared and evaluated with consideration of the resultant influence on career decisions. Lastly the career expectation of this new brand of Irish nursing graduate is

illuminated, specifically their career pathways and perceptions of opportunity for professional development, motivation, career intention and factors that positively or negatively influence new graduate retention.

## **7.2 Transition experience-adjusting to being in practice**

In this section key findings pertaining to the transition experience are discussed including sources of stress and fear of mistakes. Initiation into employment is a significant milestone in the career of any new nurse and this cohort of graduates reported challenges familiar to previous graduates of diploma and certificate programmes in Ireland and in other developed countries (Kramer 1974; Oermann and Moffitt-Wolf 1997; Charnley 1999; Gerrish 2000; Oermann and Garvin 2002; Mooney 2007b). The exploratory stage of a nursing career (<2years) is a period when graduates focus on gaining confidence and competence (Chang *et al.* 2006) and degree nursing graduates emerging from Irish third level institutions in the 21<sup>st</sup> century have similar priorities (section 6.3.2.1). Irish graduates, similar to American graduates who participated in the design and implementation of a standardised orientation programme across six US academic teaching hospitals (Goode and Williams 2004), seek to develop ability in organising and prioritising work, communication with multidisciplinary team, responding to emergent situations and practical skill development. Irish degree graduates are concerned with mastering clinical tasks, learning the routines, practices and shortcuts that are not easily accessible in textbooks (section 6.9.2) but are so essential to clinical performance as also evidenced among 11 degree graduates from Nova Scotia, Canada, who participated in in-depth interviews about their transition and preparation for practice (Ellerton and Gregor 2003). Macrum & West (2004) who had conducted a positive evaluation of a structured new graduate 13-week orientation programme for 20 graduates in Virginia, reported that it is natural for new graduates to be task-oriented and to be pre-occupied with

technical skills at this stage of their careers. Several studies confirm the findings of this study (section 6.3.1), that the period of transition is a period of acute stress for the graduate (Maben and Macleod 1998; Charnley 1999; Gerrish 2000; Oermann and Garvin 2002; Mooney 2007a). The factors that influence stress levels found in these new graduates have been documented in previous studies in the United States, United Kingdom, and Ireland and include fear of mistakes, increased responsibility, accountability, diversity of tasks and workload, and deficits in clinical knowledge and skills (Jasper 1996; Maben and Macleod 1998; Oermann and Garvin 2002; Casey *et al.* 2004; Mooney 2007b). Similar to other studies stress for new graduates was particularly associated with lack of experience of and difficulty in organising and prioritising work (Oermann and Moffitt-Wolf 1997; Halfer and Graf 2006). The interviews in this study took place after 9-12 months and, largely, graduates appeared to have overcome their transition difficulties (section 6.4). This is in contrast to a study of 434 US nursing degree graduates across 12 academic hospital sites, of whom 42% reported that they perceived they were still having transition difficulties 1 year after qualifying (Fink *et al.* 2008). Comparison with degree courses internationally is problematic as the discipline-specific immersion in the Irish system is different in nature to the generic preparation to work across general, psychiatric, intellectual disability, obstetric and children's nursing in countries where degrees have been the norm for longer periods such as the United States, Australia and New Zealand.

Frustration among Irish graduates in relation to the association between workload and fear of making mistakes corroborated by both interviews and survey findings (sections 5.3.3 & 6.7). are similar to those detected in a study of graduate (n=270) experiences across 6 Denver hospitals (Casey *et al.* 2004). This was a more notable issue for a higher proportion of general nurse graduates, and can be possibly linked to the serious consequences of making mistakes in acute care where most graduates commence

employment. The graduates in this study emerged into the workforce just as an embargo was placed on public health service recruitment and the combination of insufficient staff or lack of support with the normal process of finding one's way in a new post was found to be a difficult issue similar to the experiences of degree graduates in previous US studies (Casey *et al.* 2004; Fink *et al.* 2008). Being put in charge prematurely (section 6.5.1.3), a source of considerable stress for some Irish new graduates has been previously observed in a qualitative study of 22 new graduates in the US in a study of new graduate perception of their adaptation to clinical practice (Kelly 1998). This was an issue for those Irish graduates who commenced employment in areas (usually outside of the major academic teaching hospitals) where skill-mix insufficiencies necessitated new staff taking charge either immediately or very soon after commencing employment. Being put in charge was also a source of feedback or endorsement of performance in an exploratory study (Amos 2001) of the transition experiences of Danish graduates as it can engender a sense of achievement when one copes and this was certainly evident in this study where Irish graduates demonstrated remarkable resilience.

### **7.2.1 Socialisation as a nurse**

Key findings in making the adjustment to practice in the Irish context are considered in the light of Kramer's theory of reality shock in this section. The issues facing degree graduates in the ROI in the early part of the 21<sup>st</sup> century bear resonance to the concepts advanced in Kramer's theory. However, the shock experienced appears less profound than advanced by Kramer. Graduates do acknowledge the force of the adjustment as they come to terms with the limitations of their competency. Kramer attributes the shock to the thwarted idealism due to protective nature of the educational process experienced but Irish graduates do appear to be well socialised to the reality of the work of nursing. Degree nurses may well not be shocked or morally outraged to the extent

suggested by Kramer but they are reporting concern and discontent to the quality of care (section 6.7.1 & 5.3.3). Nurses can experience alienation and loss of professional identity when they experience a dichotomy between the quality of nursing care they think they should give and the standard of care they perceive they deliver, and sacrificing one's own standard of care to conform and meet the demands of work can be a source of moral distress for the new graduate (Kelly 1998).

Professional socialisation is the process by which new graduate nurses acquire the knowledge, skills, values and attitudes of the main body of professional nurses as they come to terms with their professional role (Corwin 1961b; Young *et al.* 2008). Corwin (1961b) describes the role conception of nurses as comprising of three components, bureaucratic, professional and service or, more simply, primary allegiance to the organisation, the profession or patient needs, suggesting that all three are inherent in all practising nurses to varying degrees. Irish graduates at this stage of their career are particularly responsive to the bureaucratic (Section 6.3) and considerable efforts to adapt to the employer/collegial expectations and fitting in at this juncture in one's career, has been previously observed in other graduates (Corwin 1961a; Delaney 2003; Mooney 2007c), and as a result they have relatively little influence on the career delivery patterns at this stage (section 6.5.1.1). This is in some contrast to the findings of Young *et al.* (2008) with 25 graduates in the US who, in the process of evaluating the effect of an intensive 6-week induction course for new graduates, reported that service role conception was highest in degree nurses. This focus on fitting in to the role, as already established, is not different than that desired by previous graduates of diploma or certificate programmes in Ireland (Mooney 2007c). Taylor *et al.* (2001) did not find that educational background (degree or diploma) influenced role orientation or socialisation of UK nurses, probably as a result of the similarities in clinical exposure between the two courses.

Role discrepancy (Corwin 1961a) and reality shock (Kramer 1974) are terms used to articulate the conflict that occurs for new graduates when they encounter dissonance between the values of the organisation and their personal values. Kramer's (1974) seminal work suggests that if graduates are unable to reconcile this discrepancy they would be more likely to leave the profession. Service role conception places value on service to the patient and the provision of holistic care (Corwin 1961b). Socialisation to nursing practice is influenced by clinical context and Philpin (1999), reporting on a Welsh study of new graduates (n=18) across three hospitals in a variety of health care settings, also acknowledged a dichotomy between the idealist preparation of practice and reality of giving care restrained by a shortage of resources and traditional ways of doing things whereby psychological care is often forfeited to meet the physical need. The reality of practice meant a dominant hierarchy and rigid structure where conformance was expected for Welsh graduates in 1999, and these findings also have some resonance with circumstances for graduates in Ireland in the latter part of 2000's (section 6.7.2.1). Philpin (1999) determined that long term care settings provide more favourable conditions than acute care areas. This was not consistent with the findings of this study as conflict was evident for a small but not insignificant number of graduates working in long term residential care settings (n=6) (section 6.5.1.3) but greater evidence of flexibility and innovation in care emerged in the accounts of graduates working in the more acute areas (section 6.5.1.1). This Welsh study examined hospital settings exclusively and differences observed within the Irish context may be explained by the isolation of some residential care settings with limited staff turnover and access to innovation in care practices.

Recent reports in the Irish health services such as the Leas Cross review (O' Neill 2006) have suggested a certain tolerance for sub-standard care has pervaded some health care facilities. Upon

initiation to employment, if the context of care is substandard there is a risk that new graduates who are more responsive naturally to the bureaucratic role at this juncture may become socialised to the norms of the work environment and opportunities for them to develop responses to the more service-centred and professional aspects of the role may be forfeited as the context of care has such a defining influence on the socialisation of new nurses. Maben et al (2006) found ideals held upon graduation such as the provision of high quality evidenced-based care can be thwarted through either professional or organisational sabotage. In this study, many graduates found their colleagues supportive (section 5.4.8 & 6.5.1.2). However, the organisational circumstances that promoted task-orientated care, or excessive workloads or inadequate time/skill mix to provide idealised care did influence socialisation. Many graduates of previous nursing education systems can offer accounts of examples of ritualised practice where the service need and tradition took precedent over patient care and, although not commonplace, there was some evidence that such practices persist. Maben (2006) described the idealism of new graduates on a continuum from 'sustained' through 'compromised' to 'crushed' work environment and most certainly the findings here would suggest it can potentially have an effect on the sustenance of ideals.

### **7.2.2 Expectations**

Key findings in relation to the high expectancy of graduate clinical judgement and skill acquisition from themselves and their professional colleagues are discussed in this section. The unrealistic expectations of competency are of significance in this study and are given detailed consideration. Expectation of degree graduates of themselves were quite high (section 6.9.1) as has been previously observed in other studies both nationally and internationally (Jasper 1996; Kelly 1996; Ellerton and Gregor 2003; Mooney 2007a). While graduates did generally report they felt prepared for the work of nursing they, in common with graduates of other types of academic



nursing programmes at all educational levels, have concerns over their confidence in clinical skills (Macleod Clark *et al.* 1996). Roberts and Farrell (2003) compared the expectations of new graduates (n=60) in Tasmania upon entry to and after 12 months in employment using Australian Nursing Council Incorporated Competencies and found graduates expected more of themselves in the initial days than did either preceptors or managers. However, after 12 months in practice graduates estimated their competency to be higher than their preceptors or managers. There was also some frustration, in particular among graduates, as to expectations of management now they are qualified (section 6.3.2.2). Ballie (1999) has previously reported the dissatisfaction of the majority of managers with the management skills of new graduates and Fink *et al.* (2008) reports that delegating to assistive personnel was a concern for degree graduates in the US. UK graduates have previously reported great difficulty with practical skills, communication and management skills (Maben and Macleod 1998). Mooney (2007b) found senior staff in an Irish context were not sufficiently supportive and highlighted the distrust of junior staff by experienced staff. Of 5700 nurse leaders in the US who responded to a survey to rate new graduate proficiency on 36 individual competencies, satisfaction was reported of between 21 and 61% (Berkow *et al.* 2008). Leaders were most satisfied with skills related to information technology, respect for cultural diversity but less satisfied with ability to take initiative, work independently and skill relating to clinical judgement, decision-making and follow up (Berkow *et al.* 2008).

The findings of this study present the high expectation of the decision-making capacity of new graduates from themselves and others (section 6.9.2), which could be judged as unrealistic. Nursing work is highly complex and perhaps the importance of clinical expertise, judgement and intuition is underestimated (Benner 1984). Adverse events associated with inexperience have been previously documented (Blegen *et al.* 2001) and the inability of new

graduates to select out the most important things to prioritise care can mean that important care can be missed. These deficiencies can be overcome by guidance and the helping hand of a more experienced nurse (Ebright *et al.* 2004), demonstrating that it is reasonable to accept that graduates require supervision and guidance in the period of their career. It is not realistic for the profession to expect its new graduates to function as equals to their more experienced colleagues. The Scope of Practice model (An Bord Altranais (ABA) 2000) does provide graduates with a framework and an opportunity to negotiate their individual needs although this is reliant on the presence of more experienced staff to guide them. Skill mix is a largely unappreciated aspect of nursing work as one nurse is not always exchangeable for the next. Divergence is evident between what is anticipated by the service, graduates themselves and third level institutions.

Competency is influenced by a multitude of factors including interprofessional teamwork and the context of practice (Ironside 2008). Benner (1984) describes experience as having sufficient exposure to practical clinical situations to enable one to anticipate and recognise patterns of care needs. The concept of competency needs to be expanded to consider that nursing practice is not always observable and that competency in the educational setting does not always translate in to competency with the reality of clinical practice (Ironside 2008). A competency transcript designed to capture a measure of clinical judgement and psychomotor skill acquisition compared the responses of degree graduate RNs in Texas (Roberts *et al.* 2009a). Using Benner's (1984) Novice to Expert Model to estimate clinical judgement researchers found the majority of graduates were at the novice level (56.2%), a minority at advanced beginner level (7.7%) and a further 30.5% of graduates were deemed unsafe. Benner (1984) estimates it take two and a half years of constant practice in the same job to practise at competency level. In the modern health care system the needs and expectations of clients are now vastly different. Expectations do need to be

adjusted, as the idea that a new graduate should hit the ground running somewhat undervalues the role of experienced nurses in bringing the graduate from advanced beginner to competency (Ellerton and Gregor 2003). It is accepted that the nurse should be skilled at the bedside and for some there is a perception that this can not be achieved through a university education.

Mc kenna et al (2006) correctly argues that the nursing work is no longer delivered in controlled, predicable environments where patients are admitted to large institutions for long periods and warns that 'selective reminiscences' (2006:137) of nursing whereby delivery patterns and circumstances of care in the past are romanticised do not contribute to the debate in relation to the educational needs of contemporary nursing graduates. It is generally accepted that it is essential that healthcare professionals such as physicians should be well educated and there is an acceptance that competency has not yet been achieved at the end of a university education. The educational learning of physician is in fact extended through the period of assuming the role as a junior doctor and working under the guidance of experienced practitioners. While the nursing education systems of the past in Ireland did produce the type of graduates that were required for the health care workplace of that time, there was a tolerance of a sub-standard academic education system for nurses. Of course the two are not mutually exclusive and the design and retention of apprenticeship elements such as the internship go a long way towards ensuring that graduates emerge with both a thorough clinical and theoretical preparation.

### **7.3 Preparation for the professional role and work readiness**

Positive findings in relation to work readiness of nursing graduates emerging from the 4 year degree are considered in this section. Key deficits in the undergraduate curricula including pharmacological knowledge and experience of clinical skills are discussed. Practice

employment sites desire that graduates that are 'competent to function in nursing service at the time of graduation with adequate clinical and patient management skills' (Adlam et al (2009:570). The Irish approach to the education of nurses does provide the broader knowledge anticipated in a 4 years honour degree programme but retains the discipline-specific approach in contrast to the generic degree nursing programmes internationally with the exception of the UK with a lengthy period of paid internship thought to be an essential component in the preparation of work-ready graduates. Degree education differs because it is educational-led rather than service-led and Irish student nurses are supernumerary and also experience a significant period of paid internship during their undergraduate experience. Self reliance has been demonstrated to be important in coping with stress for new P2000 graduates in the UK (Brown and Edelman 2000) and Irish degree graduates do appear to be resourceful and adept at getting the help they need. It does appear that the paid internship incorporated into the curriculum has yielded positive results (section 6.9) and efforts have been made in other jurisdictions to incorporate such a model in undergraduate degree programmes. Direct comparison with other countries that offer a similar degree approach to nursing education would be of benefit. Gamroth et al (2006) reported on a evaluation of a trial of paid employment for final year Canadian students (n=123) and reported that the programme was successful in increasing confidence, competency, skill, organisation of work and enhanced capacity to work within a team. One of the difficulties reported was that staff in the work area did not understand the role as it was new. Some marginal improvement in retention was found but of greater significance was that it took less time for those who had experienced internship to transition on 4 critical dimensions that shaped transition 1) Gaining familiarity with ward; 2) Managing RN patient workload; 3) Developing working relationship with colleagues; 4) Gaining comfort and familiarity with unique care needs of their practice. (Gamroth *et al.* 2006).

It has been argued that the education of nurses has become too liberal and is producing individuals who do not desire or have the appropriate skills set for clinical work (Levett-Jones 2005). In a review of graduate transition programmes in Australia Levett-Jones (2005) report that after qualifying graduates report lack of competency in skill and confidence. Changes in education have increased emphasis on theoretical knowledge in nursing education with perhaps less emphasis on the practical aspects transitionally associated with education and Bjørk (1999) in a Norwegian study designed to develop a model of graduate skill acquisition cautions that we should not underestimate simple practical tasks in nursing and that feedback on errors and observation of practice are essential in skill acquisition. Gerrish (2000) previously attributed clinical skills deficit to shorter clinical placements and under-utilisation of the period of rostered service. The concern expressed by these Irish graduates about their lack of clinical skills (section 6.9.1) is surprising given the intensive immersion in clinical practice afforded by the paid internship. One of the peculiarities of this group was that in the initial degree group, the internship was delivered in the third year for some students resulting in a gap in clinical exposure prior to uptake of employment. The timing of the internship has now been standardised by all service providers to the last thirty-six weeks of the programme, which does mean that risk of de-skilling because of absence from the workplace before commencing employment will be minimised. However, given the disparity between organisations as to the activities that may be undertaken during this period, this may still result in deficiencies highlighted by the participants here.

Mooney (2007b) used a grounded theory approach to explore the perception of diploma graduates (n=12) of the role transition and concluded that the supernumerary status of the diploma student had limited their opportunities to garner the experience they anticipated upon graduation. As borne out in previous studies new degree graduates do appear to be very focused on their ability to

carry out skills but perhaps less aware of their clinical judgement skills, although they consistently report fear as to their ability to respond to emergent situations (section 6.3.2.1). Burns and Postner (2008) argue that as students, graduates were not placed in a position to make clinical judgements in emergent situations. The Texas Nurses Association Nurses Education Redesign Taskforce (Burns and Poster 2008) has developed clinical judgment competencies to evaluate how new graduates would respond in practice to clinical judgment situations such as deep venous thrombus, pulmonary embolus, acute renal failure from a drug overdose, haemolytic blood transfusion reaction, cardiac or respiratory arrest, and diabetic ketoacidosis, all chosen because they represent high risk situations and such endeavours could well have application in an Irish context.

Many of the shortcomings in Irish nursing degree education (section 6.9.2) are not unfamiliar and have been reported in evaluation of degree curricula in other countries. Pharmacology, time management and assertiveness were all highlighted as areas for improvement in an investigation of the employment of new graduates in New Zealand (Adlam *et al.* 2009). Top skills highlighted as most likely to cause graduate (n=270) discomfort in an evaluation of 6 Denver hospitals were as follows: IV starts; blood draws; assessment skills; tracheotomy suctioning; naso-gastric tube placement; blood transfusion; time management prioritisation care; catheter care; telemetry interpretation; administering IV medication; IV drips; communicating with physicians and wound dressing (Casey *et al.* 2004). Some specific shortfalls and unmet practice needs may be attributable to the degree curriculum that although new, is still influenced by the apprenticeship and diploma models and may indeed require updating to reflect the professional needs of a modern health service. Unmet learning needs in relation to patient responsibilities such as organising a referral or transfer letter and drug administration and pharmacology have been previously reported in an Irish context (Mooney 2007b) and it

appears from this study that the need for improvement remains unmet. The Scope of Practice (An Bord Altranais (ABA) 2000) could be more appropriately utilised here to afford students maximum opportunities to get the repeated practice in desired clinical skills.

A review of guidelines for nursing registration (An Bord Altranais 2005) does indicate that the modular nature of degree curriculum used in third level institutions is not reflected in ABA descriptions. This does render it difficult to make easy comparisons as to consistency across colleges in relation to the suitability and standardisation of the curriculum and learning outcomes. The move to third level has relinquished responsibility to ensure the minimum competence level of degree graduates to third level institutions and An Bord Altranais has responsibility for the accreditation of such educational establishments. This does necessitate measures to ensure consistency, and changes in skills and responsibilities anticipated in each discipline should be reflected in the curriculum. While the ABA guidelines on pre-registration education do provide guidance as to the expected theoretical content and clinical experience that a degree graduate education should include, they appear to be interpreted differently across organisations and health service providers. Developing consensus between ABA and among health service providers and third level institutions as to specific clinical competencies anticipated during the internship and support for graduates in the initial period would be beneficial for all. In response to feedback from the health service providers all of the third level institutions have standardised to a nine month internship at the end of the programme, and similar standardisation in the curriculum design and assessment would be advantageous particularly in the absence of a national licensure examination of minimal competency. This might mean that practice through repeated exposure to skills and clinical decision making may be more enabled and this will mean that the transition will not be the 'drop at the deep end'. This study is focused on graduate perceptions; however, an objective evaluation of the competency

level of new graduates from the perspectives of service providers would be an important component in a comprehensive evaluation of the nursing degree.

#### **7.4 Contractual status/ shift patterns**

Key findings considered in the section relate to high proportion of graduates on temporary contracts, the lower than European rates of satisfaction with working hours and high number of graduates working long days are considered in this section. Market level forces greatly influence whether a person works full time or part-time in nursing but does not tend to affect whether an individual works or does not work in nursing (Brewer *et al.* 2009) and the vast majority of Irish graduates are in full-time positions. The reality of practice is that the service is very reliant on new graduate employment to replenish numbers and maintain skill mix. Traditionally in Ireland nursing graduates commenced employment on a temporary contract and it appears that such employment practices still persist (section 5.2.4). Flinkman (2008) in a study of factors influencing intent to leave nursing among recent graduates (n=147) in Finland found temporary contracts were also a feature of the working lives of young nurses (58%). This is a country that, similar to Ireland, enjoys a higher nurse ratio (Organisation for Economic Co-operation and Development (OECD) 2010).

Halfer and Graf (2006) explored the perceptions of work environment and job satisfaction during the first 18 months in practice in a US magnet designated academic hospital and found that flexible scheduling was of particular importance in determining job satisfaction among new graduates (n=84). Rambur (2003), in a large study of nurse intent to leave the profession in US state of Vermont (n=4418)) found an association between part-time work and reduced intent to leave, endorsing the need for flexibility in a female dominated profession. The majority of Irish graduates in 2007 were born after 1980 and are often described as 'nesters' and value in particular a balance between home and work (Duchscher



and Cowin 2004). Nurses favour control over their work shifts (Ruggiero and Pezzino 2006) and the proportion of Irish graduates who reported they were satisfied with their working hours in relation to their wellbeing and to their private lives was somewhat lower (section 5.2.5) than the relatively high rates of satisfaction of between 60 and 83% across Europe, highest in the Netherlands and lowest in Italy (Hasselhorn and Buscher 2003).

The use of extended work shifts has increased dramatically in recent years and a recent international systematic review revealed that a compressed working week is associated with enhanced work life balance but may also increase adverse events (Bambra *et al.* 2008). Marcum and West (2004) in evaluating a structured orientation for new graduates in Virginia observed that participants achieved progress more consistently when working four 8 hour shifts rather than 3 12-hour shifts. In a large US study researchers analysed the logbooks of shifts kept by 393 nurses to determine the relationships between shift work and patient safety and found that 40% of shifts exceeded 12 hours (Rogers *et al.* 2004). The researchers concluded that nurses were three times more likely to make an error when working 12.5 hours or more (Rogers *et al.* 2004). Reports are emerging of greater levels of fatigue at work associated with working 12 hour shifts with higher rates of sickness absence and lower job satisfaction and an accumulation of tiredness on days off (Zharil-Benson 2002; Ruggiero and Pezzino 2006; Maben 2010). Rogers *et al.* (2004) also found that nurses worked on average 55 minutes longer than scheduled each day and that working over-time is also associated with increased likelihood of making an error. The frequent usage of agency nurses may also contribute to additional work strain on permanent staff as it necessitates repetitive supervision of unfamiliar staff (Gardulf *et al.* 2005).

## **7.5 Work conditions**

Significant findings in relation to the effect of high quantitative demands of nursing work compounded by staff shortages are

discussed in this section. In addition, key findings that suggest low level of graduate influence over care decisions and their disappointment with the quality of care they provide are considered into the context of Kanter's theory of empowerment and subsequent work on Magnet characteristics of health care organisations. Workload varied considerably, causing graduates to worry that they are unable to maintain standards of patient safety and quality (section 6.7). The mean nurse-patient ratio of 10 (SD 5.25) in the Irish context is very similar to that detected in a large study of nurse-patient ratios in the UK using a sample of 122, 736 nurses across 30 English acute care trusts (Rafferty *et al.* 2007). However, nurse-patient ratios are very difficult to compare across health systems due to differences in supply, demand and expectations of productivity. Evidence is emerging from America and Australia of efforts to place mandatory minimal limited ratio to 1:4 or 1:6 (International Council of Nurses (ICN) 2010). There is little consensus in the ROI as to the appropriate nurse-patient ratio as yet and considerable variability was evidenced in the accounts of participants but greater attention is being paid internationally to reducing nurse/patient ratios in the interest of patient safety and the cost saving that may be brought about by reduced patient stays (Rothberg *et al.* 2005).

Acute nursing, as previously reported, is particularly stressful due to the high level of responsibilities and rapid technological advances (Kelly 1996). Quantitative findings in this study that RGNs more commonly have less time to talk or time to do their work than other disciplines are corroborated by the frequency with which RGNs spoke of the fast pace and requirement for speed at work (sections 5.3.3 & 6.7). Demands on new graduates compounded by staff and skill mix shortages do mean that novice staff are forced to exercise considerable judgement and skill to respond to the needs of increased acuity in hospitalised patients and do increase the threat to patient safety (section 6.7.1). In a comparison of 39 magnet and 139 control hospitals, Aiken *et al.* (2008) detected a 4.6% lower rate

of mortality in magnet hospitals and attributed the cause to hospital difference in the organisation of nursing care. The frustration among Irish nurses with workload, skill mix and concerns about safety of patient care (section 6.7.2.1) are similar to concerns expressed by new nurses in other countries (Casey *et al.* 2004; Fink *et al.* 2008). In a report of hospital care across five countries Aiken (2001) found discontent in hospital work was associated with inadequate staffing levels, inadequate support services, lack of professional recognition, work-life balance, poor quality of care and unresponsive management with insufficient opportunity to contribute to decision-making. A sense of despondency prevails that these difficulties are beyond the control of the new graduate with inadequate opportunity to influence the quality of care in any real sense (section 6.7.1 & 3). Kanter's (1977) work suggests that employee attitudes and behaviour are influenced by the structure of the work environment and are contingent on adequate access to opportunity, power and access to resources. Features of Kanter's theory of empowerment are reflected in the importance placed by new graduates on the support of colleagues and access to information section (5.4.7; 5.4.4.; 5.8.6 & 6.5.1). If graduates continually perceive they lack the necessary support, time, or skill mix to do the job (section 6.7.3) even at this early stage of their career they may be less engaged with their work and less likely to strive to reach organisational goals. Graduates are starting out on a career in nursing and it is anticipated that the intrinsic motivation and professional values that have been shaped in their education will equip them with the necessary skills to aspire to and make an active contribution to the ongoing developing the health service (DOH&C 2002a). The application of Kanter's (1977) theory indicates that if conditions of work are such that graduates perceive themselves low in opportunity they will limit their aspirations and exhibit lower self-esteem and self-protector behaviour, which will limit any opportunities for effective change as they concern themselves solely with extrinsic rewards (Kanter 1977). Similar concerns were expressed in the findings of many studies in a large systematic

review on oppressed group behaviour within the main population of nurses (Roberts *et al.* 2009b).

Widerszbal-Bazyl (2008) explains that in countries where job opportunities are plentiful, tolerance for factors such as high demand/low control and lack of support will be lower. When job opportunities are severely reduced such conditions are unlikely to produce turnover; however they are likely to produce effects on employees such as burnout. It is conceivable that if the experienced nurses are becoming burned out in such work environments that the new graduates will also be vulnerable. Cho *et al* (2006) reported that 66% of Canadian new nurse graduates had exceeded the threshold for severe burnout and put forward the contention that burnout negatively impacts on job satisfaction and organisational commitment, two significant factors that positively contribute to retention of new graduates in nursing. The experiences of Irish graduates have much in common with graduates internationally who are affected by economic constraints and fast-paced health care environments with high workload and competency expectations. Even in countries with stable health care systems across Europe, issues of burnout and excess workload have been detected (Hasselhorn *et al.* 2004).

The Effort Reward model seeks to measure any imbalance between effort expended and reward as an indication of work stress (Siegrist 1996). Lavoie-Tremblay *et al* (2008) found a significant effort/reward imbalance, high psychosocial demands and elevated job strain among young Canadian nurses who expressed intent to leave the profession. Siegrist (1996) reported that the closer the effort reward ratio is to 0 the more favourable an indicator of favourable balance between the two. Hasselhorn *et al* (2004) and the NEXT study team examined the effort-reward imbalance and intent to leave across seven European countries. Ratios for new graduates in Ireland (0.72, SD 0.26) were comparable to those of 6 other countries with Belgium, Germany, France, Italy, Poland and

Slovakia ranging from 0.57 to 0.82. Only the Netherlands demonstrated a substantially more favourable balance at 0.43. Over-commitment, another indicator of job strain among Irish graduates, was 14.39 (SD 3.64) and appears comparable to other countries ranging from 13.9 to 15.1 with only the Netherlands substantially lower at 11.9.

Roberts et al (2004) describe 'the survival mentality that pervades nursing work environments' (p407) and workload has been associated with exhaustion predisposing to burnout (Leiter and Maslach 2009). Perceptions of unfairness and inadequate reward are also all known to predispose to burnout and a study of Japanese hospitals demonstrated that nurses in inadequately staffed hospitals were 50% more likely to report burnout and 75% more likely to report low quality care (Suzuki *et al.* 2008). Hospitals with magnet characteristics are characterised by a positive nursing work environment entailing adequate numbers of and competent nursing staff, administrative support, career support and good working relationships with doctors and others where nurse feel respected and adequately supported (Aiken *et al.* 2008). Higher levels of burnout (section 5.5.10) and considerable concerns as to quality of care are significant among Irish graduates. In a study by Poghosyan et al (2009) across hospitals in eight countries, U.S., Canada, U.K., Germany, New Zealand, Japan, Russia and Armenia researchers found that higher levels of burn-out among nurses were associated with high levels of poor quality of care outcomes.

A significant finding of the present study was the proportion of time graduates estimated they spend on non-nursing duties (section 5.4.3). Non-nursing duties have been previously identified as duties such as transportation patients food trays, clerical duties, stocking supplies cleaning equipment, and housekeeping (Duffield *et al.* 2008) This is not unique to Irish graduates as Aiken (2002) reported that in their last shift, 34% of US nurses were involved in housekeeping, 43% in transporting food trays and 48% in the

transportation of patients. At the same time Aiken (2002) reported a number of tasks that are the critical indicators of good nursing care for example oral hygiene, skin care, teaching had been left undone. Likewise interviewees in this study reported not having enough time to give the standard of care desired, corroborated by the majority reporting that they were under constant time pressure or do not have enough time with patients at work (section 5.3.3 & 6.7).

Camerino et al (2008) reported that younger staff, less than 30 years of age, are associated with higher levels of harassment at work and that across Europe the highest prevalence of workplace violence against nurses was by patients and relatives (22.7%); from supervisors (8.1%); colleagues (5.7%) and discrimination (3.6). While horizontal violence, particularly manifested in the form of psychological harassment of new graduates by colleagues has been reported elsewhere (Mc Kenna *et al.* 2003) the level of violence reported by Irish graduates was relatively low (section 5.4.2).

## **7.6 Support of new graduates**

Support on transition is aimed at developing competency and confidence and to engender commitment to the profession while facilitating graduates to adjust and become socialised to the professional role as nurse (Levett-Jones 2005). A critical finding was the variability in formal and informal support to new graduates across the country and within disciplines (section 5.7.1 & 6.5). Facilitating elements of a positive learning environment found here (section 6.5) have been previously highlighted in the An Bord Altranais (2003) guidance on a clinical learning environment and include supportive nurse managers, colleagues and learning involvement by all staff. However, inhibiting factors to the clinical learning environment have also been identified, such as rigid ward routines, low morale and inadequate supervision (An Bord Altranais 2003). There is considerable debate in the literature as to the tendency of nursing to eat its young and reports of bullying of new graduates (Kelly 1996; Meissner 1999; Mc Kenna *et al.* 2003). It

has been well documented that nursing is an oppressed group and that oppressed groups are more likely to bully (Roberts *et al.* 2009b).

The importance of relationships was emphasised in Gill *et al.*'s (2010) study of the expectations and perceptions of US graduates over the 1<sup>st</sup> year in practice. Mc Kenna *et al.* (2003) also reported that overt interpersonal conflict was prevalent between nurses and manifested as being undervalued, feeling neglected or distressed by conflict, learning opportunities blocked and given responsibility without adequate support. While horizontal violence from other staff, particularly psychological/verbal harassment and responsibility without support, has been reported elsewhere (Mc Kenna *et al.* 2003), the level of this type of violence reported by degree graduates in the Irish context was relatively low (section 5.4.2). This is an encouraging finding that contradicts much anecdotal evidence in the literature in relation to nurses 'eating their young'.

The desire to help and care for others is a central motivation for all practising nurses and is not always confined to patient care and may extend to a preceptorship role that many nurses are prepared to undertake in order to help junior colleagues (Wenton 2009). Some inertia in relation to the support of graduates is reported in other countries (Stone and Rowles 2002; Pickens and Fargotstein 2006) but Irish registered nurses are relatively well socialised to this role (section 6.5.1.2) as it is clearly enshrined within the code of conduct (An Bord Altranais 2000) and do seem to actively guide and support others. There is however, concern that this may be eroded by current work conditions.

Support of senior management has been reported as a deficit in other investigations of new graduates' experiences (Kelly 1996). The attitude and disposition of managers however, was of critical importance to graduates in relation to their perception of support in the work environment and positive attitudes did permeate down the

ranks (section 6.5.1.4). Chang et al (2006) argue, that job satisfaction will be negatively impacted among nurses who perceive their opportunities for support are restrained; a most fundamental need for new graduates at this exploratory stage of career. Supportive practice environments with positive working relationships that empower graduates to practise high quality care have a positive effect on reducing burnout of nurses (Laschinger *et al.* 2009). A significant difference was detected between graduate perception of support from supervisor and the colleges attended with the lowest in the health services Athlone Institute of Technology (section 5.22) and highest recorded among graduates of Dublin City University. It is not really possible to attribute cause, although considerable industrial unrest did emerge between hospital management and some Athlone graduates in relation to the nature of contract offered and availability of working hours.

### **7.6.1 Feedback on performance**

Significant findings in this study in relation to the low level of feedback on performance and the preference of graduates for formalised mechanisms are discussed in this section. Qualitative reports on the absence of either positive or negative feedback (section 6.5.1.3) are corroborated by the one third of graduates surveyed who had received no feedback on performance (section 5.4.7). Hill (2002) cautions that individuals entering the workforce in the 21<sup>st</sup> century have been raised in more nurturing environments and are more likely to value personal development plans and be encouraged by personal fulfilment rather than external rewards. Higher levels of empowerment have been found in baccalaureate nurses (Zurmehly *et al.* 2009) and empowered nurses who have access to information, support, resources and opportunities are less likely to turnover from job or profession. Feedback should be regularly given on positive elements of performance with constructive and supportive guidance on areas for improvement and debriefing following clinical incidents as required (Evans 2001).



## **7.6.2 Formal support**

Significant findings in relation to inconsistencies and insufficiencies in formalised support for new graduates are discussed in this section. The various approaches to formalised support are considered in the context of the current reliance on brief orientation session as a process to induct new graduates. It has been recommended that graduates, regardless of their place of commencing employment, should have a formal process of orientation with an appointed preceptor and ongoing mentorship informally for a period of up to one year (Maben and Macleod 1998). Nearly all of the formal resources are devoted to orientation of Irish graduates within hospitals (section 5.7.1 & section 6.5.) but there is an emerging acknowledgement that this type of support is needed in primary and long term residential settings also. The efficacy of the varying transition programmes in the Irish context is shaped by the financial and human resources in the individual health care institution. The HSE (2009) survey of this cohort revealed that of those who responded 31% (n=125) of graduates found their orientation inadequate and 40% (n=179) received an orientation of less than one day while a further 10% (n=43) received none. In addition, deficiencies in the orientation reported were as follows: too short (70%); insufficient content (15%) inadequate preceptor support (39%) and irrelevant content (5%). There is no clear information available on the amount or quality of resources that are currently spent on bringing new graduates through their initial period of employment.

The most frequent type of orientation course was one that includes a brief period of sessions on health and safety and organisational issues. Roberts et al (2009a) suggest that there is a somewhat 'apprentice-like employment mindset' (pg 20) in nursing as orientation is often determined by a certain level of days and checklists and that in fact many new graduates undergo a training system that can overlook the important step of assessing what is

already known (Butler and Hardin-Pierce 2005). The orientation programme offers a platform for new graduates to evaluate their competency (Oermann and Garvin 2002) and it is likely that graduates entering practice from thirteen colleges will undoubtedly have varying levels of knowledge and skills. Surprisingly, none of those interviewed reported any formal assessment of knowledge and skills. Halfer (2007) reported the magnetic effect of well-designed orientation programmes in a project to implement a structured orientation programme at an academic children's hospital in Chicago to reduce turnover from 29.5% to 12.3% between 2001 and 2005. New graduates' orientation programmes have the potential to enable graduates to develop and consolidate confidence and skill in clinical judgements and decision-making (Adlam *et al.* 2009). Orientation programmes can be innovatively designed even in organisations with limited resources and can impact on retention rates. Squires (2002) described reported retention rates increased to 77% from 30% after the introduction of an 8-week orientation programme in a rural community hospital in the US where participants assumed the responsibilities of a staff nurse but were supplemented with 3 hours paid teaching per week to include venting time, case-studies, and computer-based training each week.

Residency programmes for new graduates are advocated due to increased acuity and complexity in patient care and to reduce high turnover rates reported among new graduates (Williams *et al.* 2007; Adlam *et al.* 2009; Kowalski and Cross 2010). Features include clinical rotations; extended periods working the same shifts with a preceptor; classroom orientation; periods of work full-time and the preceptor available as a resource but not on each shift; professional portfolios; email communication and pairing with experienced staff, clinical rotations; development days that includes opportunity for peer debriefing; clinical skill development and case study exercises to develop clinical judgement (Adlam *et al.* 2009; Anderson *et al.* 2009; Kowalski and Cross 2010). Residency programmes have been found to reduce turnover rates to as low as 5.6% in some instances

compared to a reported national average of 27.1 (Goode *et al.* 2009). A Robert Wood Jones evaluation (2005) of a US Federal funded residency programme across 11 sites with 434 baccalaureate graduates reported retention rates at one year were 87 % compared to 50% nationally. Costs associated with residency programmes include educational fees and replacement cost for RNs to attend educational sessions in addition to salary cost of facilitating staff. The cost of nursing internship has been estimated recently as being between \$45,000 and \$75000 (Burns and Poster 2008). In the USA nurse residency programmes are becoming commonplace to assist new graduates but are not so common in ROI although this study found sign of innovation, flexibility and a graduate-centred approach in some large academic teaching hospitals where full graduate internships were undertaken by a minority of graduates (section 5.7.1). However many Irish graduates commence employment in non-academic teaching hospital and do not enjoy the wealth of human resources that are commonplace for some other graduates (section 6.5.1.1).

The second most common type of orientation programme offered to graduates in ROI was preceptorship and mentorship or a combination. While a period of preceptorship has been previously recommended in Ireland (An Bord Altranais 2003) for all newly qualified staff the implementation of formal support is far from realised. Preceptorship programmes have been associated with a significant reduction in turnover rates from 37% to 14% in US (Beecroft 2001) and 33.1% to 13.4% in Taiwan (Lee *et al.* 2009). Although there was acknowledgement that not all Irish staff nurses are suitable to undertake this task, most appear to embrace the preceptorship role even it has been associated with increased workload and job strain (Young *et al.* 2008). Evans (2001) recommended that preceptors should be selected because of their experience, motivation and disposition for the role. Internationally a variety of incentives for preceptors have been advocated in the

literature including preceptor appreciation days, free meals, letters of recommendation, appointment as an adjunct faculty member, awards, gifts, educational opportunities, support groups, gift certificates and protection from having to work float or relief during a period of preceptorship (Lee *et al.* 2009). A preceptor model with a new graduate focus i.e. experienced RN providing one to one guidance during a defined period of orientation has been advocated as an important retention strategy following a systematic review of interventions to reduce turnover (Salt *et al.* 2008). Lee *et al.* (2009) were able to demonstrate a 46.5% reduction in turnover and reductions in adverse events through the introduction of formalised preceptorship in Taiwan. Maben and Macleod (1998) argued that regardless of educational preparation all staff would benefit from a 6 month to 1 year period of preceptorship. The preceptor role is well understood in the Irish context due to its use on the undergraduate programmes (An Bord Altranais 2003) and therefore standardisation may contribute to the successful transition into practice in all employment areas.

Kowalaski and Cross (2010) report that the traditional period of 6 weeks orientation to three months that is the norm in the USA may be too short to reach anticipated levels of competency and confidence desired by graduates themselves or indeed by their professional colleagues. Nugent (2008) evaluated a structured orientation programme for baccalaureate graduates (n=150) transitioning into acute care environments in the US. The orientation process lasted 12 weeks and incorporated a week of classroom learning in relation to skills, policies, medication testing, and a week working with a lower patient allocation with the support of a co-assigned nurse and educator with specific guidance on medication administration, time management and decision- making, Weeks 3&4 the nurse works the same shift as the preceptor to gradually increase independence and workload; Weeks 4-12 allocation includes more complex patients with preceptor allocated to provide guidance and support. The programme was well evaluated by

participants as it allowed them to gradually gain independence, although they reported that some staff had difficulty letting go of responsibility which hindered them in some way. Much of the evaluation of structured orientation programmes are generated in the US which has very different expectations of new graduate on entry to practice. Irish nurses undergo a much greater degree of clinical immersion in their discipline than other degree graduates and will have different needs.

Graduates in other jurisdictions do have designated periods of supernumerary status; however, other than the initial classroom period in the larger hospitals, with relatively few exceptions Irish degree graduates commence employment as part of the allocated workforce from the first day of employment. Given the discipline-specific educational programme, the immersion of the internship programme and timing to avoid de-skilling it is unlikely that any period of supernumerary work is actually required in the Irish context but a gradual increase in workload and responsibilities seems to be desirable with access to the support of an experienced member of staff, to assist in clinical judgement, decision-making and ongoing prioritising of clinical care. Butler and Hardin-Peirce (2005) examined strategies to enable successful graduate transition including capstone courses, residency and orientation programmes and concluded that all of the approaches are enhanced by collaboration between educators and clinical staff. A certain transience in employment is the norm for new graduates, therefore in a country as small as Ireland with limited resources, standardisation across organisations would assist in reducing duplication and minimise costs and most importantly would increase the transferability of graduates who will change job with more frequency in this period. Stress may well be reduced if students could enter their job with competencies certified for some of the clinical tasks that cause them the greatest concern.

## **7.7 Career expectations**

The high level of motivation amongst Irish graduates to pursue further professional development, specialisation and academic advancement is examined in this section. Commitment to lifelong learning is prevalent among this cohort and this is considered in the context of educational policy decisions pertaining to nursing. The findings that relate that very few graduates transition into specialised and community care are discussed. It is difficult to comment accurately on the career expectation and decision-making of new graduates in view of the economic events that overtook the country during the course of this research project. It was anticipated that this generation of graduates would not be compelled to travel to find work as Ireland had been absorbing all its graduates since 2002. However, reports are emerging of graduates being unable, or going overseas, to find work. The information on employment profiling and career pathways in these findings is also insufficient to provide a meaningful picture due to the limitations of the cross sectional design on a single cohort of 2007 graduates reported. In the light of impending legislation to introduce assessment of competency for graduates, survey data could be effectively gathered by An Bord Altranais with licence renewal to include information on activity within practice setting, details of registration and discipline currently aligned to, enrolment in education and information on practice site and professional development undertaken. Effort in tracking graduates should also seek to include those on the inactive register to gain a fuller picture of how many graduates emigrate and the reasons they do not use their registration.

### **7.7.1 Career pathways**

The decision by the HSE to reduce nurse education places on the western seaboard (approximately 1/3) in the short-term, in response to supply exceeding demands in those areas (Wallace 2009) does appear validated by the accounts of 2007 graduates interviewed in this study in regional locations, who failed to gain

employment locally (section 6.7.3). The recent FAS report (Behan *et al.* 2009) has predicted that the number of RPNs and RNIDs will meet the demand but it is anticipated that there will not be sufficient general graduates to meet demand. The number of RGNs who consider leaving the profession frequently is higher than in psychiatric and intellectual disability nursing (section 5.8.6). General nursing is a career pathway for post-graduate children's nursing, psychiatric nursing and midwifery for the majority and if graduates wish to pursue general nursing post-graduate they do so abroad. Some smaller disciplines are working in residential settings where increasing acuity of care needs are evident and RNID graduates commonly expressed a desire to study general nursing to advance their professional skills (section 6.8). For all of these reasons the projected intake numbers/attrition rates and educational pathways are going to need careful monitoring and attention if the production of nursing graduates is to meet demand.

Forty-two percent of Irish nurses work in community settings (ICN2009) but a relatively low proportion of RGNs are commencing work in residential and community care (less than 1% of Irish RGNs-section 5.4.3) suggesting that graduates are biased towards a career in acute services even though the health strategy advocates emphasis on community care delivery. Surprisingly, given the career choices anticipated for this group, relatively few graduates actively planned where they would work (section 6.7.2). Conditions of recruitment such as generic interviews and the use of panels mean that graduates are not actively involved in determining their career pathway. There is evidence internationally of a shortage of nurses in critical care (Kelley *et al.* 2004) and operating rooms, which some researchers do attribute to the lack of experience during undergraduate education (Desrosiers 2008). A significant proportion of Irish RGNs do appear to commence employment in the OR (Section 5.2.3) suggesting that they have had sufficient exposure to engender interest in this speciality. Considerable resources are being devoted to graduates in highly specialised areas and some

investigation is warranted to determine if the resources applied achieve the desired outcomes in those specialist areas. There are relatively few Irish RGNs (section 5.2.3) commencing their career in critical care nursing and, given the greater acuity of hospitalised patients, greater shortages may be pending (Buchan and Aiken 2008). Studies in the US and Australia, where nursing shortages have been experienced, already sought ways to support graduates to commence employment in these areas (Jones *et al.* 2001; Levett-Jones 2005) and such initiatives may have application in Ireland.

The primary motivation to undertake a degree in nursing was the desire to help or care for people and this often is influenced by life-long interest, positive personal health experiences or family influences (section 5.8.1), findings consistent with other studies in the Irish republic implying the people do nursing for the same reasons they always have (Mooney *et al.* 2008). It is encouraging that altruistic motives such as desire to help others or undertake meaningful work is still rated as a primary motivator for nursing as evidenced elsewhere (Miers *et al.* 2007; De Cooman *et al.* 2008). Mooney (2008) did reveal, however, that nursing is not the first choice of up to one third of candidates on nursing courses. Lavoie-Tremblay (2008) suggest that this cohort of graduates have been influenced by educationally driven baby boomer parents, therefore they will value jobs that bring opportunities to learn and career opportunities and they will have greater career mobility. Sadler (2003) proposes that this generation entering the nursing workforce are more likely to value recognition, opportunities for continuing education and professional development while working in team oriented environments, and future retention strategies do need to be mindful that such desires can be achieved by graduates of nurses with transferable skills that may be utilised elsewhere. Health care managers will need to consider the primary intrinsic motivations for nurses in an increasingly complex health care environment, so that nursing staff can exercise their desire to help and care, affording a sense of achievement and reward (Newton *et al.* 2009).



A notable finding in this study was the acknowledgement among graduates of commitment to life-long learning. Eagerness to learn has been previously documented in new graduates (Oermann and Garvin 2002) and the professional development opportunities associated with job satisfaction for new Irish entrants to the profession have been previously observed in a qualitative US study of nurses' (n=20) satisfaction in the context of shortage (Morgan and Lynn 2009). The mean rate (4 days) of attendance on professional development days does suggest commitment to continuing education among Irish graduates as rates are higher than much of Europe and comparable to rates in France and the UK, two countries that have the highest rates (mean range 3.2 to 6.5 days in younger nurses) and where continuing education is mandatory in contrast to other countries in the EU (Buescher 2005). Only 21% of Irish graduates (n=96) did not attend any professional development education in their first six months in practice compared to reported higher proportions of 40-80% in the main population of European nurses (Buescher 2005). It is anticipated that the forthcoming legislation (i.e Nursing & Midwifery Act) will introduce mandatory continuing professional development in Ireland and this may only serve to increase demand in this regard. The majority of participants across all disciplines express intent to pursue further education and specialisation in many instances (sections 5.8.2 & 6.8). Third level institutions and policy makers will need to consider such demands when determining the future educational programmes as this cohort has uniformly attained a level 8 standard of education and therefore courses they may undertake would most likely need to provide them with academic progression to level 9 in addition to the specialisation they desire. A significant finding reported by RNID graduates was their disappointment in relating to the confined nature and type of educational opportunities at their disposal and this does result in considerable demands for a post-graduate course in general nursing by this cohort.

## **7.7 Intent to stay/leave**

The relatively low level of graduates who express intent to leave the profession, is a notable outcome of the study and discussed in this section. The implications of the high level of job mobility found among graduates and the factors that are predictive of Irish graduate intent to leave are discussed in the context of the Price & Muller (1981) work turnover in this section. The large majority of Irish degree graduates responding to this study do intend to continue work or pursue further education, in nursing in Ireland. However, a critical outcome is confirmation of the transient nature of employment among degree graduates at this stage in their career with nearly half after six months in practice expecting to change job in the near future (section 5.8.4). This confirms the high turnover in the Irish nursing workforce report which recorded that of 23% of respondents expressed intent to leave job and detected 60% had graduated within the last three years (DOH&C 2002b; McCarthy *et al.* 2007). This study is also indicative of findings that those who are single without kinship responsibilities are more likely to change job (DOH&C 2002b). Particularly high turnover rates are well documented phenomena among new graduates and similar levels of employment instability have been found internationally. For example, younger nurses aged 20-30 years, in a study by Ingersoll (2002) in New York state, were significantly more likely to change job. Lavoie-Trembaly (2008) found that 61% of new Canadian nurses intended to quit new jobs to attend another. Bowles and Candela (2005) found that 30% of new graduates in Nevada left their position within one year and 57% within 2 years and in another US study of degree graduates Williams *et al* (2007) recorded turnover rates of between 35% and 55% within one year employment in a sample of 679 degree graduates employed in 12 sites across the United States. Karlowicz and Ternus (2009) found an average turnover rate among the general population of nurses of 54% within four US psychiatric inpatient facilities but this rate rose to 75% among new graduates leaving their job within 6 months.

Hiring, training and reduced productivity are the main quantifiable costs of turnover although the overall cost is difficult to quantify (Jones 2008). Turnover in an academic medical centre in the US has been estimated at 3.4-5.8 of annual operating budget with nursing turnover identified as the largest cost driver (Waldman *et al.* 2010). O'Brien-Pallas (2009) used the term 'churn' to describe the workload and quality of care difficulties that emerge as a result of high levels of staff movement. It is difficult to quantify the quality of care loss that occurs from new graduate turnover at these rates, but undoubtedly 'churn' that results from increased use of agency staff, short term contracts and rotational positions is thought to be associated with adverse effects on the continuity of care (Duffield *et al.* 2008). Inadequacies in skill mix and high usage of agency also contributed negatively to leadership performance and continuity of care. A secondary data analysis of 268 nursing units across 141 hospitals in the US found units with lower turnover had a significantly lower rate of adverse patient outcomes (Bae *et al.* 2010).

The majority of graduates are not thinking of giving up nursing but 19% of Irish graduates are frequently considering leaving the profession (section 5.8) and proportionally greater numbers of RGNs than RPNs and RNIDs think more frequently about leaving nursing. A divergence in the findings arises as participants are asked separately what their career intentions are for the next 5 years and in this response twelve percent of graduates state they wish to leave or take an indefinite break from nursing (section 5.8.2). The reason for the difference is not clear but it may be attributed to the question asked. A five year plan may indeed produce less intent to leave rates but it does raise concern if indeed graduates foresee a life-long career in nursing, particularly as they are equipped with more transferable skills to go elsewhere. While 12% who express intent to leave is not insignificant in the next five years it does mean that 88% intend to stay. The opportunity to locate alternative work is offered as a major predictor on intent to leave (Price and Mueller

1981) and therefore this may reflect the market situation and promotional opportunities as perceived by new graduates. The majority of Irish graduate nurses are not worried about being unemployed but many do perceive it is not that easy to get another job (section 5.7.2). In Poland and Slovakia where the intent to leave rates were low, the threat of unemployment was quite prevalent with 80% of nurses worried about being unemployed (Hasselhorn and Buscher 2003). In the rest of Europe less than 10% of nurses had such worries with the exception of Finland where 60% of younger graduates worried considerably (Hasselhorn and Buscher 2003).

Flinkman (2008) reported on graduates under 30 (n=147) from Finland who participated in the NEXT study and found among Finish graduates, that 26% often thought of giving up nursing in contrast to 19% of Irish graduates (section 5.8.2); 24% never thought of leaving their job and 14% often thought of working as a nurse in another country (Flinkman *et al.* 2008). The NEXT study group found that intent to leave was between 25 and 35% in most countries (Hasselhorn and Buscher 2003). The mean rate of intent to leave across Europe was 14.3% (n=27,063) indicating that as those nurses think of leaving several times a month or more often (Simon *et al.* 2004). The greatest proportion of nurses who want to leave was in the UK (36.7%) then Germany and Italy (20.5%) and Denmark (19%), Finland (15.4%) France (16.3%). The lowest proportions were found in Belgium (13%), Norway (13.5%), Slovakia (12.4%), Poland (11.2%); and lowest in the Netherlands at (10.6%).

The longitudinal nature of the NEXT study was able to demonstrate that 53.2% of all those who frequently considered leaving the profession actually left and only 13.7% remained in their current job (Simon *et al.* 2010). Kowalski and Cross (2010) observe growing numbers of employees who work in high demand jobs such as nursing will exhibit a certain level of pre-meditation in their term of

their plan to turnover after a specified period, positing that this type of graduate is well informed and is more likely to actively negotiate their own career than previous cohorts who may have responded to organisation led constraint on their career decisions. The relevance of these findings lies in the potential for intent to leave to act as an early indicator of turnover as the decision to leave has been formed 6 months prior to departure for 80% of those leaving nursing (Simon *et al.* 2010). This means that there is a 6 month window when intervention by employers could well influence loss.

### **7.7.1 Factors the influence intent to leave nursing**

Turnover intent is a multistage process defined by the voluntary departure of an employee, influenced by individual, economic, and work factors and is often caused by a discrepancy between the internal and external job context for the employee (Lum *et al.* 1998; Takase 2010). The findings detected in this mixed methods study endorse the complex relationship between explanatory factors and career intent of graduates (section 5.8) as outlined in the NEXT Model of Early Departure from Health Care Work (Hasselhorn and Buscher 2003), further illustrating the push and pull factors that influence career decisions. Herzberg *et al.*'s (1959) two-factor theory of motivation at work is also evidenced in the intrinsic and extrinsic factors that influence career intent among new graduates in this study. Higher scores on meaning of work, possibility for development, quality of leadership, positive affectivity, reward, family work conflict, interpersonal relationship, social support from supervisors and colleagues were all found to have pull factors or increased the intent to stay in profession. Conversely, perceptions of high quantitative demands, lifting & bending, emotional demands, uncertainty regarding treatment, over-commitment, effort at work, burnout, dissatisfaction with pay, work family conflict, were all found to have push factor, or increase likelihood of leaving the profession.

These findings are not surprising given the multiple factors influencing turnover in nursing and have been demonstrated to a greater or lesser degree with studies of nurses internationally. High quantitative demands, effort at work and burnout are associated with concerns over quality of care and adherence to standards in addition to friendliness and support of work groups as important factors in determining intention to leave nursing among Korean nurses (Hwang and Chang 2009). Flinkman (2008) found staff shortages interfere with capacity to give high quality care, producing difficulty for new graduates in Finland. In a study of turnover rates in rural and urban nursing units. Baernholdt and Mark (2009) reported that the unit characteristics and work environment have a significant influence on satisfaction and turnover. The inability to give quality care negatively impacted career intent of nurses in Taiwan and similar to findings of this study were also influenced by a variety of factors including lower levels of organisational commitment dissatisfaction, limited promotional and educational opportunities, rigid ward practices and limited autonomy and poor relationship (Chiu *et al.* 2009). Insufficient support from managers similar to that found in this study (section 6.5.1.4) was also associated with intent to leave across Europe and with the exception of Slovakia there was evidence of a pronounced association between intent to leave and work-family conflict in nine out of ten countries (Simon and Hasselhorn 2003). Van der Heijden *et al* (2009) also reported that lack of support and work-family interference were predictors of occupational turnover in European nurses. Job satisfaction and kinship has been shown in other American studies to be predictors of career intent (Price and Mueller 1981; Irvine and Evans 1995). Mc Carthy *et al* (DOH&C 2002b) found that the absence of kinship responsibilities made Irish nurses more likely to leave job. Shields and Ward (2001) report that lack of professional opportunities have greater impact on intent to leave than stay. Rambur (2003) also found intent to leave was associated with desire for career advancement in US nurses but was also associated with dissatisfaction with job, pay and staff management. Dissatisfaction

with salary and shift work was also found to be associated with greater intent to leave among nurses in Taiwan (Chiu *et al.* 2009). Income and younger age have been found to influence intent to stay in nursing in the US (Brewer *et al.* 2009). Suzuki *et al.* (2008) investigated the factors influencing the high turnover rate among new graduates (n=923) across 20 universities in Japan and reported rapid turnover of nurses creates a cycle of insufficiency in skill mix, resulting in insufficient experienced staff to support novices which can turn creates more turnover. Beecroft *et al.* (2008) reported that when new graduates are satisfied with pay and conditions and organisational committed they are less likely to leave but older graduates are 4.5 times more likely to leave if they do not get their ward of choice. Bowles and Candela (2005) reported that supportive colleagues and quality of care were the most important factors in predicting intent to leave of new Canadian graduates within 5 years.

A common thread in Price and Muller's (1981) theory is that nursing employee turnover behaviour is determined by both individual and work related factors in addition to economic conditions. The theory illustrates a number of predictors for increased likelihood of intent to stay in nursing among the main population of US nurses including job satisfaction, job involvement, autonomy, job strain, and promotional opportunities and predictors of intent to leave included social support, affectivity, pay and alternative career opportunities. Many of these explanatory factors were also found to be predictive of career intent among Irish degree graduates. Social support from supervisors ( $p=0.008$ ), satisfaction with pay ( $p=.032$ ), job satisfaction ( $p=0.007$ ), institutional commitment ( $p=0.032$ ) and professional commitment ( $p=0.032$ ) were all found to be predictive of increased intent to stay in current nursing job among Irish graduates. Job satisfaction ( $p<0.001$ ) and professional commitment ( $p<0.001$ ) were also found to be predictive of increased likelihood to stay in nursing profession. This has similarities to a study by Parry (2008) that examined the factors that influence intention to leave nursing job among Australian new graduates (n=131) and found a

significant predictor between job satisfaction, organisational commitment and intent to leave nursing and intent to change job. Parry (2008) cautions that professional commitment does not necessarily imply organisation commitment which is more likely to be influenced by job satisfaction. The application of the Price & Muller model (1981) of turnover in the context of new graduates is in evidence here as if working conditions (social support, control of stress and professional values) are perceived to be adequate employees will more satisfied and less likely to leave their job, or leave nursing. Job satisfaction was negatively correlated with intent to leave and reported to be lowest in Italy, Germany Slovakia, Poland and France in the NEXT study across Europe (Stordeur *et al.* 2003). Job satisfaction was found not to influence intent to leave directly but rather is mediated by organisational commitment in a model of turnover advanced by (Lum *et al.* 1998). Beechcroft *et al.* (2008) tested a model of individual work environmental and organisational factors to determine the influence of multiple factors on behavioural intent and actual turnover among new nurses (n=389) and concluded that new graduates are less likely to turn over if they report satisfaction with their current position and pay and were committed to the organisation. However they caution that older new graduates are more likely to turnover if they do not receive their first ward choice and new graduates who are younger and single are more likely to leave (Beechcroft *et al.* 2008).

Family commitment was found to be predictive of increased likelihood of staying in nursing ( $p=0.007$ ) among Irish graduates which may possibly be linked to responsibility to provide, therefore suggesting family-work conflict is a pull factor keeping graduates in the profession (section 5.8.5). Lynn and Redman (2005) also reported that families can be a reason for staying within employment, in a US mail survey to investigate career intent sent to 787 practising nurses. This would suggest an endorsement of policies aimed at promoting inclusion of mature entrants to the profession, who will no doubt have more family responsibilities and



will have more invested in maintaining their career. Conversely, high work-family conflict was found to be a push factor for increased intent to leave among Irish graduates. However, it was not found to be predictive when the relative factors that influence turnover were investigated (section 5.8.6). Of course this study was confined to recent graduates, the majority of whom are in their early twenties and therefore unlike to have the same levels of family responsibilities that may be found in the main and older population of nurses. In contrast to these findings across Europe work-family conflict was found to increase risk of intent to leave, with (22.1%) versus (9%) for low conflict (Simon *et al.* 2004). School leavers were more predictive of intent to change job and to leave nursing again similar to the findings of earlier studies of turnover in Irish nurses and explained by the absence of kinship responsibilities in determining freedom to move job or careers (Michael *et al.* 2004; Simon *et al.* 2004).

A significant finding of this study was that uncertainty regarding treatment was the only predictive factor associated with increased intent to leave the profession among new graduates (push factor). Although discipline was not found to be predictive of intent to leave, more general nurses expressed intent to leave and mean uncertainty regarding treatment score was found to be higher among RGNs than RPNs and RNIDs (section 5.4.4). Cameron *et al.* 2004 found an association between uncertainty regarding treatment and greater frequency of harassment by superiors. 'Inadequate information at work'; 'absence of doctors during a medical emergency'; and 'uncertainty as to what to tell family' are conditions that produce uncertainty in work and may be easily controlled.

Behavioural intent has been demonstrated to be the most immediate predictor of behaviour (Lane *et al.* 1988). To understand new graduate turnover health care managers must be engaged with understanding personal and work demands that influence decisions

in addition to the career aspirations of contemporary nursing graduates. The findings of this study provide additional information about the effect of personal demands, individual characteristics, work conditions and nature of nursing on graduate intent to stay. Given the longitudinal nature of the NEXT study, no clear pattern emerges between the findings of this cross sectional study and those generated by the NEXT Study group with the main body of nurses across Europe. However, the findings demonstrate a distinction between avoidable and unavoidable turnover in nursing.

## **7.8 Limitations**

This study only examined graduates who had taken up registration and are working in the profession and does not examine the exit pattern from the profession either through attrition from the undergraduate programme or those who fail to uptake registration to work in the profession. Selection bias may also have been an issue as participants self-selected to volunteer for interviews and participants may have been more dissatisfied than those who chose not to respond. The amount of time that elapsed since entry to practice before interview could have affected participant perceptions. The survey data was self reported and therefore responses may be influenced by recall. Self-report measures were used for both independent and dependent variables, therefore a common bias method may be a factor, although many of the findings are corroborated by the qualitative findings.

The main limitation of the survey is related to the moderate response rate. The census sample size was 473 (36%) and the demographical profile suggests it was representative of the graduates from that year. In comparison, response rates across Europe to the NEXT questionnaire ranged from 17.4% (France) to 63% (Finland) (Hasselhorn and Buscher 2003). A postal survey of migrant nurses in Ireland using the ABA postal survey service achieved a response rate of only 20% (Humphries *et al.* 2008) and a survey distributed by the through the third level colleges by HSE

(2009) of the same cohort that year yielded a response rate of only 33%. The extent to which these findings may be representative of non-responders is not clear as graduates not interested in participating did not respond to the invitation of the researcher. Limitations set by the ABA sampling service and the constraints of anonymity limited opportunity to gather information and prohibited communication with non-responders.

Findings are derived from a data set generated in the Irish Republic so the results cannot be generalised to other countries due to differences found in undergraduate education and academic awards in nursing and variation in the work environment and support available to them. However, given the similarities found between these results and those of many other countries, the findings do add to the international body of knowledge. The findings reflect the employment experiences of new graduate entering the Irish work force in 2007 therefore the demographic characteristics should be treated cautiously as they reflect a cross sectional snapshot only of the circumstances of these graduates.

Intention to leave was measured as frequency of thinking of giving up nursing. Although behavioural intent has been shown to be a predictor of intent to leave, it does mean that some participants will actually stay and others leave. The results do need to be reviewed cautiously as the intention to quit, and actually leaving nursing are not always contingent on one another. However, other research had demonstrated a strong relationship between intention to quit and quitting with correlation of 0.80 (Price and Mueller 1981)

The cross sectional nature of the survey design and logistical regression meant the study is not able to demonstrate causality. Using a single item to measure intent to leave rather than three items scale may have altered responses. The response categories for intent to leave were reduced from 5 to 4 as this was a new cohort with less than 6 months in practice. This made it difficult to

use the dichotomous response, so it meant it was necessary to use ordinal regression limiting the comparison to the basic questionnaire of the NEXT study.

## **7.9 Summary**

There are a variety of psychosocial factors that may be at play in the work context of any new graduate so caution is required when comparing the result of this study to other populations. It must be considered, however, that in comparing the work conditions of degree graduates in Ireland, a number of structural differences exist in the way nursing work is organised, staffed and delivered across Europe. Ireland is unique in having a degree-only entry point to the profession and has relatively low levels of assistive personnel involved in the provision of care. It must be remembered that while desire to leave profession is relatively low, it may be influenced by the current unemployment crisis. The degree of intention to leave the nursing profession differs substantially across the disciplines with small proportions in psychiatric and intellectual disability nursing groups. The nursing degree programme in Ireland has yet to be formally evaluated but the decision to standardise the internship to the end of programme is endorsed by the outcomes of the study.

Health care organisations are now individually accountable and competing with each other and the private sector in the ROI. It is not economically viable for individual organisations or indeed for the HSE to continue to orientate new graduates and equip them to provide service elsewhere. The one year residency is advocated for strongly in much of the US literature; they are designed to follow programmes that do not have the clinical immersion that Irish undergraduates get, although aspects of the clinical rotation they offer may be of particular interest in the Irish context. The findings of this study do indicate that many Irish hospitals are very successful at supporting new graduates, building their confidence and skill incrementally with the support of experienced staff.

However, it must be accepted that turnover rates are high in this group and may not be particularly affected by retention strategies, therefore in a country as small as Ireland standardisation of both educational programmes and human resource support strategies on uptake of employment would assist in facilitating this movement and avoid duplication of spending and resource use.

The reasons people undertake nursing education have not changed and degree graduates are just as likely as previous graduates to stay in nursing but are more likely to change nursing job than those at later stage of career. They are likely to change job if preferred choice of speciality is not available, if educational opportunities are limited or if they perceive their work environment is not supportive. One of the great difficulties encountered was the absence of clear information on the career pathway of Irish nursing graduates. The HSE has recently begun to survey graduates as to where they are working and this does not really provide the necessary information to inform manpower planning effectively. High quality care is contingent on experienced staff, and health service providers in the Irish republic need to replenish nursing ranks on a continual basis with its own graduates and make it desirable for them to continue to pursue careers in clinical care areas to avoid shortfalls in appropriately experienced nurses required for high quality care.

The research experience gained during this project enabled me to develop as a researcher and advance skills in mixed methodologies. This mixed approach enabled a holistic portrayal of the transition experience, work conditions and career intent of this new brand of degree entrant to the nursing profession in Ireland. The survey and interview data demonstrate and corroborate the variation and inconsistency across health care organisations in relation to the work conditions, and formalised support given to new employees. A critical finding of this study emanated from the survey to confirm that Irish degree graduates are not more likely to leave the profession than the main population of nurses across Europe. An

important unexpected finding of the study was the exceptional level of support provided to new entrants by colleagues, contradicting the widely held perception that nurses eat their young. This finding emerged from the qualitative component of the study and would not have been understood if the approach to data collection had been exclusively a survey. A full interpretation of the support given to graduates and the effect of variable and demanding work conditions on the graduate experiences upon entry to the profession was facilitated by combining methods in this exploratory study.

## **Chapter 8- Recommendations**

### **8.1 Introduction**

The chapter presents areas for recommended action by the relevant stakeholders charged with implementation; third level institutions; An Bord Altranais; Health Service Executive (HSE)/Health service providers; and those for further research. Each section is preceded by a brief summary of the key findings that informed the recommendation with reference to relevant sections of chapter 5 and 6, from which they are drawn.

### **8.2 Third Level Institutions**

Graduate expectations of themselves are quite high and they are concerned about their clinical judgment in emergent situations section (6.3.2.2). The findings uncover some deficits in the undergraduate curricula in relation to pharmacology and skill acquisition (section 6.9.1 & 2). Degree graduates have attained an honours (level 8) degree award upon entry to the profession and a high proportion of them express a desire to pursue further education (section 5.8.2 & 6.8), academic advancement, and further specialisation in their discipline (section 6.7.3).

It is recommended that Third Level Institutions:

#### **8.2.1 Curriculum development**

- Develop a formalised process for examining viewpoints and sharing knowledge between colleges in relation to strategies and sharing of best practice in education and clinical support of new nurses.
- In partnership with health service providers and An Bord Altranais, initiate a national evaluation of the activities and responsibilities undertaken by students during the internship to determine ways of maximising development of clinical judgement and skills during this period

- Review the undergraduate nursing curriculum to include education in clinical skills, with direct supervision and mentoring, to meet specific competency-based outcomes during the internship period; for example, IV cannulation, drug administration, IV administration, ward management

### **8.2.2 Career pathways**

- Review nationally the current educational pathways at MSc level to determine suitability to respond to graduate desire for specialisation and academic progression and seek ways to develop courses that are of interest to new graduates across all disciplines.

## **8.3 An Bord Altranais**

This study reports a cross-sectional overview of a single cohort of graduates and systematic information is necessary to inform national manpower planning. The ABA statistics for this cohort suggest there is potential 20% attrition rate from degree programme (5.2.10). Career choice was dictated by job availability rather than career planning (section 6.7) and there is limited uptake of employment in community and high specialised areas (section 5.2.3). RNID graduates desire a post-graduate pathway to general nursing (section 6.8).

Variation in activities undertaken and clinical exposure during their preparatory education did impact on the work readiness of graduates (section 6.9). Skill acquisition of new graduates was influenced by the nature of clinical experiences available to them and timing of the internship during the undergraduate programme (section 6.9.1 and 2). Some disparity was evident between the expectations of graduates themselves and their professional colleagues as to their competency upon entry to practice (section



6.3.2.2). Graduates expressed concerns about patient safety (section 6.7.1) and worry about making mistakes (section 5.3.3 & 6.7).

An important coping strategy for graduates lay in their familiarity with their discipline and routines of their place of employment due to clinical exposure before commencing employment (6.4). Unique elements of the Irish approach to nursing education, including the discipline specific immersion with a period of paid internship were positively evaluated (section 6.4). Variation was evident in the formal support of new graduates nationally (section 5.7.1). Job mobility is anticipated in new graduates at this stage of career and so standardisation in orientation and support is recommended across the health service to reduce duplication and preserve resources (section 5.8.4).

It is recommended that An Bord Altranais:

### **8.3.1 Evaluation of degree**

- Conduct an evaluation of the degree to include evaluation of curricula, attrition rates, learning outcomes and competency, to include the views of all stakeholders
- Retain the standardised nine month internship at the end of the 4-year degree programme, and in conjunction with the evaluation of the nursing degree, assess competency at end of programme and make comparison with graduates of similar programmes internationally
- In conjunction with HSE agree curricula and implementation of a postgraduate course to facilitate entry to the general nursing register.

### **8.3.2 Manpower planning**

- Develop and implement an electronic data collection system to track career progression of all nursing graduates on a continual basis with registration renewal. Data to include details of primary registration and discipline currently aligned to, activity within practice setting and information on practice site, career intention, reasons for intending to leave, enrolment in education and professional development undertaken.

### **8.3.3 Support of graduates**

- A task force is recommended to prepare a standardised orientation programme for new graduates across all regions, to be coordinated in collaboration with partnership groups that are already in place between the third level colleges and the service providers.

## **8.5 HSE/Health service providers**

The study highlighted the potential attrition rates from the profession as some participants expressed a desire to leave the profession with higher intent recorded among RGNs (section 5.2 and 5.8.1), therefore there is potential for future shortages in RGN. The review of ABA statistics for this cohort indicates a sizeable attrition rate from the third level colleges (section 5.2.1). The study also highlighted that relatively few RGNs commence employment in highly specialised areas (section 5.2.3.1) with significant resources being mobilised to support those who do (section 6.5.1.1). A low proportion of RGN graduates commence employment in the community (section 5.2.3).

Considerable efforts and resources are applied across organisations to the induction of new graduates but there is disparity as to the nature and quality of support given (6.5.1.1 and 5.7.1). One third of graduates did not receive a formal program of support (5.7.1) and

for the majority it constituted a brief series of orientation sessions on organisation and health & safety issues (section 5.7.1). The preceptor role was only available to a small minority of graduates upon transition in contrast to their undergraduate experience (section 5.7.1 & 6. 6.5.1.2). Graduates favour a formalised system of support (6.5.1.1) and the support of graduates was influenced by the skill mix, staffing and type of care setting (section 6.5.1.3) There was consensus among graduates that the formal feedback was desirable (section 6.5.1.3) within inconsistency in the nature and frequency of formalised feedback (section 5.4.7) and complete absence was an issue for some graduates (section 6.5.1.2).

Concerns about the effect of work conditions on the quality of care (6.7.2.1) were commonplace and fears expressed that difficult work circumstances may erode the support that is available to new graduates (section 5.3.3 & 6.7). Turnover is predicated by intent to leave and a significant proportion of graduates did express intent to leave (section 5.8.2). Considerable variation was evident in the findings as to the push and pull factors influencing career intent. Uncertainty regarding treatment was the only significant predictive factor associated with intent to leave (section 5.8.6). Inadequate information , the absence of doctors during medical emergencies or uncertainty as to what to tell a family were all elements that were indicative of uncertainty regarding treatment (section 5.4.4). The approachability of medical staff was an issue for some graduates (section 6.5.1.2). Higher job satisfaction and professional commitment were found to be predictive of intent to stay in the profession (section 5.8.6). Support from supervisor and satisfaction with job were predictive of increased intent to stay in current job (5.8.4).

Conditions of work suggest that the responsibilities faced by graduates entering the profession are significant (section 5.3.3). Competency in clinical judgment and decision-making concern graduates (section 6.3.2.1). Greater difficulty in making the

adjustment to staff nurse role emerged in the accounts of graduates working outside of their discipline (section 6.5.1.1). Acceptance by colleagues was of significant importance to graduates (section 6.5.1.2 & 3). Traditional and rigid approaches to care delivery (section 6.4.2.4) did negatively impact on their work experiences and graduates had to reconcile their own beliefs with those they encountered on entry to practice. The despondency among some graduates was compounded by work overload and staff and skill mix shortages (section 6.7.2 & 6.7.2.1).

It is recommended that HSE/Health service providers:

### **8.5.1 Manpower planning**

- Review projected intake and attrition rates from third level colleges in conjunction with manpower estimates to determine if the production of nursing graduates is sufficient to meet health care demand
- Conduct a cost-benefit analysis on the nature and quality of resources currently applied to the support of new graduates in their initial period of employment to estimate if it is of value for money and how efforts may be streamlined
- Examine strategies to create more community and long term residential pathways for RGNs to meet the demands for higher levels of acute care skills in these settings
- Conduct exit interviews and monitoring of turnover rates in new graduates to construct profiles of those who leave and give insight into avoidable and unavoidable reasons for leaving the profession

- Evaluate strategies employed nationally to orientate new graduates to highly specialised areas and initiate a cost-benefit analysis to determine if resources applied achieve the desired retention outcomes in those specialist areas

### **8.5.2 Orientation and support of graduates**

- Retain mandatory timing of the internship at end of the programme to minimise de-skilling on entry to practice
- Compare the activities that are permitted and undertaken by undergraduates during internship across organisations to standardise anticipated competency of new graduates on exit from the nursing degree
- Evaluate the current systems for support of graduates, across all organisations, to determine fitness for purpose, avoid duplication, and seeks ways to improve
- In collaboration with third level institutions, initiate and guide a system of standardised support for new graduates for use across all clinical settings using resources already in place for staff support
- Expand and standardise the preceptor role across all clinical settings thus contributing to the successful transition into practice in all employment areas
- A gradual increase in workload and responsibilities is desirable for new graduates with access to the support of experienced members of staff, to assist in clinical judgement, decision-making and ongoing prioritising of clinical care

- Develop and implement a formalised framework for feedback in conjunction with a standardised measurement of competency attainment for new graduates
- Develop orientation programmes suitable for use in long-term care and community settings.

## **8.6 Further research**

As discussed in the background to this study (section 1.3) there has to date been limited comparison between the Irish approach to nursing education and other programmes internationally and a full evaluation of the suitability of a discipline-specific degree education to respond in a modern health system has yet to be undertaken. Intention to leave is not always a predictor of actually leaving the profession and the cross sectional nature of the design means the study is not able to demonstrate causality.

Recommendations for further research as follows:

### **8.6.1 Evaluation of degree**

- Conduct larger studies in partnership with other countries that employ discipline-specific 4 year degrees with a paid internship period to evaluate outcomes.

### **8.6.2 Career pathways**

- Conduct follow up research on these graduates to determine career expectations, pathways pursued, intent to leave, and actual departure rates after 5 years in practice.

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## **9.0 Appendices**

## **9.1 Correspondence with ABA**



**The University of Dublin, Trinity College**

Faculty of Health Sciences

**School of Nursing & Midwifery**

24 D'Olier Street, Dublin 2, Ireland.

Tel: + 353 1 608 2692 Fax: + 353 1 608 3001 [http://www.tcd.ie/Nursing\\_Midwifery/](http://www.tcd.ie/Nursing_Midwifery/)

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Chief Education Officer

An Bord Altranais

31/32 Fitzwilliam Square

Dublin 2

10<sup>th</sup> June 2007

Dear Sir/Madam

**Re:** request for access to survey sample

I am a PhD student undertaking a study of the career expectation, transition experiences and intent to stay in the nursing profession among degree graduate nurses. I am writing to negotiate permission to gain access to a sample using the An Bord Altranais sampling service. The research proposal, letter of endorsement from the research supervisor and proposed survey instrument is enclosed for your consideration. A summary of the sampling requirement is detailed below.

### **Research Instrument**

The questionnaire used in the Nurses' Early Exit study in Europe has been modified for use in the study and contextualised to the Irish situation with additional questions added based on relevant themes from the literature that pertain to the transition of new nursing graduates in Ireland. The final question item at the end asks respondents to provide contact details if they wish to take part in either the interviews or journal-keeping.

### **Pilot Study**

It is proposed to randomly distribute 120 questionnaires in March 2006 to recent nursing 2004 graduates as a pilot as these are most similar cohort available (60 general, 40 psychiatric and 20 learning disability).



### **Target Population- Main study**

The target population is all newly registered nursing degree graduates on the general, psychiatric and learning disability divisions of the register in October 2007.

### **Timing of survey distribution - Main study**

The second cohort of degree graduate nurses will be registering in the latter part of 2007 following completion of the 4 year degree programme. It is proposed six months following registration, each participant will be contacted through An Bord Altranais sampling service and will be sent a personalised envelope containing a letter of invitation to participate outlining the details of the study, the research instrument and a Freepost envelope. A reminder note will be distributed to the sample group through Bord Altranais, to maximise the response rate. The second administration of the survey instrument will, again, be through An Bord Altranais, and will be sent to the complete cohort 15 months after registration.

### **Number of participants- main study**

There were 1453 students enrolled on the General Psychiatric and Learning disability divisions of the student register in 2002 and it is anticipated that approximately 1264 will graduate using an estimated 87% registration rate based on last year. The sampling will allow for representation across the country and employment settings as well as drawing on adequate numbers as all graduates will be surveyed at two cross sectional points in time.

The assistance of Bord Altranais will be acknowledged in the completed research report, a copy of which will be forwarded to the Bord Altranais Library. Please contact me if you have questions in relation to this project. If this request meets with approval, could you advise on the charges that will be incurred as the sample requested is in excess of 250 for the main study. Many thanks for your assistance with matter.

Yours sincerely

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Anne-Marie Brady

Email [anne-marie.brady@tcd.ie](mailto:anne-marie.brady@tcd.ie) Tel: 01 6083004

## **9.2 TCD Faculty of Health Science Ethical Approval**



THE UNIVERSITY OF DUBLIN

TRINITY COLLEGE

SCHOOL OF MEDICINE

FACULTY OF HEALTH SCIENCES

**Professor Dermot Kelleher, MD, FRCPI, FRCP, F Med Sci**  
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Ms A. Brady  
Course Coordinator Bachelor in Nursing Studies-Feb 2004  
School of Nursing & Midwifery Studies  
24 D'Olier St  
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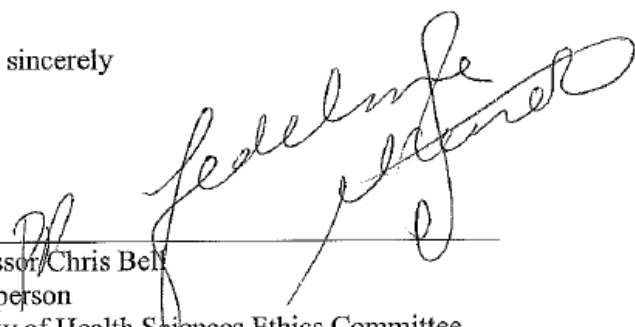
Issued: Tuesday, 05 July 2005  
Reissued: Wednesday, 11 October 2006

Study: The transition experiences career expectations and intent to stay among degree graduate nurses

Dear Ms Brady

Further to a recent meeting of the Faculty of Health Sciences Ethics Committee 2005, we are pleased to inform you that the above project has been approved without further audit.

Yours sincerely

  
\_\_\_\_\_  
Professor/Chris Bell  
Chairperson  
Faculty of Health Sciences Ethics Committee

### **9.3: Letter of invitation to participate**



**The University of Dublin, Trinity College**

Faculty of Health Sciences

**School of Nursing & Midwifery**

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Tel: + 353 1 608 2692 Fax: + 353 1 608 3001 [http://www.tcd.ie/Nursing\\_Midwifery/](http://www.tcd.ie/Nursing_Midwifery/)

---

Dear colleague,

**Re: Invitation to participate in a study of the transition experiences, career expectations and intent to stay among degree graduate nurses**

I am a lecturer in the School of Nursing & Midwifery at Trinity College Dublin and PhD student currently undertaking a research study. You have been selected to take part in this study because you registered as a nurse in 2007 and graduated from a 4 years nursing degree from one of the 13 third level colleges across the Irish Republic.

The purpose of this study is to explore the experiences of beginning degree graduate nurses in the first 12 months of practice and the nature of and quality of support given to this group of health service employees across different clinical settings and geographical locations. The study will also explore the factors that influence the career decisions of this first group of degree graduate nurses following the transition of nursing education from the hospitals to the third level.

The main part of the project will involve a national survey of nursing graduates sent directly to you via An Bord Altranais 6 months after you register. We are seeking your co-operation to ensure that a high response rate to the questionnaire is achieved. The main aim of the project is to provide information from a large and representative sample of beginning registered nurses that reflects the reality of individual and collective transition experiences of graduate nurses in a variety of clinical settings and geographical locations.

I also would like to take the opportunity to invite you to participate in the individual interviews that will be conducted across the county with a smaller number of nurses across all three disciplines, general, psychiatry and learning disability after they have been in practice for 9-12 months.

Enclosed please find an information sheet, questionnaire, consent form and a stamped addressed envelope for your consideration. When you have time to read and consider the information **please complete the questionnaire**. If you feel that you would like to participate in the interviews, please sign the consent form and complete the contact details. You will be contacted in a few months time by me to arrange time and location of your convenience. Signing this consent form does not bind you to you any agreement and you are free to change you mind and withdraw your consent at any time. I look forward to hearing from you soon and thank you for your help and co-operation. If you require any further information or clarification on any issue relating to this study please do not hesitate to contact me at the following number 01 8963004.

Yours sincerely

Anne-Marie Brady

## **9.4 Participant Information**



**The University of Dublin, Trinity College**

Faculty of Health Sciences

**School of Nursing & Midwifery**

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## **Participant Information**

Dear Colleague,

**Re: A Study of Transition experiences, career expectations and intent to stay among degree graduates nurses**

### **Introduction**

Five years after the transfer of pre-registration nursing education in Ireland from hospitals based school of nursing into the third level education sector, you are among the first nursing degree graduates and stand at a threshold of a career in nursing. This affords a starting point to examine your career expectations and experiences on entering professional practice. Work readiness is only partially achieved by the educational preparation of graduates but also influenced the organisational conditions in which new graduates find themselves. There has been considerable monetary investment in the nursing degree and a key concern nationally will be the ability of profession to retain degree graduates following registration. The purpose of this research study is to explore the transition experiences, career expectations and the intent to stay among nursing degree graduates. The finding of this study should be useful to prospective health service employers in reviewing the type and quality of support provided to new graduates and inform nursing work planning and policy development at a local and national level.

### **1. Procedures for study.**

Nurses entering General, Psychiatry and Learning Disability divisions of the Bord Altranais in 2007, following graduation from the 4 year nursing degree



programmes in any of third level institutions across in the Republic of Ireland are invited to participate.

In this study you are asked to complete a questionnaire which evaluates your individual transition experiences, career expectations and working conditions as a graduate degree nurse six months after you have registered. Participation is voluntary. However, we hope of course that you will take the time to fill in this questionnaire. It will take about ½ to one hour. The more participants the better the quality of the results will be.

The questions concern **your individual** transition experiences, **and** working conditions and **your** opinion. Therefore we would like you to fill it in by yourself and without "help" from others. If there are questions which you cannot answer, you may of course skip them. However, we would like to ask you to answer as many questions as possible. Please return the questionnaire with the prepaid enclosed envelope as quickly as possible (preferably within 14days). The costs for postage will be covered by us.

A proportion of nurses across all disciplines will be interviewed to explore individual experiences during the first months in practice and those factors which helped or hindered their transition in addition to their future career plans.

## **2. Duration**

The study period will commence six months after the 2007 nursing degree graduates qualify as registered nurses when the questionnaire will be mailed to newly registered nurses. Those graduate nurses who have consented will be interviewed after 9-12 months in practice.

## **3. Benefits of the Study.**

There may be no individual benefit for you as research participant but it is anticipated that the study will

- Inform the preparation of nursing graduates for nursing practice
- Document and contribute to a data base of information on graduate employment pattern and career progression.

- Identify factors that contribute to a positive transition from student to staff nurse for new graduates
- Inform the development of appropriate support structures for new graduates.
- Contribute to the body of knowledge about Irish Nursing degree graduates
- Inform nursing work force policy and planning at a local and national level

#### **4. Risks.**

There are no major risks attached to this study. The sole disadvantage is the time to complete the questionnaires or participate in the interview for those that consent.

#### **5. Exclusion from participation.**

- Nursing graduates entering the General, Psychiatry or Learning disability register in 2007 who have not undertaken a nursing degree.
- Nursing graduates who have undertaken a nursing degree outside of the Republic of Ireland.

#### **6. Confidentiality.**

The questionnaire is anonymous. This means that nobody dealing with the questionnaires knows your name. However, because we would like to follow up all participants in the future again, we ask you to fill in a code which only you will know so we can identify questionnaires filled in by the same person without knowing their name. All your answers which you give in this questionnaire will be treated confidentially by the researchers. No other person will have access to the data. All results will be published in a way that individuals cannot be recognised. For those who consent to be interviewed, please note that that your identity will only be known to the researcher and that each interviewee will be allocated a numerical code which will be stored separately to your name.

#### **7. Compensation.**

This study is covered by standard institutional indemnity insurance. Nothing in this document restricts or curtails your rights.

**8. Voluntary Participation.** You have offered to take part in this study. You may leave at any time. If you decide not to take part, or if you leave, you will not give up any benefits that you had before entering the study.

**9. Permission.** The research study has Research Ethics Committee approval from The University of Dublin, Trinity College.

**10. Further information:** You can get more information or answers to your questions about the study, your taking part in the study, and your rights, from Anne-Marie Brady at (01) 8963004.

If the researcher learns of important new information that might affect your wish to remain in the study, you will be informed at once.

The success of this study is dependent on the willingness of degree graduate nurses to participate in order to accurately capture the transition experiences and working conditions of newly registered nurses across all divisions of the register, so therefore your participation is very important.

If you are able to, please complete the questionnaire and return it in the enclosed **FREEPOST** envelope (preferably within fourteen days of receipt of this letter).

With best wishes,  
Anne-Marie Brady

## **9.5 Consent form**



## CONSENT FORM

### **A study of transition experiences, career expectations and intent to stay among degree graduate nurses**

The purpose of this study is to explore the experiences of beginning degree graduate nurses in the first 12 months of practice and the nature of and quality of support given to this group of health service employees on entry to practice. The study will also explore the factors that influence the career decisions of this first group of degree graduate nurses following the transition of nursing education from the hospitals to the third level. I understand the focus of the interviews will be on exploring my individual experiences during the first months in practice and those factors which helped or hindered my transition in addition to my future career plans. There may be no individual benefit for me as a research participant but it is anticipated that the study will inform the preparation of and the development of appropriate support structures for new graduates.

I \_\_\_\_\_ hereby give consent to participate in the interview phase of the study and understand that I may withdraw from the study at any time if I should wish to do so.

I understand that any information given will be confidential and full anonymity will be maintained.

Name (block letters) \_\_\_\_\_

#### **My contact details are as follows**

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone contact: \_\_\_\_\_ Mobile: \_\_\_\_\_

Email address: \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

**Thank you for agreeing to take part in the study**

## **9.6 Survey instrument**

# A STUDY OF THE TRANSITION EXPERIENCES, CAREER EXPECTATIONS AND INTENT TO STAY AMONG DEGREE GRADUATE NURSES

## QUESTIONNAIRE

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This questionnaire is part of a research project which evaluates the transition experiences, career expectations and intent to stay among degree graduate nurses. Special attention is paid to examining the working conditions of degree graduates. The questionnaire was sent to you through the Bord Altranais Sampling service because you have completed a 4 year nursing degree and have successfully registered as nurse on the general, psychiatric or learning disability division of the register in 2007.

The questionnaire is anonymous. This means that nobody dealing with the questionnaires knows your name. However, because we would like to follow up on all participants in the future again, we ask you to fill in a code which only you will know, so we can identify questionnaires filled in by the same person without knowing their name. All your answers which you give in this questionnaire will be treated confidentially by the researchers. No other person will have access to the data. All results will be published in a way that individuals cannot be recognised. Participation is voluntary. However, we hope of course that you will take the time to fill in this questionnaire. It will take about ½ to one hour. The more participants the better the quality of the results will be. The questions concern **your** working conditions and **your** opinion. Therefore we would like you to fill it in by yourself and without “help” from others. If there are questions which you cannot answer, you may skip them. However, we would like to ask you to answer as many questions as possible. Please return the questionnaire with the prepaid enclosed envelope as quickly as possible (preferably within 14 days). The costs for postage will be covered by us. If you would like to add any further comments, please use the space at the end of the questionnaire. If you have questions, you are welcome to call Anne-Marie Brady, Tel: 01 8963004.

With kind regards

Anne-Marie

**Before you start answering, please fill in your personal identification code.**

**Please use the following procedure:**

first initial of your mothers first name →	<input type="text"/>	<i>Example:</i>	<i>mother: Kate</i> →	<input type="text" value="K"/>
month of your mothers birthday →	<input type="text"/>		<i>mother born in November</i> →	<input type="text" value="11"/>
first initial of your fathers first name →	<input type="text"/>		<i>father: Paul</i> →	<input type="text" value="P"/>
month of your fathers birthday →	<input type="text"/>		<i>father born in August</i> →	<input type="text" value="08"/>

**Part A****The first part contains questions concerning the institution you work in and your personal situation.****1. What is your main work department?**

- <sub>1</sub> critical care unit
- <sub>2</sub> operating department
- <sub>3</sub> accident & emergency
- <sub>4</sub> medical ward
- <sub>5</sub> surgical ward
- <sub>6</sub> paediatrics ward
- <sub>7</sub> Obstetrics
- <sub>8</sub> gynaecology ward
- <sub>9</sub> care of the elderly ward in a hospital
- <sub>10</sub> oncology ward
- <sub>11</sub> Rehabilitation
- <sub>12</sub> nursing homes /long-term care/residential
- <sub>13</sub> community / home care
- <sub>14</sub> Intellectual Disability - long-term care/residential
- <sub>15</sub> Acute psychiatry
- <sub>16</sub> Psychiatry - long-term care/residential
- <sub>17</sub> out patient clinic
- <sub>18</sub> day clinic
- <sub>19</sub> practice nurse
- <sub>20</sub> palliative care/hospice
- <sub>21</sub> technical department / laboratory
- <sub>22</sub> other:  
please specify \_\_\_\_\_

**2. Did you enter nursing?**

- <sub>1</sub> As a school leaver
- <sub>2</sub> As a mature student
- <sub>3</sub> As a mature student/care assistant on stipend

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**3. Do you always work in the same department?**



- <sub>1</sub> no, I move between departments a lot  
<sub>2</sub> no, I occasionally move between departments  
<sub>3</sub> yes, fixed department
- 

**4. What is your present position at work?**

- <sub>1</sub> Sister/charge nurse/clinical nursing manager grade 2  
<sub>2</sub> Junior sister/ charge nurse/ clinical nursing manager grade 1  
<sub>3</sub> Staff nurse  
<sub>4</sub> Other Staff  
Please specify \_\_\_\_\_
- 

**5. How many nursing colleagues (including nursing care assistants/aides) do you usually work with?**

I usually work

- <sub>1</sub> Alone  
<sub>2</sub> with one colleague  
<sub>3</sub> with 2 to 4 colleagues  
<sub>4</sub> with 5 or more colleagues
- 

**6. How many patients/clients are you normally responsible for during one shift?**

approximately \_\_\_\_\_ patients/clients

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**7. Are there any vacant nursing posts in your work place at present?**

- <sub>1</sub> No  
<sub>2</sub> Yes  
<sub>3</sub> don't know
- 

**8. Do you have a permanent employment contract?**

- a. <sub>1</sub> Yes  
<sub>2</sub> No  
b. **If no: what duration is it :** \_\_\_\_\_ months/years
-

**9. What is your highest level of education before nursing education?**

- <sub>1</sub> No certificate
  - <sub>2</sub> Junior/Intermediate certificate or equivalent
  - <sub>3</sub> Leaving certificate/A levels
  - <sub>4</sub> NVQ or equivalent
  - <sub>5</sub> Degree
  - <sub>6</sub> Other  
please specify \_\_\_\_\_
- 

**10. Which nursing registration do you hold?**

- <sub>1</sub> Registered General nurse (RGN)
  - <sub>2</sub> Registered Psychiatric Nurse (RPN)
  - <sub>3</sub> Registered Intellectual Disabilities (RNID)
- 

**11. In which third level institution did you complete your nursing degree?**

- <sub>1</sub> Dublin City University
  - <sub>2</sub> Institute of Technology Dundalk
  - <sub>3</sub> Institute of Technology Galway/Mayo
  - <sub>4</sub> Institute of Technology Letterkenny
  - <sub>5</sub> Institute of Technology Tralee
  - <sub>6</sub> Institute of Technology Atlongue
  - <sub>7</sub> Institute of Technology Waterford
  - <sub>8</sub> Trinity College Dublin
  - <sub>9</sub> University College Cork
  - <sub>10</sub> University College Dublin
  - <sub>11</sub> University College Galway
  - <sub>12</sub> University of Limerick
  - <sub>13</sub> St Angela's College Sligo
- 

**12. How many days did you participate in continuing professional development during the last 6 months? (study days including orientation)**

\_\_\_\_\_ days

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**13. For how long have you worked in the nursing profession?**

(Please do not include your undergraduate experience)

\_\_\_\_\_ months

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**14. Number of your work hours (on average) per week**

**(Please put 0 if not applicable):**

- a. according to work contract \_\_\_\_\_ hours per week
- b. overtime: paid \_\_\_\_\_ hours per week
- c. overtime: compensated by leave \_\_\_\_\_ hours per week
- d. overtime: neither paid nor compensated by leave \_\_\_\_\_ hours per week
- 

**15. Do you work for a nursing agency?**

- a. <sub>1</sub> No  
<sub>2</sub> yes
- b. **If yes: how many hours per week?** \_\_\_\_\_ hours
- 

**16. Do you have any other regular paid jobs apart from your occupation?**

- a. <sub>1</sub> No  
<sub>2</sub> Yes
- b. **If yes: how many hours per week?** \_\_\_\_\_ hours
- 

**17. Do you have any other caring responsibilities apart from your job?**

(e.g. taking care of relatives, but **not** including child care)

- a. <sub>1</sub> No  
<sub>2</sub> Yes
- b. **If yes: how many hours per week?** \_\_\_\_\_ hours
- 

**18. How often within the past 6 months did you find yourself going to work although your state of health meant that you should have stayed at home?**

\_\_\_\_\_ times

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**19. Has anybody else offered you a new job outside your present institution during the last 6 months?**

- <sub>1</sub> No  
<sub>2</sub> yes, from within the health care sector  
<sub>3</sub> yes, from an area outside the health care sector

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20. 4.4.1 How do you see the present employment situation of nurses in your region?

- <sub>1</sub> it is very difficult to get a job
  - <sub>2</sub> it is quite difficult to get a job
  - <sub>3</sub> it is not that easy to get a job
  - <sub>4</sub> it is quite easy to get a job
  - <sub>5</sub> it is very easy to get a job
- 

21. Your year of birth: 19\_\_\_\_\_

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22. Your gender?

- <sub>1</sub> Female
  - <sub>2</sub> male
- 

23. Place of birth:

in the same city or area that I work <sub>1</sub>

in another part of the Republic of Ireland <sub>2</sub>

in another European country <sub>3</sub>

in another Non-European country <sub>4</sub>

**Part B**  
The following questions concern your work in general

24. How pleased are you with...

- |                                     | very<br>unsatisfied                   | unsatisfied                           | satisfied                             | highly<br>satisfied                   |
|-------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. your work prospects?             | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| b. the physical working conditions? | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |

- |    |  |                                       |                                       |                                       |                                       |
|----|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| c. | the way your abilities are used?                             | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| d. | psychological support at your workplace?                     | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| e. | your opportunities to give your patients the care they need? | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
| f. | your job as a whole, everything taken into consideration?    | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> |
- 

**25. Are you worried about...**

- |    |  |                                       |                                       |     |
|----|--|---------------------------------------|---------------------------------------|-----|
|    |  |                                       | no                                    | yes |
| a. | becoming unemployed?   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |     |
| b. | being unable to work?  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |     |
| c. | difficulties finding another job if you became unemployed?             | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |     |
| d. | being transferred to another job / place of work that you do not want? | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |     |
| e. | receiving a new work schedule which does not suit you?                 | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |     |
- 

**26. How often during the course of the 6 months have you thought about ..**

- |    |  |                                       |                                       |                                       |                                       |                                       |
|----|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
|    |  | never                                 | some-times<br>each month              | some-<br>times each<br>week           | Every day                             | Not<br>applicable                     |
| a. | further qualification in nursing                                   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| b. | further qualification outside nursing                              | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| c. | giving up nursing  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
| d. | giving up nursing completely and starting a different kind of job? | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
- 

**27. What type of institution do you work in?**

- <sub>1</sub> Dublin Area Teaching Hospital
- <sub>2</sub> Major academic teaching hospital outside Dublin area
- <sub>3</sub> Regional hospital
- <sub>4</sub> Other smaller hospital
- <sub>5</sub> Private hospital
- <sub>6</sub> Nursing Home
- <sub>7</sub> Community Care services
- <sub>8</sub> Institutional Intellectual disabilities services
- <sub>9</sub> Community Intellectual disabilities services
- <sub>10</sub> Institutional Psychiatric services
- <sub>11</sub> Community Psychiatric services
- <sub>12</sub> other: Please specify \_\_\_\_\_

<sub>13</sub> Don't know

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**28. Do you work in**

- <sub>1</sub> Greater Dublin area  
<sub>2</sub> Other main city/large town in Ireland  
<sub>3</sub> Rural location  
<sub>3</sub> Outside of Irish republic - Location \_\_\_\_\_
- 

**29. How often during the course of the past 6 months**

	never	some-times each month	some-times each week	Every day
a. Changing to a different department/another ward/community area with the same employer?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b. Looking for an alternative employment in nursing	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c. Self-employment	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

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**30. Below you will find a set of statements expressing a relationship to your organisation. Please mark how much you agree with them.**

	no, totally inaccurate	not so accurate	partly accurate	fairly accurate	yes, totally accurate
a. I really feel that I belong to this institution.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b. This institution has a great deal of personal meaning for me.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c. I am proud to belong to this institution.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d. I do not feel like a part of the family in this institution.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e. I really feel that I belong to the nursing profession.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
f. Nursing profession has a great deal of personal meaning for me.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
g. I am proud to belong to the nursing profession.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
h. I do not feel part of the nursing profession.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

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**Part C**  
**The following questions concern the content of your work**

**31. Please answer the following questions:**

	to a very small extent	not very much	some- what	to some extent	to a large extent
a. Does your work require you to take the initiative?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b. Do you have the possibility of learning new things through your work?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c. Can you use your skills or expertise in your work?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d. Is your work meaningful?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e. Do you feel that the work you do is important?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
f. Do you feel motivated and involved in your work?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

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**32. Cont.: Please answer the following questions:**

	hardly ever	seldom	some- times	often	always
a. Is your work varied?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b. Do you have enough time to talk to patients?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c. How often do you lack time to complete all work tasks?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d. Can you pause in your work whenever you want?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e. Are you worried about making mistakes?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
f. Do you have to work very fast?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
g. Is your workload unevenly distributed so things pile up	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

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**33. How accurate are the following statements with relation to your personal occupational situation?**

	totally inaccurate	not so accurate	partly accurate	fairly accurate	totally accurate
a. I have a say in what type of task I am asked to fulfil.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b. I can decide for myself how to fulfil the tasks given to me.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c. I can set my own work pace.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d. I have a say in <i>when</i> I fulfil the tasks given to me.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

---

**34. Which of the following hazards occur in your work environment and how much do they affect you?**

		quite hazardous	slight hazard	not a hazard	does not apply	
a.	toxic substances	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b.	exposure to infection	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c.	Noise	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d.	Temperature	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e.	Verbal/physical abuse	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

---

**35. How often on an average workday are you personally occupied with the following tasks?**

		0-1 times a day	2-5 times a day	6-10 times a day	more than 10 times a day
a.	bedding and positioning patients	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b.	transferring or carrying patients	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c.	lifting patients in bed without aid	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
d.	mobilising patients	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
e.	washing, bathing (personal hygiene)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
f.	clothing patients	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
g.	helping with feeding	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
h.	making beds	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
i.	pushing patient's beds, food trolleys or laundry trolleys	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
j.	maintaining an uncomfortable posture	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

---

**36. How long approximately are you in a standing posture?**

- <sub>1</sub> less than 2 hours  
<sub>2</sub> 2 to 3 hours  
<sub>3</sub> 4 to 5 hours  
<sub>4</sub> 6 hours or more
- 

**37. Do you have lifting aids / hoists in your working area?**

- <sub>1</sub> No  
<sub>2</sub> yes → **If yes: Do you usually use them?** <sub>3</sub> yes  
<sub>4</sub> no



---

**38. If you think of a typical working day, do you, in your opinion, perform tasks which do not belong to the nursing profession?**

- <sub>1</sub> no, (almost) never
  - <sub>2</sub> yes, up to 20% of my working time
  - <sub>3</sub> yes, more than 20% of my working time
- 

**39. How often do you have to perform tasks for which you are not qualified enough?**

- <sub>1</sub> Never
- <sub>2</sub> less than once per week
- <sub>3</sub> about 1 to 5 times per week
- <sub>4</sub> about 1 to 5 times per day
- <sub>5</sub> constantly

**40. How often do you receive information, which is relevant to your work, insufficiently or too late?**

- <sub>1</sub> Never
  - <sub>2</sub> less than once per week
  - <sub>3</sub> about 1 to 5 times per week
  - <sub>4</sub> about 1 to 5 times per day
  - <sub>5</sub> constantly
- 

**41. How often do you receive conflicting / contradictory orders concerning the performance of your work?**

- <sub>1</sub> Never
  - <sub>2</sub> less than once per week
  - <sub>3</sub> about 1 to 5 times per week
  - <sub>4</sub> about 1 to 5 times per day
  - <sub>5</sub> constantly
-

42. Below is a list of situations that commonly occur in a work setting. Please indicate how often you are stressed by the following situations.

	never	Somet imes	frequently	very frequently	does not apply
a. Inadequate information from a doctor regarding the medical condition of a patient.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b. A doctor ordering what appears to be inappropriate treatment for a patient.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c. A doctor not being present in a medical emergency.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d. Not knowing what a patient or a patient's family ought to be told about the patient's medical condition and its treatment.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e. Uncertainty regarding the operation and functioning of specialised equipment.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
f. Inadequate support from senior nursing staff regarding nursing care for a patient	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

**Part D**  
The following questions are related to your work schedule.

43. Which answer fits your working schedule best?:

- <sub>1</sub> I work 1 shift: only morning shifts
- <sub>2</sub> I work 1 shift: only afternoon shifts
- <sub>3</sub> I work 1 shift: only night shifts
- <sub>4</sub> I work 1 shift: only long days
- <sub>5</sub> I work 2 shifts (morning & afternoon) without night shifts
- <sub>6</sub> I work 2 shifts (morning or afternoon) with night shifts
- <sub>7</sub> I work 2 shifts long day with night shifts
- <sub>8</sub> I work 3 shifts without night shifts
- <sub>9</sub> I work 3 shifts with night shifts
- <sub>10</sub> I work 4 shifts without night shifts
- <sub>11</sub> I work 4 shifts with night shifts
- <sub>12</sub> I work irregular hours, but not in a shift

**44. If you work shifts: How often in one month do you have split shift?**

- <sub>1</sub> Never
  - <sub>2</sub> 1 to 2 times per month
  - <sub>3</sub> 3 to 5 times per month
  - <sub>4</sub> 6 to 10 times per month
  - <sub>5</sub> more than 10 times per month
- 

**45. If you work shifts: Is your regular rota an alternating shift?**

(late shift followed by morning shift next day)

- <sub>1</sub> No
  - <sub>2</sub> Yes
- 

**46. If you work night shifts, how many (consecutive) night shifts in a row?**

(Put 0 if nights do not apply)

\_\_\_\_\_ night shifts

---

**47. If you work night shifts, do you have the opportunity to lie down to rest?**

- <sub>1</sub> no, never
  - <sub>2</sub> no, only on some nights
  - <sub>3</sub> yes, most of the nights
  - <sub>4</sub> yes, every night
- 

**48. Do you have the opportunity to swap your shifts at short notice (1 to 3 days in advance)?**

- <sub>1</sub> No
  - <sub>2</sub> swapping shifts is quite easy
  - <sub>3</sub> swapping shifts is difficult
-

**49. How often do you have to take over shifts at short notice? (1 to 3 days in advance)**

- <sub>1</sub> Never
  - <sub>2</sub> about 1 to 2 times / month
  - <sub>3</sub> about 3 to 5 times / month
  - <sub>4</sub> more than 5 times / month
- 

**50. How many weekends (Saturday and/or Sunday) per month do you have to work?**

- <sub>1</sub> None
  - <sub>2</sub> approx. one
  - <sub>3</sub> approx. two
  - <sub>4</sub> approx. three
  - <sub>5</sub> approx. four
- 

**51. During the last 3 months: what is the greatest number of days, you had to work without a rest day? (including night shifts)**

\_\_\_\_\_ days

---

**52. Would you like to change the way you work shifts at present (e.g. work only a certain kind of shift)?**

- <sub>1</sub> No
  - <sub>2</sub> yes, perhaps
  - <sub>3</sub> yes, absolutely
- 

**53. How much influence do you have in planning your duty rota?**

- <sub>1</sub> no influence
  - <sub>2</sub> little influence
  - <sub>3</sub> moderate influence
  - <sub>4</sub> considerable influence
  - <sub>5</sub> I decide myself
-

54. Are you satisfied with staff handovers when shifts change?

<sub>1</sub> Yes

<sub>2</sub> no, because of →

(multiple answers possible)

<sub>A</sub>

... not enough time

<sub>B</sub>

... insufficient rooms (not enough space)

<sub>C</sub>

... bad atmosphere

<sub>D</sub>

... insufficient exchange of information

<sub>E</sub>

... too many disturbances

<sub>F</sub>

... for other reasons:

please specify \_\_\_\_\_

55. All in all: are you satisfied with your working hours?

a. with respect to your well being: no <sub>1</sub> yes <sub>2</sub>

b. with respect to your private life: no <sub>1</sub> yes <sub>2</sub>

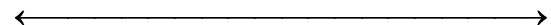
**Part E**

The following questions relate to the atmosphere between your colleagues at your place of work

56. Please answer the following questions concerning your work environment.

not at all

very much



a. Is your **immediate supervisor** able to appreciate the value of your work and its results?

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

<sub>5</sub>

b. Are your **colleagues** able to appreciate the value of your work and its results?

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

<sub>5</sub>

never

very often



c. Does your **immediate supervisor** express an opinion on your work?

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

<sub>5</sub>

d. Does your **immediate supervisor** give you supportive advice?

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

<sub>5</sub>

e. Do your **colleagues** express an opinion on your work?

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

<sub>5</sub>

f. Do your **colleagues** give you supportive advice?

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

<sub>5</sub>





**Part F****The following questions concern personal aspects relating to your work.****64. Please indicate to what extent you personally agree with these statements.**

	strongly disagree	disagree	agree	strongly agree
a. I get easily overwhelmed by time pressures at work.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b. As soon as I get up in the morning I start thinking about work problems.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c. When I get home, I can easily relax and "switch off" from work.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
d. People close to me say I sacrifice too much for my job.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
e. Work rarely lets me go, it is still on my mind when I go to bed.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
f. If I postpone something that I was supposed to do today I'll have trouble sleeping at night.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

---



65. For each of the following adjectives rate the extent to which you feel that way (not only today, but in general).

		very slightly or not at all	a little	moderately	quite a bit	extremely
a.	interested	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b.	distressed	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c.	excited	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d.	upset	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e.	strong	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
f.	guilty	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
g.	scared	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
h.	hostile	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
i.	enthusiastic	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
j.	proud	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
k.	irritable	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
l.	alert	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
m.	ashamed	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
n.	inspired	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
o.	nervous	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
p.	determined	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
q.	attentive	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
r.	jittery	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
s.	active	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
t.	afraid	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

**Part G**

The questions in this section deal with your present occupation. For each of the following statements, please indicate first whether you agree or disagree with it. If there is an arrow → behind your answer please also indicate how much you are generally distressed by this situation.

66. I am under constant time pressure due to the heavy work load.

- |                                       |                               |                                       |              |
|---------------------------------------|-------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | no                            | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | yes, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                               | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                               | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**67. I have many interruptions and disturbances in my job.**

- |                                       |                               |                                       |              |
|---------------------------------------|-------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | no                            | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | yes, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                               | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                               | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**68. I have a lot of responsibility in my job.**

- |                                       |                               |                                       |              |
|---------------------------------------|-------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | no                            | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | yes, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                               | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                               | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**69. I am often pressured to work overtime.**

- |                                       |                               |                                       |              |
|---------------------------------------|-------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | no                            | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | yes, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                               | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                               | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**70. My job is physically demanding.**

- |                                       |                               |                                       |              |
|---------------------------------------|-------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | no                            | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | yes, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                               | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                               | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**71. I receive the respect I deserve from my superiors.**

- |                                       |                              |                                       |            |
|---------------------------------------|------------------------------|---------------------------------------|------------|
| <input type="checkbox"/> <sub>1</sub> | yes                          | <input type="checkbox"/> <sub>1</sub> | not at all |
| <input type="checkbox"/> <sub>2</sub> | no, and this distresses me → |                                       |            |

- <sub>2</sub> moderately
  - <sub>3</sub> considerably
  - <sub>4</sub> very much
- 

**72. I receive the respect I deserve from my colleagues.**

- <sub>1</sub> yes
  - <sub>2</sub> no, and this distresses me →
  - <sub>1</sub> not at all
  - <sub>2</sub> moderately
  - <sub>3</sub> considerably
  - <sub>4</sub> very much
- 

**73. I experience adequate support in difficult situations.**

- <sub>1</sub> yes
  - <sub>2</sub> no, and this distresses me →
  - <sub>1</sub> not at all
  - <sub>2</sub> moderately
  - <sub>3</sub> considerably
  - <sub>4</sub> very much
- 

**74. I am treated unfairly at work.**

- <sub>1</sub> no
  - <sub>2</sub> yes, and this distresses me →
  - <sub>1</sub> not at all
  - <sub>2</sub> moderately
  - <sub>3</sub> considerably
  - <sub>4</sub> very much
- 

**75. My job promotion prospects are poor.**

- <sub>1</sub> no
  - <sub>2</sub> yes, and this distresses me →
  - <sub>1</sub> not at all
  - <sub>2</sub> moderately
  - <sub>3</sub> considerably
  - <sub>4</sub> very much
-

---

**76. I have experienced or I expect to experience an undesirable change in my work situation.**

- |                                       |                               |                                       |              |
|---------------------------------------|-------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | no                            | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | yes, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                               | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                               | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**77. My job security is poor.**

- |                                       |                               |                                       |              |
|---------------------------------------|-------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | no                            | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | yes, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                               | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                               | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**78. My current occupational position adequately reflects my education and training.**

- |                                       |                              |                                       |              |
|---------------------------------------|------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | yes                          | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | no, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | Moderately   |
|                                       |                              | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                              | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**79. Considering all my efforts and achievements, I receive the respect and prestige I deserve at work.**

- |                                       |                              |                                       |              |
|---------------------------------------|------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | yes                          | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | no, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                              | <input type="checkbox"/> <sub>3</sub> | considerably |
|                                       |                              | <input type="checkbox"/> <sub>4</sub> | very much    |

---

**80. Considering all my efforts and achievements, my work prospects are adequate.**

- |                                       |                              |                                       |              |
|---------------------------------------|------------------------------|---------------------------------------|--------------|
| <input type="checkbox"/> <sub>1</sub> | yes                          | <input type="checkbox"/> <sub>1</sub> | not at all   |
| <input type="checkbox"/> <sub>2</sub> | no, and this distresses me → | <input type="checkbox"/> <sub>2</sub> | moderately   |
|                                       |                              | <input type="checkbox"/> <sub>3</sub> | considerably |

<sub>4</sub> very much

**81. Considering all my efforts and achievements, my salary / income is adequate.**

<sub>1</sub> yes

<sub>2</sub> no, and this distresses me →

<sub>1</sub> not at all

<sub>2</sub> moderately

<sub>3</sub> considerably

<sub>4</sub> very much

**Part H**

**The following part deals with aspects concerning your private and family life.**

**82.**

**Is your economic situation...?**

Very strained <sub>1</sub>

Strained <sub>2</sub>

Neither good or bad <sub>3</sub>

Good <sub>4</sub>

Very good <sub>5</sub>

**83.**

**How satisfied are you with your pay ...?**

not at all ←

ver

mu

in relation to your need for income  
considering the pay of other comparable  
professions

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

considering the pay of nurses in other institutions

<sub>1</sub>

<sub>2</sub>

<sub>3</sub>

<sub>4</sub>

<sub>5</sub>

---

84.

82.

live alone

live as the only adult together with child/children

live with another adult

live with another adult and child/children

**(If children are not applicable go to Question 87)**

---

85.

**How many children do you take care of at home?**

\_\_\_\_\_ child /children

86.

**If you have children:**

**Do you have enough opportunities for child care when you are at work?**

<sub>1</sub> no

<sub>2</sub> yes, most of the time

<sub>3</sub> yes, definitely

---

87.

**Who does most of the household chores?**

<sub>1</sub> Myself

<sub>2</sub> someone else

<sub>3</sub> evenly shared with someone else

88.

**Is affordable housing a problem for you ...?**

no <sub>1</sub>      yes <sub>2</sub>

---

89.

**How long does it take to go from home to work? (one way only)**

- <sub>1</sub> up to 15 minutes
- <sub>2</sub> up to 30 minutes
- <sub>3</sub> up to 45 minutes
- <sub>4</sub> up to 60 minutes
- <sub>5</sub> up to 75 minutes
- <sub>6</sub> up to 90 minutes
- <sub>7</sub> up to 105 minutes
- <sub>8</sub> upto 2 hours

90.

**How often do you spend time...?**

		never	about once a month	few times per month	few times per week	da
a.	with your partner / family?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
b.	with your friends / relatives?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
c.	on relaxation (e.g. reading) for yourself?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
d.	on sport, hobbies, courses?	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>

91.

**How accurate are the following statements with relation to your personal occupational situation**

		totally disagree				totally agree
		←				
a.	The demands of work interfere with my home and family life.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
b.	The amount of time my job takes makes it difficult to fulfil family responsibilities.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
c.	Things I want to do at home do not get done because of the demands of my job.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
d.	My job produces strain that makes it difficult to fulfil family duties.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
e.	Due to work-related duties, I have to make changes to my plans for family activities.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
f.	The demands of my family or spouse/ partner interfere with work related activities.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
g.	I have to put off doing things at work because of demands on my time at home.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>
h.	Things I want to do at work do not get done because of the demands of my family or spouse / partner.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/>

- i. My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks and working overtime. <sub>1</sub> <sub>2</sub> <sub>3</sub> <sub>4</sub> <sub>5</sub>
- j. Family-related strain interferes with my ability to perform job-related duties. <sub>1</sub> <sub>2</sub> <sub>3</sub> <sub>4</sub> <sub>5</sub>

**Part I**  
The following part deals with the topic of “work and health”

**93. How often ...**

- |   | Never/<br>almost<br>never             | once or a<br>few times<br>per month   | once or<br>twice a<br>week            | three to<br>five<br>times<br>per<br>week | Almost/ever<br>y day                  |
|---|---------------------------------------|---------------------------------------|---------------------------------------|--|---------------------------------------|
| a. do you feel tired?                           | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub>    | <input type="checkbox"/> <sub>5</sub> |
| b. are you physically exhausted?                | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub>    | <input type="checkbox"/> <sub>5</sub> |
| c. are you emotionally exhausted?               | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub>    | <input type="checkbox"/> <sub>5</sub> |
| d. do you think: “I can’t take it anymore”?     | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub>    | <input type="checkbox"/> <sub>5</sub> |
| e. do you feel worn out?                        | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub>    | <input type="checkbox"/> <sub>5</sub> |
| f. do you feel weak and susceptible to illness? | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub>    | <input type="checkbox"/> <sub>5</sub> |

**Part j**  
The following part deals with orientation to professional role.

**94. Does your area of employment provide a programme to initiate new graduates into your organisation?**

- <sub>1</sub> Yes  
<sub>2</sub> No

If you answered no go to question 103

**95. If you answered yes to the previous question what best describes your programme?**

- <sub>1</sub> **Transition programme**  
*Informal support during the initial 1 to 3 months of employment*



- Full graduate nurse internship programme**  
*Formal programme of orientation usually 6 to 12 months in duration with support from specifically designated clinical nurse educators*
  - Orientation course**  
*Brief period of sessions over a few days or weeks focused mainly on organisational and health and safety issues*
  - Preceptorship**  
*Formal programme of supervision and support provided by specific members of nursing staff*
  - Mentorship**  
*More informal programme of supervision and support provided by specifically prepared experienced nurses*
  - Combination of preceptorship and mentorship**
- 

96. **Do you expect to leave your place of nursing employment in the near future?**

- Will definitely leave in the near future
- It is quite likely that I will leave
- The situation is uncertain
- The chances are very slight that I will leave
- Definitely will not leave in the near future

97. **What are your career intentions for the next 5 years? (please select one)**

- Continue to work in nursing in Ireland
- Continue to work in nursing abroad (long-term)
- Continue to work and pursue further education in nursing in Ireland
- Take a break from nursing indefinitely
- Leave nursing

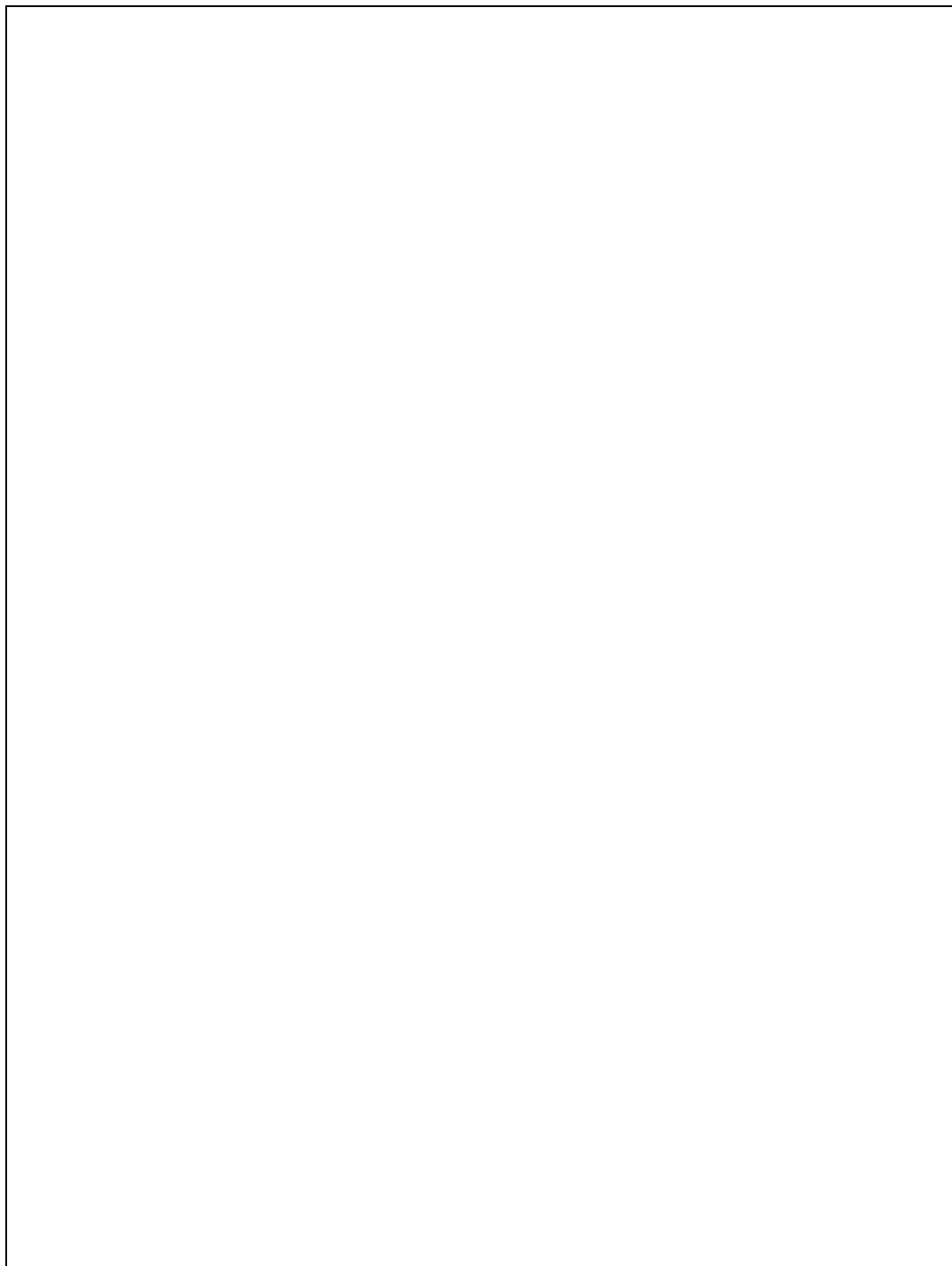
98. **Can you describe what motivated you to pursue a degree in nursing?**

---

---

**Thank you very much for your help!**

**Please share any further comments in relation to your work and future career in nursing.  
(Continue on the back of this booklet if necessary)**

A large, empty rectangular box with a thin black border, intended for the respondent to write their comments. It occupies the central portion of the page.

Funded by the Health Research Board  
All enquires to Anne-Marie Brady, Research Fellow, School of Nursing, Trinity College  
Dublin  
Tel: 01 8963004 Email: [anne-marie.brady@tcd.ie](mailto:anne-marie.brady@tcd.ie)

## **9.7 Reminder letter**



The University of Dublin, Trinity College

Faculty of Health Sciences

School of Nursing & Midwifery

24 D'Olier Street, Dublin 2, Ireland.

Tel: + 353 1 608 2692 Fax: + 353 1 608 3001 [http://www.tcd.ie/Nursing\\_Midwifery/](http://www.tcd.ie/Nursing_Midwifery/)

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Dear colleague,

**Re: Research Study: The transition experiences, career expectations and intent to stay among degree graduate nurses**

I am writing to you to again request your participation in a study about the career experiences of 2007 graduates who have entered practice. Your individual contribution is vital so that the findings truly represent the reality of the work experiences of those who have recently commenced employment in the profession. The purpose of this study is to explore the factors that influence the career decisions of this group of degree graduate nurses and to evaluate quality of support given to this group of health service employees across different clinical settings and geographical locations. The main aim of the project is to provide information from a large and representative sample of beginning registered nurses that reflects the reality of individual and collective transition experiences of graduate nurses in a variety of clinical settings and geographical locations.

If you have not already done so, please complete the study questionnaire and return in the FREEPOST envelope. **Please ignore this reminder if you have previously responded to a request for participation in this study.** Thank you to all who have already returned the completed questionnaire. Your contribution to this study is deeply appreciated. I would also like to take this opportunity to thank those family members who contacted me to relay details of those who are unable to participate due to absence from the country. If you happen to have mislaid the questionnaire, please contact me by email or telephone and I will deliver replacement copies to you. Thank you for considering this request. If you have questions you are welcome to contact me.

Yours Sincerely

---

Anne-Marie Brady

HRB Research Fellow

Email: [anne-marie.brady@tcd.ie](mailto:anne-marie.brady@tcd.ie)

Tel: 353 1 8963004

## **9.8 World of Irish Nursing Article**

Brady, A-M (2008) Graduate questionnaire to look at retention World of Irish Nursing 16(2): 12

NEWS

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## Graduate questionnaire to look at retention

A NATIONAL study to examine the experiences of nursing degree graduates during their first 12 months of practice across different clinical settings and geographical locations is set to get underway in March.

Anne-Marie Brady, lecturer at Trinity College Dublin, is undertaking a HRB-funded research study on the working conditions of last year's graduates and their career intentions. In March a questionnaire will be sent to all graduates from the 2007 nursing degree programmes.

It is five years since pre-registration nursing education was transferred from hospital-based schools of nursing to the third level sector. Every year 1,640 students commence a four-year degree programme, across 13 third level institu-

tions. At a time of unprecedented career choices, and following such a considerable monetary investment in the nursing degree, a key concern is now the ability of the profession to retain nursing degree graduates following registration. Work readiness is only partly achieved by the educational preparation of graduates, as it is also influenced by the organisational conditions in which new graduates find themselves. The Nursing and Midwifery Research Priorities Report (2005) identified recruitment and retention as a priority research issue for healthcare management. The transition from the academic institution to the workplace is of critical importance to new degree graduates, as turnover is more

prevalent in younger groups and new graduates may find themselves unprepared for the work situation.

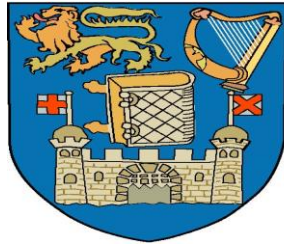
Several factors are associated with nurse turnover, including work environment, alternative employment opportunities, job commitment and intent to stay. The National Study of the Turnover in Nurses and Midwives (2002) stated that research was needed on the career intentions of new nursing degree graduates and whether they intend to leave. All 2007 nursing degree graduates will be contacted by post during March 2008 and asked to participate in an anonymous national survey after entry to practice. A high response rate is essential so that the study captures the issues that are

important for new nursing degree graduates as they enter the profession. If you are a 2007 nursing graduate, please look out for this questionnaire and take the time to complete it.

The main aim of the project is to provide, from a large and representative sample of nursing graduates, information that reflects their experiences in a variety of clinical settings and geographical locations. The study will help prospective health service employers in reviewing the type and quality of support provided to new nursing graduates, as well as to inform workforce planning and policy development in nursing at a local and national level.

For further information on the survey email: [anne-marie.brady@tcd.ie](mailto:anne-marie.brady@tcd.ie)

## **9.9 Advance Notice flyer**



## Research Study Notice

[Did you qualify as a nurse in 2007?](#)

If so you are invited to participate in a research study about new degree entrants to the profession.

[What is this study about?](#)

This study will examine the support you received on transition to your new job, your experiences and working conditions, your career expectations and intent to stay in nursing.

[Why is participation so important?](#)

A high response rate is essential so that the study captures the issues that are important and affect new graduates as they enter the profession.

[How can I take part?](#)

Please complete the FREE-POST questionnaire that you will receive through An Bord Altranais early 2008.



## **9.10 Overview of Scales**

## Overview of scales

Scale	Source	items
Meaning of work (3 items)	COPSOQ (Kristensen 2000)	31.d,e,f
Possibilities for development (4 items)	COPSOQ (Kristensen 2000)	31 a,b,c and 32a
Quantitative demands (5 items)	COPSOQ (Kristensen 2000)	32 b ,c, d, f, g,
Influence at work (4 items)	NEXT	33 a,b,c,d,
Emotional demands (4 items)	De Jonge et al. (1999)	60 a,b,c,d
Quality of leadership(4 items)	COPSOQ (Kristensen 2000)	63 a,b,c,d
Interpersonal relations (6 items)	NEXT	61 a,b,c,d,e,f,g,
Social support from supervisor (4 items)	v.d. Heijden (1998)	56 a,c,d 57
Social support from colleagues(4 items)	v.d. Heijden (1998)	56 b,e,f, and 58
Uncertainty concerning Tx. (4 items)	Gray-Toft & Anderson (1981)	42 a,b,c,d
Lifting and bending	NEXT	35 a,b,c,d,e,f,g,h,i
<b>Individual resources</b>		
Work-family conflict (5 items)	Netmeyer (1996)	91 a,b,c,d,e
Family-work conflict (5items)	Netmeyer (1996)	91 f,g,h,i,j
Satisfaction with payment (3 items)	NEXT (2003)	83 a,b,c
Effort (4 items)	ERI (Siegrist 1996)	66,67,69,70
Reward (11 items)	ERI (Siegrist 1996)	71,72,73,74,75,76,77,78,79.80,81
Over commitment (5 items)	ERI (Siegrist 1996)	64, a,b,c,d,e,f 64 c needs change of direction
Job satisfaction (4 items)	COPSOQ (Kristensen 2000)	24 a, b, c, f
Positive/negative affectivity (10 items)	Watson et al (1998)	65 a,c,e,i,in,p,q,s (positive)

each)		65 b,d,f,g,h,k,m,o,r,t (negative)
Institutional commitment (4 items)	Allen-Meyer (1990)	30 a,b,c,d d needs change of direction
Professional commitment (4 items)	Allen-Meyer (1990)	30 e,f,g,h h needs change of direction
Personal burnout (5 items)	Borritz & Kristensen (2001)	93 a,b,c,d,e,f

# 9.11 Computation of Scales: SPSS Syntax

### **Computation of Scales: SPSS**

```
COMPUTE meaningofwork1 = mean(Q31D,Q31E,Q31F) .  
EXECUTE .
```

```
COMPUTE possdev2 = mean(Q31A,Q31B,Q31C,Q32A) .  
EXECUTE .
```

```
COMPUTE quantdemands3 = mean(RECQ32B,Q32C,RECQ32D,Q32E,Q32F,Q32G) .  
EXECUTE .
```

```
COMPUTE influencework4 = mean(Q33A,Q33B,Q33C,Q33D) .  
EXECUTE .
```

```
COMPUTE emotdemands5 = mean(Q60A,Q60B,Q60C,Q60D) .  
EXECUTE .
```

```
COMPUTE quallead6 = mean(Q63A,Q63B,Q63C,Q63D) .  
EXECUTE .
```

```
COMPUTE interpersonal7 = mean(Q61A,Q61B,Q61C,Q61D,Q61E,Q61F,Q61G) .  
EXECUTE .
```

```
COMPUTE socialsupportsuper8 = mean(Q56A,Q56C,Q56D,Q57) .  
EXECUTE .
```

```
COMPUTE socialsupportcoll9 = mean(Q56B,Q56E,Q56F,Q58) .  
EXECUTE .
```

```
COMPUTE uncertainty10 = mean(Q42A,Q42B,Q42C,Q42D) .  
EXECUTE .
```

```
COMPUTE liftbend11 = mean(Q35A,Q35B,Q35C,Q35D,Q35E,Q35F,Q35G,Q35H,Q35I) .  
EXECUTE .
```

COMPUTE workfamconflict12 = mean(Q91A,Q91B,Q91C,Q91D,Q91E) .  
EXECUTE .

COMPUTE famworkconflict13 = mean(Q91F,Q91G,Q91H,Q91I,Q91J) .  
EXECUTE .

COMPUTE satpay14 = mean(Q83A,Q83B,Q83C) .  
EXECUTE .

COMPUTE effort15 = mean(Q66A,Q67A,Q69A,Q70A) .  
EXECUTE .

COMPUTE reward16 =  
mean(Q71A,Q72A,Q73A,Q74A,Q75A,Q76A,Q77A,Q78A,Q79A,Q80A,Q81A)  
.  
EXECUTE .  
EXECUTE .

RECODE  
Q64C  
(SYSMIS=SYSMIS) (1=4) (2=3) (3=2) (4=1) INTO recQ64C .  
EXECUTE .

COMPUTE overcommit17 = mean(Q64A,Q64B,recQ64C,Q64D,Q64E,Q64F) .  
EXECUTE .

COMPUTE jobsat18 = mean(Q24A,Q24B,Q24C,Q24F) .  
EXECUTE .

COMPUTE posaffect19 =  
mean(Q65A,Q65C,Q65E,Q65I,Q65J,Q65L,Q65N,Q65P,Q65Q,Q65S).  
EXECUTE .

COMPUTE negaffect19 =  
mean(Q65B,Q65D,Q65F,Q65G,Q65H,Q65K,Q65M,Q65O,Q65R,Q65T).  
EXECUTE .

RECODE

Q30D

(SYSMIS=SYSMIS) (1=4) (2=3) (3=2) (4=1) INTO recQ30D .

EXECUTE .

COMPUTE instcommit20 = mean(Q30A,Q30B,Q30C,recQ30D).

EXECUTE .

RECODE

Q30H

(SYSMIS=SYSMIS) (1=4) (2=3) (3=2) (4=1) INTO recQ30H .

EXECUTE .

COMPUTE profcommit21 = mean(Q30E,Q30F,Q30G,recQ30H).

EXECUTE .

COMPUTE personalburn22 = mean(Q93A,Q93B,Q93C,Q93D,Q93E,Q93F).

EXECUTE .

## **9.12 Content validity scores**



### Content Validity Scores

Question	Clarity	Relevance	Representativeness	CVI
1.	0.83	0.50	0.50	0.93
2.	1.00	1.00	1.00	1.00
3.	1.00	1.00	1.00	1.00
4.	1.00	1.00	0.83	0.94
5.	1.00	1.00	1.00	1.00
6.	1.00	1.00	1.00	1.00
7.	0.66	0.83	1.00	0.83
8.	0.83	1.00	1.00	0.94
9.	1.00	1.00	1.00	1.00
10.	1.00	1.00	1.00	1.00
11.	1.00	1.00	1.00	1.00
12.	1.00	1.00	0.83	0.94
13.	1.00	1.00	1.00	1.00
14.	1.00	1.00	0.83	0.94
15.	0.66	0.83	0.66	0.72
16.	1.00	1.00	0.83	0.94
17.	1.00	1.00	1.00	1.00
18.	1.00	1.00	1.00	1.00
19.	1.00	0.66	0.83	0.83
20.	1.00	1.00	1.00	1.00
21.	0.83	1.00	1.00	0.94
22.	1.00	1.00	1.00	1.00
23.	1.00	0.83	1.00	0.94
24.	1.00	0.66	1.00	0.89
25.	1.00	0.66	1.00	0.89
26.	1.00	0.83	0.83	0.89
27.	1.00	1.00	0.83	0.94
28.	1.00	0.83	0.83	0.89
29.	1.00	0.66	0.66	0.77
30.	1.00	0.66	0.50	0.72

<b>Question</b>	<b>Clarity</b>	<b>Relevance</b>	<b>Representativeness</b>	<b>CVI</b>
31.	0.66	1.00	0.83	0.83
32.	0.66	1.00	0.66	0.77
33.	0.66	1.00	0.83	0.83
34.	1.00	0.83	0.83	0.89
35.	0.83	1.00	0.83	0.89
36.	0.83	1.00	0.83	0.89
37.	0.83	1.00	1.00	0.94
38.	1.00	0.83	0.83	0.89
39.	1.00	0.83	0.83	0.89
40.	0.83	1.00	0.83	0.89
41.	0.66	1.00	0.83	0.83
42.	1.00	1.00	0.83	0.94
43.	0.83	1.00	0.83	0.89
44.	1.00	1.00	0.66	0.89
45.	1.00	1.00	0.83	0.94
46.	0.83	1.00	0.83	0.89
47.	0.66	0.50	0.50	0.55
48.	1.00	0.83	0.83	0.89
49.	0.83	1.00	0.83	0.89
50.	1.00	0.83	1.00	0.94
51.	1.00	0.66	1.00	0.89
52.	1.00	0.83	1.00	0.94
53.	1.00	0.83	1.00	0.94
54.	0.83	0.83	0.83	0.83
55.	0.83	1.00	1.00	0.94
56.	1.00	1.00	1.00	1.00
57.	0.83	1.00	0.83	0.89
58.	1.00	1.00	0.83	0.94
59.	1.00	1.00	1.00	1.00
60.	1.00	1.00	1.00	1.00

<b>Question</b>	<b>Clarity</b>	<b>Relevance</b>	<b>Representativeness</b>	<b>CVI</b>
61.	0.83	1.00	0.83	0.89
62.	1.00	1.00	1.00	1.00
63.	1.00	1.00	1.00	1.00
64.	1.00	1.00	1.00	1.00
65.	1.00	1.00	1.00	1.00
66.	1.00	0.83	0.83	0.89
67.	0.66	1.00	1.00	0.89
68.	1.00	0.83	0.83	0.89
69.	0.83	1.00	0.83	0.89
70.	1.00	1.00	1.00	1.00
71.	1.00	1.00	1.00	1.00
72.	1.00	1.00	1.00	1.00
73.	1.00	1.00	1.00	1.00
74.	1.00	1.00	1.00	1.00
75.	1.00	1.00	1.00	1.00
76.	1.00	1.00	1.00	1.00
77.	1.00	1.00	1.00	1.00
78.	1.00	1.00	1.00	1.00
79.	1.00	1.00	0.83	0.94
80.	1.00	1.00	0.83	0.94
81.	1.00	1.00	0.83	0.94
82.	1.00	1.00	1.00	1.00
83.	1.00	1.00	1.00	1.00
84.	1.00	1.00	1.00	1.00
85.	1.00	0.83	0.83	0.89
86.	1.00	0.83	0.83	0.89
87.	1.00	1.00	0.83	0.94
88.	1.00	1.00	1.00	1.00
89.	0.83	0.83	0.83	0.83
90.	1.00	0.83	0.83	0.89
91.	1.00	0.83	0.83	0.89

Question	Clarity	Relevance	Representativeness	CVI Score
92.	1.00	0.83	1.00	0.94
93.	1.00	1.00	0.83	0.94
94.	1.00	0.83	0.83	0.89
95.	1.00	1.00	1.00	1.00
96.	1.00	1.00	1.00	1.00
97.	0.83	1.00	0.83	0.89
98.	1.00	1.00	1.00	1.00
99.	1.00	1.00	1.00	1.00
100.	1.00	0.83	0.83	0.89
101.	1.00	0.83	0.83	0.89
102.	0.83	1.00	0.83	0.89
103.	0.83	0.83	0.83	0.83
104.	0.83	0.83	0.83	0.83
105.	0.66	0.83	0.83	0.77
106.	0.66	0.83	0.83	0.77
107.	0.66	0.83	0.83	0.77
108.	0.83	1.00	0.83	0.89
109.	0.83	0.83	1.00	0.89
110.	0.83	0.83	0.83	0.83
111.	0.83	0.83	0.83	0.83
112.	0.83	0.83	0.83	0.83
113.	1.00	1.00	0.83	0.94
114.	0.83	0.83	0.83	0.83
115.	1.00	0.83	0.83	0.89
116.	1.00	0.83	0.83	0.89
117.	1.00	0.83	0.83	0.89
118.	0.83	0.83	0.83	0.83
119.	0.83	0.83	0.83	0.83
120.	0.83	0.83	0.83	0.83
121.	0.83	1.00	1.00	0.94
122.	0.83	1.00	1.00	0.94

<b>Question</b>	<b>Clarity</b>	<b>Relevance</b>	<b>Representativeness</b>	<b>CVI Score</b>
123.	1.00	1.00	1.00	1.00
124.	1.00	1.00	0.83	0.94

## **9.13 Summary of Modifications to survey instrument**

Summary of modifications to NEXT Basic Questionnaire (Hasselhorn 2003) content validity analysis and pilot study with 2006 graduates (main study)

Question	Modification
1	Modification and enlargement to ensure categories were relevant and representative of the Irish context and disciplines
5	Removed due to repetition
6	Removed due to repetition
7	Wording changed to enhance clarity
8	Wording changed to enhance clarity
10	Wording to changed to reflect the number of months worked by new graduates
13	Wording changed to enhance clarity
15	Wording changed to enhance clarity and reflect Irish context
16	Removed as number of institutions worked in did not apply to new graduates
19	Wording changed to enhance clarity
29	Categories modified and reduced to 5 ( sometimes each year dropped) rather than 6 as new graduates in employment <6-9 months
32	Categories modified and reduced to 5 (sometimes each year dropped) rather than 6 as new graduates in employment <6-9 months
41	Wording changed to enhance clarity
44	Score lower on representativeness but retained as part of the uncertainty regarding treatment scale
47	Removed as data generated was confusing in relation to hours and did not enhance information on shift patterns already collected
48	Removed pilot suggested that rising before 5 did not apply to new graduates
52	Removed as repetitive with preceding question
57	Wording changed to enhance clarity
67	Wording changed to enhance clarity and reflect Irish context
93	Removed as repetitive with preceding question
100-120	Removed work ability index as no meaningful data-more relevant to an older population than the graduate group. Reduced number of items in main study
124	Two additional categories to capture career intention for next 5 years added as the 3 used in the pilot were insufficient to reflect the graduate group.

## **9.14: Coding Survey (open ended question)**



**Coding for intent to stay in nursing study (open ended question)**

Code	Motivation to pursue nursing (Q95)
1	Desire to help/care for people/work in a caring profession
2	To work in a dynamic/exciting/challenging job
3	Opportunity for continuing/life long learning
4	Job security/
5	Job satisfaction
6	Previous related work/family experience
7	Desire for fulfilment/meaningful work/make a difference
8	Did not get the points to do what I wanted
9	Do not know
10	Variety of job/career opportunities
11	Opportunities for further education
12	Inspired by observation of nursing care
13	No other interest
14	Desire for travel
15	Degree/qualification/personal achievement/further educ.
16	Life long interest/desire/ambition
17	Economic advancement
18	Desire for contact/work with people
19	Respected profession/good job/job prospects
20	Natural aptitude/skills for this work
21	Interest in the subject/ associated subjects
22	Family in nursing/related profession/family advice
23	Got the points
24	Unhappy in previous job/course
25	Paid employment during final year
26	Variety within job
27	Desire to work locally
28	Miscellaneous

## **9.15 interview Guide**

## INTERVIEW GUIDE

1. Can you tell me about your current position

Prompt: Can you describe your typical clinical responsibilities

Prompt: Can you tell me about other responsibilities that you have

2. Can you tell me how you were recruited for this position?

Prompt: Can you describe the recruitment process?

3. Can you tell me about how you feel about your new position?

Prompt: Can you describe elements of the job that you are enjoying

Prompt: What kind of experiences have stood out for you since you started

Prompt: Can you tell me about any difficulties you have encountered since starting?

4. Can you tell me about your thoughts in relation to how prepared you feel for this role?

5. Can you tell me about the support you have received since you have started your current position?

Prompt: Can you describe the different types of supports that you have experienced?

Prompt: What types of support would have assisted your transition further?

6. Can you tell me about your career plans for the future?

7. Can you tell me additional points you wish to make?

## **9.16 Coding through NVivo**

final report organised nodes.nvp - NVivo

File Edit View Go Project Links Code Tools Window Help

Look for: [ ] Search In: Tree Nodes Find Now Clear Options X

### Tree Nodes

Name	References	Created By
Career expectations	39	AMB
Conditions at work	73	AMB
Reflections on the degree	88	AMB
Support at work	161	AMB
Transition experiences	207	AMB

Main themes

The screenshot shows the NVivo interface with a table of tree nodes. The table has three columns: Name, References, and Created By. The rows list five categories: Career expectations (39 references), Conditions at work (73 references), Reflections on the degree (88 references), Support at work (161 references), and Transition experiences (207 references). All were created by AMB. An arrow points from the text 'Main themes' to the 'Name' column header.

final report organised nodes.nvp - NVivo

File Edit View Go Project Links Code Tools Window Help

Look for: Search In Tree Nodes Find Now Clear Options X

### Tree Nodes

Name	References	Created By																								
Transition experiences	207	AMB																								
<table border="1"> <thead> <tr> <th>Name</th> <th>References</th> <th>Created By</th> </tr> </thead> <tbody> <tr> <td>Socialisation to nursing environment</td> <td>45</td> <td>AMB</td> </tr> <tr> <td>Confidence</td> <td>61</td> <td>AMB</td> </tr> <tr> <td>Reality</td> <td>98</td> <td>AMB</td> </tr> </tbody> </table>			Name	References	Created By	Socialisation to nursing environment	45	AMB	Confidence	61	AMB	Reality	98	AMB												
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<table border="1"> <thead> <tr> <th>Name</th> <th>References</th> <th>Created By</th> </tr> </thead> <tbody> <tr> <td>Preparation for job</td> <td>100</td> <td>AMB</td> </tr> </tbody> </table>			Name	References	Created By	Preparation for job	100	AMB																		
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Conditions at work	73	AMB																								
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Name	References	Created By																								
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Opportunity	5	AMB																								
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**Sub-themes**

AMB 61 Items

start My Computer Search Results content anal... Real Messag... Content anal... final report o... Qualitative fi... Appendix EN 09:15

# Conditions at work: sub-themes

final report organised nodes.nvp - NVivo

File Edit View Go Project Links Code Tools Window Help

Look for: Search In Tree Nodes Find Now Clear Options X

### Tree Nodes

Name	References	Created By	Modified On
Conditions at work	73	AMB	27/11/2009 18:07
Satisfaction with nursing	12	AMB	23/11/2009 15:35
Personal demands	9	AMB	26/11/2009 13:06
Satisfaction with pay	7	AMB	26/11/20
Shift patterns	5	AMB	27/11/20
Contractual status	13	AMB	26/11/2009 13:12
Agency-relief-bank	17	AMB	23/02/20
Nature of nursing work	21	AMB	27/11/2009 13:56
Demands of nursing work	19	AMB	27/11/20
Establish priorities	15	AMB	27/11/20
Clinical responsibilities	9	AMB	27/11/20
Setting standards	14	AMB	27/11/20
Delegating	57	AMB	15/02/20
Feelings about nursing work	26	AMB	27/11/20
Embargo issues	27	AMB	27/11/2009 16:34
Workload and staffing	34	AMB	27/11/2009 18:07
Non-nursing duties	9	AMB	23/11/20
Quality of care	12	AMB	27/11/20

AMB 61 Items

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# Career expectations: sub-themes

final report organised nodes.nvp - NVivo

File Edit View Go Project Links Code Tools Window Help

Look for: Search In: Tree Nodes Find Now Clear Options X

### Tree Nodes

Name	References	Created By	Modified On
Conditions at work	73	AMB	27/11/2009 18:07
Career expectations	39	AMB	02/02/2010 10:31
Career intent	3	AMB	25/11/2009 15:34
Intent to leave nursing	12	AMB	23/11/2009
Career pathway	12	AMB	23/11/2009
Intent to travel	8	AMB	23/11/2009
Intent to change job	5	AMB	26/11/2009
Desire for learning	23	AMB	25/11/2009 15:44
Opportunity	5	AMB	27/11/2009 14:18
Access to professional development	7	AMB	25/11/2009
Recruitment process	77	AMB	04/03/2010
Job prospects	15	AMB	04/03/2010
Difficulty in getting a job	14	AMB	27/11/2009
Support at work	161	AMB	04/03/2010 16:06
Reflections on the degree	88	AMB	09/03/2010 17:57
Transition experiences	207	AMB	15/09/2010 20:13

AMB 61 Items

start My Computer Search Results content analy... Real Message... Content anal... final report or... Qualitative fin... Appendix EN 09:38



# Support at work: sub-themes

The screenshot displays the NVivo software interface for a project named 'final report organised nodes.nvp'. The main window shows a hierarchical tree of nodes under the heading 'Tree Nodes'. The 'Support at work' node is expanded, revealing several sub-themes. A search bar at the top of the window is set to 'Tree Nodes'. The Windows taskbar at the bottom indicates the user is 'AMB' with 61 items, and the time is 09:41.

Name	References	Created By	Modified On
Conditions at work	73	AMB	27/11/2009 18:07
Career expectations	39	AMB	02/02/2010 10:31
Support at work	161	AMB	04/03/2010 16:06
Advises to others	17	AMB	04/03/2010 16:06
Sources of support	117	AMB	11/06/2010 17:35
Comparisons	8	AMB	27/11/2009
Organisation support	44	AMB	11/06/2010
Support form colleagues	130	AMB	11/06/2010
Attitude to degree	14	AMB	27/11/2009
Asking for help	24	AMB	27/11/2009
Skill mix	13	AMB	15/02/2010
Feedback on performance	54	AMB	04/03/2010
Strategies to cope	35	AMB	04/03/2010
Relationship at work	57	AMB	11/06/2010 17:37
Reflections on the degree	88	AMB	09/03/2010 17:57
Transition experiences	207	AMB	15/09/2010 20:13

# Transition experience: Sub-themes

final report organised nodes.nvp - NVivo

File Edit View Go Project Links Code Tools Window Help

Look for: Search In Tree Nodes Find Now Clear Options X

### Tree Nodes

Name	References	Created By	Modified On
Conditions at work	73	AMB	27/11/2009 18:07
Career expectations	39	AMB	02/02/2010 10:31
Support at work	161	AMB	04/03/2010 16:06
Reflections on the degree	88	AMB	09/03/2010 17:57
Preparation for job	100	AMB	04/03/2010 16:06
Transition experiences	207	AMB	15/09/2010 20:13
Socialisation to nursing environment	45	AMB	27/11/2009 16:31
Difference from being a student	39	AMB	27/11/2009
Traditional ways of doing	16	AMB	04/03/2010
Confidence	61	AMB	04/03/2010 16:06
Learning the rules	10	AMB	27/11/2009
Knowing what to do	33	AMB	27/11/2009
Feeling part of the team	22	AMB	04/03/2010
Really	98	AMB	04/03/2010 16:06
Worries or difficulties	44	AMB	04/03/2010
First day	29	AMB	15/02/201
Expectations	50	AMB	04/03/2010

AMB 61 Items

start My Computer Search Results content analy... Real Message... Content anal... final report or... Qualitative fin... Appendix EN 09:44

**9.17 Visual representation of qualitative findings:  
Transition experience, work conditions and career  
expectations of degree graduate nurse**

