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A tale of two courses: comparing careers and competencies of nurses prepared via three-year degree and three-year diploma courses.

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EXECUTIVE SUMMARY

1. POLICY CONTEXT, AIMS AND METHODS

This research investigated the careers and competencies of nurses qualifying from three-year degree courses and three-year diploma courses and provides a comprehensive assessment of the outcomes of these two courses. Findings are relevant to current debates about the future shape of pre-registration nurse education and to many aspects of the human resources agenda on workforce expansion, quality of working life, career pathways and continuing professional development.

1.1 CONTEXT OF THE RESEARCH

The introduction of Project 2000 saw the transformation of nurse education towards a three-year diploma course as the main route to registration (UKCC 1986). Once nursing education was established within higher education, three-year nursing degree courses were introduced and, since then, there has been a year-on-year increase in the provision of degrees. Therefore, the current situation is one of two routes running alongside each other leading to a qualification in nursing: the degree course and the diploma course.

Despite the development of both three-year degrees and diplomas, little information exists regarding the benefits of either course. Some argue for an all-graduate entry into nursing, suggesting that degree courses enhance recruitment (UKCC 1999), raise the status of the nursing profession (RCN 1995) and develop the nursing competencies required for contemporary care (Clarke and Warr 1995). However, the case against three-year degrees has been made equally strongly. There are fears that recruitment may suffer due to the perceived difficulty of degrees (Newton 1998), academic barriers to less-qualified staff (Hakesley-Brown 1999) and a lack of diversity in social backgrounds (Payne 1994). Some argue that graduate nurses will be less likely to stay in the profession due to their more transferable qualification (Akid 2001). There are also concerns that degree students will not develop sufficient practical skills (Watson and Thompson 2000).

1.2 AIMS OF THE RESEARCH

The purpose of this research is to inform the debate about the future shape of pre-registration nurse education and two aims were developed to this end. First, to compare the careers of graduate and diplomate nurses (Part A) and, secondly, to compare the

competencies of graduate and diplomate nurses (Part B). These two aims were addressed by seven research questions (RQ).

Part A

RQ1: How do graduate nurses compare with diplomate nurses in terms of diversity within the workforce?

RQ2: Do graduate and diplomate nurses differ in their career plans at qualification and thereafter?

RQ3: In what ways do the career pathways followed by graduate and diplomate nurses differ?

RQ4: What differences emerge between graduate and diplomate nurses in relation to continuing professional development?

RQ5: Do graduate and diplomate nurses differ in their satisfaction with the quality of working life experienced while working in healthcare?

RQ6: How do graduate nurses compare with diplomate nurses in terms of retention in nursing?

Part B

RQ7: Are there differences between the competencies of degree and diploma prepared nurses in the early post-qualification period?

1.3 RESEARCH DESIGN, FRAMEWORK AND METHODS

1.3.1 Part A: Careers

The ideal design to answer the above research questions would have been a prospective, longitudinal study of a large cohort of diplomates and a large cohort of graduates from qualification onwards but constraints of time and resources precluded its adoption. The design adopted instead was as follows. Part A of the project comprised a series of cross-sectional comparisons between cohorts of degree nurses with an already recruited cohort of diploma nurses. The diplomate cohort had been recruited in the course of an existing longitudinal study (P2K) based at the Nursing Research Unit and questionnaire data on this cohort were available for the following time points: at qualification, six months, 18 months and three years after qualification. Details of the sampling design are available in Marsland and Murrells (2000). In generating graduate cohorts to compare with our existing diplomate cohort at these time points, we generated four retrospective cohorts: Cohort 1 who had qualified in 2001 (at qualification comparison), Cohort 2 who had

qualified in 2000 (six months after qualification comparison), Cohort 3 who had qualified in 1999 (18 months after qualification comparison) and Cohort 4 who had qualified in 1998 (three years after qualification comparison). The graduate cohorts were censuses of qualifiers from those years.

The overall analytic framework for this part of the project drew upon a wide body of literature that conceptualises careers as an interaction between individual choice and the enabling or constraining aspects of the social context. Questionnaire design was informed by these debates and also by extensive pilot-work with both diplomate and graduate nurses.

Graduates were recruited by sending letters requesting participation via the UKCC (with the exception of the graduates who qualified in 2001 who were contacted through their universities). This process differed from the recruitment of diplomates who had been invited to participate just prior to qualification during face-to-face meetings with researchers. This had an impact upon response rates. Seventy-six per cent of diplomates eligible to participate in the study agreed to do so. At the six months, 18 months and three-year phases of data collection, questionnaires were sent to those who had responded at the previous phases. Response rates at over 80% resulted in 43% of qualifiers being retained in the study at three years after qualification. The percentage of the four graduate cohorts who agreed to participate ranged from 45% to 55%; subsequent questionnaire response rates from between 90 and 98% resulted in the following proportion of qualifiers in the study: 43% of Cohort 1, 50% of Cohort 2, 48% of Cohort 3 and 44% of Cohort 4.

While data from all four branches were collected, the low number of graduates that it was possible to recruit only allowed for meaningful comparisons to be made between adult graduate and adult diplomates. Base numbers for the adult branch data are presented below in Table 1; diplomate figures have been weighted to take account of the complex sampling design for this cohort.

Table 1: Base numbers for adult nurses

Base numbers	At qualification	At six months	At 18 months	At three years
Graduates	99	111	53	57
Diplomates	1596	1339	1117	900

1.3.2 Part B: Competence

Several cross-sectional comparisons were made between the competencies of graduate and diplomate nurses. Competencies were both self-rated and rated by immediate line-

managers, at one, two and three years after qualification. The Nursing Competencies Questionnaire (NCQ, Bartlett *et al.* 1998) was used to measure competence. This measure was chosen for the following reasons: others had recommended it as an instrument worthy of more extensive research use (e.g. Norman *et al.* 2000); a quantitative instrument was congruent with the research design, and the aims of the project did not include developing a new instrument. Pilot work was carried out to develop the NCQ, building upon work carried out by Norman *et al.* (2000). The revised NCQ asks the respondent to rate how often each of 103 tasks/functions had been performed over the previous six months. These items combine to represent underlying constructs: eight in the original NCQ (leadership, professional development, assessment, planning, intervention, cognitive ability, social participation and ego strength) and two additional constructs in the revised version (awareness/use of research and awareness/knowledge of practice and policy developments)

Graduates who had returned careers questionnaires were asked to complete the NCQ, as were a sample of the existing diplomate cohort (who by this time had been qualified for three years). Diplomate cohorts for one and two years after qualification had to be recruited via the UKCC. Line-managers were recruited through nurses who had returned an NCQ. Although information on all branches was collected, to create sufficient numbers for valid multivariate statistical analyses the branches had to be combined. Response rates for nurses were 66% for graduates (166) and 30% for diplomates (188). Response rates for line managers were 36% for graduates (60) and 27% for diplomates (51).

1.3.3 Limitations of the design

The most robust methodological approach was adopted within the time and resources available. The design has limitations in five areas: comparing cross-sectional and longitudinal data; rates of participation and response; covering only the first three years after qualification; small cohort sizes for graduates, and the limitations of the NCQ. These are discussed in detail in the report. Suffice it so say here that we have interpreted our findings with caution given these limitations.

1.3.4 Presentation of findings

Despite the small size of the graduate cohorts, differences did arise between graduates and diplomates that were statistically significant. When significant differences are part of a series of comparisons, attention is also drawn to other differences in the same direction.

2. FINDINGS

Findings are presented in five sections; each comprises a brief statement about key policy directives, the main findings and their policy implications.

1) Diversity (Research Question 1)
2) Continuing professional development (Research Question 4)
3) Satisfaction (Research Question 5)
4) Careers followed, career plans and retention (Research questions 2,3 and 6)
5) Competence (Research Question 7)

2.1 DIVERSITY

Recruiting and retaining a diverse workforce in the NHS is a longstanding policy objective and is regarded as desirable for a number of reasons. Firstly, it addresses the shrinking of the profession's traditional recruitment base (UKCC 1987, 1999, Iganski 1998). Secondly, it is important that the workforce reflects the life experiences of the service users in the local population (Department of Health 1999a, Chevannes 2001). Thirdly, if managed correctly, group diversity has been associated with superior workgroup functioning (Knouse and Dansby 1999). Fourthly it contributes to widening participation in higher education (DH 2000b)

This research provides information on the sex, age, ethnic group, partner status, childcare experiences, previous education and employment experiences of graduates and diplomates.

2.1.1 Key findings on diversity

Key findings from qualification to three years after qualification were:

- *There were similarities in the profile of graduates and diplomates at the four time points in terms of sex (92-96% were women) and ethnic origins (95-96% were white)*
- *In comparison with diplomates, graduates were:*
    - *Significantly younger (2 years on average - 25 yrs vs. 27yrs at qualification)*
    - *Significantly less likely to have a partner, be married, have children living with them and have pre-course childcare and employment experiences*
    - *Significantly more likely to have higher educational qualifications (66% had two or more A-levels compared with 31% of diplomates)*

- *Significantly less likely to have entered their course without formal academic qualifications (10% vs.20%)*

- *The diversity within both the graduate and the diplomate workforce at qualification did not decrease between then and 3 years after qualification*

2.1.2 Policy implications of findings on diversity

A positive message from these findings is that the diversity in the workforce that enters nursing is retained during the first three years after qualification. Furthermore, twice as many graduates than diplomates had educational qualifications of two A-levels and above. It is possible that this higher academic achievement may be transferred to raise nursing performance, however, this is not certain. Less positive messages are that degree courses appear to attract a less heterogeneous group of nurses than diplomas, thus leading to less diversity within the workforce. The findings suggest that increasing the proportion of graduates, or indeed moving to all graduate entry, may lead to a lower level of diversity than retaining the current proportion of diploma prepared nurses. Both courses had only attracted a very small proportion of men and members of ethnic minority groups, falling short of that recommended in recent policies.

2.2 CONTINUING PROFESSIONAL DEVELOPMENT

The importance of continuing professional development (CPD) for nurses featured strongly in the Project 2000 proposals (UKCC 1986) and this view has been reiterated in subsequent policy documents produced by the statutory and professional bodies for nursing and by central government (UKCC 1990, 1993, 1994, DH 1999a, 2000b, 2001). These documents have identified, with varying degrees of emphasis, the role of CPD in individual career progress and retention, enhancing the quality of patient care, and meeting service needs. It has also been maintained in various policy documents that career guidance facilitates career development and thereby contributes to improved retention (e.g. Department of Health 1988, 1995).

This research provides information on graduates' and diplomates' CPD aspirations and experiences in relation to: courses, preceptorship and career guidance.

2.2.1 Key findings on CPD

Key findings regarding CPD during the first three years of qualification were:

Courses

- *By 18 months after qualification, 20% of diplomates and 25% of graduates had completed courses and at 3 years these figures had risen to 41% and 51% respectively.*
- *At 18 months after qualification, 50% of diplomates and 45% of graduates had not been able to start courses that they had planned to and at 3 years these figures were 40% and 44% respectively*
- *At 6 months and 18 months after qualification, graduates were significantly more likely than diplomates to plan to undertake courses in the future and more likely to do so at 3 years after qualification*

Preceptorship

- *The majority of graduates (94%) and diplomates (97%) wanted preceptorship on qualifying, and after 6 months, it had been received by a large proportion of both graduates (69%) and diplomates (61%)*
- *Over a third of both graduates and diplomates who received preceptorship indicated an unmet demand for several aspects of preceptorship, particularly those concerned with the development of new skills*
- *Unmet demand for feedback on clinical skills was higher for graduates (52%) than diplomates (40%)*

Career Guidance

- *Diplomates and graduates expressed substantial unmet demand for guidance during their course about National Board courses and pursuing a range of career pathways*
- *Diplomates were significantly more likely than graduates to have received guidance about writing a CV, job availability, and information about National Board courses*
- *Graduates were significantly more likely than diplomates to have received guidance about opportunities for working outside the NHS, and developing a career in nursing research, in nursing education and management in the NHS*

2.2.2 Policy implication of findings on CPD

These findings indicate that an operational framework of CPD has been developed to support nurses in that many had taken courses, received preceptorship and career guidance. A substantial minority of graduates and diplomates, however, had not been able to start courses as planned and not had demands met for preceptorship and career guidance. The extent to which the CPD framework is comprehensive and responsive to demand needs further consideration.

While the career guidance findings suggest a greater emphasis for graduates than diplomates on career pathways, it is difficult to interpret this difference since it is not known whether guidance was actively sought, offered without request, or both.

2.3 SATISFACTION

Recent policy documents have acknowledged the importance of good working conditions as important strategies in ensuring job satisfaction for staff and in improving retention in the profession (Department of Health 1998, 1999, 2000b). Indeed, previous research has suggested that intent to stay in nursing is strongly related to level of job satisfaction of nurses (Borda and Norman 1997), and sometimes that nurses' satisfaction is linked to level of patient care (e.g. Robertson *et al.* 1995).

This research provides information on the areas of working life (e.g. working conditions, working relationships, aspects of work, reflection on practice and continuing professional development (CPD) that are found to be satisfying or dissatisfying by graduate and diplomate nurses, and compares their levels of satisfaction within these areas and overall.

2.3.1 Key findings on satisfaction

The key findings regarding graduates' and diplomates' satisfaction with quality of working life were:

Similar sources of satisfaction and dissatisfaction

- *Sources of satisfaction common to all qualifiers were relationships with, and support from, colleagues or peers, availability of supplies and equipment, and the proportion of time providing direct client care*
- *Sources of dissatisfaction common to all qualifiers were pay and grade in relation to level of responsibility, career development discussions, paperwork and opportunities to reflect upon practice*

Differences between graduates' and diplomates' satisfaction

- *At six months the overall level of satisfaction for diplomates and graduates was similar; at 18 months the level had fallen for both groups, at 3 years the diplomates were more satisfied than they were at 6 months whereas this was not the case for graduates.*
- *At 3 years, diplomates had a significantly higher overall level of satisfaction than graduates*
- *Graduates had significantly lower levels of satisfaction than diplomates with pay in relation to level of responsibility at 18 months and 3 years and with grade in relation to level of responsibility at 3 years*
- *Graduates had significantly higher levels of satisfaction than diplomates with aspects of continuing professional development (opportunities to go on courses, constructive feedback on work, frequency and quality of discussions about career development, and content of appraisals) at 6 months, similar levels at 18 months and significantly lower levels at 3 years.*
- *Graduate had lower levels of satisfaction with opportunities to reflect upon practice and opportunities to provide good quality care*

2.3.2 Policy implications of findings on satisfaction

Our findings offer clear indications of the sources of discontent in nursing and also the aspects that add to the quality of nurses' working lives. As such, any attempts to increase satisfaction in the workforce as a whole should consider both alleviating some of the problem areas and maintaining the positive areas. However, the findings on graduate dissatisfaction and the implications thereof are of concern.

As the next section shows, it was found that graduates have higher expectations in a number of respects. It is suggested that the lower graduate satisfaction may be due to those higher expectations being unfulfilled once they have been working in the NHS for some time. The implications of lower satisfaction are multiple and likely to be negative. It could be argued therefore that enhancing graduate satisfaction by targeting the key areas highlighted by this research should be a priority. Targeting of the suggested key areas will also benefit diplomate nurses.

2.4 CAREERS FOLLOWED, CAREER PLANS AND RETENTION

Careers followed by nurses and the plans they have regarding their future careers are likely to have an impact upon overall retention of the nursing workforce. It is for this reason that these findings are presented together, as their policy implications are linked. The development of attractive career pathways in nursing partly arises from the need for enhanced retention, with policy documents placing a high priority on valuing and retaining staff working in the service (Department of Health 1997, 1999a, 2000b).

This research presents information on the careers followed by graduate and diplomate nurses during the first three years after qualification, focusing on career activities, transitions, promotions, employers and specialties. As such, it provides a benchmark on retention during the early post-qualification period. It also documents graduates' and diplomates' career plans during that time, thus allowing predictions to be made about future retention of qualifiers from the two courses.

2.4.1 Key findings on careers followed, career plans and retention

The key findings regarding the career activities and career plans of graduate and diplomate nurses and their (likely) impact upon retention were:

Careers followed

- *The majority of both graduates and diplomates (always over 80%) were working in nursing jobs in the UK up to 3 years after qualification; those not doing so were usually undertaking full-time nursing related courses or on maternity leave*
- *No differences existed between graduates and diplomates regarding employing organisation (nearly all worked in the NHS), grade or promotion rates*

Career plans

- *Graduates are more career-minded as indicated by:*
    - *graduates were significantly more likely than diplomates to start their nursing course to gain a professional qualification or to have an occupation with career prospects*
    - *graduates were more certain than diplomates about their career plans*
    - *graduates were more likely than diplomates to emphasise professional and career development opportunities as reasons for preferring to work in the NHS (most frequent for both groups were security and pension benefits)*

- *Graduates have greater career expectations*
    - *graduates were significantly more likely than diplomates to indicate that they hoped to be working at a higher grade at future time points when asked at qualification, 6 months and 18 months after qualification*
    - *findings on satisfaction, particularly at 3 years, indicated a substantial lack of fulfillment of these higher career expectations*

- *Once graduates began working in the NHS, they were significantly less likely than diplomates to indicate that they would remain in nursing*

Retention

- *In terms of employment history, no differences emerged regarding the retention of graduates and diplomates during the first three years after qualification*
- *In terms of potential employment history, there is a possibility that retaining graduate nurses will be more difficult then retaining diplomate nurses given their plans about remaining in nursing*

2.4.2 Policy implications of findings on careers followed, career plans and retention

At a surface level, there would appear to be no differences between graduates and diplomates regarding their career pathways and retention. However, graduates appear to have quite different ambitions, expectations and attitudes. If it is to be believed that graduates are more likely to leave nursing, as they report that they will, this is an obvious problem for the NHS and nursing education. It appears that the more career-minded and ambitious graduate group has career and work expectations that are not being supported by the NHS. This is perhaps unfortunate as these are potentially positive qualities. The long-term policy implications are that if degree courses are to stay a part of nurse education, either graduates' expectations have to change or the NHS has to change to support graduates' careers. If neither is achieved, then there is a risk of greater numbers of graduates than diplomates leaving the profession.

2.5 COMPETENCE

A competency-based approach to pre-registration nurse education has been advocated by the UKCC (1999). This led to changes in the curriculum as well as the development of a

set of competencies that must be met for entry to the branch programme and for entry to the Register (UKCC 2000). However, there has been a lack of clarity within nursing regarding the difference in the competencies acquired by degree and diploma students. In spite of this, there is often an assumption that degree courses develop a higher level of competence in their students, for example, the UKCC (1999) suggest that the graduate has *"an enhanced level of analysis, synthesis and decision making"* (UKCC 1999, p32) which, it is argued, is required for effective contemporary care (Clarke and Warr 1995). Yet others would argue that additional competence or competencies acquired from degree courses, if there are any, may not be 'nursing' competencies and are perhaps redundant in the care-giving setting (Burke and Harris 2000). This is an important debate, but for which there has been a lack of evidence to inform policy decision-making.

This research assessed the competence of graduate and diplomate nurses as rated by the nurses themselves and by their immediate line-managers using the Nursing Competencies Questionnaire (NCQ, Bartlett *et al.* 1998). Information is provided about this comparison and the effect of other background variables upon level of competence ratings.

2.5.1 Key findings on competence

The key findings regarding the perceived competence of graduates and diplomates during the first three years after qualification were:

- *Course type alone had little impact upon the perceived competencies of nurses within the first 3 years after qualification, with both graduates and diplomates scoring highly on the NCQ*
- *Very small but statistically significant differences in self-report scores suggest that diplomates were more able in some respects than graduates, although numerical differences were so small that they were unlikely to be reflected in observable differences in nursing performance in care-giving settings*
- *Female diplomates and male graduates appeared to be very slightly more able than their counterparts in the areas of leadership, professional development, nursing assessment, making interventions and planning nursing actions*
- *A conservative interpretation of findings is necessary due to the very small differences and the developmental status of the NCQ*

2.5.2 Policy implications of findings on competence

The only legitimate interpretation of these findings is that there are no meaningful differences in graduates' and diplomates' competencies as measured by the NCQ. As such this should alleviate concerns that graduate courses do not prepare nurses adequately in terms of practical skills or that diploma courses prepare nurses to a

substantially lower level than degrees. This research also suggests that there is no advantage associated with three-year degrees in terms of competence and so raises the question, identified by Girot (2000a), about the advantages to nursing of the three-year degree. Further conclusions cannot be drawn due to various limitations of the NCQ.

3. CONCLUSION

3.1 KEY FINDINGS

The main finding that emerged from this comparison between graduate and diplomate nurses is that there is little difference in their career pathways and competence. With the exception that diplomates were a more heterogenous group than graduates, the two groups were *objectively* very similar, in that they cannot be distinguished in terms of their measurable employment history or ability. However, what distinguishes the two groups are *subjective* differences, in that more graduates have higher career expectations, are less satisfied with their working life and intend to leave the profession. Whilst intention to quit does not always lead directly to turnover, this is nevertheless a concern. It appears that the root of the problem is that the NHS does not support the higher expectations and ambitions of graduates and, at the moment at least, three-year degrees and the NHS do not appear to be perfect partners.

3.2 THE CONUNDRUM OF GRADUATE-ENTRY

The policy implications of the research offer a conundrum regarding the future role of three-year degrees as a route to registration. The current situation of two routes to registration is far from ideal in the long-term and has created a certain amount of confusion about the purposes of, and the differences between, each route. Yet to vastly increase the provision of three-year degree courses could be potentially detrimental to nursing due to the lower level of satisfaction recorded amongst graduates and their greater intent to leave nursing. Thus, a pessimistic view of the possible outcomes of all-graduate entry could be an NHS facing greater difficulties with staff morale and more acute retention problems. However, a more optimistic view can be taken from the fact that degree courses are reported as being more popular than diploma courses (UKCC 1999). These students also have higher academic qualifications and appear to be more career-minded and ambitious, either from the outset or as a result of the degree course. Therefore the graduates have an abundant potential for the NHS (even if their level of perceived competence is currently no greater than diplomates) and the problem appears to be that the NHS is not supporting this potential.

3.3. RECOMMENDATIONS

The conundrum forces cautious recommendations. This research does not provide an unequivocal answer to the debate about all-graduate entry. Instead, it is recommended that the provision of three-year degree courses as routes to registration should not be increased until further work has been carried out to find a long-term education strategy. In meantime, several recommendations can be made aimed at targeting some of the problem areas highlighted in this research. Firstly, the quality of working life of both graduates and diplomates requires improvement, and this research has highlighted areas where both groups of nurses can benefit. Secondly, a certain amount of unmet demand was found in some aspects of CPD. The framework of CPD needs to be highly responsive to support the needs of the NHS and of the different groups of nurses who work within it.

3.4 FURTHER RESEARCH

Two follow-up studies are recommended. Firstly, a follow-up study of the nurses involved in this study is required to investigate further the similarities and differences between graduates and diplomates over a longer time period and to assess whether the plans of some of the graduates to leave nursing have materialised. Secondly, it has to be established that themes found in these populations are representative of the larger groups of three-year degree students being recruited today. It is suggested that one of the possible causes of the higher expectations of graduates is that they were only a small proportion of the nurses entering the workforce at the time of this research and, as such, may have viewed themselves as an ‘elite’ in some way. As the proportions of graduates and diplomates entering the workforce become more even, such attitudes may change and findings of a similar piece of research may be different.

Further work also needs to be carried out in the area of nursing competence. As yet, a valid, reliable, theoretically informed and, above all else, practical competency framework has not been developed. Such a framework could aid the education and subsequent evaluation of nurses, and would reduce the confusion that currently exists about the development of nursing competence and the best ways of achieving competence.

CHAPTER 1:
BACKGROUND AND PURPOSE

1.1 INTRODUCTION

The introduction in 1989 of the Project 2000 proposals for the reform of nurse education (UKCC 1986) led to three-year diploma courses becoming the main route to registration as a qualified nurse. The proposals firmly established the education of nurses in higher education institutions (HEIs). The other route to registration is via a degree course. Until 1994, these degrees were either in the form of 'top-up' degrees or four-year courses leading to a registration in nursing. Following the introduction of three-year degree courses leading to a registration in nursing in 1994, there has been a year-on-year increase in the number of three-year degree places available. Despite the increased provision of degree courses their value has yet to be fully assessed in the UK (Girot 2000a).

It is against this background that the Department of Health's Human Resources Research Initiative in 1999, included a comparison of the careers and competencies of graduate and diplomate nurses prepared via three-year courses. A team at the Nursing Research Unit (NRU), King's College, made a successful bid for this part of the Initiative and commenced work on a two-year project in June 2000. The purpose of the project is to contribute to an assessment of outcomes from three-year degrees and it forms part of an established programme of research at the Unit on the careers of nurses and a range of workforce issues.

1.2 AIMS

The project has two parts. The aim of part A is to compare the careers of nurses qualifying from three-year degree and three-year diploma courses which lead to a registration in nursing. This aim is addressed through the following six research questions:

1: How do degree nurses compare with diploma nurses in terms of diversity within the workforce?

2: Do degree and diploma prepared nurses differ in their career plans at qualification and thereafter?

3: In what ways do the career pathways followed by degree and diploma nurses differ?

4: What differences emerge between degree and diploma nurses in relation to continuing professional development?

5: Do degree and diploma nurses differ in their satisfaction with the quality of working life experienced while working in healthcare?

6: How do degree nurses compare with diploma nurses in terms of retention in nursing?

The aim of part B of the project is to compare competencies of nurses prepared via three-year degree courses with those of nurses prepared via diploma courses. This aim is addressed via the following research question:

7: Are there differences between the competencies of degree and diploma prepared nurses in the early post-qualification period?

1.3 DESIGN

The project includes nurses from all four branches. Part A entails a series of cross-sectional comparisons of degree and diploma educated nurses. Questionnaires were sent to a full census of nurses qualifying from three-year degree courses in 1998, 1999, 2000 and 2001. Findings were compared with a cohort of diploma nurses already established for another project in the NRU programme. Part B of the project also entailed a series of cross-sectional comparisons of degree and diploma qualified nurses. Data were collected using a questionnaire which built on the Nursing Competencies Questionnaire (NCQ), an instrument developed by Bartlett *et al.* (1998) for a project also concerned with competencies of diplomates and graduates. In the NRU study, graduates and diplomates who qualified in the years 1998, 1999 and 2000 self-assessed using the NCQ. In addition, the managers of these nurses also used the NCQ to assess the competence of these nurses. Further details of the design of both parts of the project are provided in chapter four.

1.4 STRUCTURE OF REPORT

The final section of this chapter focuses on key professional and policy issues concerning the provision of the degree route to registration as a nurse. This account provides a context for the subsequent two chapters. Chapter two provides more detail on the policy relevance of the research questions relating to careers, theoretical perspectives in careers and previous research into nurses' careers. Chapter three outlines the moves in nursing towards competency based assessment, considers problems in defining competence and reviews research investigating the differences between nurses qualifying from different

courses. Chapter four describes the design, data collection tools and methods of data analysis. Findings are presented in chapters five to ten. Chapter five addresses research question 1 on how degree and diploma nurses differ in terms of diversity. Chapters six and seven focus on the second and third research questions respectively: do degree and diploma prepared nurses differ in career plans and career pathways followed? These two chapters also address research question six: how do degree nurses compare with diploma nurses in terms of retention? Research question four on what differences emerge between degree and diploma nurses in relation to continuing professional development is the subject of chapter eight, and research question five on differences in satisfaction with quality of working life is the subject of chapter nine. Chapter ten presents findings on whether competencies of degree and diploma prepared nurses differ (research question seven). Each of the findings chapters is concluded with a brief summary. The final chapter (11) provides an overview and discussion of the key findings, addresses research question six and considers implications of findings for policy and further research.

1.5 THE CONTEXT: NURSE EDUCATION, RECRUITMENT, RETENTION, CAREERS AND COMPETENCE

This section provides a context for the project, including a brief history of the move of nursing into higher education, and particularly the development of degree courses, the current arguments for an all-graduate entry, as well as the links between higher education, recruitment, retention, careers and competence.

1.5.1 Moving nursing education into higher education

Relative to other countries the link between nursing and higher education in the UK has evolved slowly (Hayward 1992, Fitzpatrick *et al.* 1993, Fletcher 1997). The resistance towards this integration came in the form of perceptions that nursing was too vocational a course to warrant unconditional inclusion within universities (Owen 1988), and concern that nurses would not learn sufficient clinical skills (Fitzpatrick *et al.* 1993). These concerns have accompanied the integration of nursing into higher education and still find expression today (Meerabeau 2001).

Prior to 1989 the majority of nurses in the UK were prepared via an apprenticeship-type model. Preparation was service led and those taking nursing courses were regarded as employees rather than students. Research suggested, however, that such a system was detrimental to the education of nurses. Specifically, there was a lack of teaching in the workplace, poor integration of theory and practice, ward staffing needs took priority over educational needs, attrition rates from the course were high, and both staff and students were isolated from the educational community (Elkan and Robinson 1991, Bentley 1996).

A further driving force behind the move into higher education was the aspiration within nursing for professional status. Groups such as nurses wanted to be partners with the medical profession rather than their servants (Wilson and Stilwell 1992).

The introduction of Project 2000 in 1989 saw the start of the transfer of NHS Schools of Nursing into Higher Education Institutions (HEIs). This process was completed in 1996 (National Audit Office 2001). The main route to registration was now via a three-year diploma course. There was an 'uncoupling' of the link between education and service and those undertaking the courses were no longer regarded as employees, but rather as students. It was argued that not only would the quality of care improve as nurses were equipped with the skills to meet the demands of the future, but that the threat to recruitment and retention would be addressed. Attention turns now to the development of degree courses as a route to registration.

1.5.2 Developing graduate routes to registration as a nurse

It is worth noting that although the move of all nurse education into higher education is relatively recent, there has long been a lobby for graduates in nursing in the UK. Furthermore, the number of nursing degree courses has been rising since their inception in the late 1950s and 1960s. As early as 1898 there were calls from Ethel Bedford-Fenwick for degrees in nursing. Attempts to set up courses, at King's College and Bedford College, were thwarted by the outbreak of the First World War in 1914. The late 1950s and 1960s saw some 'degree linked' schemes in Universities, where graduates received a degree as well as gaining registration as a nurse. These degree courses, however, were linked with other subjects rather than 'in' nursing (Burke and Harris 2000). The first degree 'in' nursing was at Manchester University in 1969. These degree linked schemes and nursing degrees expanded during the 1970s and were undertaken over a four-and-a-half to five year period.

Various rationales have been proffered for degree courses, which have shifted over time and between institutions. Investigations into nurse education recommended the expansion of graduates in nursing (RCN 1964, Committee on Nursing 1972, UKCC 1999). Reasons proffered in the first two investigations were the greater analytical and objective approach required in nursing administration and research (RCN 1964), the opportunity to develop professional knowledge (Committee on Nursing 1972), and the need to recruit people from different backgrounds (Committee on Nursing 1972). The UKCC (1999) noted that there was little difference between the diplomate and degree courses, and suggested that graduate preparation would enable nursing to compete with other professions for young people, would help the government to meet targets for participation in higher education, would meet the demands of employers for workforce flexibility and role diversity, and

would enable the development of the appropriate skills and competencies required to function in such an environment.

It has been suggested that the Project 2000 initiatives can be perceived as a 'halfway house' on the quest for all-graduate preparation (Clarke and Warr 1995). The argument runs that Project 2000 led to nursing qualifications being recognised as having academic status, and the next step is for an all-graduate entry. Indeed, there is an expectation within higher education that nursing will move towards graduate preparation (National Committee of Inquiry into Higher Education 1997), and this has now been realised in Scotland and Wales. Within nursing there have been advocates both for and against all graduate entry. Those for the change include the Royal College of Nursing, the Northern Ireland Board for Nursing, Midwifery and Health Visiting, the Community Practitioners' and Health Visitors' Association and Council of Deans (UKCC 1999). What evidence there is suggests less enthusiasm from commissioners of nurse education (UKCC 1999, Burke and Harris 2000) and nurses themselves (Vousden 1998, UKCC 1999).

1.5.3 The case for all graduate entry

Three interrelated arguments can be identified for advocating an all-graduate entry and focus upon recruitment, status and competencies. Starting with recruitment, evidence suggests that recruiting students onto degree courses is easier than onto diploma courses (UKCC 1999). Degree entry would thus be more attractive to potential students. This is particularly important if Government targets for the number of nurses, outlined in the NHS Plan (Department of Health 2000b), are to be met. Furthermore, there is concern that if nursing remains a diploma entry profession, then it will attract those less able students who are unable to attain a degree level standard (Fletcher 1997). Such a scenario also has implications for status. A degree level entry would ensure that nurses were taken more seriously by other occupational groups (Mangan 1993), that nursing as a profession was respected (Fletcher 1997) and that nursing would have parity of status with other professions (RCN 1995). A third argument for advocating an all-graduate entry concerns the competencies required of nurses to provide quality care and it has been suggested that skills required of nurses today demand a level of education beyond that of the diploma (Clarke and Warr 1995, RCN 1995).

1.5.4 The case against all graduate entry

There are, however, arguments against an all-graduate entry level, some of which reflect the same themes as the arguments in favour. Arguments against focus on recruitment, career pathways, retention and competencies. There are three issues related to recruitment. First, there is the possibility that nursing would no longer recruit from such a wide range of social backgrounds (Payne 1994). Secondly, there is an anxiety about

absolute numbers, since the perceived difficulty of studying for a degree may deter potential applicants (Newton 1998). Thirdly, it is suggested that degree level entry may deny less qualified nursing staff, such as enrolled nurses, care assistants and residential support workers, the opportunity to reach their potential and enhance the diversity of the workforce. Less qualified staff currently have the opportunity to obtain diplomas, but degree level entry may be a barrier to their entry to the profession (Hakesley-Brown 1999). The concern about career pathways relates to the type of work graduate nurses would be expected to undertake (Newton 1998). This is based on the assumption of a hierarchy within the profession and that degree nurses would be working at a higher level than less qualified nurses. Such concerns are further exacerbated by the proposed new career structure in which the Department of Health (1999a) suggests a link between level of qualification and promotion. In terms of retention, there is a fear that degree nurses will not stay in the profession since they have skills which are more easily transferable (Akid 2001). There are two aspects to concerns over competence: first that graduates will not have sufficient practical skills (Watson and Thompson 2000) and second that nurses do not need to be educated to degree level to provide quality care (Burke and Harris 2000).

1.5.5 Current context

In 1988 the Department of Health and the then Department of Education and Science supported a proposal in a University Grants Committee (UGC) report to increase the number of existing nursing degree programmes and to establish new programmes in universities and polytechnics. Agreement was reached, however, that in the case of polytechnics any additional funding from the Polytechnic and Colleges Funding Council (PCFC) was to be conditional upon the development of three-year degree programmes. Three-year degrees leading to a registration in nursing were considered to be both feasible and cost-effective. In 1989 the PCFC established a Nursing Advisory Group to consider the requirements for such three-year programmes and a number of these programmes were subsequently approved in England. Following concerns expressed by the English National Board (ENB) a moratorium was imposed on validating any further three-year degree courses until an evaluation was completed. An interim report by the research team (the final report by Schostak *et al.* was completed in 1995) of whether a degree leading to a registered nurse qualification could be completed in three years concluded that completion in three years was possible and so the moratorium on three-year degrees was lifted.

The Higher Education Funding Council for England (HEFCE, formerly the UGC and PCFC) and Local Education Authorities (LEA) funded most of the three and four-year degrees available. Working Paper 10 led to the development of various levels and types

of direct and indirect financial support for degrees (Department of Health 1989), and by the mid-1990s there was little distinction between HEFCE/LEA funded degrees and NHS funded diploma courses. The increased importance to employers of degrees as a route to registration was underlined by the switching of funding for these courses from the HEFCE to the NHS (National Committee of Inquiry into Higher Education 1997). Education commissioning consortia (later to be replaced by Workforce Development Confederations), established in 1995, were keen to expand pre-registration degree commissioning due to a perception that the health service required a higher proportion of graduate nurses than was available, and that more undergraduate places would aid recruitment. In addition, three-year degrees were regarded as a more cost-effective alternative to 'top-up' degrees.

The move of nurse education into higher education and the further development of the degree route to registration must also be seen in the context of a drive to increase the number of people in higher education generally. Government sees the increase in the number of people in higher education as essential if the UK is to compete with other countries in the global market (Glen 1995, Fletcher 1997). Consequently, the higher education system has become less exclusive and esoteric than hitherto (Glen 1995, Jarvis 1997), enabling the inclusion of more vocational courses such as nursing. Indeed, recruitment to nursing courses is one means of the Government meeting its targets for the expansion of further and higher education (UKCC 1999).

For the NHS, developments in nurse education are increasingly viewed in the context of concerns about recruitment, retention, career opportunities and competence. Recent policy documents from the Department of Health stress commitment to increasing diversity in recruitment to nursing (Department of Health 1999a), and improving the career opportunities and retention of staff (Department of Health 1998, 1999a, 2000b) and commitment to life-long learning (Department of Health 2001). The issue of competence is high on political and health professional agendas and there has been a drive towards a competency-based approach in health professional education (Department of Health 1999b, UKCC 1999).

There has been speculation that three-year degree courses may impact on recruitment, retention, career opportunities and competence. Nurse education purchasers therefore need information on the relative merits of diploma and degree courses to inform commissioning decisions. Hence this project was commissioned to enable a comparison of recruitment, career and retention outcomes and competencies of those prepared via three-year degree courses with those qualifying from three-year diploma courses.

CHAPTER 2:
CAREERS IN THE EARLY YEARS AFTER QUALIFICATION

This chapter starts by discussing theoretical perspectives adopted for the research regarding the concept of 'career'. The discussion here will explain how the term 'career' has been understood and operationalised in this research. This is followed by consideration of each of the six questions under investigation in part A of the project, in terms of both policy relevance and a brief review of informative prior research.

2.1 THEORETICAL PERSPECTIVES

The concept of career is much contested in social sciences. Some writers have securely linked 'career' to the world of work, but differ as to whether careers should relate only to vertical mobility (e.g. Wilensky 1961), or should encompass horizontal as well as vertical progression (e.g. Super 1957, Arthur *et al.* 1989). Others have adopted a wider usage and refer to the entry into, and construction of, a range of adult life experiences; domestic life, parenthood and leisure, as well as work (Crompton and Sanderson 1990, Brannen and Moss 1991, Banks *et al.* 1992). We follow the latter approach and define nurses' careers as the sequence of events and experiences concerning employment in the years after qualification and the way in which these intersect with other life events.

Two theoretical perspectives on careers were identified as relevant to this project: the interaction between occupational choice and opportunity structure and the concept of person-environment fit. Career patterns have been seen, primarily by developmental psychologists, as the outcome of individual choice (e.g. Super 1957, Cytrynbaum and Crites 1989). Opposing views have been offered by sociologists (initially and notably by Roberts 1981), who have argued that career histories are determined not by individual choice, but by the extent to which they are enhanced, limited or determined by features of the social structure (for example socio-economic status, educational achievement, gender and ethnicity, employment opportunities and recruitment and retention policies). Subsequent work argued for a more interactive approach and that models for understanding careers needed to incorporate both occupational choice and opportunity structure perspectives (e.g. Nicholson and West 1989). Within this choice and opportunity framework, a notion of 'fit' between the person and the environment or career has been suggested (Holland 1959). For an individual, a positive career episode will represent a congruence or 'fit' between opportunity structures available to the individual and the needs of that individual. To look at it from an organisational perspective, the 'fit' is whether the individual or group of individuals are congruent with the goals of the

organisation. It becomes problematic for both individual and organisation when a fit is not achieved. Degree and diploma nurses have made an initial choice of occupation; this project focuses on the interaction of choice, constraint and fit in career development thereafter, and on how the two groups of nurses may differ in this respect.

2.2 RESEARCH QUESTIONS

Each of the research questions is presented with its relevance to the policy context. It was our initial intention to answer these questions for each of the four branches: adult, child, mental health and learning disability. Chapter four on design and methods discusses what proved to be feasible with the numbers obtained.

2.2.1 Diversity

Research question 1: How do graduate nurses compare with diplomate nurses in terms of diversity within the workforce?

A key strategy advocated in workforce policies is that of increasing diversity among entrants. Concerns in the mid 1980s about decreasing numbers in the traditional pool of female school leavers led to recommendations to increase recruitment of men, mature students, those with higher academic qualifications and those without formal academic qualifications (UKCC 1987). Subsequently it was argued that increasing diversity of entrants would improve recruitment levels but also ensure that the composition of the profession more directly reflected the people it served (DH 1999a). A criticism levelled against the NHS was that the workforce often does not reflect the diversity of the communities for which it cares, and that increased diversity would mean "*nurses can provide care that is appropriate, sensitive and responsive to all cultural groups of their local population*" (Chevannes 2001, pp.626). Particular reference was made to making training more accessible to those seeking a second or third career, those with family or other commitments, people from ethic minority groups and those who wished to upgrade their vocational qualifications (DH 1999a, UKCC 1999). In *The NHS Plan* (DH 2000b) increasing diversity of entrants to healthcare generally was also linked to the broader government agenda of widening participation in higher education.

Diversity, in terms of ethnicity, age or sex, can be seen to be desirable for a number of further reasons. Whilst some studies find a negative effect of membership diversity upon various outcomes, the growing message is that a high level of diversity, when managed correctly, is associated with superior workgroup functioning when compared to less diverse groups (e.g. Knouse and Dansby 1999). For example, higher work performance (Magjuka and Baldwin 1991) and more creative and higher quality decision-making

(McLeod *et al*. 1992) have been found in more heterogeneous groups, especially when the tasks are creatively and cognitively demanding (Guzzo and Dickson, 1996).

It is therefore important to investigate diversity amongst nurses qualified via the two different routes towards registration, as diversity is a positive characteristic of the workforce that should be enhanced. It may be that either degree or diplomate nurses as a group are more or less diverse at qualification, or maintain/lose this diversity in the years following qualification.

Most nationally available figures relate to the work force as a whole and to make comparisons of these with figures for newly qualified diplomates and graduates can be misleading since there may be differential attrition of subgroups in the years after qualification. To assess whether diversity differs from one group of nurses to another, comparisons need to be made at the same time point for each group. Comparisons also need to be made separately for each branch, otherwise characteristics of the largest branch, adult, may mask differences in smaller groups such as learning disability. Our previous research on traditional adult and mental health nurses (Robinson *et al* 1995, 1996) enabled us to make comparisons with adult and mental health branch diplomates at qualification and at subsequent time points thereafter. Our research on diplomates (adult, mental health, child and learning disability) enables us to make comparisons with corresponding branches of graduates at qualification and at subsequent time points thereafter.

The diversity within the two groups of nurses in terms of sex, age, ethnic group, partner status, childcare experiences, previous education, previous employment and reasons for starting course and taking branch will be ascertained and compared.

2.2.2 Career Plans

Research question 2: Do graduate and diplomate nurses differ in their career plans at qualification and thereafter?

The career plans of nurses are of policy interest so that predictions about future trends can be made. Knowledge of the career pathways nurses are planning and promotion aspirations they have can enable employers and educationalists to estimate what will be required in the future in order to fulfil the needs of both nurses and the NHS.

Research indicates that future behaviour is contingent upon prior attitudes, beliefs and plans, (e.g. Ajzen's Theory of Planned Behaviour 1991). Borda and Norman (1997), in a

review of nursing literature, found that intent to stay in current employment was the variable with the greatest influence upon turnover itself. The suggestion here therefore is that without constraints, nurses will carry out their career intentions in the future. Previous research has found differences in career plans between graduates and diplomates. Bartlett *et al.* (1998) compared the career orientations of four-year degree nurses and diploma nurses in a cross-sectional study and reported that the former considered a broader range of career directions and were more attracted to full-time study. Such findings are in need of verification and expansion across the two current routes to registration.

Career plans of the two groups at qualification, and at subsequent points thereafter, will be documented and compared; these will include plans for career pathways and continuing professional development activities, together with promotion aspirations.

2.2.3 Career Pathways

Research question 3: In what ways do the career pathways followed by graduate and diplomate nurses differ?

Project 2000 aimed to prepare diplomates for a rapidly changing health care environment; for example, increasing emphasis had been placed on the provision of care in community settings and there had been an increase in the range of employing organisations involved in the provision of services (UKCC 1986). Moreover, considerable diversity has emerged in career pathways in nursing practice, education, research and management, with a great deal of blurring of the boundaries between roles and the introduction of new roles (Department of Health 1995). A new career framework was also proposed in response to the reduction in vertical promotion opportunities, with a first level of healthcare assistant, followed by three broad ranges for nurses; registered practitioner, senior registered practitioner and consultant nurse (Department of Health 1999a). The aim of this initiative was to enhance the opportunities for career progression, with prospects of job combinations or lateral movement between jobs, and also to avoid a 'ceiling effect' in nursing. The proposed new career framework also links educational development more closely to career progression.

As yet, no study has compared career pathways of nurses qualifying from the three-year degree and three-year diploma courses. Indeed, no studies have investigated the reasons why graduates and diplomates took their respective courses to begin with and as such, this study will be the first to look at the decision making involved in undertaking either a degree or a diploma. What is available is a large body of work evaluating either diploma courses or four-year degree courses. Research on diploma prepared nurses has primarily

focused on student experiences (e.g. O' Neill *et al.* 1993, Jowett *et al.* 1994, White *et al.* 1994, May *et al.* 1997), yet a few studies have focused on early career experiences and behaviours of qualified nurses (Jowett 1995, Jasper 1996, Luker *et al*. 1996). Outcomes of the studies evaluating early careers were that diploma courses were a better means of preparing students for contemporary nursing than previous routes to registration, but still provided insufficient preparation for a completely smooth transition into the nursing career. Indeed, the most extensive research into Project 2000 diplomates' careers is currently being carried out at the NRU and in this project will be used to provide a comparison with data obtained from graduates.

Numerous studies have focused on career pathways of graduates from four-year degrees. A meta-analysis of early- and pre-1990 research (Winson 1993a) suggested that after graduation the majority of these nurses gain clinical posts with many moving to the community after 2-3 years for increased autonomy and skill use, that the majority gain further nursing qualifications, and that most had remained in the profession at the time when last surveyed. The evidence suggests that graduate nurses do not receive a more rapid promotion when compared to non-graduate nurses, with few moving into management (Sinclair 1987, Smith 1993). Indeed, Kelly (1996) suggests that a divide in socialising forces between the academic world and the hospital setting may place graduate nurses at a disadvantage when entering the profession as they are unprepared for the realities of the wards.

It is likely that nursing career pathways will be influenced by other factors other than the route to registration. As discussed in Section 2.1, career pathways are formed through the interaction between individual choice and opportunities/constraints within society structures, implicating an array of factors that may influence nursing career pathways. The number and level of qualifications obtained other than a nursing degree/diploma is likely to have an impact upon career pathways followed. For example, those with previous degrees or those with A-levels may follow different career pathways to those who do not have such a high level of qualification, due to greater number of opportunities available to them or due to a perceived higher level of ability. Age has also been suggested to influence career pathways. Career Stage theorists would argue that during different periods across the life-span, individuals will be involved in different career activities due to varying priorities and events at different ages (e.g. Super's Career Rainbow, 1992). Some studies have focused on differences in the careers followed by subgroups within nursing; in particular those of male and female nurses (Davies and Rosser 1986, Hardy 1987a, 1987b, Marsland *et al.* 1996, Halford *et al.* 1997, Finlayson and Nazroo 1998). Some of these studies have drawn on various theories to explain the

differences observed, e.g. differences in orientation to work, differences in 'human capital' in the form of education and training, and structural barriers to women's careers.

Information on the career pathways of degree and diplomate nurses in the early post-qualification period will be documented. Differences and similarities in activities, transitions, promotions, employers and specialties will be explored. Information on non-nursing activities will also be discussed.

2.2.4 Continuing Professional Development

Research question 4: What differences emerge between graduate and diplomate nurses in relation to continuing professional development (CPD)?

The Project 2000 strategy included the development of a comprehensive framework of professional development (UKCC 1986). Subsequent policies developed in this respect included the induction of an initial period of preceptorship for all newly qualified nurses and midwives (UKCC 1990), aimed at assisting the transition from student to registered nurse and to facilitate the consolidation of practical skills. There have also been initiatives to provide opportunities to take a range of specialist courses, aimed at maintaining and developing professional knowledge and competence (ENB 1990, UKCC 1990, 1993, 1994). Government policies have also emphasised the importance of CPD as underpinning the provision of high quality care, allowing nurses to fulfil their potential and develop their careers, and enhancing job satisfaction for practitioners (Department of Health 1996, 1998, 1999a). In recent policy documents emphasis again has been placed upon the importance of CPD in developing a more flexible approach to career progression and facilitating moves within and between professions (Department of Health 2000a, 2000b), and on a commitment to lifelong learning (Department of Health 2001).

i) Preceptorship

Many studies have found that a period of preceptorship greatly eases the transition from student nurse to registered nurse, which can often be a stressful and aversive experience (e.g. Maben and Macleod-Clark 1998, Gerrish 2000). Indeed, support has been a factor found to be influential on retention (e.g. Bain 1996) and the experience of sufficient levels and periods of preceptorship may therefore influence turnover. Experiences of preceptorship are often mixed (Macleod-Clark *et al.* 1996), however, with research indicating that many newly qualified nurses do not in fact receive preceptorship despite the national commitment for its provision (Gerrish 2000, Maben and Macleod-Clark 1998).

ii) Continuing education

Reviews of the literature on continuing education in nursing have pointed to the following outcomes of this practice; increased nurse confidence, knowledge, self awareness, and awareness of professional issues, combined with improved communication skills, enhanced individualised care, and research centred practice (Wood 1998). A recent study similarly found outcomes of improved knowledge, improved care delivery and professional development resulting from continuing education (Smith and Topping 2001). Such factors are likely to stimulate career development. Experience of regular continuing education has also been found to be associated with lower levels of burnout (Koivula *et al.* 2000) and higher job satisfaction (Hart and Rotem 1995). Retention in nursing may be aided by such factors (Gould *et al.* 2001).

If graduates and diplomates are found to differ in their experiences of and demand for continuing education, it is important to know what kind of impact this may have.

CPD opportunities, experiences and aspirations for both groups will be explored in order to assess whether differences exist in, for example, receiving preceptorship, plans to take courses, access to courses and the provision of career guidance.

2.2.5 Satisfaction with Quality of Working Life

Research question 5: Do graduate and diplomate nurses differ in their satisfaction with the quality of working life experienced while working in health care?

Recent policy documents have stressed the importance of satisfactory working conditions and the provision of family friendly policies as important strategies in ensuring a good quality of working life for staff and in improving retention in the profession (Department of Health 1998, 1999a). Satisfaction with working life may be relevant to the career pathways pursued by nurses in three respects; decisions to remain in or leave present jobs, to pursue specific directions within nursing and healthcare, and decisions to leave the profession altogether.

Previous research consistently points to the central role job satisfaction plays in work-related processes in nursing. Recent research has found a range of variables that influence job satisfaction (Tovey and Adams 1999) including job content, resource issues, working relationships and external pressures. The authors also argue that sources of both satisfaction and dissatisfaction change over time, as nursing adapts to contemporary issues and interventions. Further evidence from research in the private sector suggests that decentralised decision-making, staff participation and involvement, innovative work

practices, and the 'fit' between structure, strategy, and environment have a positive impact upon job satisfaction (West 2001). Outcomes of nurses' job satisfaction appear to have a large impact upon organisational-level issues such as turnover. Intent to stay in nursing has been consistently found to be strongly related to level of job satisfaction (Borda and Norman 1997), suggesting a negative relationship between satisfaction and turnover. Furthermore, another study has found that highly satisfied departments provide superior levels of care for patients (Robertson *et al.* 1995).

To date, however, no evaluation of the job satisfaction of graduates and diplomates has been carried out. As level of satisfaction with working life has been found to be such an influential factor in nursing careers, it seems that such an evaluation is required to attend to this lack of knowledge. This research will help to redress this deficit.

Areas of working life from which satisfaction or dissatisfaction is developed will be isolated and levels of satisfaction with these areas compared for graduates and diplomates.

2.2.6 Retention

Research question 6: How do graduate nurses compare with diplomate nurses in terms of retention in nursing?

Improving retention and reducing wastage in nursing was one of the aims of the Project 2000 reforms and has since been re-iterated in various policy documents, such as *Making a difference* (Department of Health 1999a). The policy aim is to give a much greater priority to valuing and retaining the staff working in the service, to the end of reducing staff shortages and maintaining the skills, knowledge and abilities of nurses in the nursing profession. However, concerns over retention focus not only on the overall number of nurses, but also on retention in the NHS as opposed to other employing organisations, and the distribution of nurses across specialties and clinical services.

Studies ranging from the early work of MacGuire (1969) through to the series of studies carried out by the Institute of Employment Studies (e.g. Smith and Seccombe 1998) have, in varying orders of priority, identified the following as being related to retention; dissatisfaction with conditions of service, insufficient opportunities for continuing education, poor promotion prospects, a perceived lack of support and feedback from senior staff, and difficulties in combining work and family.

Differences between the two groups, at several levels of interest to workforce planners, will be explored. This will include both actual retention during the first three years after qualification and anticipated retention in the future.

CHAPTER 3:
COMPETENCE AND GRADUATENESS

3.1 INTRODUCTION

The specific research question addressed in Part B of the project is:

Research question 7: Are there differences between the competencies of degree and diploma prepared nurses in the early post-qualification period?

There are various factors underpinning the current drive for a competency-based approach to nurse education. Following concerns that newly qualified diploma nurses were deficient in various practical skills, a competency-based approach to pre-registration nurse education was advocated in the UKCC (1999) report *Fitness for Practice*. This led to changes in the curriculum as well as the development of a set of competencies that must be met for entry to the branch programme and for entry to the Register (UKCC 2000). There have also been developments in assessing competencies in post-registration education. For example, Gibson and Soanes (2000) developed a competency model to assess clinical competence during a post-registration specialist course. It is not only in education, however, where a competency-based approach has been applied. In their document *Agenda for Change*, the Department of Health made the case for linking competency to career pay spines (Department of Health 1999b). The aim is to provide a framework within which all jobs within health care professions could be evaluated.

No distinction has been made by the UKCC between the competencies required of those nurses qualifying from degree courses and those qualifying from diploma courses. It is worth noting, however, that since this research began the Quality Assurance Agency for Higher Education (QAA 2001) have developed a set of benchmark statements about expected standards of qualifiers from the two routes to registration. The career structure of nurses is not, at the moment, linked to educational achievement, and nor are there distinct career pathways dependent on the route taken to registration (Taylor *et al.* 2001). Plans for a new career structure, incorporating four 'ranges', do suggest however, that a degree rather than a diploma would provide a better opportunity of reaching the third range (Department of Health 1999a). The profession and employers are, however, unclear about their relative expectations of nurses prepared via degree and diploma courses. If there are no differences in the competence of these two groups of nurses then it is difficult to justify the two routes to registration upon grounds of competence alone. Information on any differences in competence could be used to inform the purchasing

decisions of Workforce Development Confederations, and to highlight to employers and HEIs whether there are particular aspects of competence of either of the two groups of nurses which need addressing in pre- and post-registration courses.

Purposes of this chapter are to: explore definitions of competence and associated concepts; justifying the definition used for this study; consider methodological problems of assessing competence; review those studies exploring differences in competence between groups of nurses and work which explores 'graduateness'; and consider contextual influences on competence.

3.2 THE CONCEPT OF COMPETENCE

Much has been written about the problems involved in clarifying the meaning of competence (e.g. Bartlett *et al.* 1998, Eraut 1998, Norman *et al.* 2000). This section explores some of these conceptual issues and ends by outlining the approach adopted in this study.

3.2.1 Defining competence

Eraut (1994) notes that competence and associated concepts such as performance and capability are often used interchangeably. Drawing on the American and Australian literature he makes a distinction between competence and competency. He suggests that competence can be perceived as a generic term referring to a person's overall capacity, while competency refers to specific capabilities. These capabilities are made up of the attributes of knowledge, skills and attitudes. He also makes a distinction between competence, which refers to what a person is capable of doing, and performance, which is what people can actually do in practice. The former is what a person can do in ideal circumstances, while the latter is what is actually done in existing circumstances.

There is much disagreement about whether it is performance or competence which should be the focus of assessment. While (1994) suggests that performance rather than competence is a more feasible outcome measure. That is, the focus should be on assessing ability in practice. Others (e.g. Worth-Butler *et al.* 1994, Norman *et al.* 2000) suggest that the two concepts are inseparable. They suggest that competence involves both performance and capability. For Worth-Butler *et al.* (1994) performance refers to observable behaviour which can be measured, while capability refers to unobservable attributes such as attitudes, values, judgmental ability and personal dispositions. Eraut (1994) would appear to agree with these latter sentiments, asserting that competence integrates attributes with performance.

3.2.2 Broadness of competence

An issue closely related to the definition of competence and its associated concepts is the 'broadness' of competence. This refers to which of the various attributes (skills, knowledge and attitudes) should be considered. The myriad ways of conceptualising the attributes makes the goal of conceptual clarity very difficult to achieve. Distinctions are made between different types of capabilities, competencies and skills. Eraut (1998) distinguishes between professional capability i.e. what a person can think or do that is relevant to a particular profession, and additional capability i.e. what an individual can do but which is not required of a job. Other authors make distinctions between different types of competencies, such as personal and occupational competencies (Grundy 2001), and academic and operational competencies (Barnett 1994). Still others refer to intellectual and interpersonal skills (While *et al.* 1998), and cognitive skills (Fitzpatrick *et al.* 1994). This section will outline one way of considering the broadness of competence, with the aim of clarifying a conceptually confusing area.

A key point is that many authors caution against a reductionist approach to competence, in which it is work tasks and roles which are considered rather than knowledge and understanding (e.g. Barnett 1994, Manley and Garbett 2000, Watkins 2000). Thus, a more holistic or broader notion of competence is advocated. Reductionist and holistic approaches can be regarded as being at polar ends of a continuum, with many approaches in between. Thus, the extent to which one adopts a narrow reductionist or a broader holistic approach is one of degree. The work of Barnett (1994), and his distinction between operational and academic competence, can also be used to provide greater clarity.

Barnett (1994) suggests that the move from elite to mass education has led to society, via the state, the market and economic institutions, seeking a greater influence over higher education. Higher education is now perceived by society as an economic good and society seeks to bend it towards societal ends. Society values operational knowledge over academic knowledge. The former reflects the concerns of the world of work and how one performs, while the latter reflects the interests of academia and mastery of a discipline. Thus, there has been a shift in balance of studies away from philosophy towards more vocational courses, and an emphasis on operational competence (knowing how) rather than academic competence (knowing that). Applying the work of Barnett to nursing, Meerabeau (2001) suggests that nursing 'tends' towards the former type of knowledge. The use of the word 'tends' is important, since it is suggested here that the boundaries between the different types of knowledge and competence are blurred rather than definite. It is argued here that even within the confines of operational competence the range of

attributes that can be considered may vary. Thus, operational competence need not necessarily lead to a reductionist approach to competence assessment.

It should also be noted that Barnett (1994) adopts a global perspective in that he is considering academia and society generally, and thus his arguments about the impact of society on academia and knowledge and competence are based on broad trends. A consideration of individual disciplines, such as nursing, reveals that there are also counter trends so that academia can also impact upon the knowledge and competence valued within that discipline. The work of Bradshaw (1997, 1998, 2000) can be used to highlight the counter trends in nursing. Prior to 1979 she asserts that education of nurses was didactic and rule bound with the General Nursing Council identifying explicit and measurable competencies. The emphasis was on ensuring that nurses were fit to undertake specific functions. This suggests a reductionist approach to competence. The move into higher education led to nursing adopting modern educational approaches so that a broader definition of competence was advocated. These changes were included in the Nurses, Midwives and Health Visitors Act of 1979 which proposed more general competencies such as health promotion, leadership and management. These competencies, while still operational, are broader than those considered in the more reductionist approach of pre 1979. Educational policy began to encourage a more flexible and self-directed method of learning. Bradshaw (1997) notes that the educational approach of the 1980s is enshrined in the ENB's Regulations and Guidelines for the Approval of Institutions and Courses (1993), where competencies and standards are not defined and course content is not specified.

A theme running though the literature reviewed, thus far, is that of the impact of various stakeholders in determining the broadness of the definition of competence. Barnett (1994) suggests society is influencing the type of competence which is valued, i.e. operational competence. Implicit in Bradshaw's work is the suggestion that it has been the agenda of professionals and educationalists, rather than employers which have been influencing the definitions of competence in nursing resulting in a less reductionist interpretation than hitherto. Meerabeau (2001) notes a more recent trend of greater employer influence over the direction of nurse education. From 1996 education purchasing has been undertaken by consortia of NHS trusts (which have subsequently been replaced by Workforce Development Corporations). Meerabeau (2001) suggests that employers have an influence over nurse education which is unprecedented in mainstream education. This influence can perhaps be found in the recommendations of the UKCC (1999) which advocated the development of national competencies, a greater emphasis on the development of practical skills, and a greater influence for employers in

defining these competencies. Such developments have led to concerns that the focus is now very much on clinical, or practical, competence rather than on broader competencies associated with higher education (e.g. Watson and Thompson 2000).

In summary, competence can be considered in holistic or reductionist terms, and in academic or operational terms. Furthermore, although wider society may impact on higher education and the types of knowledge and competence which are valued, so higher education can influence the type of knowledge and competence valued in a discipline.

3.2.3 Scales of competence

Another problem when trying to establish clarity of terminology is whether to regard competence in terms of a stage on a continuum or as a binary scale. An example of the former is the work of Benner (1984) who outlined a five-stage model from novice to expert with competence being stage three. A binary scale would identify whether one is competent or not. The competencies outlined by the UKCC (2000), for example, can be regarded as a binary scale, since one meets the standard or does not.

3.2.4 The approach in this study

This study uses the Nursing Competencies Questionnaire (NCQ) to measure competence, (rationale for this decision is provided in Chapter four, Section 4.6.1). The NCQ was developed in the first instance by combining Schwirian's (1978) Six-D Scale and a tool developed by Deback and Mentowski (1986). The instrument measures competence in terms of eight constructs: leadership, professional development, assessment, planning, intervention, cognitive ability, social participation and ego strength.

Using Eraut's (1994) distinction between competence and competency, the NCQ assesses an individual's overall competence, while the various constructs within the NCQ can be regarded as assessing 'competencies' or 'capabilities'. The NCQ also fits with the definition of competence provided by Worth-Butler *et al.* (1994), so that performance and capability are elements of competence.

In terms of the broadness of the attributes or competencies considered, this study will lean towards an assessment of operational competence. In the terminology of Eraut (1998), it is professional capability rather than additional capability which is assessed in this project. A reductionist approach is, however, rejected. Any measure of competence, it is asserted here, should include affective, cognitive and psychomotor skills. Thus, within the confines of operational competence a holistic or 'multi-dimensional' (Bedford *et al.* 1993) approach to competence is adopted, rather than focusing only on work roles, tasks

and functions. Defined in this way competence cannot always be directly observed, but rather inferred through competent performance (Norman *et al.* 2000).

Finally, in this project, competence is regarded as a continuum so that it is possible to compare differences between graduate and diplomate nurses in level of competence. However, the instrument used to measure competence in this study, i.e. the NCQ, does not identify specific stages along the continuum, but rather the higher the competency score then the more competent the individual is judged to be.

3.3 PROBLEMS OF ASSESSMENT

A variety of tools have been used to assess nurses' competence and much of this work has been undertaken in the USA. Various reviews have been undertaken of the range of tools used (e.g. Norman *et al.* 2000, Bartlett *et al.* 1998). Norman *et al.* (2000) identified six broad approaches; questionnaire rating scales, ratings by observation, Benner's model of skill acquisition, reflection in and on practice, self-assessment and multi-method approaches. These reviews concluded that few approaches have been tested adequately for reliability and validity. Each of the approaches have strengths and weaknesses. In terms of weaknesses for example, ratings scales have been criticised for being reductionist (Bartlett *et al*. 1998) and too removed from the practice setting (e.g. Fitzpatrick *et al.* 1994, Bartlett *et al*. 1998). More qualitative approaches have been criticised, however, for being context specific and unstandardised (Bartlett *et al.* 1998).

3.4 DIFFERENCES BETWEEN NURSES QUALIFYING FROM DIFFERENT COURSES

Much of the research on competencies has been undertaken in the USA (e.g. Gray *et al.* 1977, DeBack and Mentowski 1986, Marquis and Worth 1992). While (1994), in a review of the North American literature, concludes that nurses educated through baccalaureate degree programmes have a broader range of competencies and perform better than nurses educated through diploma or certificate programmes. She cautions, however, that there are various methodological problems with these studies. There have been few published studies undertaken in the UK which have attempted to assess differences between the outcomes of different courses. Some of these studies have focussed on students, some on qualified nurses, and some on both.

While *et al.* (1995) used a triangulation design to compare the performance of students on a registered general nurse programme (n=34), on a Project 2000 diploma programme (n=34) and on a four-year integrated degree programme (n=31). The students were drawn

from three institutions in the South East of England and were in the last three months of their courses. Two simulations, non-participant observation and semi-structured interviews were the methods used in the triangulation design. Findings showed that the degree nurses had a more systematic approach to information-seeking, superior care-planning skills and a higher quality nurse performance.

Bartlett *et al.* (1998) compared the competencies of nurses qualifying from a four-year degree course (n=52) and a diploma course (n=28), each from two different universities. They used the NCQ to assess competencies. The nurses assessed themselves at qualification and at six months and one year after qualification. Nurses' mentors also assessed the nurses at qualification. At qualification diplomates had a significantly higher score than graduates in 'leadership'. At six months after qualification graduates scored significantly higher on 'professional development', 'assessment' and 'ego strength'. At one year after qualification the only difference between the two groups was in 'professional development', in which the graduates scored higher.

A study by Girot (2000b) sought to test the hypotheses that graduate nurses have more highly developed critical thinking skills than non-graduate nurses, and that graduate status has a significant influence on decision-making. The Watson-Glaser Critical Thinking Appraisal and the Jenkins' Clinical Decision-Making in Nursing Scale were given to four groups of nurses to test the respective hypotheses. Group 1 comprised students, just two months into their four-year pre-registration degree (n=32). Group 2 consisted of students in the final year of their four-year pre-registration degree (n=19). Mature graduate practitioners who had recently qualified from a four-year, part-time, post-registration degree made up the third group (n=17). The fourth group consisted of mature practitioners who were completing a study skill programme and were returning to study after a considerable break (n=15). Girot found no significant differences between the critical thinking skills of graduate and non-graduate nurses. However, those exposed to the academic process were significantly more likely than experienced non-academic practitioners, to show effectiveness in decision-making.

The studies present mixed evidence on differences between students and nurses on the various courses. These studies have also all been locally based and some included only small numbers of nurses.

3.5 GRADUATENESS AND COMPETENCE

There has been a lack of clarity within nursing about what the differences between degree and diploma courses should be, and the differences in the competencies acquired by the students on those two courses. Girot (2000a), for example, questions whether the profession is aspiring to one level of competence with two different academic awards, or two different levels of competence. Burke and Harris (2000) note that the concept of graduateness in nursing lacks definition. The UKCC (1999) suggest that the graduate may have *"an enhanced level of analysis, synthesis and decision making"* (UKCC 1999, p32), but then concludes that the diploma course is a *"close approximation to graduate level"* (UKCC 1999, p33). There have been just a few studies in nursing which have explored the concept of graduateness, and only recently has a distinction been made between nurses qualifying from the diploma and degree courses in terms of standards required (QAA 2001). This section considers that research which has investigated graduateness in nursing, followed by a consideration of the work of the QAA.

Winson (1993b) compared the nursing curriculum of eight HEIs (four universities and four polytechnics) which offered four-year degrees leading to a registration in nursing with those of four colleges of nursing running Project 2000 diploma courses. Heads of departments were also interviewed to explore their views about the differences between degree, diploma and traditional nursing courses. A key difference between the curricula was the stress in degree courses on research and implementing research findings in nursing practice. The interviews revealed that all of the heads of department perceived graduate nurses as more critical in their thinking and more research aware than their colleagues who qualified via the diploma or traditional routes. Other key findings from the interviews were the perception that graduates are more able to apply and utilise knowledge, more innovative in practice and more relaxed in their style of management, than their diploma and traditionally trained colleagues.

Robinson and Leamon (1999) set out to identify common features of degree courses. Curriculum documents from fifty degree courses, within 32 institutions were investigated. These courses included 22 pre-registration degrees, 11 post-registration degrees with a Higher Award, and 17 post-registration degrees without a Higher Award. Common features of 'graduateness' were managing change, creativity, innovation and leadership, criticality, caring and reflective practice, research-based practice and competence (used to describe the complexity and variety of skills required at graduate level).

A study by Burke and Harris (2000) investigated the views on graduate nurses of stakeholders responsible for commissioning and contracting education. Thirty-four

stakeholders, representing all eight Regions in England, were interviewed. The stakeholders identified various attributes of graduates. These included the ability to be reflective, question practice, make decisions, transfer knowledge from one area to another, and challenge poor practice. They were also deemed to be more sensitive to the needs of clients, and have a broader range of skills including technical, analytical and leadership skills than their diplomate colleagues.

These studies suggest that there may be differences between graduates and diplomates not only in how well they utilise certain skills but also in which skills they utilise. The lack of research, combined with the myriad of attributes on which it is possible to differ, however, makes it difficult to draw any firm conclusions.

Since this research began, the QAA (2001) have developed subject benchmark statements about health care programmes of study and training. These statements are a set of expectations about the standards expected of a practitioner qualifying from any given programme, and the attributes and capabilities they should be able to demonstrate. The standards were developed by groups of appropriate specialists selected from HEIs, service providers and professional and statutory regulatory bodies, and incorporate the UKCC's (2000) competence requirements for pre-registration nursing programmes. Included in their work are standards for the pre-registration Diploma in Higher Education and Honours Degree, which lead to registration as a nurse. It is to this work that this chapter now turns. The standards consist of expectations when working as a health professional, standards required when applying principles and concepts and standards required in terms of knowledge, understanding and associated skills. Appendix 1 shows the complete list of standards for diplomates and graduates.

Although there are broad similarities between the two sets of statements there are a few key differences. The statements for graduates have a greater emphasis, than those for diplomates, on critical evaluation (for example, critically evaluate research findings and suggest changes to planned care), working strategically (for example capitalise on the potential for health improvement for patients, clients and groups through the development of health education/promotion strategies), drawing on theory (for example use relevant theoretical and research evidence to inform a comprehensive, systematic assessment of the physical, psychological, social and spiritual needs of patients, clients and communities), challenging practice (understand the differences in beliefs and cultural practices of individuals and groups and recognise and challenge discriminatory practice) and working creatively (use practical skills and knowledge with confidence and creativity to enhance the quality of care). It is possible to detect, in the standards, echoes of the

findings of previous research into graduateness. Thus, Winson's (1993b) critical thinking and Robinson and Leamon's (1999) criticality are similar to critical evaluation. It could be argued that critical thinking involves an ability to draw on theory and also on research, the latter of which was referred to by Winson (1993b) and Robinson and Leamon (1999). Working creatively is similar to Winson's (1993b) innovation and Robinson and Leamon's (1999) innovation and creativity. The working strategically items imply an ability to manage change and work at a senior level, and therefore have some similarity with Robinson and Leamon's (1999) and Burke and Harris' (2000) leadership, and Robinson and Leamon's (1999) manage change. Challenging practice is similar to Burke and Harris' (2000) questioning and challenging poor practice.

As noted, the QAA (2001) document was published after the development of the NCQ and after this study had begun. Some of the themes and issues identified in this section resonate with the constructs in the revised NCQ used in this research (see Section 3.2.4). For example, critical evaluation identified in this section has links with the NCQ construct of cognitive ability, which is defined as the ability to analyse, judge and think critically. The links are, however, generally tenuous, at an abstract level and cut across the various constructs rather than fitting neatly into them and it is, therefore, not possible to make direct comparisons with the NCQ.

3.6 CONTEXTUAL INFLUENCES ON COMPETENCE

It is important to note that there are factors other than type of course which may impact upon competence. Various factors are considered here: educational establishment, education experiences, institutional context, morale, emotional and physical demands of the job.

In terms of educational establishment, there may be differences between HEIs, for example, in terms of the quality of the course and/or teaching which may have an impact on the competence of those qualifying from the course. A second factor may be educational experiences. Thus, for example, level of education prior to entering a nursing programme, may be an indicator of competence which exists irrespective of the nursing programme. The institutional context refers to how the culture of employing organisations can impact on the performance of employees via, for example, affecting morale (While 1994). Other examples of the institutional context are the emotional and physical demands of a job (Eraut 1998). Clearly, taxing emotional and/or physical demands can impact upon the competence demonstrated by an individual.

3.7 SUMMARY

This chapter has explored definitions of competence, factors impacting upon competence, a review of studies comparing nurses qualifying from different courses and of that literature that considers 'graduateness'. It is clear that there are a myriad ways of defining competence and its associated terms and that there is no 'gold standard' in how competence should be assessed. Furthermore, the little research available in the UK on the distinction between nurses qualifying from different courses is inconclusive and there is a lack of clarity about what defines 'graduateness'. The chapter has sought, despite the conceptual confusion surrounding competence, to articulate the definition and approach to competence adopted in this research. Attention now turns, in Chapter four, to the research methods used in this study, and how the definition and approach to competence were operationalised.

CHAPTER 4:
PROJECT DESIGN AND METHODS

4.1 OVERVIEW

Part A of this project compares the careers of graduate and diplomate nurses at four stages after registration and Part B compares the competence of graduate and diplomate nurses at three stages after registration. For the careers part of the project, data on diplomate nurses were drawn from an existing longitudinal cohort of diplomate nurses whereas data on graduate nurses were drawn from four graduate cohorts recruited specifically for this project. Sections 4.2 to 4.5 of this chapter discuss the design, data collection, and data analysis adopted for Part A, as well as highlighting some of the implications of the chosen methodology. Part B of the project involved the creation of two new data sets from graduate and diplomate cohorts covering three time points after qualification. Sections 4.6 to 4.8 discuss the design of this part of the project, the development of the competencies questionnaires, and how data were collected and analysed. The rationale for the methods adopted and some of their implications are also discussed.

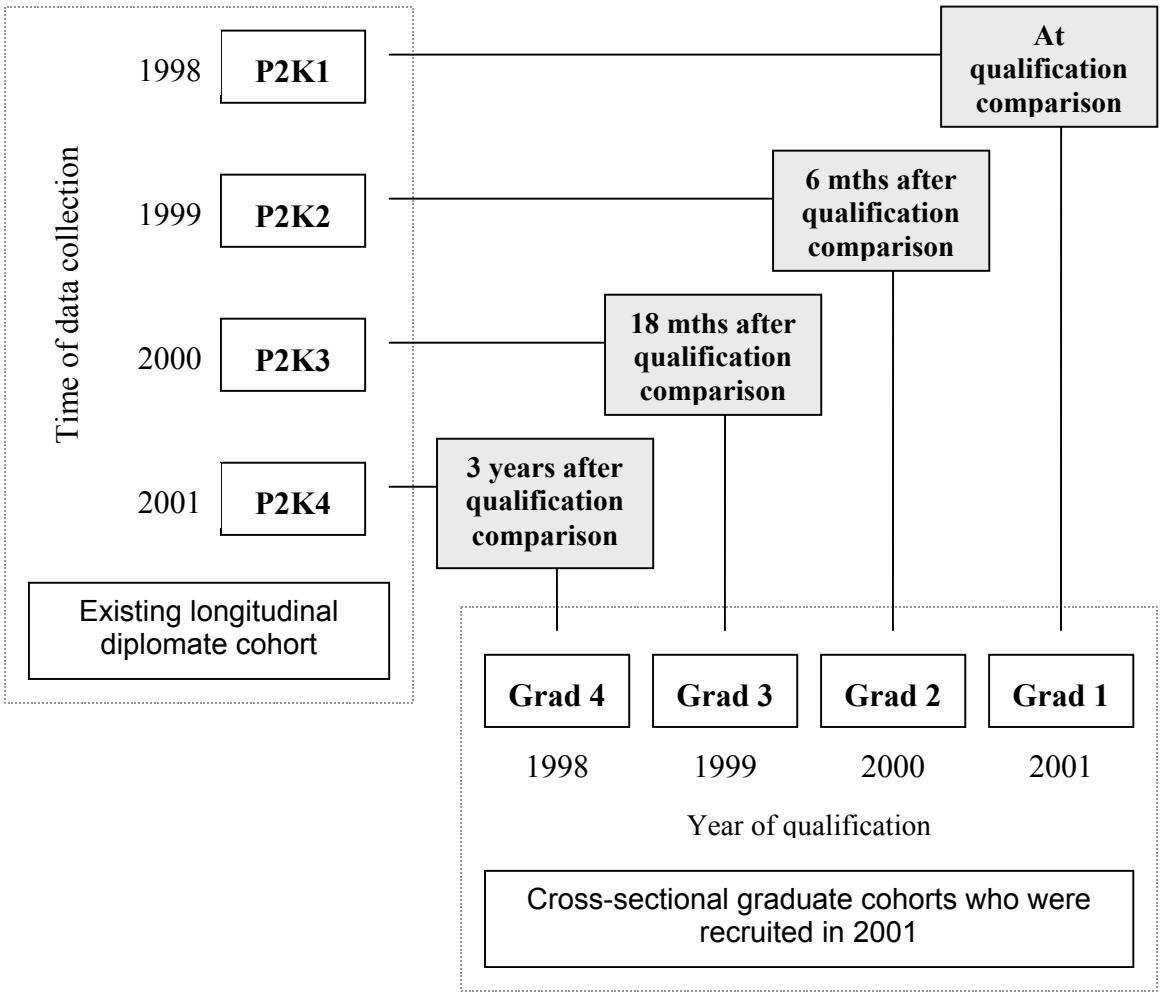
4.2 COMPARING CAREERS: RESEARCH DESIGN

The design was a series of cross-sectional comparisons of cohorts of degree nurses with an already recruited cohort of diploma nurses from all four branches of the course (adult, child, mental health and learning disability). The diplomate cohort had been recruited in the course of an existing longitudinal study (P2K) based at the NRU. Data in the aforementioned study were collected by questionnaire at qualification (P2K1), six months (P2K2), 18 months (P2K3) and three years (P2K4) after qualification. In generating graduate cohorts to compare with our existing diplomate cohort we generated four retrospective cohorts. The four cohorts of degree nurses recruited were as follows: graduate cohort 1 who qualified in 2001; graduate cohort 2 who qualified in 2000; graduate cohort 3 who qualified in 1999, and graduate cohort 4 who qualified in 1998. How these cohorts correspond for comparison is illustrated in Figure 4a.

The diplomate cohort and graduate cohorts were sampled in different ways. A multi-stage process was used to select adult and mental health diplomates with a sample of colleges taken from regional sampling frames. There was a further stage of selection of groups of nurses at the college level for the adult branch (Marsland & Murrells 2000). All child and

learning disability diplomates and all graduates were surveyed (full census) because of their small population sizes.

Figure 4a: Design of Part A of the project



Ideally, a further longitudinal study of graduates for comparison with the longitudinal data set of diplomates would have been undertaken. Such a study would have had the benefits of monitoring graduate cohort changes over time. Any consistent changes in the graduate cohorts across the time points must be viewed with extreme caution, as the only effects that are measured in this study are cohort effects. However, the cross-sectional comparisons allow several key questions to be answered within a far shorter time period, thus reducing the distance in time between measurement and results for both graduate and diplomate data sets. As a result of this complexity of the design, analyses were subsequently fairly sophisticated and interpretations were made with respect to the possibilities and limitations of comparisons of this nature. An important assumption made was that chronological time differences between the graduate and diplomate comparisons would have no effect. For example, 'At qualification' comparisons include a graduate

cohort who qualified in 2001 and a diplomate cohort who qualified in 1998. These cohorts were assumed to have equivalency. As such, certain factors, for example, changes in labour market sensitivity between the periods, cannot be accounted for.

4.3 COMPARING CAREERS: DATA COLLECTION

This section describes the procedures involved in the recruitment of the graduate cohorts and the development of the questionnaires.

4.3.1 Recruiting diplomate nurse cohorts

As indicated the diplomate cohort included nationally representative samples of adult and mental health diplomates and a census of child and learning disability diplomates. These diplomates had already been recruited for a different study in which their careers were followed from qualification onwards. Members of the research team met with each intake just prior to qualification to invite participation in the study; 88% of diplomates agreed to do so. A full account of the sampling and recruitment methods is available in Marsland and Murrells 2000, Robinson *et al.* 1998, 1999).

4.3.2 Recruiting graduate nurse cohorts

There were three stages involved in accessing and recruiting nurses who qualified from three-year degree courses leading to a registration in nursing. Stage one involved establishing the numbers of qualifiers and from which universities they qualified. Stage 2 involved contacting the universities to obtain the names of qualifiers. Stage 3 involved contacting qualifiers to request their participation in the study. Each of these stages is discussed below.

i) Stage one – Establishing number of qualifiers and universities from which they qualified

Developing the proposal necessitated establishing the number of qualifiers from three-year degree courses leading to a registration in nursing in the appropriate years. The first point of contact was the English National Board (ENB) who informed us that they could not supply these figures. Our second contact, the Universities and Colleges Admission Service (UCAS), was able to supply us with figures for entrants onto, rather than qualifiers from, courses. Subsequent contact with UCAS revealed that the figures with which they initially had supplied us were incorrect; the formula used to calculate the number of entrants was not sufficiently discriminatory and resulted in inflated figures. Further investigations revealed that the ENB should, in fact, be able to provide figures on qualifiers in the appropriate years as well as the universities from which the nurses were qualifying. Following fresh negotiations with the ENB we were provided with the relevant information. On the basis of both the UCAS and the ENB figures we decided to

include all graduates in the study rather than take a sample, as even with the larger branches numbers were smaller than we had originally anticipated and the likely response to the proposed method of contact was unknown. We investigated the possibility of obtaining figures from the Higher Education Statistics Agency (HESA); however their figures do not distinguish between those taking three-year nursing degrees from those taking four-year nursing degrees and were not therefore appropriate for this project.

ii) Stage two – Contacting Universities

A top-down approach was adopted to gain access to qualifiers. In the first instance Heads of School were contacted, via letter, in each of the universities identified by the ENB. This letter provided information about the project and a request for the names of qualifiers. These letters were followed up with a telephone call to each of the Heads of School. Information from some of the Heads of School revealed that some of the universities identified by the ENB did not have qualifiers from three-year degree courses in the appropriate years, while others had three-year degree qualifiers in years not identified by the ENB. Given the inaccuracy in the information provided by the ENB, all universities were contacted to establish when they had qualifiers from the three-year degree courses.

In total, 16 universities had qualifiers in the appropriate years. Ease of access to the names of these qualifiers varied. The Heads of School were generally supportive of the project and identified another individual or individuals from whom we could obtain the appropriate information. For most universities we were required to liase with a different individual for each branch, usually a lecturer or admissions tutor. Our request was considered by the ethics committees of two universities, following which access to the names of qualifiers was granted.

iii) Stage three – Contacting qualifiers

Graduate cohort 1 was sent a letter requesting their participation in this project by their university just prior to graduation and 45% agreed to do so. Graduate cohorts 2, 3, and 4 had obviously left university in the previous years, so letters requesting their participation were sent to qualifiers via the UKCC. Those willing to participate were asked to return a slip providing an address to which a questionnaire could be sent. Three strategies, adopted at four week intervals, were used to maximise response rates. First, non-respondents were sent another letter via the UKCC requesting their involvement in the project. Secondly, the alumni associations of the universities forwarded requests on our behalf. Thirdly, further attempts were made to trace non-respondents via their course-colleagues who had responded. These respondents were asked if they were still in touch with any members of their group from whom we did not hear during the initial contacting

stage and could pass on a questionnaire, or knew of their whereabouts so that a questionnaire could be forwarded on to them directly by the research team. This process increased the response rate for Cohort 2 from 46% to 55%, for Cohort 3 from 35% to 49% and for Cohort 4 from 42 to 49%. The approach having the greatest impact on response rate varied from one cohort to another.

4.3.3 Designing Questionnaires

The design of questionnaires was informed by two key criteria. First, to ensure comparability with information already obtained from diplomates participating in the existing longitudinal study of their careers, it was essential that the same questions were used in the questionnaires for graduates. Secondly, it was important that the questionnaires were substantially shorter than our previous questionnaires investigating nurses' careers. The length of questionnaires can influence response rates. Unlike our previous projects in which nurses were recruited face-to-face, graduates were contacted by post. The face-to-face recruitment sessions had enabled the team to be more persuasive about the importance of the research than was possible 'cold contacting' via letter, and we were, therefore, more confident of respondents completing lengthy questionnaires.

All questionnaires designed by the NRU are underpinned by extensive pilot work. This maximises the relevance and comprehensibility of the questionnaires and minimises the chances of routeing errors. In turn, these factors are likely to have an impact on response rates. In this part of the project the need for piloting was less acute since questions already extensively piloted for the diplomate project were used. Piloting was still necessary, however, to ensure the relevance of questions to graduates and to detect routeing errors.

Piloting of each questionnaire was undertaken with graduates from one university. A census of graduates was taken and so the pilot group was also part of the main cohort and recruited in the same way. Pilot work to develop the questionnaires revealed that only a few design changes, rather than content changes, were required.

The questions included in the final questionnaires were selected on the basis of addressing the six research questions outlined in chapter one:

i) Diversity

Respondents at all four time points were asked for various demographic information, such as sex, age, ethnic group, partner status, childcare experiences, previous education, previous employment and reasons for starting course and taking branch. The format for

the question on ethnic group was adapted from that used in the British Social Attitudes Study (SCPR 1989).

ii) Career Plans

Respondents were asked about career plans and expectancies at various points in time.

iii) Career pathways

Differences in careers followed was addressed via a career chart that provided details of jobs held, including for how long a job was held, grades and specialty.

iv) CPD expectations and experiences

At all four time points respondents were asked about their plans to undertake further courses, and reasons for wanting to pursue courses. Respondents at six months, 18 months and three years after qualification were also asked for details about courses they had taken, courses they wanted to undertake but not done so thus far, and reasons why these plans had not been fulfilled. Newly qualified nurses were asked two questions about aspects of their course that might have relevance to the direction of their future careers: the first concerned receipt of career guidance and the second the influence of course experiences on encouraging or discouraging them to consider working in certain clinical specialties. Newly qualified nurses were also asked about expectations of preceptorship, while those qualified for six months were asked about experiences of preceptorship.

v) Satisfaction with quality of working life

Satisfaction was addressed at six months, 18 months and three years after qualification via a section asking respondents to rate their satisfaction with a range of aspects of jobs, including working conditions, working relationships, and CPD.

vi) Retention

Information on retention in nursing was obtained via a career chart, which provided information on movement in and out of nursing, movement between employers, and movement between specialties and clinical services. Questions on job plans and on reasons for not working in nursing also provided information on retention.

The questions were also informed by the choice/constraint career theory, discussed in Section 2.1. As such, career outcomes were regarded as being determined by the interaction of individual agency and environmental barriers/opportunities. The questionnaire therefore explored intentions and planned behaviour of the graduates and diplomates involved in the study, whilst also examining constraints and opportunities available that may influence their career activity. Questionnaires and letters for Part A are included in Appendix 2A.

4.4 COMPARING CAREERS: FEASIBILITY OF SEPARATE BRANCH ANALYSIS

It was our initial intention to undertake these comparisons separately for each branch in order to ascertain whether differences that existed between diploma and degree prepared nurses were consistent for the four branches. As indicated on page 31 we had already decided to include a census of all four branches for the graduate cohorts as numbers were smaller than initially anticipated. Even with this approach, however, the numbers obtained for the mental health, child and learning disability cohorts of graduates (Table 4.1) were too small to make meaningful comparisons with the corresponding diploma qualifiers.

Table 4.1: Graduate sample sizes

Branch	Grad 4 (1998)	Grad 3 (1999)	Grad 2 (2000)	Grad 1 (2001)
Adult	57	53	111	99
Child	12	28	37	43
Learning Disability	3	5	12	6
Mental Health	16	11	24	16

One option would have been to combine the data from the four branches of the diplomate cohort and then compare these with the combined data from the censuses of each of the four graduate branches. The much larger number of adult graduate and adult diplomate qualifiers would lead to findings that were biased in their favour. Another option would have been to combine the child, learning disability and mental health branches. Either option would have led to difficulties with interpretation. There seemed little to be gained apart from increased sample size. The approach adopted therefore was to compare the adult diplomates with adult graduates.

4.4.1 Response Rates

Response rates for the longitudinal adult diplomate cohort and the cross-sectional adult graduate cohorts are presented in Tables 4.2i & ii (response rates for all branches are presented in Appendix 3).

Table 4.2i: Response rates of adult diplomate cohort

Diplomates	Eligible qualifiers	Agreed to participate	Completed questionnaire
At qualification - *P2K1*	2109	1832	1596
% of qualifiers		88%	76%
% of those who agreed to participate			87%
6 months after qualification - *P2K2*			1339
% of qualifiers			63%
% of those completed 1st questionnaire			84%
18 months after qualification - *P2K3*			1117
% of qualifiers			53%
% of those who completed 1st & 2nd questionnaire			83%
3 years after qualification - *P2K4*			907
% of qualifiers			43%
% of those who completed 1st, 2nd, & 3rd questionnaire			81%

The initial agreement to participate rate was 88% of all diplomate qualifiers and response rates for each phase were high. For graduates, once they had agreed to participate in the study (44%), response rates were extremely high (90-98%). As indicated, in Tables 4.2i) and 4.2ii) for both adult graduates and adult diplomates at least 40% of all eligible qualifiers were represented at each time point.

A reason for the higher proportion of eligible adult diplomate qualifiers, compared with graduate qualifiers, who agreed to participate and subsequently completed a questionnaire, is that diplomates were recruited in person by the researchers at the outset of the existing longitudinal P2K project. This provided researchers with the opportunity to gain the trust of the students, to assuage any concerns and generally persuade them to take part. This is in contrast to the graduate qualifiers, who were recruited by a letter from either their university or via the UKCC. This may have had at least two possible effects. Firstly, graduates were perhaps less motivated to participate in the study. Secondly, some of the addresses of the nurses held by the UKCC may have been out-of-date. Thirdly, recruiting via the UKCC also meant that it was not possible to recruit graduate qualifiers who had not (yet) registered with the UKCC.

Table 4.2ii: Response rates for adult graduate cohorts

Graduates	Eligible qualifiers	Agreed to participate	Completed questionnaire
At qualification - *Grad 1*	232	104	99
% of qualifiers		45%	43%
% of those who agreed to participate			95%
6 months after qualification - *Grad 2*	221	121	111
% of qualifiers		55%	50%
% of those who agreed to participate			92%
18 months after qualification - *Grad 3*	110	54	53
% of qualifiers		49%	48%
% of those who agreed to participate			98%
3 years after qualification - *Grad 4*	129	63	57
% of qualifiers		49%	44%
% of those who agreed to participate			90%

Finally, we need to give consideration to potential biases resulting from non-response and to the small size of the graduate cohorts. Relationships between at qualification demographic data and non-response at 6 months, 18 months and three years amongst diplomates suggest that certain groups of individuals are less likely to respond. (The study design meant these relationships could not be explored for graduate cohorts). Men, white Irish, Black, Asian and Chinese, those entering via an access course or DC test, and those aged 25-29 (at 3 years only) had lower questionnaire return rates. The impact of differential response rates however is small for the cohort as a whole as evidenced by the low explanatory power of non-response models that have sex, ethnic group, educational group and age as predictors. These models at best explain between 5% and 8% of the variation in non-response. We have taken the approach that it would not be unreasonable to assume that similar biases (systematic non-response) are common to both the diplomate and graduate cohorts and that these biases should cancel out during comparison (Kish, 1994).

We acknowledge that the size of the 18 months and 3 years graduate cohorts are small. This resulted from a need to fit the study design into a two-year timescale. As already discussed a series of graduate cohorts were recruited retrospectively. Past experience at the Nursing Research Unit has shown that recruitment rates fall below 50% when there is no face-to-face contact. The recruitment rates for the graduate cohorts are therefore close to expectation. We tried to recruit the total graduate population into the study so there was no way of boosting numbers by increasing the size of the sampling frame. Once recruited, questionnaire response rates were high. The usual caveats and cautionary interpretations should therefore apply whilst also recognising that the graduate responders represent the views of between 43% and 50% of their respective populations (Table 4.2ii).

4.5 COMPARING CAREERS: DATA ANALYSIS

There were two components to the analysis. The first component was the 'within' adult graduate cohorts comparisons, with data for each cohort being available as a cross-sectional survey with a retrospective element. This first comparison was necessary to determine the extent to which the adult graduate cohorts differed. The second component was the 'between' adult cohort comparisons, with differences between the degree cohorts and diplomate cohorts being examined at selected time points. Comparisons included the profile of each group, the proportion of each group working in nursing, the proportion of each group working in the NHS, particular pathways pursued (e.g. opting for particular specialties, reaching particular grades), details of non-nursing jobs, views on quality of working life in nursing and the NHS, continuing professional development activities completed and in progress, and plans for the future both within and outside nursing. The exploration of differences across sex or ethnic group were considered but not pursued because of the small numbers of men and respondents from ethnic minority groups.

4.5.1 Database construction

Procedures for linking data across questionnaires from the diplomate cohort have been developed with colleagues at SPSS-Market Research. Databases were created using the Quantum programming language. These databases are accessed using the survey analysis package Quanvert that acts as an interface with Quantum. Data were exported from Quanvert into other packages such as SAS (SAS Institute Inc. 1989) and SPSS for further analysis and statistical inference. SAS data manipulation procedures were used to create event history data sets and to extract summary information such as time spent in nursing and career paths.

4.5.2 Statistical inference

Data were collected either as a full census (adult graduates) or by multi-stage sampling (adult diplomates). The adult diplomates represent approximately one third of their population (1997-98). Statistical inference that compares two groups is of limited value when a large sample (diplomates) is compared with a census (graduates). The sampling error of the former is low, and by definition, non-existent for the latter. However, if we wish to generalise beyond the period of interest to some point in the future, then allowing for uncertainty by treating the data as a sample rather than a population, would be an appropriate, albeit conservative, position to adopt. We have taken this stance throughout the report since this allows us to make statements and interpretations in a more convincing way and with a surety that any differences that emerge are likely to be repeatable. Despite the small size of the graduate cohorts, differences did arise between graduates and diplomates that were statistically significant. The approach taken to reporting differences taken throughout this report is as follows: when significant

differences are part of a series of comparisons attention is also drawn to other differences that are in the same direction.

i) Weighting

The adult diplomate respondents have been weighted for unequal selection probabilities (probability of selection was derived from the number of colleges sampled from each region and the number of groups (qualifying sets) sampled from within each college). Consequently the diplomate-weighted frequencies, which have been rounded to integers, occasionally do not sum to the total. Percentages have been rounded to whole numbers; this means that occasionally totals do not sum to 100%. See Table 4.3 for weighted and unweighted figures.

Table 4.3: Base numbers for adult diplomates

	At qualification	At 6 months	At 18 months	At 3 years
Unweighted	1596	1331	1115	907
Weighted	1596.22	1338.72	1117.37	900.58

ii) Prospective and Retrospective Designs

We recognise that the two samples (i.e. degree and diploma samples) have been collected using different methods, the diplomate cohort prospectively and the degree cohorts retrospectively. Retrospectively generated cohorts may be more likely than longitudinal cohorts to be skewed towards those in nursing. However, the discussed strategies above are aimed to mitigate this. The diploma cohort is also larger than the degree cohorts. We recognise that the different sizes of the two cohorts may affect decisions taken to aggregate the graduate cohort data and this will need to be taken into account in the interpretation of differences. However, we have recruited a census of the graduates thus aiming for cohorts as large as possible in order to minimise this problem.

4.5.3 Presentation of findings

Data and findings in this report are presented in a variety of ways. Firstly, graduate cohorts are often combined to increase sample size when answering certain questions. Although the number of graduates increased approximately two-fold between 1998-99 and 2000-1, the compositions of each cohort are broadly similar. No linear trends in time-invariant demographic (sex, age, highest educational qualification) variables across the four graduate cohorts were apparent. A higher level of educational attainment might have been expected for the earlier cohorts because of a lower intake but this does not appear to be the case. This was considered justification for viewing all graduates as a homogenous group and allowed the combining of cohorts. Additionally, graduate cohorts were only

combined when time after qualification was not deemed to be an important factor. Finally, it should also be added that unless otherwise stated, the figures presented in this report include responses of at least 95% of each cohort (i.e. less than 5% 'not answered' at each item).

4.6 COMPARING COMPETENCIES: PROJECT DESIGN

The aim of Part B of this project was to compare the competencies of graduate nurses and diplomate nurses. To this end, a series of cross-sectional comparisons between data gathered about the competencies of each of these groups were conducted. However, in order to do this, three issues had to be resolved regarding the design of these comparisons:

i) Which instrument would be used for assessing the competencies of nurses for a valid comparison?
ii) Who should make such an assessment?
iii) At what time points after qualification should the assessment of competency be made?

4.6.1 The Nursing Competencies Questionnaire

A review of the literature on competencies in nursing indicated that there were practical and methodological problems of various kinds with all instruments designed to measure nursing competence. Quantitative measures, such as questionnaire-based and observation ratings scales have often been accused of being reductionist (Bartlett *et al.* 1998) while more qualitative measures, for example reflective approaches have been criticised for being too subjective, inconsistent and ambiguous (Bedford *et al.* 1993) and context specific (Bartlett *et al.* 1998). In short, no faultless 'off-the-shelf' instrument emerged for assessing competence that would have been ideal for this study. In discussion with Department of Health personnel it was agreed that a quantitative instrument would be most congruent with our aim of gaining information regarding the competencies of the highest number of nurses possible. Furthermore, it was agreed that the aim of this project was not to develop a new instrument, but to build on the best of what currently existed. The Nursing Competencies Questionnaire (NCQ) has been recommended as a tool worthy of more extensive research (Norman *et al*. 2000). The NCQ was considered in terms of the following factors to assess whether it was appropriate for this project:

i) Validity and reliability

Validity and reliability of competency assessment tools continues to be a problem (Norman *et al.* 2000). The NCQ has, however, been assessed for content validity and

internal consistency (Bartlett *et al.* 1998). Furthermore Norman *et al.* (2000) also found the tool to have good internal consistency.

ii) Compatibility with our definition of competence and breadth of instrument

The instrument measures competence in terms of eight constructs: leadership, professional development, assessment, planning, intervention, cognitive ability, social participation and ego strength. The NCQ, while focusing on operational competence, avoids a reductionist approach (see Chapter three, Section 3.2.4). The NCQ includes an assessment of psychological competencies as well as the ability to perform nursing tasks. The former, although not directly observable, are inferred from performance over the last six months. Furthermore, items are not considered in isolation as a measure of competence, but rather are grouped into a more complex unit of competence, i.e. a construct.

iii) Sensitivity to any differences in the competencies of the two groups of nurses

The work undertaken by Bartlett *et al.* (1998) suggests that the NCQ can discriminate between the competencies of graduates and diplomates up to one year after qualification. Furthermore, the NCQ has been used with nurses qualifying from all four branches (Norman *et al.* 2000).

Another strength of the NCQ is that it is quick and easy to complete and can be administered to a larger number of nurses than is possible by other assessment tools (Norman *et al.* 2000). For all the above reasons a decision was made to use the NCQ. It was recognised, however, that development work was needed for this project since nurses were being assessed at a greater length after qualification than hitherto.

4.6.2 Assessment of competencies by nurses and immediate line-managers

Four options were considered when deciding by whom the assessment of competencies of degree and diploma nurses should be made.

I) Researchers
II) Patients who have received care from graduate and diplomate nurses
III) Self assessment by individual graduate and diplomate nurses
IV) Immediate line-managers of individual graduate and diplomate nurses

Following discussion with Department of Health personnel, option I was rejected on the grounds that the time and resources necessary to undertake such a study were not available. Moreover, this approach would not necessarily provide more robust data than

those obtained by other options, given the problems of inter- and intra-rater reliability and the effect of observation on practice.

With regards assessment using patients' perceptions of nurses' competencies (option II), very little research has been carried out into the validity of such assessments, with the work of del Bueno (1993) being an exception. Certainly it is recognised by those who have worked in the field of competency assessment that this is an area where more research is needed (e.g. Bartlett *et al.* 1998, Norman *et al.* 2000). It was concluded, albeit regretfully, that the proposed project could not have easily encompassed obtaining patients' assessments. While others (e.g. Redfern and Norman 1999a, 1999b) have shown that patients are skilled observers of the care they receive, the logistics of including patients in the assessment appeared prohibitive within the proposed project. There is no widely accepted and validated instrument which patients could be asked to use in their assessment and to develop such an instrument was outside the remit of this project. However, we recognise that the patient perspective is an important component of assessment and suggest that obtaining this perspective be the subject of further work.

Options III and IV, however, were both pursued in the project. Studies have demonstrated that both graduate and diplomate nurses, and their immediate line- managers, can complete the NCQ (e.g. Bartlett *et al*. 1998, Norman *et al*. 2000). By immediate line-manager we mean the person to whom the individual graduate and diplomate nurses are responsible in the first instance. A nurse's immediate line- manager was chosen in preference to a more senior manager because completion of the NCQ requires awareness of the skills and knowledge of the nurses taking part in the project.

Despite self-assessment by individual nurses and assessment by immediate line-managers being the most attractive methods of assessing competencies, as with all methods of assessment these had some limitations. The link between self- and supervisory assessment has not always been clear. A meta-analysis, carried out by Harris and Schaubroeck (1988), found that there was only a moderate correlation between self-ratings and supervisor ratings. Reasons proffered for this have centred upon biases in self-reports of ability. Self-reports have been found to be both an underestimation and an overestimation of ability by different studies. For example, Arnold and Davey (1992) found that self-ratings of competencies in a non-nursing graduate sample were higher than supervisory ratings of competencies. Farh *et al.* (1991), however, found that in their sample of non-nursing workers, a modesty bias existed in that supervisory ratings were actually higher than self-ratings. Lindeman *et al.* (1995) looked at differences within their sample of non-nursing workers, concluding that underestimators tended to have lower

self-esteem, with overestimation being more typically associated with higher self-esteem, having higher work motivations and being male.

Although generally accepted to be a valid measure of employee ability, problems have also been found with supervisory appraisals. An insightful article by Lefkowitz (2000) complained of an assumption of 'rationality' when looking at supervisory appraisals without appreciation of what will bias a supervisor's rating of an employee. In examining the literature, he found many different routes through which bias is applied. These included, contextual influences (e.g. rater's mood, level of job satisfaction and work-related attitudes of rater/ratee and the purpose of the rating), a liking/disliking of ratee, and the degree of similarity between ratee and rater. Yet, he also discusses the way that many of these features actually validate appraisals. For example, if a supervisor comes from a similar background to the ratee, it may follow that the ratee's work performance is enhanced by this fact, due to a deeper shared understanding of certain issues, and thus, a highly positive appraisal may therefore be appropriate. Also a supervisor may like someone more if they perform to a satisfactory standard than if they performed below par.

Evidence does exist, however, that performance appraisal ratings from different rating groups are indeed comparable. Facteau and Craig (2001) used confirmatory factor analyses and item response theory to support this assertion. Also, by using a combination of methods for assessing competencies, any systematic bias in either the self-report of nurses or the appraisals of immediate line managers regarding nursing competencies can be identified and analysed separately. Therefore, given the foregoing, it was decided that both self- and supervisory appraisals of competencies of graduate and diplomate qualifiers were most appropriate.

4.6.3 Assessment of competencies at one, two and three years after qualification

On the basis of the literature review, discussion with others who have worked in the field and personnel at the Department of Health, the following time-points for assessment were selected: one year after qualification (qualified in 2000); two years after qualification (qualified in 1999), and three years after qualification (qualified in 1998).

One year is sufficiently long enough after qualification for nurses to have consolidated skills and for differences in competencies to emerge; moreover this time point affords a direct comparison with Bartlett *et al.*'s study (1998). The latter two time points will enable an assessment of whether differences that might be apparent at the earlier time

points subsequently disappear and whether differences that are not apparent at the earlier time points subsequently emerge. Furthermore, the NCQ has not been used to assess competencies beyond the one-year time point and so the project offered the opportunity to assess whether the tool has usefulness beyond this point and what modifications, if any, might be necessary to enable the NCQ to be used beyond this time point.

4.7 COMPARING COMPETENCIES: PILOT WORK AND THE DEVELOPMENT OF THE COMPETENCIES QUESTIONNAIRES

The purposes of the pilot work were twofold. The first was to identify any problems in gaining access to nurses and their managers and the second to assess the appropriateness of, and to develop, the NCQ. It was largely upon the outcomes of this pilot work that the main competency study was based.

4.7.1 Access

Two factors guided our decision about which NHS Trusts to approach for the pilot work. First, resource constraints necessitated that pilot work was undertaken locally. Secondly, we needed to maximise the opportunities of accessing three-year degree and diploma qualifiers. Thus, seven NHS Trusts within easy travelling distance, and with contracts with universities that ran three-year degree and three-year diploma courses were contacted.

A ‘top-down’ approach was used to access nurses and their managers so that the executive nurses were contacted in the first instance. Executive nurses of seven trusts (both acute and community) were sent a letter asking if they would be willing to assist the team with the research. A follow-up telephone call was made asking them to identify various managers whom we could contact to provide us with names of graduate and diplomate nurses. These executive nurses then either identified various managers for us to contact, or suggested we put our request to another individual in the Trust. Additional information was often requested at this stage. Two Trusts asked us to attend a meeting in order to further discuss the research, one with the head of paediatric nursing and one a ward managers’ forum. Two Trusts required completion of ethics forms and approval from their ethics committee. Once contact had been made with managers, they were asked to identify a maximum of two nurses who had qualified via the three-year diploma route, and two nurses who had qualified via the three-year degree route. Asking managers to identify a greater number of nurses would, it was believed, act as a deterrent to participation in the project.

Sixteen nurses were interviewed as part of the pilot work, all of whom had been qualified for up to three years. These nurses included six children's nurses (four qualified via diploma courses and two via four-year degree courses), four mental health nurses (three qualified via diploma courses and one via a four-year degree course), four adult branch nurses (all four qualified via diploma courses), and two learning disability nurses (one qualified via a diploma course and one qualified via a three-year degree course). Additionally, 13 ward managers/sisters were interviewed, the majority of whom were G grade. These managers included seven adult branch managers, and two managers from each of the other three branches. Where possible the individual nurse and their manager were seen together. In some instances (usually because staff were on nights/annual leave/sickness absence) arrangements for interview could be made only with the nurse or only with the manager. Interviews were scheduled for a time and place convenient to the respondent and were approximately 30-60 minutes in length. During each interview, the interviewees were asked to complete the NCQ and raise any queries over clarity of any of the items or the appropriateness of any item to their branch/speciality, and were asked what they thought the differences might be between degree qualified nurses and diploma qualified nurses in terms of competencies.

The pilot work revealed major problems for accessing the appropriate nurses. Most managers were uncertain via which route their nurses had qualified, i.e. whether it was a degree or diploma course, or whether the degree was a three- or four-year course or a 'top-up' degree. Just one nurse was identified who had qualified via the three-year degree route. Of the other graduate nurses identified, three had qualified via a four-year degree and one had completed a 'top-up' degree following the diploma. The eventual process of recruiting nurses into the study is addressed in Section 4.8.

4.7.2 Changes and additions to the NCQ

The NCQ had already undergone minor changes in the course of work by Norman *et al.* (2000) so that it would be appropriate for nurses from all four branches and midwives alike. In addition, a subsequent study (Jowett *et al.* 2001) added an additional 19 items to the NCQ that reflected competencies required of qualified nurses, which had been identified by the UKCC (2000) and not covered by existing items on the NCQ. It was this latter version of the NCQ that was used in the pilot work. Following the pilot work, two broad changes were made to the NCQ. Firstly, some items needed rephrasing to ensure clarity. Secondly, additional competency items were required and subsequently developed.

The pilot work in this study revealed that many nurses and nurse managers felt that some items in the questionnaire were too vague or ambiguous. Changes have been made to 20 of the items on the NCQ. In Appendix 4 the updated version of the NCQ used in this project is presented.

A combination of the pilot work and the literature review revealed that there may be some competencies, additional to those included in the NCQ, that graduates may be more likely to exercise than their diplomate colleagues. Chapter three identified some of the competencies that have been associated with 'graduateness'. These competencies, along with the additional items added by Jowett *et al.* (2001), were analysed as individual items. Analysis was also undertaken to consider whether some of these items make up two new constructs of 'awareness/use of research' and 'awareness/knowledge of practice and policy developments'. It should be noted that some of the items that make up these constructs are already included under other constructs in the NCQ. The items that are included under the two new constructs are given below:

"Awareness/use of research"

1. Apply findings from research to clinical practice as appropriate
2. Consult clinical nurse specialists appropriately to assist in the investigation of nursing problems
3. Initiate research studies and surveys on health-related topics
4. Adapt nursing practice in line with current research
5. Critically evaluate the evidence base that underpins safe nursing practice
6. Undertakes research in a competent manner (new)

"Awareness/knowledge of practice and policy developments"

1. Recognise legal responsibilities in nursing practice
2. Carry out nursing activities consistent with policies and procedures of employing organisation
3. Display knowledge about current political and social issues
4. Discuss opinions expressed in the press or general media
5. Informed about health and social policy (new)
6. Informed about new initiatives/developments in clinical care (new)
7. Informed about policies and procedures of employing organisation (new)

There is an acknowledged issue regarding developments of the NCQ. Before our changes, the NCQ was a 'validated' instrument for assessing nursing competencies with an assessed and acceptable reliability. In making alterations to items and adding new ones, the version we have used in this project is different from the previously 'validated' version and it could be argued that these changes affect the comparisons of our findings with those from other studies using the NCQ. The effect upon the existing NCQ should, however, be marginal, with the arguably greater clarity of this updated NCQ having beneficial effects. Face validity is likely to have improved as a result of the pilot work, with the greater clarity and relevance of items adding to content validity of the NCQ. Reliability is also likely to be improved as a result of the developments to the NCQ. Indeed, internal reliability across related items of the updated NCQ can be explored, as can the inter-rater reliability between nurse and manager assessment. Therefore a trade-off has been made between using a previously 'validated' instrument, and using a potentially more valid and reliable instrument instead.

4.7.3 Additional variables influencing competence

It is recognised that there are variables, other than type of course, which may impact on the scores an individual achieves on the NCQ. These variables may include differences between university attended, subsequent courses undertaken, career pathways, demographic background, previous qualifications, and length of time in nursing. These variables were all measured for moderation and controlling purposes during analyses.

4.8 COMPARING COMPETENCIES: DATA COLLECTION

4.8.1 Recruiting graduate and diplomate nurse cohorts

To account for the effect of university on competencies, we only recruited nurses for this part of the project who had qualified from universities that ran the three-year degree and the three-year diploma during the three relevant years. All the graduates from these colleges who had returned a 'careers' questionnaire for Part A of the project, except those qualifying in 2001, were sent a letter asking if they would be willing to take part in the 'competencies' part of the project. A copy of the NCQ was enclosed for them to complete.

For a comparison with graduates who qualified in 1998 we sampled our existing diplomate cohorts so that numbers would be similar to those for graduates. Details were as follows: a random sample of approximately 65% of the adult diplomate cohort, a random sample of approximately 50% of the mental health cohort; and a full census of

the child and learning disability cohorts. These diplomates were sent the NCQ and a letter inviting them to take part in the project. For comparison with the graduate cohorts qualifying in 1999 and 2000, new diplomate cohorts were required. Lists of one and two-year qualified diplomate nurses were compiled via communication with universities offering three-year degree and diploma courses. From these lists the following random samples were drawn. For 1999 we took a 23% sample of adult diplomates, a 50% sample of child diplomates, a 40% sample of mental health diplomates and a census of learning disability diplomates. For 2000 we took a 23% sample of adult diplomates, a 50% sample of child diplomates, a 50% sample of mental health diplomates and a census of learning disability diplomates. Sampling by these processes produced a total of 782 diplomates. We held addresses for those who were members of our existing diplomate cohort, but the 1999 and 2000 diplomates had to be contacted via the UKCC. Those for whom the UKCC had an address were sent, via the UKCC, the NCQ and a letter inviting them to take part. A contact address was found for 620 of the 782 diplomates. All non-respondents were sent a further NCQ and letter one month after the initial mailing. Response rates are shown in Table 4.4.

4.8.2 Recruiting a manager cohort

Recruiting a cohort of line-managers involved gaining approval from a Multi-Centre Research Ethics Committee. Once obtained, immediate line managers were recruited into the study via nurses who had returned the NCQ. These nurses were sent a letter inviting them to forward on a pack to their immediate line manager. This pack contained a letter inviting the supervisor/manager to take part in the study and the NCQ for rating the competencies of the nurse who forwarded the pack to them. The process of nurses identifying and forwarding on an NCQ to an immediate line manager was selected as a recruitment strategy over alternatives to enhance response rates. The rationale for this approach was that nurses may feel that this strategy was less intrusive if they were given a more participative role in the project, i.e. identifying and recruiting their line manager, than if the manager was contacted directly by the researcher. It was hoped that this might lead to an increased co-operation with this part of the study. Furthermore, it was anticipated that managers would be more likely to complete an NCQ if delivered via a member of staff and not direct from the research team as it would be less of a 'cold call'. Letters used for recruiting nurses and managers are presented in Appendix 2B.

4.9 COMPARING COMPETENCIES: RESPONSE RATES

Response rates for Part B of the project are presented in Table 4.4. Graduate self-report response was fairly high (66%), probably due to the fact that they had all already been recruited into the careers study and had previously returned a careers questionnaire.

Diplomate self-report response was lower (30%), which can be attributed to the 'cold call' recruitment method of about two-thirds of the cohort. Line-manager response was also fairly low for both graduate and diplomate groups (27-36%). However, this is perhaps understandable considering the convoluted method which had to be used to recruit the line-managers (see Section 4.8.2). Nevertheless, such a response rate is fairly common in studies using a postal questionnaire design. Additionally, further analyses indicated no substantial demographical differences (sex, age, educational qualifications, type of course, year of qualification, branch, grade) and no differences in self-rated competence (Wilks' lambda = 1.964, F = 1.274, p = .244) between nurses for whom a questionnaire was received from their line-manager and nurses for whom no questionnaire was received.

Table 4.4: Competency response rates

Response rates	Nurse self-report	Line-managers
Diplomates		
Number sent	620	188
Number returned	188	51
Percentage returned	30%	27%
Graduates		
Number sent	253	166
Number returned	166	60
Percentage returned	66%	36%
Total		
Number sent	873	354
Number returned	354	111
Percentage returned	41%	31%

4.10 COMPARING COMPETENCIES: DATA ANALYSIS

The design of this part of the project enabled the following comparisons to be made for each of the time points specified above:

1) Comparison of self-assessments made by graduate and diplomate nurses
2) Comparison of line-managers' assessments of graduate and diplomate nurses
3) A comparison of the line managers' assessment of nurses with that of the nurses' assessment of themselves

There are relatively few mental health, learning disability, and child branch graduates and it is not possible therefore to obtain sufficient numbers to enable statistically valid comparisons of graduates and diplomates from these branches. The numbers for the adult branch were on the low side so a decision was taken to combine data from all the branches. This combined sample was analysed using multivariate methods, with branch investigated as a covariate.

As mentioned, the NCQ measures competence in terms of eight constructs: leadership, professional development, assessment, planning, intervention, cognitive ability, social participation and ego strength. For each NCQ construct, a number of items have been developed which tap that construct (see Appendix 4). Thus, the score for each construct is determined by combining the scores of the underlying items (calculating the mean). The added constructs of 'awareness/use of research' and 'awareness/knowledge of practice and policy developments' (see section 4.7.2) are also calculated in this way. However, the additional items as developed by Jowett *et al.* (2001) are analysed individually as there is no theoretical basis upon which they can be combined or integrated with the other items.

For 1) – 3) above, statistical methods included multivariate analysis of covariance (MANCOVA) to compare mean scores for all the eight constructs of the NCQ simultaneously and univariate analysis of covariance (AOC) to compare mean scores for each construct. Variability in profile data for nurses (age and sex of respondent, branch, grade, length of time in job and educational background) and line-managers (sex, grade, length of time in job and their route to qualification) was accounted for in the statistical model where this was feasible. Each variable was entered into the analysis of variance to assess any independent or interactive effects on competence scores. This enabled us to isolate the effect of being either a graduate or a diplomate upon competence by controlling for the effects of potentially related variables.

CHAPTER 5:
DIVERSITY

Research question 1: How do graduate nurses compare with diplomate nurses in terms of diversity within the workforce?

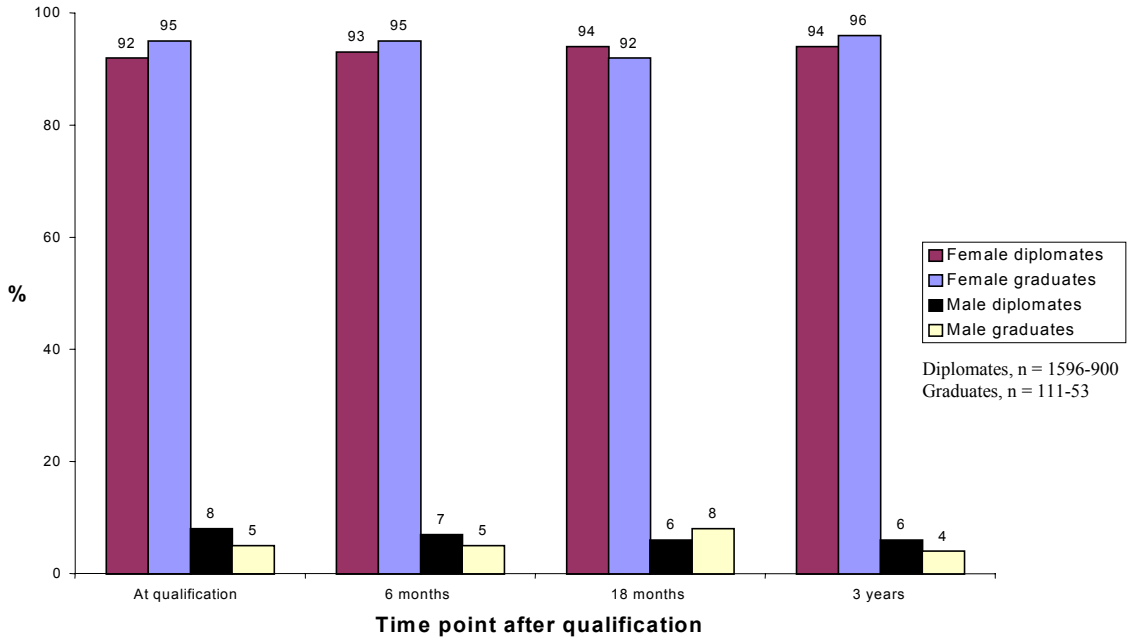
In order to ascertain differences or similarities in terms of diversity between graduate nurses and diplomate nurses, the two groups were compared across a number of different demographic factors at four different time points after qualification. The demographic factors were sex, age, ethnic group, marital status, pre-course childcare experiences, pre-course employment and reasons for starting degree/diploma and their particular branch. The time points were at qualification, six months after qualification, 18 months after qualification and three years after qualification. As the comparisons are between a longitudinal data set and several cross-sectional data sets, the reader should be aware of two issues when interpreting some of the results. Firstly, as a single cohort, it is possible that changes in the diplomate diversity over time may only represent changes in that particular cohort. Secondly, as four separate cohorts, changes or trends in graduate diversity over the time points should be viewed with caution.

5.1 SEX

Percentages of men and women qualifiers from degree and diploma courses are presented in Figure 5a. Comparisons were made across all of the time points and none differed significantly. Both graduate and diplomate groups were comprised predominantly of women qualifiers (92-96%), with men forming only a small proportion in each (4-8%). This level of diversity appeared to remain fairly constant in the years after qualification. As such, the sex of nurses entering the workforce does not differ according to route taken towards qualification.

In an earlier study it was shown that there has been an increase in the proportion of male qualifiers with the move from traditional to the diploma course (Robinson *et al.* 2001) but the current study did not indicate that this trend had continued with the introduction of three-year graduate courses.

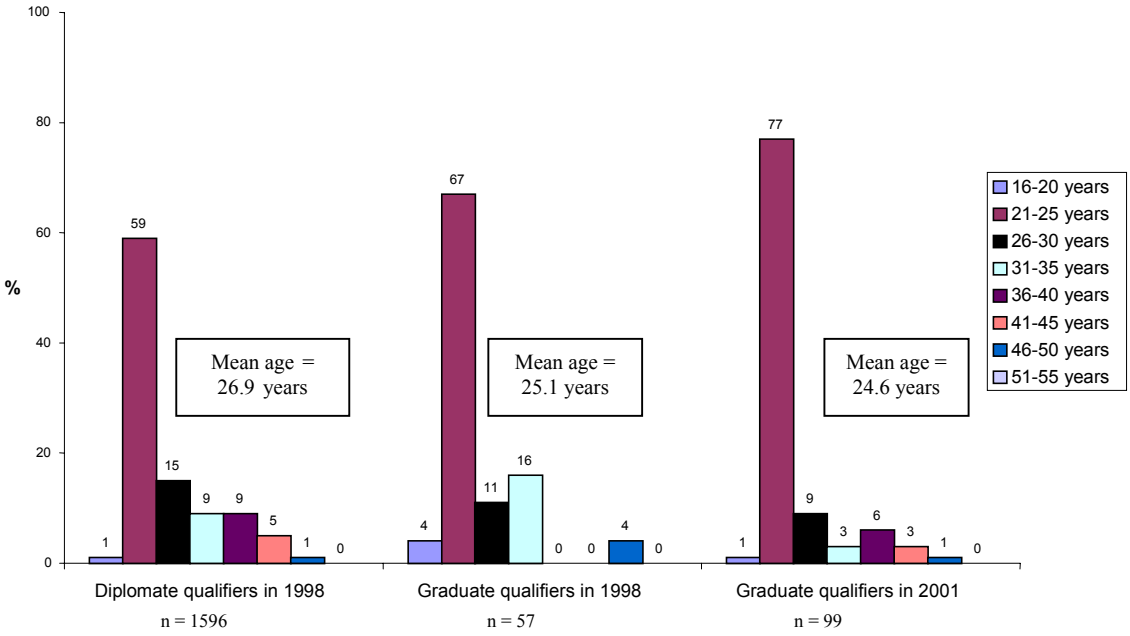
Figure 5a: Comparison of sex at qualification and over time



5.2 AGE

Comparisons of ages of graduates and diplomates qualified were made between graduates who qualified in both 2001 and 1998, and diplomates who qualified in 1998. These years were chosen as they either offered a baseline measure for which the 'age at qualification' values were available or it was possible to calculate them from the data collected. These comparisons revealed that qualifiers from both groups were mostly from the 21-25 year age group (i.e. the mode was very similar for both groups). However, graduates were found to be approximately two years younger than their diplomate counterparts when comparing means. As such, graduate nurses at qualification had a mean age of 25 years and diplomate nurses at qualification had a mean age of 27 years. It appeared that the group of diplomate qualifiers included a greater proportion of individuals outside the 21-25 year age group than in either graduate group. When independent groups t-tests were applied, the mean age of the diplomate group was found to differ significantly from that for the graduate qualifiers in 1998 ($p = .05$) and the graduate qualifiers in 2001 ($p<.001$). Degree courses seem therefore to attract younger students than diploma courses. This information is illustrated in Figure 5b.

Figure 5b: Comparison of age at qualification



5.3 ETHNIC GROUP

No consistent differences were recorded between graduates and diplomates in terms of ethnic origin. The graduate groups at qualification and at six months after qualification were largely similar to the diploma group in terms of ethnic composition. As such, the composition of the groups were 95-96% of White origin, 1-4% of Asian origin, 0-2% of Black origin, and 1-2% of 'other' ethnic origin. However, the graduate groups after 18 months and three years had different compositions. Graduates 18 months after qualification were entirely white, without any other ethnic representation (53). On the other hand, graduates three years after qualification were 89% (51) of White origin, 7% (4) of Black origin, 2% (1) of Asian origin, and 2% (1) of 'other' ethnic origin. The low number of graduates in some cohorts makes these findings difficult to interpret with great certainty. What can be said is that no definite trend emerged regarding differences in ethnic diversity between graduates and diplomates. However, one positive finding was that no ethnic group was leaving nursing in any systematic way after qualification although, as noted in section 4.4.1, members of ethnic minority groups were less likely to return the questionnaire than their white counterparts. A table of all data on the ethnic origins of graduate and diplomate qualifiers, including raw scores, is presented in Appendix 5.

5.4 PARTNER STATUS

A clear trend was evident between graduate and diplomate groups over having a partner. As indicated in Figures 5c and 5d, graduates had a far higher ratio of individuals without partners to individuals with partners across all time points in comparison with diplomates (24-11% differences in proportions across the time points). Contrastingly, diplomate groups contained far higher proportions of individuals with partners and smaller proportions of those without. These differences were found to be significant at qualification ($p < .001$), at 6 months ($p < .001$) and at 3 years after qualification ($p = .021$). These differences are most likely to be due to the two-year average age difference between graduates and diplomates.

Figure 5c: Partner status of diplomates

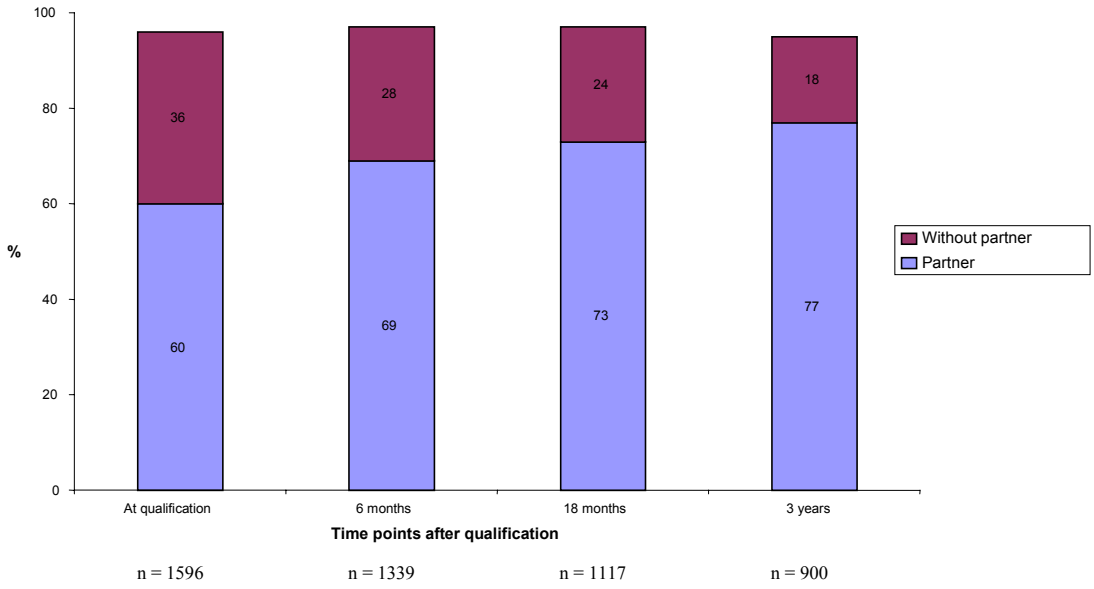
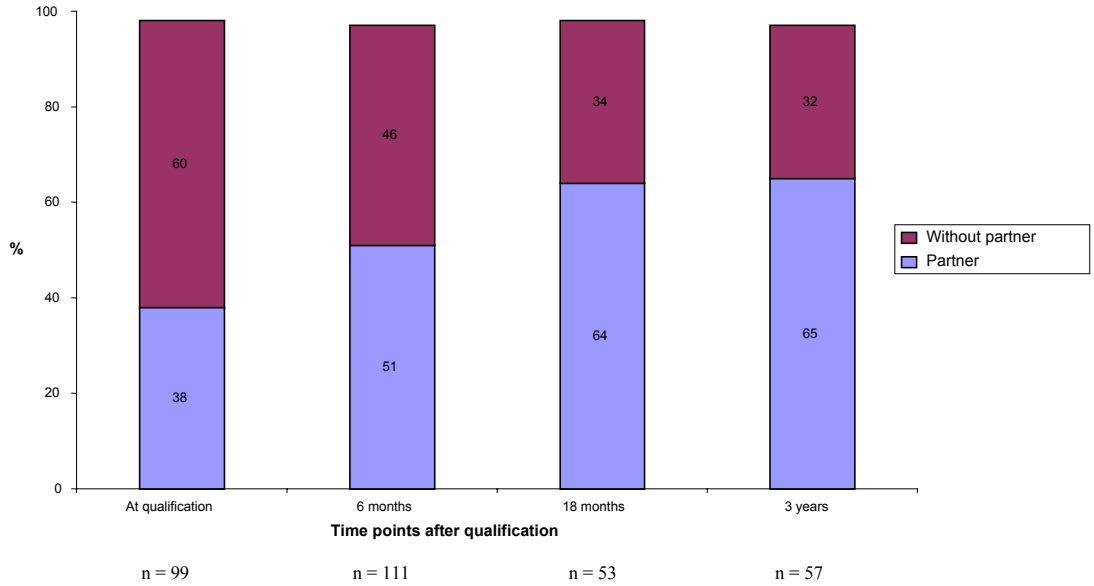


Figure 5d: Partner status of graduates



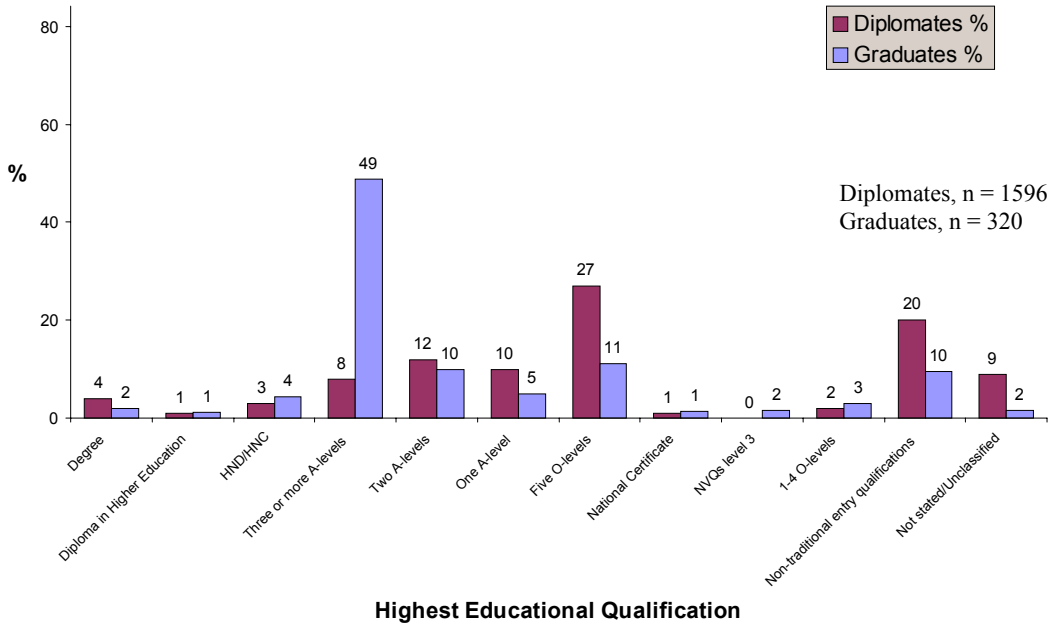
Perhaps more noticeable was the difference in terms of marital status of graduates. A higher proportion of diplomates were married than graduates both at qualification (24%, 383 vs 10%, 10) and at six months after qualification (26%, 348 vs 14%, 15) and even at three years after qualification, which were groups of a younger average age than this graduate cohort (19%, 11). Furthermore diplomates were far more likely to get married over the first three years after qualification, with a 17% increase during this time. The proportion of graduates who married over the three years was comparatively quite small, with only a 9% increase between the cohort at qualification and the cohort at three years after qualification. No trends emerged regarding the proportion of divorced, widowed, or married but separated individuals between the two groups, with neither group ever representing more than 5% of responses.

5.5 HIGHEST EDUCATIONAL QUALIFICATION

Looking at diplomate and graduate cohorts as two groups, a large difference was found over the highest educational qualifications obtained prior to starting the nursing course. As shown in Figure 5e, graduates have a higher level of previous educational qualifications than diplomates. Far more graduates (49%) were found to have three or more A-levels, compared with diplomates (8%). In contrast, the most common highest educational qualification for diplomates was five O-levels or equivalent (27%). While diplomates and graduates were equally likely to have entered via an Access course (10%), the fact that diplomates could enter via the UKCC DC test meant that the number entering

the diploma course without formal academic qualifications was higher at 20%. All of these differences were found to be significant ($p < .001$).

Figure 5e: Highest educational qualifications



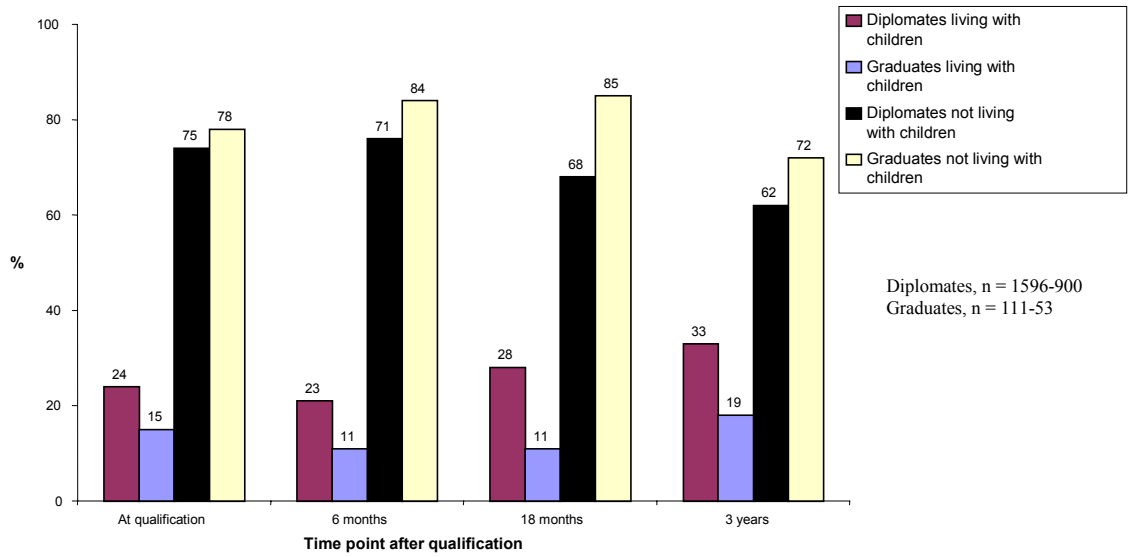
5.6 CHILDREN AND CHILDCARE EXPERIENCES

Across the four time points after qualification, graduates compared with diplomates, were found to be less likely to have either children of their own or their partner's children living with them. This difference between graduates and diplomates ranged from 9% to 17 % across the time points, as Figure 5f indicates, and was found to be significant from six months onwards (six months $p = .002$, 18 months $p = .006$, 3 years $p = .050$). However, these findings are likely to be a result of the age differences between graduates and diplomates. Three years after qualification, a similar proportion of graduates (18%, 10) had children living with them as diplomates of a similar age (21%, 266), i.e. the diplomates at six months. Looking at common themes between the groups, it is perhaps unsurprising that, for both groups, there are more instances of children living with respondents at three years after qualification than at qualification. However, a non-linear trend was apparent (bearing in mind that graduates are different cohorts), with figures for both groups going down at six months. It is unclear why this should be the case as

diplomate non-response at six months was unrelated to having children living with them, i.e. it is not due to parents dropping out of the study.

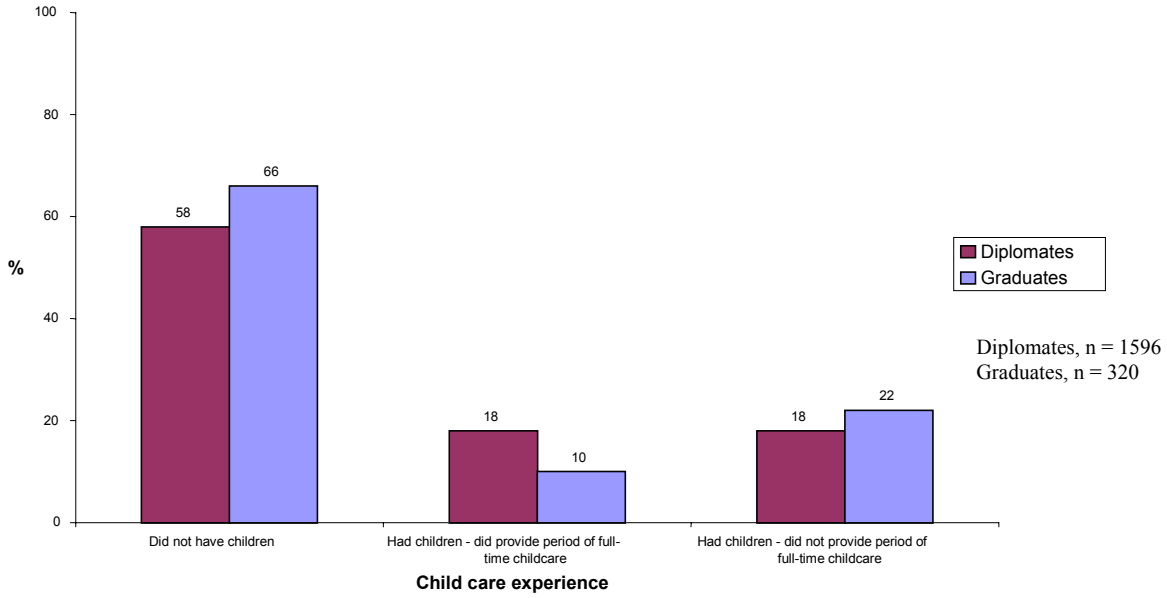
Slight differences existed between graduates and diplomates regarding their pre-course childcare experiences, as shown in Figure 5g. The majority of both graduates and diplomates did not have children by the time they started their respective courses. Of those who had children, then diplomates were more likely than graduates to have spent a period of time in full-time childcare (50% vs 32% p = .001).

Figure 5f: Children living with respondents



A further finding came from combining this data with partner status data, namely that there were no real differences between the proportion of single parent qualifiers in either the diplomate or graduate cohorts (0-4% of cohort).

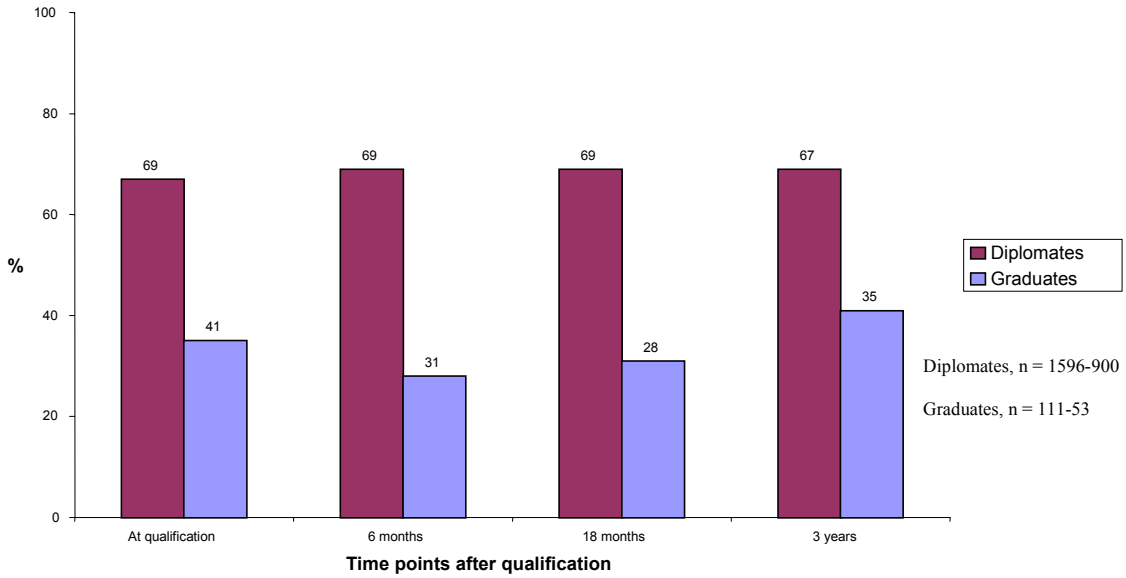
Figure 5g: Pre-course childcare experiences



5.7 PREVIOUS EMPLOYMENT

There was a large difference between the previous employment experience of degree qualifiers and diploma qualifiers. Previous employment was defined in this study as employment that was pre-course, full-time and not during school/college holidays.

Figure 5h: Full-time paid employment experience

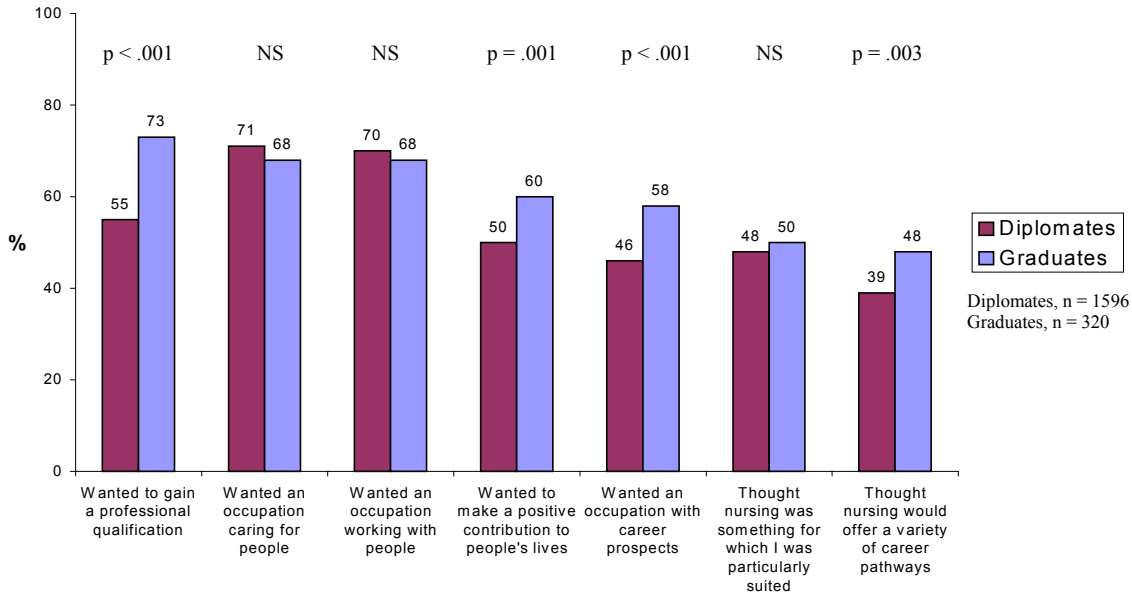


As indicated in Figure 5h, there were about as many diplomates who had worked prior to their course as graduates who had not worked previously (59-68% of graduates who had not worked and 67-69% of diplomates who had). These differences between the two groups were found to be highly significant ($p < .001$) As such, for the majority of graduates, the job they started initially after qualifying from their degree was their first ever job. Conversely, the majority of diplomates would have full-time work experience. As with differences in marital status, this difference may be due to the difference in age between the groups, with graduates starting the course at an earlier age than diplomates or the different length of time spent in education.

5.8 REASONS FOR STARTING NURSING DEGREE/DIPLOMA COURSE

Both the graduates and diplomates were presented with a list of items representing possible reasons for starting their course and asked to assign one of the following ratings to each of the reasons; very important, quite important, not very important, not at all important, and not applicable to decision. These items were developed through the pilot work and analysis of the nursing literature. In making comparisons between graduates and diplomates over their reasons for starting the degree or diploma course respectively, reasons that were considered very important were found to be the same for both courses. However, the emphasis that graduates and diplomates placed upon each aspect often differed as illustrated in Figure 5i. Figures are only presented for those reasons for which at least one third of respondents rated as very important.

Figure 5i: Reasons rated as very important to decision to start nursing course



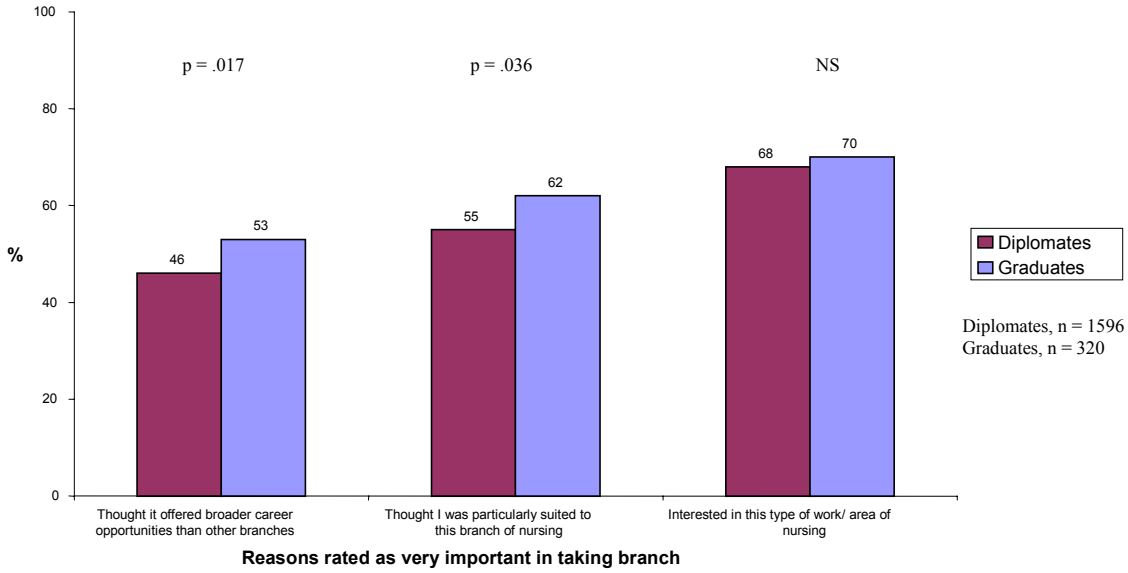
Receiving a professional qualification was the highest rated reason for graduates in starting their degree course. However, this was only the third highest rated reason for diplomates, with 19% fewer diplomates rating receiving a professional qualification as very important. Graduates also rated three other reasons consistently higher than diplomates (9-12% higher): wanting an occupation with career prospects, thinking that nursing would offer a variety of career pathways, and wanting to make a positive contribution to people's lives. The reasons discussed here, with exception of making a positive contribution to people's lives, seem to be related to career development, and the findings perhaps suggest that individuals who start degree courses are more likely to do so for reasons related to their careers or are more career-minded than those who start diploma courses. All of these differences were highly significant. Additionally, 77% of graduates reported that wanting a degree level qualification and not a diploma level qualification was a very important reason for choosing a degree course.

A further interesting finding was that diplomates were more likely than graduates to report advice from a careers teacher or officer as being not applicable to them starting their nursing course; a difference that could be attributable to several possible reasons. Diplomates were more likely to have been working prior to starting the course and thus had less access to careers teachers and officers, unlike graduates who entered the course straight from school or college. Additionally degree students may have been more disposed to seek pre-course careers advice, or career advisors been more likely to suggest a degree course to prospective nurses than a diploma course.

5.9 REASONS FOR TAKING ADULT BRANCH

Three reasons were consistently highlighted as being very important in the decision over which branch to take for both graduates and diplomates (see Figure 5j below).

Figure 5j: Reasons rated as very important to decision to take branch



These reasons were, in order of highest frequency, an interest in that type of work or area of nursing, being particularly suited to that particular branch, and believing that that branch offered broader career opportunities than other branches. A slightly higher proportion of graduates gave these reasons than diplomates (2-7% difference). For the latter two reasons these differences were statistically significant.

Both graduates and diplomates heavily emphasised several reasons as being not applicable to their decision to choosing the adult branch. Most of these reasons refer to the fact that the large majority of both graduates and diplomates were not forced into choosing their branch. Where graduates and diplomates did differ was over the effects of the experiences of the Common Foundation Programme (CFP). While 88-90% of diplomates reported that experiences during the CFP were unrelated to their decision over which branch to take, only 68-73% of graduates admitted the same. Instead a number of graduates reported a level of importance to enjoying aspects of a branch experienced during the CFP in determining their choice of branch. Such findings suggest that degree courses allow students to make a later decision about which branch to choose than diploma courses.

5.10 SUMMARY

A summary of the main findings when graduates and diplomates were compared in terms of diversity:

- The profile of the graduate and diplomate cohorts in terms of sex and ethnic origins was very similar
- In comparison to diplomates, graduates were significantly:
    - younger (two years younger on average)
    - less likely to have a partner and to get married
    - less likely to have children living with them
    - less likely to have pre-course childcare experience
    - less likely to have pre-course full-time employment experience
- On average, graduate qualifiers were significantly more likely to have started their course with a 'higher' highest educational qualification than diplomates, indicating an increased amount of time spent in education and perhaps suggesting greater academic ability
- Graduate qualifiers were significantly less likely to have entered the course without formal academic qualifications
- Graduates were significantly more likely than diplomates to start their course for career-related reasons, suggesting that they are more career-minded when starting their course

CHAPTER 6:
CAREER PLANS AND PREFERENCES

Research question 2: How do degree and diploma nurses differ in their career plans at qualification and thereafter?

In this chapter comparisons are made between graduates and diplomates on plans immediately after qualification, certainty of job plans, orientation towards working in nursing, orientation towards working in the NHS, orientation towards working in particular specialties, plans for grade and plans to work full-time. These comparisons also contribute to answering the last research question for Part A of the project regarding retention.

6.1 PLANS IMMEDIATELY AFTER QUALIFYING

In the questionnaire sent at qualification, graduates and diplomates were asked about their plans immediately after qualifying (see Table 6.1). At qualification nearly all of the graduate (92%, 91) and diplomate respondents (89%, 1418) intended to work full-time in jobs in the UK (with or without part-time study). Graduates (22%, 22) were more likely than diplomates (8%, 135) to plan to undertake part-time studying with a full-time job. Just a small proportion of each cohort did not intend to undertake paid employment in the UK immediately after qualifying (graduates 1%, 1 vs diplomates 2%, 37). The majority of graduates and diplomates intended to obtain a nursing job in the UK immediately after qualifying (graduates 98%, 97 vs diplomates 95%, 1450).

Table 6.1: Plans immediately after qualification

Plans	Dips (n=1596) %	Grads (n=99) %
Full-time paid employment in the UK	80	70
Full-time paid employment in the UK and part-time study	8	22
Part-time paid employment in the UK and part-time study	1	1
Part-time paid employment in the UK	5	5
Part-time paid employment in the UK and full-time study	1	1
Not to take up paid employment in the UK	2	1
No answer	2	0
Total	100	100

6.2 CERTAINTY OF JOB PLANS

Graduates and diplomates were asked, in the questionnaires sent at qualification, at six months and at 18 months after qualification, about the certainty of their job plans for various points in time after qualification.

6.2.1 Certainty of plans at qualification

At qualification, respondents were asked about plans for 18 months and three years after qualification. Table 6.2 shows the certainty of plans of the two groups at these time points. A higher proportion of graduates, than diplomates, had an idea, whether definite, reasonably clear or vague, of the job they would be holding at both time points. Looking ahead to 18 months, 90% (89) of graduates and 80% (1272) of diplomates had an idea of their plans, while for the three-year time point the respective figures were 67% (68) and 61% (969). Comparing certainty of plans at 18 months after qualification, with those for three years after qualification, shows a reduction in the proportion of both groups with a definite, reasonably clear or vague idea of the job in which they hoped to be working and a rise in the proportion of those with no idea of the job in which they hoped to be working. Other differences were the greater proportion of diplomates than graduates, at both time points, who had no idea about such plans.

Table 6.2: At qualification questionnaire: Certainty of job hope to be working in at 18 months and 3 years after qualification

	18 months		3 years	
Degree of certainty	Dips (n=1596) %	Grads (n=99) %	Dips (n=1596) %	Grads (n=99) %
I have a definite job/ position in which I hope to be working	20	21	15	17
I have a reasonably clear idea about the job/ position in which I hope to be working	37	48	25	30
I have a vague idea about the job/ position in which I hope to be working	23	20	20	21
I have no idea about the job/ position in which I hope to be working	18	8	37	26
I do not plan to be in paid employment	1	1	1	0
Not stated	1	1	2	5
Total	100	100	100	100

6.2.2 Certainty of plans at six months after qualification

In the questionnaires sent at six months after qualification, respondents were asked about certainty of job plans for 18 months and three-and-a-half years after qualification (Table 6.3). A similar proportion of graduates (79%, 88) and diplomates (80%, 1075) had some idea (definite, reasonable or vague) of the job in which they would be working at 18 months after qualification. A higher proportion of graduates than diplomates had some idea of plans at three-and-a-half years after qualifying (64%, 71 graduates vs 55%, 734 diplomates). For both cohorts there was a reduction in the proportion of respondents with an idea of the job in which they hoped to be working at three-and-a-half years after qualification, when compared with responses for 18 months after qualification. This fall was particularly marked for diplomates, down from 80% (1075) to 55% (734). Diplomates were more likely than graduates to indicate that they had no idea of the job in which they hoped to be working at both time points.

Table 6.3: Six months after qualification questionnaire: Certainty of job hope to be working in at 18 months and 3 years after qualification

	18 months		3.5 years	
	Dips (n=1339)	Grads (n=111)	Dips (n=1339)	Grads (n=111)
Degree of certainty	%	%	%	%
I have a definite job/position in which I hope to be working	23	32	12	14
I have a reasonably clear idea about the job/ position in which I hope to be working	37	34	23	28
I have a vague idea about the job/ position in which I hope to be working	20	13	20	23
I have no idea about the job/ position in which I hope to be working	18	14	43	26
I do not plan to be in paid employment	1	1	0	0
Not stated	1	6	2	10
Total	100	100	100	100

6.2.3 Certainty of plans at 18 months after qualification

In the questionnaire sent at 18 months after qualification, respondents were asked about their plans at three years after qualification (Table 6.4). A similar proportion of graduates (81%, 43) and diplomates (78%, 871) had a definite, reasonably clear or vague idea of their plans.

Table 6.4: 18 months after qualification questionnaire: Certainty of job hope to be working in at 3 years after qualification

	3 years	
	Dips (n=1117)	Grads (n=53)
Degree of certainty	%	%
I have a definite job/ position in which I hope to be working	25	17
I have a reasonably clear idea about the job/ position in which I hope to be working	35	49
I have a vague idea about the job/ position in which I hope to be working	19	15
I have no idea about the job/ position in which I hope to be working	19	15
I do not plan to be in paid employment	1	4
Not stated	1	0
Total	100	100

6.2.4 Overview of certainty of plans

Looking back at tables 6.2, 6.3 and 6.4 the following pattern emerges in relation to certainty of plans. Five time-points were investigated: at qualification looking ahead to 18 months and three years after qualification, at six months looking ahead to 18 months and 3.5 years after qualification, and at 18 months looking ahead to three years after qualification. At each of these time-points the largest group of both diplomates and graduates said that they had a reasonably clear idea about the job/position in which they hoped to be working. The further ahead respondents were asked to consider, the greater the proportion who said that they had no idea. At one time-point, six months looking ahead to 18 months after qualification, 1% more diplomates than graduates had some idea about the job/position in which they hoped to be working but at the other four time-points graduates were more likely than diplomates to have some idea (between 3% and 11% more). This difference was statistically significant for one time-point, at qualification looking ahead to 18 months, (p=0.013).

6.3 ORIENTATION TOWARDS NURSING: SPECIFYING A NURSING JOB IN PLANS FOR FUTURE TIME POINTS

Orientation towards working in nursing was investigated in two ways. First, all those who had expressed some degree of certainty about their plans for specified time points were asked to provide as many details about this job as they were able. Analysis of these data provided information about the proportion who hoped to be holding a nursing job. These data are presented in this section. Secondly, all respondents, whether certain or not of the job they hoped to be holding at specific time points were asked about their likelihood of working in nursing in the UK. These data are presented in Section 6.4. In

the questionnaire sent to respondents who had been qualified for three years, those who thought it unlikely that they would be nursing were asked to give their reasons; these data are also in Section 6.4.

Our interest was in the proportion of respondents who planned to stay in nursing or in work that used nursing skills, for example health promotion or bereavement counselling. Pilot work showed that of those who had plans in relation to the latter, some did not regard this work as nursing and so said no when asked about remaining in nursing. Consequently in these questions the phrase nursing, health and social care was used in order not to underestimate the proportion planning to remain in nursing and/or work that used nursing skills. Analysis of plans for specific posts showed that all but a handful were based in nursing rather than in health or social care. For brevity, 'nursing' is used in this report rather than 'nursing, health and social care'.

Table 6.5 shows responses at each data collection point (column headings) for each time point in the future to which respondents were asked to look forward (row headings). It should be noted that the percentages in the table are calculated as a proportion of those respondents who indicated some degree of certainty about their plans and not the cohort as a whole. Underneath the table the number of respondents who had plans, for each time point within each questionnaire, are given. Figures in Table 6.5 show that for each data collection point, and for both graduates and diplomates, the majority of those who had plans intended to work in nursing.

Table 6.5: Plans to work in nursing, health or social care

	Point at which asked:					
	Qualification		6 months		18 months	
Looking ahead to:	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
18 months	96	97	95	94	n/a	n/a
3 years	91	97	n/a	n/a	98	98
3.5 years	n/a	n/a	92	90	n/a	n/a

At qualification questionnaire. Plans for 18 months: grads n=89, dips n=1272. Plans for three years: grads n=68, dips n=969

6 months questionnaire. Plans for 18 months: grads n=88, dips n=1075. Plans for three & half years: grads n=71, dips n=734

18 months questionnaire. Plans for three years: grads n=43, dips n=871

6.4 ORIENTATION TOWARDS NURSING: LIKELIHOOD OF WORKING IN NURSING

All respondents in each questionnaire were asked their likelihood of working in nursing in the UK, at various time points after qualification. Five options were given for each time point; very likely, quite likely, unlikely, very unlikely and unable to say at this stage.

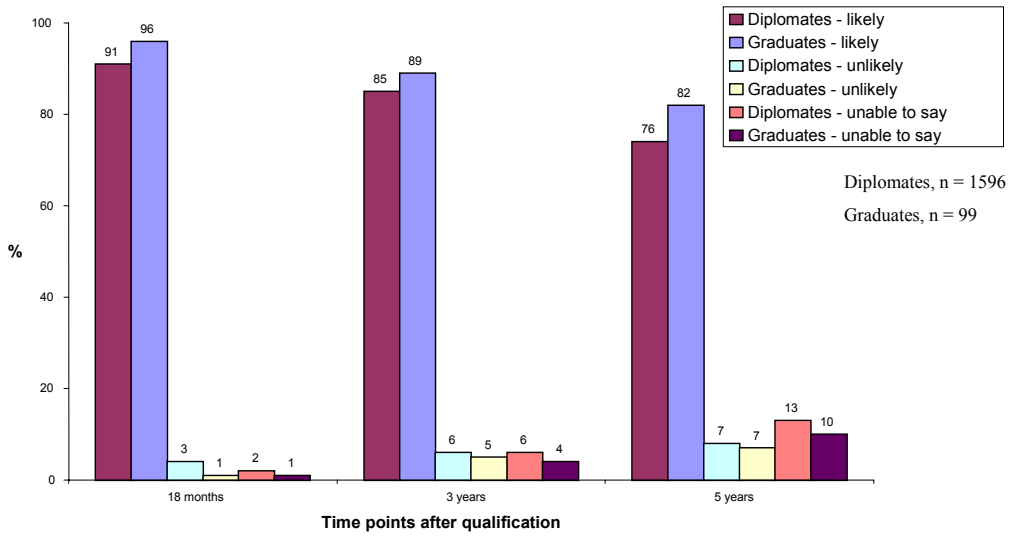
Responses for very and quite likely have been combined in this section as have responses to unlikely and very unlikely. It should be noted that for both graduates and diplomates, findings are likely to be skewed towards being likely to be working in nursing, since those who have not responded to the questionnaires are likely to be those who have left nursing.

6.4.1 At qualification questionnaire

Figure 6a shows responses to the question when asked at qualification. For both graduates and diplomates, the majority of respondents thought it likely that they would be working in nursing at each of the time points. The proportion who thought this likely decreased, however, the further into the future they were asked to consider.

For both graduates and diplomates, and at each time point, relatively few respondents indicated that they were not likely to be working in nursing. Predictably, the proportion of respondents indicating 'unable to say at this stage' rose the further into the future they were asked to consider. Interestingly, a slightly higher proportion of graduates than diplomates indicated that they thought it likely that they would be working in nursing at each of the time points.

Figure 6a: At qualification questionnaire: Plans to work in nursing in the UK at various time points after qualification

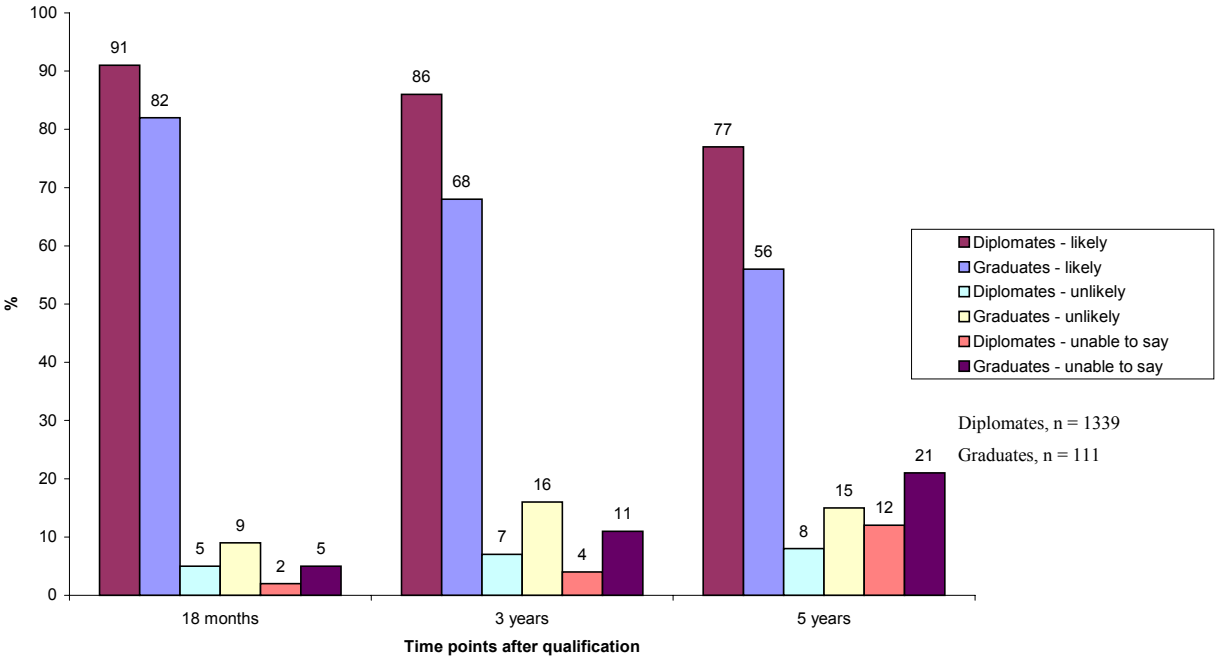


6.4.2 Six months after qualification questionnaire

In the questionnaire sent at six months after qualification, respondents were asked how likely they thought it was that they would be working in nursing at three time points.

Figure 6b shows that, for both graduates and diplomates, a majority of respondents thought it likely that they would be working in nursing at each of the time points.

Figure 6b: Six months after qualification questionnaire: Plans to work in nursing in the UK at various time points after qualification

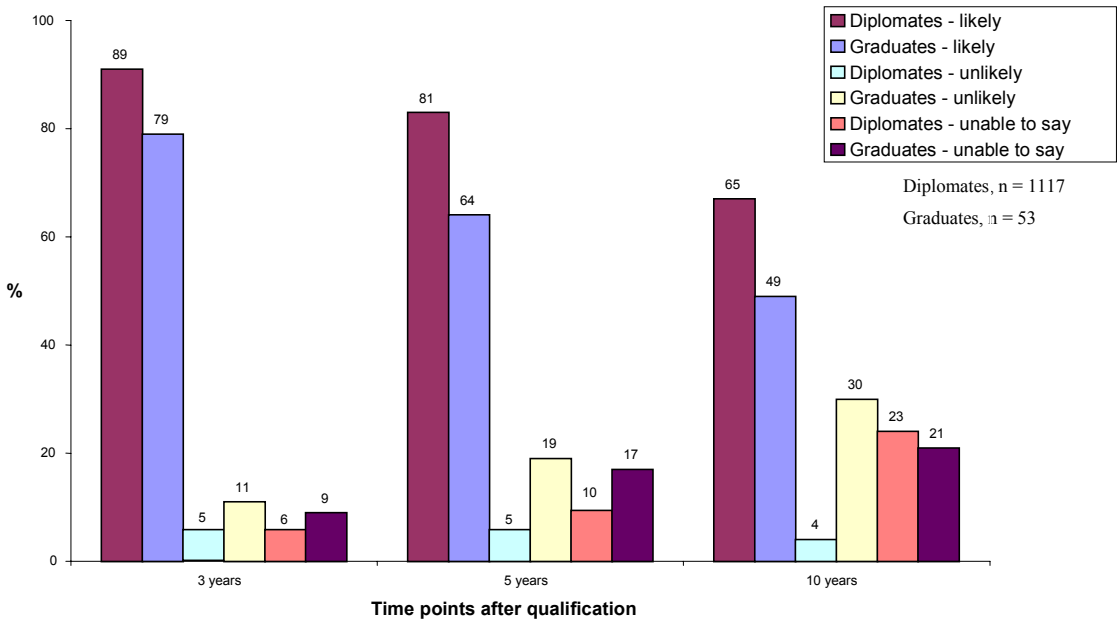


The graph also shows, however, that at each time point a smaller proportion of graduates, than diplomates, thought it likely that they would be working in nursing. At 18 months there is a 9% difference, at three years an 18% difference, and at five years a 19% difference. Conversely, at each time point a greater proportion of graduates, than diplomates, thought it unlikely or very unlikely that they would be working in nursing. Also of particular note is that over a fifth of graduates (21%, 23) were 'unable to say at this stage' for likelihood of working in nursing in five years time. This is clearly different to the findings at qualification (10%, 10).

6.4.3 18 months after qualification questionnaire

In the questionnaires sent out 18 months and three years after qualification, respondents were also asked their views about likelihood of working in nursing at 10 years after qualification (Figures 6c, 6d respectively). Figures for 18 months (Figure 6c) show that at each time point, for both graduates and diplomates, the majority of respondents thought it likely that they would be working in nursing jobs. For both groups, the proportion who thought this likely decreased at each time point.

Figure 6c: 18 months after qualification questionnaire: Plans to work in nursing in the UK at various time points after qualification

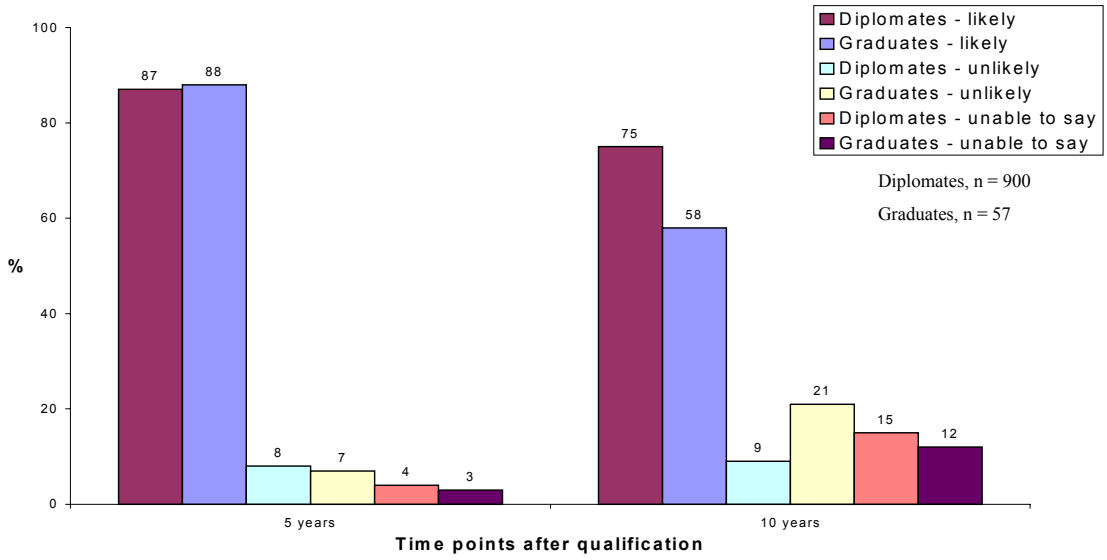


The figure also shows that at each time point a smaller proportion of graduates, compared with diplomates, thought it likely that they would be nursing. Conversely, at each time point, a greater proportion of graduates thought it quite or very unlikely that they would be nursing. Furthermore, although the proportion of diplomates who thought it unlikely they would be working in nursing remained fairly constant, the proportion of graduates rose at each time point, so that at 10 years after qualification nearly a third (30%, 17) thought it unlikely.

6.4.4 Three years after qualification questionnaire

In the questionnaire sent to graduates and diplomates at three years after qualification, respondents were asked the likelihood of working in nursing at five and 10 year time points after qualification. Figure 6d shows that for both time points the majority of both graduates and diplomates thought it likely that they would be working in nursing. The proportion of respondents who indicated it was likely was, for both cohorts, less at the 10-year time point than at the five year time point. This change was particularly marked for the graduates (down from 88%, 50 to 58%, 33). Also of note is the high proportion of graduates (21%,12), compared with diplomates (9%, 88) who, at 10 years after qualification, thought it unlikely that they would be working in nursing.

Figure 6d: 3 years after qualification questionnaire: Plans to work in nursing in the UK at various time points after qualification



6.4.5 Assessing the significance of differences between plans of diplomates and graduates

Looking back at Figures 6a to 6d the following pattern emerges in relation to likelihood of staying in nursing. At qualification, a very high proportion of both diplomates and graduates thought it likely that they would be nursing at 18 months, three years and five years after qualification, with the graduates slightly more likely to express this view than diplomates (Figure 6a). At six months after qualification, however, the position is reversed in that graduates were less likely than diplomates to express this view in relation to each of the time-points ahead (Figure 6b). At 18 months after qualification, when respondents were asked about their likelihood of nursing at three, five and ten years after qualification, graduates were less likely than diplomates to indicate that they would be nursing at each of these time-points (Figure 6c). The same pattern emerges at three years after qualification when respondents were asked to look ahead to five and ten years after qualification (Figure 6d). In short, whereas graduates were more likely than diplomates at the point of qualification to anticipate nursing in the future, this position is reversed once they have started work.

These differences between diplomates and graduates may have been associated with respondents' age and whether they have a partner or children. To ascertain whether this might be the case the relationship between likelihood of nursing and these variables were modelled using logistic regression (Table 6.6). Table 6.6 shows unadjusted and adjusted

(for age, partner and children) odds ratios for the effect of the course. The last two columns show what effect this would have on the percentage of diplomates who are likely to nurse in the future holding the percentage for graduates constant. The maximum change in the difference between diplomates and graduates was two percentage points once these variables were controlled for.

Table 6.6 Likelihood of nursing in the future – course comparison

	Odds ratio			Diplomates %		Graduate %
	Unadjusted	Adjusted	p	Unadjusted	Adjusted	(held constant)
At qualification						
Looking ahead to:						
18 months	0.431	0.422	0.10	91	91	96
3 years	0.695	0.665	0.22	85	84	89
5 years	0.714	0.664	0.13	76	75	82
Six months after qualification						
Looking ahead to:						
18 months	2.135	2.098	0.006	91	91	82
3 years	2.762	2.690	<0.001	86	85	68
5 years	2.519	2.409	<0.001	77	77	56
18 months after qualification						
Looking ahead to:						
3 years	2.024	1.830	0.09	88	87	79
5 years	2.331	2.189	0.009	81	80	64
10 years	1.927	1.812	0.038	65	64	49
3 years after qualification						
Looking ahead to:						
5 years	0.937	0.785	0.57	87	85	88
10 years	2.169	1.877	0.027	75	72	58

p is the significance level for comparison of the two courses having controlled for age, partner and children in the logistic regression model

As Table 6.6 shows, having controlled for these variables, graduates were significantly less likely than diplomates to indicate that they would be nursing in the future when asked about this eventuality at six months, 18 months and three years after qualification (with the exception of looking ahead to five years when asked at three years).

6.4.6 Reasons that unlikely to be working in nursing

In the questionnaire sent at three years after qualification, those respondents who indicated that they thought it unlikely that they would be working in nursing at five and 10 years after qualification were asked for their reasons. They were given a list of closed options with the opportunity to add in any reasons not included on the closed list. Just four graduates and 76 diplomates indicated that they thought it unlikely that they would be working in nursing at five years after qualification. Frequently given responses for both cohorts were wanting to work in a better paid occupation (graduates n=3 vs diplomates n=29), wanting to work regular hours (graduates n=3 vs diplomates n=17) and nursing had not lived up to their expectations with regard to career development (graduates n=3 vs diplomates n=16). Other frequently given reasons by diplomates were wanting to live, work or travel outside the UK (n=26), nursing had not lived up to their expectations with regard to being able to provide good quality care (n=23), and wanting to work in a career other than nursing (n=19).

Twelve graduates and 88 diplomates indicated that they thought it unlikely they would be working in nursing at 10 years after qualification. Frequently given reasons for both cohorts were wanting to work in a better paid occupation (graduates n=9 vs diplomates n=37), wanting to work regular hours (graduates n=9 vs diplomates n=24) and nursing had not lived up to their expectations with regard to being able to provide good quality care (graduates n=9 vs diplomates n=23). Thirty diplomates wanted to work in a less stressful occupation.

6.5 ORIENTATION TOWARDS WORKING IN THE NHS

In the questionnaires sent at qualification and at six months and 18 months after qualification, those respondents who planned to hold a nursing job were asked about their plans to work in the NHS. All respondents were also asked, in each questionnaire, about their preferences of employer if they were to work in nursing, health or social care jobs. In the questionnaires sent at 18 months and three years after qualification respondents were also asked about their reasons for preferring to work in the NHS.

6.5.1 Plans to work in the NHS

Table 6.7 shows the proportion of those respondents who planned to hold a nursing job and who hoped to work in the NHS. It should be noted that the percentages in the table are calculated as a proportion of those respondents who planned to hold a nursing job and not the total cohort. For both graduates and diplomates, the NHS was by far the most frequently mentioned. Findings from the 18 months questionnaire show that a lower proportion of graduates (81%, 34), than diplomates (88%, 768), hoped to be working in

the NHS at three years after qualification. Ten per cent of graduates were hoping to work abroad and 7% in the private sector.

Table 6.7: Plans to work in the NHS

	Point at which asked:					
	Qualification		6 months		18 months	
	Dips	Grads	Dips	Grads	Dips	Grads
Looking ahead to:	%	%	%	%	%	%
18 months	89	92	86	88	n/a	n/a
3 years	81	83	n/a	n/a	88	81
3.5 years	n/a	n/a	81	78	n/a	n/a

At qualification questionnaire. Plans for 18 months: grads n=86, dips n=1175. Plans for three years: grads n=66, dips n=823
6 months questionnaire. Plans for 18 months: grads n=83, dips n=1022. Plans for three & half years: grads n=64, dips n=672
18 months questionnaire. Plans for three years: grads n=42, dips n=856

6.5.2 Employer preferences

Table 6.8 shows respondents' preferences for employer if they were to work in nursing jobs. Differences between graduates and diplomates were small at each of the time points. Very few graduates or diplomates indicated that they would prefer to hold only those jobs not funded by the NHS.

Table 6.8: Employer preferences

Preferences	Point at which asked:							
	Qualification		6 months		18 months		3 years	
	Dips (n=1596) %	Grads (n=99) %	Dips (n=1339) %	Grads (n=111) %	Dips (n=1117) %	Grads (n=53) %	Dips (n=900) %	Grads (n=57) %
I would prefer to hold only jobs that are funded wholly or partly by the NHS	47	54	47	46	55	62	54	53
I would not mind holding jobs in employing organisations other than the NHS	50	43	46	47	42	32	39	40
I would prefer to hold only jobs that are not funded by the NHS	1	2	2	2	1	2	2	0
Not applicable – not planning to work in nursing care, health or social care	1	1	3	3	1	4	4	7
No answer	2	0	2	3	1	0	2	0
Total nurses	100	100	100	100	100	100	100	100

6.5.3 Reasons for preferring to work in the NHS

In the questionnaires sent at 18 months and three years after qualification, those respondents who indicated that they would prefer to hold only those nursing jobs that were funded wholly or partly by the NHS were asked their reasons why this was so. Respondents were presented with the items listed in Table 6.9. At both 18 months and three years after qualification, and for both graduates and diplomates, the two most frequently given reasons were ‘I think the NHS has a good pension scheme’ and ‘I like the job security provided by the NHS’. Other frequently given reasons for both groups of nurses were ‘I do not want to lose the benefits of my NHS pension scheme’ and ‘I am/was content/satisfied working in the NHS’. Graduates were more likely than diplomates, at both 18 months and three years after qualification, to cite opportunities for career and professional development.

Table 6.9: Reasons for preferring NHS

Reasons	18 months		3 years	
	Dips (n=604) %	Grads (n=33) %	Dips (n=497) %	Grads (n=30) %
I think the NHS has a good pension scheme	71	73	80	87
I like the job security provided by the NHS	61	61	67	67
I do not want to lose the benefits of my NHS pension scheme	49	58	60	63
I think the NHS offers more opportunities for professional development than many other organisations	40	52	31	43
I think the NHS provides better career opportunities than many other organisations	37	48	34	43
I am/was content/satisfied working in the NHS	55	45	49	47
I think the NHS provides better services for its clients than many other organisations	32	39	29	33
I think the NHS places more emphasis on quality and less on profit than many other organisations	26	36	30	27
I believe that all healthcare should be publicly funded	23	33	23	30
I have a loyalty to the NHS	24	30	27	37
I was trained by NHS and believe I have a responsibility to work for the NHS	30	24	25	33
I think the NHS pay is better than many other organisations	9	0	7	10
Other	5	15	4	0

6.6 ORIENTATION TOWARDS SPECIALTIES

In the questionnaires sent at qualification, and at six and 18 months after qualification, those respondents who planned to be holding a nursing job were asked to specify its specialty if known (Section 6.6.1). In the questionnaire sent at three years after qualification respondents were also asked for their views about working in particular specialities in the future (Section 6.6.2).

6.6.1 Specialties in which planned to hold jobs at future time points

In the at qualification questionnaire, respondents provided information on specialties plans for 18 months and three years after qualification. At the 18 months after qualification time point the three most frequently mentioned specialties, for both graduates and diplomates, were general medicine (graduates 14%, 12, diplomates 15%, 174), general surgery (graduates 10%, 9, diplomates 14%, 159), and accident and emergency (A & E, graduates 14%, 12, diplomates 11%, 126). For all other specialties less than 10% of graduates and diplomates indicated that they planned to be working in them 18 months after qualification. The three most frequently mentioned specialties in which graduates and diplomates planned to work at three years after qualification were community (graduates 18%, 12, diplomates 11%, 90), A & E (graduates 15%, 10,

diplomates 12%, 97) and intensive care units (ICUs, graduates 12%, 8, diplomates 10%, 80). For all other specialties less than 10% indicated that they planned to be working in them three years after qualification.

In the six months after qualification questionnaire, respondents were asked about specialties for 18 months and three and a half years after qualification. For 18 months after qualification, and for both groups of nurses, the most frequently mentioned specialties were general medicine (graduates 18%, 15, diplomates 13%, 133), A & E (graduates 14%, 12 vs diplomates 12%, 121), ICUs (graduates 10%, 8 vs diplomates 7%, 72) and general surgery (graduates 7%, 6, diplomates 14%, 139). A difference of note was that just one graduate referred to community compared with eight per cent (87) of diplomates. Plans for three and a half years after qualification revealed some variation in choice of specialties. Community was again more frequently mentioned by diplomates (12%, 82) than graduates (5%, 3), and while no graduates mentioned midwifery, 9% (62) of diplomates did so. Other frequently mentioned specialties were general medicine (graduates 13%, 8 vs diplomates 7%, 48), ICUs (graduates 11%, 7 vs diplomates 6%, 40) and A & E (graduates 13%, 8 vs diplomates 8%, 57).

In the questionnaire sent at 18 months after qualification, respondents were asked about plans for specialties for three years after qualification. Some specialties were frequently mentioned by both graduates and diplomates; A & E (graduates 21%, 9 vs diplomates 10%, 88), ICUs (graduates 19%, 8 vs diplomates 10%, 85), community (graduates 10%, 4 vs diplomates 11%, 94) and general medicine (graduates 7%, 3 vs diplomates 11%, 93). A difference of note was that none of the graduates mentioned general surgery compared with 12% (102) of diplomates.

6.6.2 Views about working in specialties in the future

In the three years after qualification questionnaire all respondents were asked about their thoughts about working in various specialties (Table 6.10). Respondents were presented with four options; definitely want to work in this area, do not mind whether or not I work in this area, definitely do not want to work in this area and do not know whether I want to work in this area.

Table 6.10: Preferences for specialties

Specialties	I definitely want to work in this specialty		I do not mind whether or not I work in specialty		I definitely do not want to work in this specialty		I do not know whether to work in this specialty	
	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
Accident and Emergency	12	28	35	25	39	30	12	12
AIDS/ HIV	2	9	46	33	32	33	15	19
Cardiology/ coronary care	11	23	38	26	36	33	12	12
Cardiothoracic	6	11	34	30	42	39	14	16
Community	29	21	37	46	18	9	12	18
Ear, nose and throat	2	0	20	19	62	60	13	16
Care of the elderly	5	4	23	33	58	53	11	5
Endocrinology/ diabetes	3	5	34	37	46	40	13	12
Gastroenterology	3	4	28	35	52	40	13	16
General Medicine	10	11	31	32	47	44	8	9
General Surgery	10	18	38	32	38	35	10	11
Gynaecology	5	9	33	30	48	42	11	14
Haematology	4	5	33	39	46	42	14	9
Infectious diseases	2	9	31	33	47	39	15	14
Intensive care	15	21	33	33	38	25	11	16
Mental Health	1	2	9	7	76	75	10	11
Neurology/ neurosurgery	3	4	24	26	54	47	14	16
Occupational health	3	5	28	23	49	51	16	16
Oncology	10	21	40	37	32	28	13	9
Orthopaedics	4	5	20	16	62	65	10	7
Paediatrics	4	0	15	23	65	53	12	19
Palliative care	15	23	38	35	32	26	11	11
Practice nursing	14	35	41	30	27	19	14	11
Renal	3	7	27	32	50	44	15	11
Respiratory	4	0	28	35	52	53	11	7
Theatres	5	0	15	14	64	65	11	16
Urology/ genito-urinary	4	5	25	26	56	53	10	11
Vascular surgery	4	4	24	23	56	60	12	9

Diplomates, n=900
Graduates, n=57

Table 6.10 shows that, for both graduates and diplomates, respondents were generally more likely to indicate that they definitely did not want to work in a particular specialty or did not mind whether or not they worked in a specialty than either of the other two options. Exceptions were community for both graduates and diplomates, and practice nursing for graduates. The most popular specialties for both groups of nurses were practice nursing, A & E, cardiology/coronary care, community, palliative care, ICUs and oncology. Over half of respondents in both groups definitely did not want to work in mental health, orthopaedics, theatres, ears, nose and throat, vascular surgery, paediatrics, urology/genito-urinary and care of the elderly. Those specialties for which differences were most marked (i.e. more than 10%), were as follows. Graduates were more likely

than diplomates to say that they definitely wanted to work in: practice nursing, A & E, cardiology, oncology. Diplomates were more likely than graduates to say that they definitely did not want to work in: ICUs, paediatrics, gastroenterology.

6.7 PLANS FOR GRADE

In questionnaires sent at qualification and at six months and 18 months after qualification, respondents who hoped to be holding a nursing job were asked about the grade at which they hoped to be working.

Tables 6.11i-iii show that at all of the data collection time points, and for each time point in the future nurses were asked to consider, graduates were more likely to specify a higher grade than their diplomate counterparts.

Table 6.11i: At qualification questionnaire: Grade at which hoped to be working at 18 months and three years after qualification

	18 months		3 years	
Grade	Dips (n=1175) %	Grads (n=88) %	Dips (n=823) %	Grads (n=65) %
D or D grade equivalent	40	29	11	3
D/E grade	19	15	8	3
E or E grade equivalent	32	48	44	42
E/F grade	2	2	11	12
F or F grade equivalent	0	1	9	18
F/G grade	0	1	1	8
G grade	0	0	4	5
G/H grade	0	0	0	2
Other	0	1	0	5
Not stated	6	2	13	3
Total	100	100	100	100

A Fisher's Exact test was used as follows:

18 months: courses compared across grade grouped as D, D/E, E or higher, other. p = 0.027

3 years: courses compared across grade grouped as D, D/E, E, E/F, F or higher, other. p = 0.003

Table 6.11ii: At six months after qualification questionnaire: Grade at which hoped to be working at 18 months & 3.5 years after qualification

	18 months		3.5 years	
Grade	Dips (n=1022) %	Grads (n=83) %	Dips (n=672) %	Grads (n=64) %
D or D grade equivalent	44	22	9	3
D/E grade	20	18	9	9
E or E grade equivalent	25	46	39	30
E/F grade	0	1	8	14
F or F grade equivalent	0	2	10	19
F/G grade	0	1	2	3
G or G grade	0	0	3	2
G/H grade	0	0	0	2
H or H grade equivalent	0	0	0	2
Other	9	6	15	14
Not stated	2	2	5	3
Total	100	100	100	100

A Fisher's Exact test was used as follows:

18 months: courses compared across grade grouped as D, D/E, E or higher, other. $p < 0.001$

3 years: courses compared across grade grouped as D, D/E, E, E/F, F or higher, other. $p = 0.066$

Table 6.11iii: At 18 months after qualification questionnaire: Grade at which hoped to be working at three years after qualification

	3 years	
Grade	Dips (n=856) %	Grads (n=42) %
D or D grade equivalent	16	7
D/E grade	16	2
E or E grade equivalent	48	60
E/F grade	5	12
F or F grade equivalent	3	0
F/G grade	0	0
G or G grade	1	2
G/H grade	0	2
H or H grade equivalent	0	0
Other	9	10
Not stated	1	5
Total	100	100

A Fisher's Exact test was used as follows:

3 years: courses compared across grade grouped as D, D/E, E, E/F, F or higher, other. $p < 0.001$

6.8 PLANS TO WORK FULL-TIME

In the questionnaires sent at qualification, and at six and 18 months after qualification, respondents who hoped to be holding a nursing job at various time points in the future were asked whether they planned to be working full-time. Table 6.12 shows the majority of both groups intended to be working full-time at all time points. A very small proportion of diplomates were more likely to plan to work part-time in comparison to graduates.

Table 6.12: Plans to work full-time

	Qualification		6 months		18 months	
	Dips	Grads	Dips	Grads	Dips	Grads
Looking ahead to:	%	%	%	%	%	%
18 months	91	93	88	95	n/a	n/a
3 years	88	91	n/a	n/a	86	95
3.5 years	n/a	n/a	84	92	n/a	n/a

At qualification questionnaire. Plans for 18 months: grads n=86, dips n=1175. Plans for three years: grads n=66, dips n=823

6 months questionnaire. Plans for 18 months: grads n=83, dips n=1022. Plans for three & half years: grads n=64, dip n=672

18 months questionnaire. Plans for three years: grads n=42, dips n=856

6.9 GRADUATES AND CAREER-MINDEDNESS

Bringing these sections together, the findings suggest that graduates were more likely to be orientated towards their careers or to be career-minded. As such, they have greater career expectations than their diplomate counterparts. Evidence for this comes from the findings that graduates were more likely to cite reasons of professional and career development as reasons for working in the NHS, and were significantly more likely to plan to work at a higher grade than diplomates at various time points in the future. While in many ways these may be seen as positive characteristics, at the same time graduates were significantly less likely than diplomates to indicate that they will be in nursing, health or social care in the future. These themes are developed further in Chapter eleven.

6.10 SUMMARY

Findings are summarised in this section across the various time points at which data were collected i.e. at qualification and at six months, 18 months and three years after qualification. Although there were many similarities between graduates and diplomates there were a few differences of note:

- The majority of both graduates and diplomates planned to be working in nursing immediately after qualifying

- Once having started work graduates were significantly less likely to indicate that they would remain in nursing in comparison with diplomates
- Orientation towards working in the NHS was high amongst graduates and diplomates. The reasons most frequently given for preferring to work in the NHS were related to the security and pension benefits. This finding may reflect a media focus at the time of questionnaire completion on problems of future pension provision for those at early stages of their working life. Graduates were more likely than diplomates to emphasise professional and career development opportunities
- Graduates were more likely to indicate that they had some idea of the job they hoped to hold at future time points. The majority of both graduates and diplomates who had job plans, hoped to be working in nursing, health or social care, full-time and in the NHS
- Across all the questionnaires, and at all time points, graduates were significantly more likely to indicate that they hoped to be working at a higher grade than their diplomate counterparts

CHAPTER 7:
CAREER PATHWAYS

Research question: 3: In what ways do the career pathways followed by degree and diploma nurses differ?

This chapter addresses our third research question regarding career pathways. In answering this question information is presented on the activities of graduates and diplomates at two months, six months, 18 months and three years after qualification. The findings are presented in four sections. The first section focuses on nursing employment status at the various time points. The second section provides job details of those graduates and diplomates working in non-agency or bank nursing jobs in the UK. The third section provides information on the activities of those respondents not working in nursing in the UK. The fourth section focuses on two aspects of the course: receipt of career guidance and the influence of course experiences on encouragement to work in certain clinical specialties.

In this chapter, wherever possible, the cohorts of graduates have been combined (see Table 7.1). The data presented for the two months and six months after qualification time points combine activities of those cohorts of graduates sent a questionnaire at six months, 18 months, and three years after qualification (graduate cohorts 2, 3 and 4 respectively as shown in Figure 4a, (p.30). Data for activities at 18 months include the two graduate cohorts sent a questionnaire at 18 months and three years after qualification. The data for three years after qualification, naturally, include only those graduate nurses sent a questionnaire at three years after qualification. The data for diplomates include just one cohort of nurses, sent questionnaires at the various time-points.

Table 7.1: Career episode data combined for graduates

Different graduate cohorts		Career episodes			
		2 months	6 months	18 months	3 years
Grads 2	6 months				
Grads 3	18 months				
Grads 4	3 years				
Total no. of graduates		n=220	n=219	n=108	n=56

A comparison was made at two months after qualification, rather than at qualification, because at qualification many respondents were 'between course and work'. That is, many respondents were waiting to start their first jobs, and, therefore, findings would be

more meaningful if a period after qualification was chosen, by which time the vast majority of respondents would have started their first jobs. Two months was considered an appropriate time after qualification. Furthermore, because the gap between finishing their course and starting work was short some respondents did not provide any information about what they were doing in this period.

7.1 NURSING EMPLOYMENT STATUS

Information is presented in Table 7.2 on the nursing employment status of graduates and diplomates at two months, six months, 18 months, and three years after qualification. It should be noted that 'permanent nursing job in the UK' refers to those jobs which are not agency or bank nursing jobs. At each time point after qualification the majority of both graduates and diplomates were working in permanent nursing jobs in the UK. The trend, for both graduates and diplomates, is that from six months the further the time point after qualification then the lower the proportion of respondents working in permanent nursing jobs in the UK. The biggest changes, for both graduates and diplomates, took place between six months and 18 months after qualification. Thus, while at six months after qualification 95% (209) of graduates and 94% (1264) of diplomates were working in such jobs, these figures fell at 18 months after qualification to 85% (92) and 85% (954) respectively. More information on the activities of those respondents who were not working in nursing in the UK at the various time-points is presented in section 7.3.

Table 7.2: Nursing employment status

	Time after qualifying							
	2 months		6 months		18 months		3 years	
	Dips (n=1339)	Grads (n=220)	Dips (n=1339)	Grads (n=219)	Dips (n=1117)	Grads (n=108)	Dips (n=900)	Grads (n=56)
Current activity	%	%	%	%	%	%	%	%
Permanent nursing job in UK	91	94	94	95	85	85	82	82
Agency/bank nursing in UK	4	1	1	0	3	2	3	7
Not nursing in UK	5	5	5	5	11	13	15	11
Total	100	100	100	100	100	100	100	100

A comparison of our graduate figures with those provided by HESA on first destinations of nursing graduates was not possible, since the latter relate to all nursing graduates and do not distinguish between those who have qualified from three-year degrees and those who have qualified from four-year degrees.

7.2 NURSING IN THE UK

Sections 7.2.1 to 7.2.5 provide information on the details of those permanent nursing jobs (i.e. non-agency/bank jobs) held in the UK at the various time points. Thus percentages in the tables are calculated from those respondents who, at the various time points, were holding permanent nursing jobs in the UK. Information is presented on number of nursing jobs held, grade, specialty, employer and whether jobs were full- or part-time.

7.2.1 Number of nursing jobs

Table 7.3 shows few differences between graduates and diplomates in terms of the number of nursing jobs held in the UK at the various time points after qualification. Unsurprisingly, the further the point in time from qualification, then the more likely respondents were to have had more than one nursing job. The biggest change, for both graduates and diplomates, was between six and 18 months after qualification, so that at six months 89% (186) of graduates and 92% (1157) of diplomates were in their first job, while at 18 months after qualification these figures fell to 41% (38) and 48% (461) respectively.

Table 7.3: Number of nursing jobs

	Time after qualifying							
	2 months		6 months		18 months		3 years	
	Dips (n=1217)	Grads (n=207)	Dips (n=1264)	Grads (n=209)	Dips (n=954)	Grads (n=92)	Dips (n=738)	Grads (n=46)
Jobs	%	%	%	%	%	%	%	%
First nursing job	99	100	92	89	48	41	11	17
Second nursing job	1	0	8	11	44	48	46	41
Third nursing job	0	0	*	0	6	10	33	33
Fourth nursing job	0	0	0	0	*	1	9	2
Fifth nursing job	0	0	0	0	0	0	*	4
Sixth nursing job	0	0	0	0	0	0	*	2
Total	100	100	100	100	100	100	100	100

7.2.2 Grade

Information is presented in Table 7.4 on the grade of graduates and diplomates at six months, 18 months, and three years after qualification.

Table 7.4: Grade

	Time after qualifying							
	2 months		6 months		18 months		3 years	
	Dips (n=1217)	Grads (n=207)	Dips (n=1264)	Grads (n=209)	Dips (n=954)	Grads (n=92)	Dips (n=738)	Grads (n=46)
Grade	%	%	%	%	%	%	%	%
D or D grade equivalent	99	99	99	98	86	83	46	41
E or E grade equivalent	*	*	*	*	12	17	49	52
F or F grade equivalent	0	0	0	*	*	0	3	4
G or G grade equivalent	0	0	0	0	*	0	*	0
Other	*	0	*	0	*	0	*	2
Not stated	*	*	*	*	*	0	*	0
Total	100	100	100	100	100	100	100	100

Table 7.4 shows little difference between graduates and diplomates. The majority of both graduates and diplomates, who were working in permanent nursing jobs in the UK, were working at a D grade up until 18 months after qualification. The biggest change, for both graduates and diplomates occured between 18 months and three years after qualification, so that at three years after qualification over half of both groups of nurses were working at a grade higher than D (graduates 57%, 26 vs diplomates 53%, 389).

7.2.3 Specialty

Table 7.5 shows the specialties within which respondents were working at various points in time after qualification. Included in Table 7.5 are those specialties for which, at any point in time, 5% or more of graduates or diplomates were working. A full list is included in Appendix 6.

Table 7.5: Specialties

Specialties	Time after qualifying							
	2 months		6 months		18 months		3 years	
	Dips (n=1217) %	Grads (n=207) %	Dips (n=1264) %	Grads (n=209) %	Dips (n=954) %	Grads (n=92) %	Dips (n=738) %	Grads (n=46) %
General medicine	28	25	27	22	19	21	15	13
General surgery	17	15	16	15	14	13	11	9
Elderly care	10	5	10	3	7	1	6	2
Orthopaedics	8	10	9	9	8	4	5	2
Cardiology/coronary care	6	10	6	10	7	14	8	7
Theatres	5	3	5	3	5	3	5	0
Accident and emergency	4	9	4	9	6	10	6	17
Neurology	4	2	4	2	3	5	2	2
Cardiothoracic	3	4	3	4	3	3	2	7
Intensive care	3	8	3	8	7	13	12	17
Vascular surgery	3	5	3	5	3	4	2	2

There were few meaningful differences between graduates and diplomates. A relatively large proportion of graduates and diplomates at each of the time points were working in general medicine and general surgery. Indeed, these two specialties were the most frequently mentioned at two and six months after qualification, for both graduates and diplomates. The trend was that the further the time points from qualification then the lower the proportion of nurses working in these specialties. At 18 months after qualification, these two specialties were still the most frequently mentioned specialties by diplomates (general medicine 19%, 180, general surgery 14%, 138) while for graduates it was general medicine (21%, 19) and cardiology/coronary care (14%, 13). At three years after qualification, the most frequently mentioned specialties by graduates were accident and emergency (A & E, 17%, 8) and intensive care units (ICUs, 17%, 8), while for diplomates it was general medicine (15%, 109) and ICUs (12%, 86).

There were three specialties in which a greater proportion of diplomates than graduates worked at each time-point (elderly care, theatres, and ears, nose and throat), and two specialties in which a greater proportion of graduates worked (A & E and ICUs). However, it was only for the specialty of A & E, at three years after qualification where the difference between graduates and diplomates is more than 10% (graduates 17%, 8 vs diplomates 6%, 44).

7.2.4 Employer

Table 7.6 shows the employers of those graduates and diplomates working in permanent nursing jobs in the UK at various points in time after qualification. Although various other employers were given by graduates and diplomates, each of these accounted for less than 1% of the total graduates and diplomates at each time point, and so are not included

here. The NHS was by far the most frequently mentioned employer at each of the time points after qualification.

Table 7.6: Employer

	Time after qualifying							
	2 months		6 months		18 months		3 years	
	Dips (n=1217)	Grads (n=207)	Dips (n=1264)	Grads (n=209)	Dips (n=954)	Grads (n=92)	Dips (n=738)	Grads (n=46)
Employer	%	%	%	%	%	%	%	%
NHS	97	97	97	97	96	99	94	93
Private	*	2	*	2	2	0	2	4
Charity	*	0	*	0	*	0	*	2

The overall trend, for both graduates and diplomates, was for there to be a small reduction over time, in the proportion of nurses working in the NHS. For diplomates, at each subsequent time point from six months after qualification, there was a small reduction in the proportion of nurses working in the NHS. Thus, at three years after qualification 94% (697) of respondents working in nursing were working in the NHS, compared with 97% (1224) at six months after qualification, and 96% (913) at 18 months after qualification. Although the proportion of graduates working in nursing in the NHS rose at 18 months after qualification (99%, 91) when compared with six months after qualification (97%, 202), at three years after qualification the figure was 93% (43).

7.2.5 Full- or part-time

Table 7.7 shows that the majority of both graduates and diplomates, working in nursing at the various time points, were doing so full-time. At each time point, however, more diplomates than graduates were working part-time. This difference was particularly marked at three years after qualification, so that 14% (105) of diplomates compared with just 4% (2) of graduates were working part-time.

Table 7.7: Full or part-time

	Time after qualifying							
	2 months		6 months		18 months		3 years	
	Dips (n=1217)	Grads (n=207)	Dips (n=1264)	Grads (n=209)	Dips (n=954)	Grads (n=92)	Dips (n=738)	Grads (n=46)
Hours	%	%	%	%	%	%	%	%
Full-time	93	97	93	97	92	98	85	96
Part-time	6	3	6	3	8	2	14	4
Not stated	*	0	*	0	*	0	1	0
Total	100	100	100	100	100	100	100	100

7.2.6 Rotational posts

Respondents were asked whether their first job was rotational; this was defined as a job in which it is planned for the employee to rotate between different clinical specialties, usually spending six months in each. These planned rotations have the benefit of enabling newly qualified nurses to gain a range of experience. A minority of both groups of qualifiers had started their post-qualification careers with a rotational job; a third of graduates compared with less than a quarter of diplomates.

7.3 NON-NURSING IN THE UK

Table 7.8 shows the activities at various points in time of those graduates and diplomates who were doing something other than working in permanent nursing jobs or agency/bank nursing in the UK. The graduate figures are not calculated as a percentage due to the small numbers at each time-point. The small number of graduates makes any meaningful comparison with the diplomates very difficult.

The most frequently mentioned activities by diplomates at qualification were finishing training 22% (15) and unemployment 17% (12). The relatively large proportion of unemployed respondents was probably because many of these respondents were waiting to start, or were trying to obtain, a nursing post. At the subsequent time points, courses, and in particular courses related to nursing, were the most frequently mentioned activities. Midwifery was by far the most frequently mentioned course at each of the time points. The proportion of diplomates on maternity leave rose at each time point, from 9% (7) at two months after qualification, to 21% (26) at three years after qualification. In terms of the total cohort, however, the proportion of diplomates on maternity leave was very small; less than 1% at two months after qualification and just 3% at three years after qualification.

Table 7.8: Activities of respondents not nursing in the UK

Activity	Time after qualifying: 2 months Dips (n=69) %	2 months Grads (n=8) No.	6 months Dips (n=59) %	6 months Grads (n=7) No.	18 months Dips (n=126) %	18 months Grads (n=14) No.	3 years Dips (n=126) %	3 years Grads (n=6) No.
Courses								
Midwifery	16%	1	33%	2	29%	3	19%	1
Nursing, health, social care course other than ENB	9%	1	11%	1	5%	0	6%	0
District nursing	0%	0	0%	0	0%	0	5%	0
Health visiting	0%	0	0%	0	0%	0	1%	0
Other branches	0%	0	0%	0	5%	0	1%	0
ENB course	0%	0	0%	0	2%	0	2%	0
Non-nursing, health, social care course	0%	0	0%	0	0%	0	2%	0
Working in UK - non-nursing								
Non-nursing, health, social care job	4%	1	7%	1	5%	1	7%	2
Non-nursing, health, social care job and another activity	1%	0	2%	0	0%	0	0%	0
Health, social care job but not nursing	0%	1	0%	1	2%	2	5%	2
Break								
Maternity leave	9%	0	15%	0	18%	1	21%	0
Break for child care	4%	0	7%	0	4%	0	9%	1
Break - unspecified	2%	0	1%	0	4%	0	*%	0
Abroad								
Travelling/living abroad - not nursing	8%	0	3%	1	8%	1	5%	0
Nursing abroad	6%	2	11%	1	11%	6	13%	0
Other								
Finishing training	22%	0	2%	0	0%	0	0%	0
Unemployed	17%	2	5%	2	3%	0	2%	0
Sick leave	2%	0	3%	0	6%	0	6%	0
Total	100%	8	100%	7	100%	14	100%	6

7.4 COURSE EXPERIENCES AND CAREER PATHWAYS

At the time that they qualified members of the diplomate cohort were asked two questions about aspects of their course that might have relevance to the direction of their future careers: the first concerned receipt of career guidance and the second the influence of course experiences on encouraging or discouraging them to consider working in certain clinical specialties. Graduate cohort 1, those who had just qualified when they completed the questionnaire, were also asked these two questions.

7.4.1 Career guidance

There has been increasing emphasis in recent years on career planning. Diplomates and graduates were asked whether during their course they had had information and advice about the following: applying for a first job, clinical courses offered by the National Boards, and various career pathways. The specific topics are listed in Table 7.9 and participants were asked whether they had received information and advice about each of

these. If they had, then they were asked if they would have liked more. If they had not, then they were asked if they would have liked some. For each topic, Table 7.9 shows the proportion of respondents who: had enough information/advice (Column 1); had some but wanted more (Column 2); had none but did not want any (Column 3), and had none and would have liked some (Column 4). The total of Columns 1 and 3 could be regarded as the proportion of respondents whose demand for guidance was met, while the total of Columns 2 and 4 could be regarded as the proportion whose demand was unmet.

Table 7.9 Receipt of careers guidance

	Diplomates (n = 1596)				Graduates (n = 99)			
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 1	Col. 2	Col. 3	Col. 4
	I had enough information / advice %	I had some but I wanted more %	I had none but I didn't want any %	I had none and I wanted some %	I had enough information /advice %	I had some but I wanted more %	I had none but I didn't want any %	I had none and I wanted some %
a) Applying for first job								
Completing job application form	40	42	5	11	36	38	6	17
Writing a CV	34	45	8	13	27	41	8	22
Performing at job interviews	32	47	5	15	38	47	2	11
Job availability	33	38	6	21	38	21	15	24
b) Continuing education								
Types of clinical course offered by the National Boards	11	41	4	43	7	28	-	64
Clinical courses offered by the National Boards relevant to your particular ideas about the future	8	32	6	53	2	19	3	75
Procedures for applying for clinical courses offered by the National Boards	4	23	7	65	-	14	5	80
c) Career pathways								
Career pathways for people with a nurse diploma from your particular branch	11	42	3	43	10	36	3	47
Jobs for which your particular skills might be most suitable	11	28	8	51	14	25	9	51
Opportunities for working abroad	9	17	30	43	19	19	15	45
Opportunities for working outside the NHS	9	16	30	44	15	39	2	42
Developing a career in clinical practice	12	35	7	46	15	39	2	42
Developing a career in nurse education	5	12	39	42	10	19	26	43
Developing a career in nursing research	10	16	35	38	22	20	25	31
Developing a career in management in the NHS	9	17	33	39	12	23	16	47

Considering the figures for diplomates and graduates, then both groups were more likely to have received guidance about applying for a first job than about National Board courses or the range of possible career pathways. Both groups expressed considerable unmet demand for guidance about National Board courses and career pathways.

Clearly, lack of guidance about career planning is a concern to many diplomates and graduates, even at this early stage of their careers. The question emerges, however, of who should be responsible for providing career guidance during nurse education courses. Whilst students may have an expectation that guidance should be provided for them, in recent years there has been growing emphasis on the self-direction of, and individual responsibility for, career development. It is suggested therefore career development programmes are introduced that equip diplomates and graduates to identify, access and utilize the information and advice so that they can manage their careers proactively.

A number of differences emerged between the two groups with diplomates being more likely than graduates to receive guidance about applying for a first job and continuing education and graduates being more likely than diplomates to receive guidance about career pathways. Details were as follows. Diplomates were significantly more likely than graduates to have received guidance about: writing a CV (79% vs.68%, p=.022); job availability (71% vs. 59%, p=.015): type of clinical courses offered by the National Boards (52% vs. 35%, p=0.001); clinical courses offered by the National Boards relevant to your particular ideas about the future (40% vs 21%, p<.001) and procedures for applying for clinical courses offered by the National Boards (27% vs. 14%, p=.006). Graduates were significantly more likely than diplomates to have received guidance about: opportunities for working outside the NHS (54% vs 25%, p<.001); developing a career in nursing research (42% vs 26%, p=.001); developing a career in nurse education (29% vs 17%, p=.005), and developing a career in management in the NHS (26% vs 35%,p=0.047). It is difficult to interpret these differences since it is not known whether diplomates and graduates actively sought guidance, whether it was offered to them without request, or both. Whatever the source, the findings suggest a greater emphasis during the pre-registration course on career pathways other than clinical practice for graduates compared with diplomates.

7.4.2 Influence of course experiences

All participants were asked whether experiences during the course had encouraged or discouraged them from wanting to work in certain specialties. For each of a list of 28 specialties, participants were asked to ring one of the four options shown in Table 7.10.

Table 7.10 Experiences of specialties during the course

Specialties	Diplomates (n = 1596)				Graduates (n = 99)			
	Course experiences led me to consider working in this specialty %	Course experiences put me off considering working in this specialty %	Course experience did not affect my plans one way or the other %	Had little/no experience of this specialty so unable to comment %	Course experience led me to consider working in this specialty %	Course experiences put me off considering working in this specialty %	Course experience did not affect my plans one way or the other %	Had little/no experience of this specialty so unable to comment %
Accident and Emergency	38	15	19	28	49	10	8	32
AIDS/HIV	11	1	18	69	9	2	15	74
Burns and plastics	5	2	6	86	5	2	10	83
Cardiology/coronary care	33	7	22	37	31	7	16	45
Cardiothoracic	15	3	13	68	16	5	9	70
Community	63	12	24	1	61	15	16	7
Day surgery	19	11	22	48	14	10	21	55
Dermatology	5	3	10	82	2	2	9	87
Ear, nose and throat	8	6	15	71	9	6	10	75
Elderly care	26	35	37	1	24	28	41	6
Endocrinology	7	2	16	75	10	3	13	74
Gastroenterology	17	5	27	49	19	10	18	52
General medicine	55	16	26	2	48	22	24	5
General surgery	56	13	24	7	42	18	28	11
Gynaecology	25	6	11	57	30	8	12	48
Haematology	13	3	15	68	11	1	11	77
Infectious diseases	7	2	16	74	8	3	15	74
Intensive care	26	10	12	51	23	9	2	66
Neurology (medical or surgical)	12	4	15	69	11	4	12	73
Oncology	28	4	17	50	37	7	18	37
Ophthalmology	5	5	10	79	4	4	8	83
Orthopaedics	27	20	22	30	23	15	20	41
Outpatients	6	18	18	58	6	11	23	60
Renal	10	4	16	70	9	6	12	72
Rheumatology	4	4	14	77	2	5	12	80
Urology/genito-urinary	19	8	20	53	17	9	19	55
Theatres	22	33	26	19	25	22	19	32
Vascular surgery	16	7	22	54	10	6	14	70

There were some differences in the specialties experienced by diplomates and graduates whilst undertaking their respective courses (Table 7.10). Graduates were more likely than diplomates not to have experienced intensive care (66% vs. 51%, p=0.007), orthopaedics (41% vs. 30%, p=0.025), theatres (32% vs. 19%, p=0.001) and vascular surgery (70% vs. 54%, p=0.002). Conversely, diplomates were more likely than graduates not to have experienced oncology (50% vs. 37%, p=0.013). In terms of course experiences leading respondents to consider working in specialties, there were few differences of note apart from the higher percentage of diplomates than graduates (56% vs. 42%, p=0.009) and the higher percentage of graduates than diplomates (49% vs. 38%, p=0.025) who considered working in general surgery and accident and emergency respectively. The specialties for which course experiences were most likely to have discouraged respondents from considering working in them were elderly (diplomates 35%, graduates 28%); theatres (diplomates 33%, graduates 22%), and then orthopaedics for diplomates (20%) and general medicine for graduates (22%).

7.5 SUMMARY

Few differences emerged between the careers followed by graduates and diplomates in the early years after qualification, as summarised below:

- The majority of both graduates and diplomates were working in nursing jobs in the UK up to three years after qualification
- At six months after qualification, and at each time point considered thereafter, there was a smaller proportion of both graduates and diplomates working in nursing posts in the UK. Main reasons are because respondents are undertaking full-time nursing related courses or are on maternity leave
- The majority of graduates and diplomates working in nursing jobs in the UK acquired a second job between six and 18 months after qualification. These second jobs, however, were mainly on the same grade as first jobs, i.e. D grade jobs. The majority of graduates and diplomates did not acquire E grade jobs until beyond the 18 months point after qualification
- The NHS was, overwhelmingly, the most frequently mentioned employer for those graduates and diplomates working in nursing. The overall trend was a small reduction over time in the proportion of graduates and diplomates who were working in the NHS
- Diplomates were more likely than graduates to be working part-time in nursing

- Diplomates and graduates expressed substantial unmet demand for guidance about National Board courses and pursuing a range of career pathways
- For most specialties, course experiences were more likely to have encouraged than discouraged diplomates and graduates from considering working in them

CHAPTER 8:
CONTINUING PROFESSIONAL DEVELOPMENT

Research question 4: What differences emerge between degree and diploma nurses in relation to continuing professional development?

Respondents were asked about two aspects of continuing professional development: courses and preceptorship. Information on courses is presented first, followed by that on preceptorship.

8.1 COURSES

Respondents were asked about courses that they had completed, their plans for undertaking courses, and their unfulfilled plans, i.e. courses which they wanted to start but did not do so. Both graduates and diplomates were asked not to provide any information on study days or workshops. Information on degree courses (both under graduate and Masters degrees) is presented separately since to include these along with others courses may skew the findings. As there has been a growing emphasis on nurses having a degree in order to gain promotion (Department of Health 1999a, Hewison *et al.* 1999), then diplomates would be much likely than graduates to seek a degree qualification after qualifying as a nurse.

8.1.1 Courses completed

In the questionnaires sent at 18 months and three years after qualification, respondents were asked whether they had completed any courses since qualification. Information for each data collection time point is presented in Table 8.1. The differences between graduates and diplomates at each time point are small and not significant.

Table 8.1: Whether or not completed any courses

	Diplomates		Graduates	
Time point after qualification	No.	%	No.	%
18 months	219	20	13	25
3 years	374	41	29	51

A Fisher's Exact test was used to compare differences between courses. Differences were not significant at the 5% level for both the 18 month and 3 year time point.

The figures in Tables 8.1 do not include those diplomates and graduates who had completed a degree course, but who had not completed any other courses. Thus, at 18 months after qualification a further 2% (17) of diplomates, and no graduates, had

completed a degree but not any other courses. At three years after qualification 2% (18) of diplomates compared with 5% (3) of graduates had completed degrees but no other courses.

Of those courses completed, the ENB 998 Teaching and Assessing in Clinical Practice course, or equivalent courses, were the most frequently mentioned courses for diplomates at both time points, while for graduates this was the case at three years after qualification. Seven per cent (79) of diplomates had completed this course at 18 months after qualification, and 25% (223) had done so by three years after qualification. For graduates, at 18 months after qualification, 10 courses were mentioned, all of which were different. At three years the most frequently mentioned courses were the ENB 998 Teaching and Assessing in Clinical Practice, or equivalent courses (7%, 4). The most likely reason for the relative popularity of this course is that it is often a prerequisite for promotion to an E grade.

8.1.2 Plans for courses

At six months, 18 months and three years after qualification, graduates and diplomates were asked whether they planned to start any courses at various time points in the future. Tables 8.2i – iii show figures for courses other than degrees, and the figures adjusted to include degrees. At all data collection time points a greater proportion of graduates, compared with diplomates, planned to take a course(s), whether one considers courses other than degrees or all courses. For courses other than degrees the differences ranged from 12% to 17%. The inclusion of degree courses reduced the differences between graduates and diplomates for the six months (7%), 18 months (5%) and three years after qualification time points (13%). Also of note is that at each data collection time-point, graduates were less likely than diplomates to state that they did not plan to start any courses. Differences between the plans of graduates and diplomates were significant at the six month and 18 month data collection point but not at the three year point.

Table 8.2i: Six months after qualification questionnaire: whether plan to start a course(s) within the next 12 months

	Courses other than degrees		All courses	
Plans	Diplomates (n=1339) %	Graduates (n=111) %	Diplomates (n=1339) %	Graduates (n=111) %
Yes	34	49	46	53
No	27	14	20	10
Unsure	38	37	34	37
No answer	1	0	1	0
Total	100	100	100	100

A Fisher's Exact test was used to compare differences in distributions across three categories for all courses (yes, no, unsure). p = 0.026

Table 8.2ii: 18 months after qualification questionnaire: whether plan to start a course(s) within the next 18 months

	Courses other than degrees		All courses	
Plans	Diplomates (n=1117) %	Graduates (n=53) %	Diplomates (n=1117) %	Graduates (n=53) %
Yes	41	53	48	53
No	24	4	19	4
Unsure	33	43	30	43
No answer	3	0	2	0
Total	100	100	100	100

A Fisher's Exact test was used to compare differences in distribution across three categories for all courses (yes, no, unsure). p = 0.003

Table 8.2iii: Three years after qualification questionnaire: whether plan to start a course(s) within the next two years

	Courses other than degrees		All courses	
Plans	Diplomates (n=900) %	Graduates (n=57) %	Diplomates (n=900) %	Graduates (n=57) %
Yes	39	56	45	58
No	21	18	18	16
Unsure	39	25	36	25
No answer	2	2	1	2
Total	100	100	100	100

A Fisher's Exact test was used to compare differences in distribution across three categories for all courses (yes, no, unsure). Difference not significant at 5% level.

Respondents were asked to state the names of courses they planned to take. At each time point, and for both graduates and diplomates, the most frequently mentioned course was the ENB 998 Teaching and Assessing in Clinical Practice course or equivalent course. At

six months after qualification 19% (21) of graduates, compared with 18% (237) of diplomates, planned to start this course. At 18 months after qualification 23% (12) of graduates, compared with 17% (185) of diplomates, planned to take this course within 18 months. Finally, at three years after qualification 16% (9) of graduates, compared with 13% (116) of diplomates, intended to take this course within the next two years.

8.1.3 Unfulfilled plans

Respondents were asked in the questionnaires sent at six months, 18 months and three years after qualification whether there were any courses, since qualification, which they had wanted to start but had not done so. Table 8.3 shows the proportion of respondents at each data collection time-point who had wanted to start a course but had not done so. The table does not include figures for degree courses since there is no comparable data. The findings suggest substantial unfulfilled plans. At 18 months and three years after qualification, approximately half of both graduates and diplomates had unfulfilled plans.

Table 8.3: Planned to start a course but did not start course

	Diplomates		Graduates	
Time point after qualification	No.	%	No.	%
6 months	329	25	39	35
18 months	564	50	24	45
3 years	364	40	25	44

A Fisher's Exact test was used to compare differences between courses at each time point. There was a significant difference at 6 months only p=0.017.

Information on which courses were not taken is available for the six months and 18 months after qualification time points. The most frequently mentioned course for both graduates and diplomates was the ENB 998 Teaching and Assessing in Clinical Practice course, or equivalent courses. For graduates, at six months after qualification, 16% (18) of respondents had wanted to take this course, while at 18 months 26% (14) had planned to do so. The corresponding figures for diplomates were 12% (162) at six months after qualification and 26% (293) at 18 months after qualification.

8.1.4 Reasons for not starting courses

In the questionnaires sent at six and 18 months after qualification respondents were asked to give their reasons for not starting courses which they had planned to do so. Graduates and diplomates were presented with a closed list of options and an 'other' option in which they could give additional reasons. 'Other' options were subsequently grouped into categories. The reasons were developed via extensive pilot work and reflected a variety of organisational constraints, for example, 'still waiting for place on course' and 'no places

available'. There are, however, those reasons which reflect individual circumstances, for example 'decided to do a different course instead' and 'I went on maternity leave'.

Table 8.4 shows only those reasons for which there were 4% or more of either of the four groups of respondents who gave this as a response. The full list of reasons is in Appendix 7. The figures in the table refer to the number of courses rather than the number of respondents. The main reasons given for not being able to start courses reflect organisational constraints. One of the most frequently given reasons by both graduates and diplomates, and at both time points, was 'still waiting for place on course'. However, while this was given as a reason for 64% (25) of courses not taken by graduates at six months after qualification and 62% (18) at 18 months after qualification, the figures for the diplomates were 17% (71) and 38% (279) respectively.

Table 8.4: Reasons for not starting courses

	Time after qualifying							
	6 months				18 months			
	Diplomates (n=412)		Graduates (n=39)		Diplomates (n=725)		Graduates (n=29)	
Reasons	No.	%	No.	%	No.	%	No.	%
Still waiting for place on course	71	17	25	64	279	38	18	62
No places were available	88	21	9	23	124	13	9	31
Do not have enough experience	55	13	1	3	8	1	1	3
No/Lack of funding	47	11	0	0	3	*	0	0
Could not be released because of staff shortages	22	5	5	13	85	12	3	10
Manager didn't support my attendance	15	4	0	0	64	9	1	3
Not yet been offered funding	12	3	6	15	141	19	3	10
I was unable to fund myself	5	1	5	13	85	12	2	7
I left/will be leaving the job to which the course was relevant	0	0	1	3	67	9	1	3

The other differences of note emerged from data obtained at six months after qualification and were mainly concerned with funding. 'Not yet been offered funding' was a reason given by graduates for 15% (6) of the courses, compared with 3% (12) for diplomates. I was unable to fund myself was a reason given by graduates for 13% (5) of courses, compared with 1% (5) of diplomates. Conversely 11% (47) of diplomates referred to lack of funding, while no graduates did so. For just 3% (1) of the courses that graduates wanted to start, not having enough experience was given as a reason, compared with 13% (55) for diplomates.

8.2 PRECEPTORSHIP

At qualification, respondents were asked about their demand for preceptorship, in terms of whether they wanted a preceptor and how important they perceived various aspects of preceptorship to be. Six months after qualification respondents were asked about their experiences of preceptorship.

8.2.1 Demand at qualification for preceptorship

In terms of demand for preceptorship, questions were asked only of those graduates and diplomates who, immediately after qualifying, intended to take up a job in the UK that used knowledge and skills obtained during their nursing course.

Table 8.5 shows the extent to which graduates and diplomates wanted a preceptor at qualification. The overwhelming majority of both graduates (94%, 90) and diplomates (97%, 1462) wanted to have a preceptor.

Table 8.5: Wanting to have a preceptor

	Diplomates		Graduates	
Wanting to have a preceptor	No.	%	No.	%
Want to have a preceptor	1462	97	90	94
Did not mind	29	2	2	2
Do not want to have a preceptor	13	1	2	2
No answer	8	1	2	2
Total	1512	100	96	100

Those graduates and diplomates who wanted to have a preceptor, or did not mind, were then asked how important they thought various aspects of preceptorship to be at qualification (see Table 8.6). The aspects of preceptorship were determined following a literature review and extensive pilot work (Hardyman and Hickey 2001). Two broad roles of the preceptor can be identified in the aspects of preceptorship: easing the transition into a new role and assisting the newly qualified nurse to develop new skills. 'Emotional support', 'someone to confide in' and 'help me settle into the environment' are all part of the former role, while 'constructive feedback on my clinical skills', 'teaching new skills', and 'assisting in setting learning objectives are part of the latter role. Other aspects, for example 'someone to work alongside' and 'someone to meet with on a regular basis', encompass both roles. Two additional aspects, which emerged from the pilot work, were also included: 'advising on professional issues' and 'discussing career plans'.

Table 8.6: Importance of aspects of preceptorship

Aspects of preceptorship	Very important		Quite important		Not very important		Not at all important	
	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
Constructive feedback on my clinical skills	90	93	9	7	1	0	0	0
Teaching new clinical skills	82	76	17	23	1	1	0	0
Confidence building	64	63	31	34	4	2	1	1
Help me to settle into the work environment	60	47	34	42	6	9	1	2
Advising on professional issues	57	59	39	38	4	3	0	0
Assisting in setting learning objectives	50	54	44	41	5	4	1	0
Emotional support	49	49	43	41	8	10	0	0
Someone to work alongside	30	44	49	44	18	11	3	1
Someone to confide in	29	36	46	45	23	17	3	2
Someone to meet with on a regular basis	28	43	51	41	18	14	4	1
Discussing career plans	19	26	43	42	34	29	4	2

Diplomates, n = 1491
Graduates, n = 92

For both graduates and diplomates, all aspects of preceptorship bar one, were considered very or quite important by three-quarters or more of respondents. The aspect of 'discussing career plans' was rated as important by 68% (65) of graduates and 62% (935) of diplomates.

Those aspects of preceptorship encompassed by the role of assisting with development of new skills were particularly important for both graduates and diplomates. Thus, 'constructive feedback on my clinical skills' was rated as very or quite important by 100% (92) of graduates and 99% (1482) of diplomates, while the figures for 'teaching new clinical skills' were 99% (91) and 99% (1479) respectively.

Differences of note between graduates and diplomates emerged for the aspects of 'help me to settle into the work environment' and for 'someone to meet with on a regular basis'. A higher proportion of diplomates than graduates rated the former as very important (diplomates 60%, 891 vs graduates 47%, 43), while the reverse was true for the latter (diplomates 28%, 434 vs graduates 43%, 39). It should be noted, however, that the differences are largely accounted for in the 'quite important' column.

8.2.2 Preceptorship experiences in first nursing job

At six months after qualification, all those respondents who had been, or were, employed in a nursing job were asked about preceptorship experiences in their first nursing job. They were asked whether they had received preceptorship, and their views on the amount of preceptorship that they had received. The majority of both graduates and diplomates, who had had a first job, had also had a preceptor (graduates 90%, 95 vs diplomates 85%,

1090). Approximately three-quarters of both graduates (77%, 73) and diplomates (72%, 781) who had a preceptor actually received preceptorship. Considered as a proportion of those who had had a nursing job, then a slightly higher proportion of graduates (69%, 73) than diplomates (61%, 781) had received preceptorship. Those respondents who actually received preceptorship from their preceptor were asked their views on the amount of preceptorship received for each of the aspects identified in Table 8.6. Pilot work for the questionnaire sent at six months after qualification led to the addition of another aspect of assistance with reflection on practice (Robinson *et al.* 2001). This aspect was regarded as being part of the preceptor's role of assisting the newly qualified nurse to develop new skills.

Respondents were given seven options which were developed following extensive pilot work (Robinson *et al.* 2001). For the purposes of this chapter these options have been grouped into the four categories also shown in Table 8.7. Findings are presented on the first three categories in Table 8.7, i.e. demand met, no demand and unmet demand. For the category 'did not need any because of dissatisfaction with preceptor', for each aspect of preceptorship, 4% or less of graduates and diplomates indicated this to be the case.

Table 8.7: Categories of options

Categories	Options
Demand met	I had sufficient from my preceptor
No demand	I had none from my preceptor, but did not want any as I did not need any from him/her I had some from my preceptor, but didn't want as much as I didn't need it from him/her
Unmet demand	I had none from my preceptor, but wanted some from him/her I had some from my preceptor, but wanted more from him/her
Did not need any because of dissatisfaction with my preceptor	I had none but, because I was dissatisfied with my preceptor, I did not want any from him/her I had some but, because I was dissatisfied with my preceptor, I didn't want as much from him/her

8.2.3 Meeting demand for preceptorship in first nursing job

Table 8.8 shows the proportion of graduates and diplomates who, for the various aspects of preceptorship, indicated that they had received a sufficient amount of preceptorship, i.e. demand met or no demand for preceptorship from their preceptor.

The proportion of graduates and diplomates who reported receiving sufficient preceptorship were higher for the same four aspects, i.e. help settling into the work environment, emotional support, confidence building and someone to confide in. Three of these four aspects, i.e. help settling into work environment, emotional support, and someone to confide in reflect the preceptor's role of easing the transition to a new role.

Overall, the findings suggest that graduates were slightly less likely than diplomates to report receiving sufficient preceptorship. There were five aspects of preceptorship for which less than half of graduates indicated that they had received sufficient preceptorship, (constructive feedback on clinical skills 42%, 31, assistance with reflection on practice 48%, 35, discussing career plans 48%, 35, having someone to work alongside 48%, 25, and assistance in setting learning objectives 49%, 36), compared with just two for diplomates, (discussing career plans 44%, 342 and assistance with reflection on practice 46%, 362).

Table 8.8: Demand met and no demand

	Demand met		No demand	
Aspects of preceptorship	Dips (n=781) %	Grads (n=73) %	Dips (n=781) %	Grads (n=73) %
Help settling into the work environment	71	67	6	4
Emotional support	64	60	11	14
Confidence building	62	56	2	3
Someone to confide in	60	62	18	16
Being taught new clinical skills	57	52	4	4
Having someone to work alongside	56	48	7	8
Assistance in setting learning objectives	55	49	6	8
Constructive feedback on my clinical skills	52	42	3	1
Advice on professional practice	53	52	12	11
Someone to meet on a regular basis	52	53	9	8
Assistance with reflection on practice	46	48	9	8
Discussing career plans	44	48	29	23

A Fisher's Exact test was used to compare differences between courses for each aspect for demand met and no demand separately. All differences were not significant at the 5% level. Constructive feedback on my clinical skills approached statistical significance for demand met p = 0.066.

The main difference of note between graduates and diplomates in the particular aspects of preceptorship in the 'demand met' column was 52% (406) of diplomates compared with 42% (31) of graduates reported receiving sufficient constructive feedback on clinical skills. As stated earlier, however, one must be cautious when drawing conclusions on unmet demand using these figures alone. For example, although less than half of both graduates and diplomates thought that they had had sufficient discussion of career plans it should be noted that 23% (17) of graduates and 29% (224) of diplomates thought that they did not need any.

Turning to 'unmet demand' for preceptorship, Table 8.9 shows the 'ranking' of unmet demand for the various aspects of preceptorship. The findings indicate a perceived unmet demand, for both graduates and diplomates, for the preceptorship role of assisting the newly qualified nurse to develop new skills. Indeed, the top four aspects, for both graduates and diplomates, are encompassed by this role. For eight aspects of preceptorship more than 30% of both graduates and diplomates indicated an unmet demand. These were: 'assistance with reflection on practice', 'constructive feedback on my clinical skills', 'assistance in setting learning objectives', 'being taught new clinical skills', 'someone to meet with on a regular basis', 'having someone to work alongside', 'advice on professional practice', and 'confidence building'.

Although there was little difference between graduates and diplomates in the proportion of respondents who wanted more preceptorship for each of the aspects; overall, graduates' unmet demand was slightly higher than that of the diplomates. Thus a higher proportion of graduates than diplomates indicated unmet demand for eight of the twelve aspects, with the largest difference emerging for constructive feedback on clinical skills; over half of graduates (52%, 38) compared with 40% (312) of diplomates.

Table 8.9: Unmet demand for preceptorship

	Diplomates (n=781)		Graduates (n=73)	
Aspects of preceptorship	No.	%	No.	%
Assistance with reflection on practice	329	42	30	41
Constructive feedback on my clinical skills	312	40	38	52
Assistance in setting learning objectives	290	37	29	40
Being taught new clinical skills	287	37	31	42
Someone to meet on a regular basis	286	37	26	36
Having someone to work alongside	265	34	28	38
Advice on professional practice	260	33	25	34
Confidence building	242	31	29	40
Discussing career plans	188	24	19	26
Emotional support	176	23	15	21
Help settling into the work environment	158	20	19	26
Someone to confide in	133	17	12	16

A Fisher's Exact test was used to compare differences between courses for each aspect. All differences were not significant at the 5% level. Constructive feedback on my clinical skills approached statistical significance p = 0.061

8.3 SUMMARY

The findings for Continuing Professional Development can be summarised as follows:

Courses

- Graduates were more likely than diplomates to plan to undertake courses and this difference was significant at 6 months and 18 months.
- There was little difference between graduates and diplomates in terms of the proportions who had completed courses.
- There was substantial unmet demand for courses from both graduates and diplomates. At 18 months and three years after qualification approximately half of both graduates and diplomates had not started courses which they planned to take.
- The ENB 998 course was the most frequently mentioned course in terms of courses completed, courses planned to take and courses wanted to take but did not do so.

Preceptorship

- An overwhelming majority of graduates and diplomates wanted preceptorship on qualifying. At six months after qualifying, however, a substantial minority of both graduates and diplomates had not received preceptorship.
- Of those who received preceptorship, for each aspect the majority of both groups (between 55% and 78%) reported receiving sufficient preceptorship or not wanting any. The one exception was a figure of 43% for graduates in respect of constructive feedback on my clinical skills.
- There was, nonetheless, a substantial level of unmet demand for various aspects of preceptorship. This unmet demand was particularly high for those aspects of preceptorship which involve the development of new skills. Over a third of both graduates and diplomates who received preceptorship indicated an unmet demand for the following aspects: assistance with reflection on practice, constructive feedback on my clinical skills, assistance in setting learning objectives, being taught new clinical skills, having someone to meet on a regular basis and having someone to work alongside.
- The figure for unmet demand for constructive feedback on clinical skills was particularly high for graduates.

CHAPTER: 9
JOB SATISFACTION

Research question 5: Do degree and diploma nurses differ in their satisfaction with the quality of working life experienced while working in health care?

Satisfaction with the quality of working life of graduates and diplomates was measured at six months, 18 months and three years after qualification using a scale developed by Robinson *et al.* (2001). Participants were asked to indicate how satisfied they were with the items on the scale on a 5-point Likert type scale of 'very satisfied', 'fairly satisfied', 'neither satisfied nor dissatisfied', 'fairly dissatisfied' and 'very dissatisfied', with the option of responding 'not applicable' to some items. Some issues were only relevant at particular time points. Therefore 34 items were used at six months after qualification, 35 items at 18 months and 36 items at three years after qualification.

Data on job satisfaction refers to the current jobs of graduates and diplomates working in nursing or healthcare jobs in the UK (excluding agency or bank nursing jobs). Numbers of respondents for the satisfaction scale for the longitudinal diplomate cohort and cross-sectional graduate cohorts are presented in Table 9.1. Percentages are produced using these figures as the number of total respondents. Unless otherwise stated, total responses to all items discussed included less than 8% 'not applicable' responses and less than 5% not stated. Additionally, mean scores for items were calculated by assigning numerical values to the 5-point response options ('very satisfied' = 5, through to 'very dissatisfied' = 1). The means represent only those responses recorded on the 5-point Likert scale, i.e. individuals who responded 'not applicable' were not included in these calculations.

Table 9.1: Numbers of respondents who completed satisfaction scale

	Diplomates		Graduates	
Time point after qualification	Total number	% of whole cohort	Total number	% of whole cohort
At 6 months	1281	96	106	95
At 18 months	954	85	49	92
At 3 years	772	86	48	84

9.1 RANKED AREAS OF SATISFACTION

Through ranking items means for graduate and diplomate nurses' ratings of satisfaction (highest mean represents the most satisfying item, lowest mean represents the most dissatisfying item), it was apparent that both groups were satisfied with similar aspects of

their work, and also dissatisfied with similar aspects of their work (see Table 9.2; means are presented to one decimal place only). Thus, the 'structure' of both graduate and diplomate job satisfaction is largely the same.

Table 9.2: Ranking of work satisfaction

Ranked satisfaction		Diplomates		Graduates	
		Rank	Mean	Rank	Mean
Most satisfied	Quality of working relationships with colleagues	1st	4.3	1st	4.3
	Emotional support from nurses of the same grade/position	2nd	4.1	2nd	4.1
	Availability of Supplies (eg dressings)	3rd	3.7	3rd	3.7
	Ratio of qualified to unqualified staff on nights	4th	3.7	5th	3.7
	Notice of off duty	5th	3.7	10th	3.5
	Proportion of time I spend/spent providing direct client care ('hands on' care)	6th	3.6	4th	3.7
	Availability of equipment (eg audiovisual equipment, art materials, books)	7th	3.6	8th	3.5
	Quality of clinical supervision received	8th	3.6	19th	3.2
	Size of community caseload	9th	3.6	34th	2.7
	Emotional support from immediate line manager	10th	3.5	14th	3.4
	Ratio of permanent to agency/bank staff on days	11th	3.5	7th	3.6
	Opportunity to go on study days/workshops	12th	3.5	9th	3.5
	Opportunities to provide good quality care	13th	3.5	15th	3.2
	Level of support available when dealing with violent/aggressive incidents	14th	3.5	12th	3.4
	Frequency with which I leave work on time	15th	3.4	13th	3.4
	Number of staff usually on nights	16th	3.4	16th	3.2
	Contents of appraisal(s)	17th	3.4	20th	3.1
	Combining work hours with responsibilities for children	18th	3.4	32nd	2.7
	Ratio of qualified to unqualified staff on days	19th	3.4	6th	3.6
	Ratio of permanent to agency/ bank staff on nights	20th	3.4	11th	3.4
	Combining work hours with social life	21st	3.4	21st	3.1
	Amount of clinical supervision received	22nd	3.3	24th	3.0
	Constructive feedback on my work from staff of a higher grade/position	23rd	3.2	17th	3.2
	Opportunity to go on courses other than study days/workshops	24th	3.2	18th	3.2
	Combining work hours with life with spouse/partner	25th	3.2	26th	2.9
	Opportunity to reflect on my own practice on my own while at work	26th	3.1	28th	2.9
	Grade/ position in relation to level of responsibility	27th	3.1	31st	2.8
	Opportunities to introduce/implement changes to aspects of practice	28th	3.1	22nd	3.1
	Opportunity to reflect on my practice with someone of a higher grade/position	29th	3.1	25th	3.0
	Opportunity to reflect on practice with a group of colleagues	30th	3.1	30th	2.9
	Number of staff usually on days	31st	3.0	23rd	3.0
	Support with developing my Personal Development Plan (PDP)	32nd	3.0	35th	2.3
	Quality of discussions about developing my career	33rd	3.0	29th	2.9
	Proportion of time I spend/spent on paperwork	34th	2.9	27th	2.9
	Frequency of discussions about developing my career	35th	2.7	33rd	2.7
Most dissatisfied	Pay in relation to level of responsibility	36th	2.6	36th	2.2

Several themes appear to emerge from the data shown in Table 9.2. The two most satisfying areas of work for both graduates and diplomates are *peer relationships* (quality of working relationships with colleagues, the level of emotional support from nurses of the same grade/ position) and the *availability of supplies and equipment*. In particular,

satisfaction with peer relationships is clearly greater than satisfaction with all the other aspects of work.

The most dissatisfying aspect of work for both groups was *pay* in relation to level of responsibility. This is perhaps unsurprising as it is a commonly voiced issue within nursing. Further areas of dissatisfaction were found to be in *career development* (frequency and quality of discussions about career development and support with developing a Personal Development Plan), *paperwork* (proportion of time spent on paperwork) and *opportunities to reflect on practice* (opportunities to reflect on practice with colleagues, with those on a higher grade, and whilst alone at work).

Not all sources of satisfaction/dissatisfaction were shared, however, with there being a few differences in ranking between graduates and diplomates. Size of community caseload, being able to combine work hours with childcare responsibilities and quality of clinical supervision were ranked far lower for graduates than diplomates (34^{th} v 9^{th}, 32^{nd} v 18^{th}, and 19^{th} v 8^{th} respectively), and ratio of qualified staff to unqualified staff on days ranked higher (greater satisfaction) for graduates than diplomates (6^{th} v 19^{th} respectively). These exceptions withstanding, the findings indicate that both graduates and diplomates develop satisfaction from similar sources and develop dissatisfaction from similar sources. However, this does not indicate whether graduates and diplomates differ in terms of the *level* of satisfaction or dissatisfaction they have with their working lives. Looking at differences in means between graduates and diplomates does indicate variations in the levels of satisfaction with aspects of work between the two groups. These differences between the level of satisfaction of graduates and diplomates are explored in the following sections.

9.2 GENERAL LEVEL OF SATISFACTION

An initial point to make regarding the level of satisfaction is that, on average, the respondents were more satisfied than dissatisfied with virtually all areas of their working lives. As shown in Table 9.2, diplomates were, on average, more satisfied than dissatisfied (mean score greater than 2.5) with all aspects of their working lives. A similar finding was reported by graduates, who were, on average, more satisfied than dissatisfied with all areas of their working life with the exception of two areas: support with the development of a Personal Development Plan and pay in relation to level of responsibility.

In order to ascertain a more general level of satisfaction with the quality of working life for graduates and diplomates, responses to items on the scale were averaged so that mean

proportions of both groups in each response option could be created (see Table 9.3). Across the three time points, contrasts in the level of satisfaction with quality of working life between graduates and diplomates appeared. While measurement at six months revealed little difference between levels of overall satisfaction, with graduates being slightly more satisfied than diplomates, at 18 months a stronger difference emerged of graduates being more dissatisfied than diplomates. This latter difference was more marked again at three years after qualification.

These findings suggest that the general level of satisfaction with the quality of working life increases over time for diplomates remaining in nursing up to three years after qualification (the diplomates are a longitudinal cohort). However, the data suggests that this could be the opposite for graduates, whose satisfaction with the quality of their working life appears to be lower at three years than at six or 18 months after qualification (although it is important to remember that the graduates are different cross-sectional cohorts).

Table 9.3: General level of satisfaction with quality of working life

	Very satisfied		Fairly satisfied		Neither satis nor dissatis		Fairly dissatisfied		Very dissatisfied		Not applicable	
General satisfaction	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
6 months	14	17	29	29	17	16	17	18	9	8	11	8
18 months	15	17	29	29	16	14	15	19	7	8	14	12
3 years	16	11	29	31	15	14	15	19	6	12	13	14

At 6 months: grads n = 106, dips n = 1281 . At 18 months: grads n = 49, dips n =954 . At 3 yrs: grads n = 48, dips n = 772.

Differences in overall job satisfaction (at six months, eighteen months and three years) between diplomates and graduates were explored multivariately using a regression modelling approach. The aim was to ascertain whether the observed differences remained having accounted for variability due to: age; whether the respondent had children; whether the respondent had a partner; their current nursing grade; the region in which the job was based; the number of nursing posts that the respondent worked in (including current post), and time (in months) in current nursing post. Means adjusted for this co-variation are shown in Table 9.4 along with the conditional test of significance from the regression model.

Table 9.4: Multivariate analysis of overall job satisfaction

	Diplomates	Graduates	
	Adjusted Mean	Adjusted Mean	p
6 months	3.440	3.475	0.64
18 months	3.249	3.141	0.29
3 years	3.524	3.226	0.005

At six months there were no major differences between diplomates and graduates in terms of overall job satisfaction. A similar picture emerged at 18 months with diplomates having a higher mean score than graduates. There was a noticeable and statistically significant difference between the two groups at three years. The mean difference between the two groups had therefore increased and changed direction over time from –0.035 at 6 months to 0.298 at 3 years suggesting that diplomates were becoming more satisfied with their working lives in comparison with graduates.

9.3 UNDERLYING THEMES BEHIND DIFFERENCES

Although graduates were found to have a lower level of general satisfaction compared with diplomates, there were areas in which this difference was more pronounced and also less pronounced. Four consistent areas of difference in level of satisfaction are discussed; pay and grade in relation to level of responsibility, opportunities to reflect upon practice, opportunities to provide good quality care, and professional development. These areas were deemed meaningful due to statistically significant (or approaching significance at the 5% level) differences between graduates and diplomates particularly at the 3 year point. It is interesting to note that these areas were also among the extremes of satisfaction/dissatisfaction of both graduates and diplomates as discussed in Section 9.1. As such, the main differences in levels of satisfaction between graduates and diplomates were apparent when both groups had relatively strong feelings about that aspect of work. The dependence of each job satisfaction item on course was tested using an ordinal regression model. Levels of significance corresponding to this test are shown beneath each table or in the text if equal to or less than 5%, otherwise the term not significant is used.

9.3.1 Pay and grade in relation to level of responsibility

For both graduate and diplomate groups, the ranking of grade in relation to level of responsibility was found to be low down in relation to other items, and pay in relation to responsibility was rated as most dissatisfying by both groups. Graduates, however, were more dissatisfied with these aspects of work than their diplomate counterparts. Indeed these differences were the largest between the two groups. As shown in Table 9.5, no real difference was apparent at six months after qualification between graduates and

diplomates in terms of satisfaction with their pay in relation to their level of responsibility. However, 27% more graduates than diplomates at 18 months and 21% more graduates than diplomates at three years after qualification reported a level of dissatisfaction with their pay in relation to their level of responsibility.

Table 9.5: Satisfaction with pay in relation to level of responsibility

	Very satisfied		Fairly satisfied		Neither satis nor dissatis		Fairly dissatisfied		Very dissatisfied		Not applicable	
Pay	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
6 months	5	5	22	19	12	13	30	25	30	34	2	5
18 months	7	10	24	14	17	0	29	37	20	39	4	0
3 years	6	0	23	23	14	6	32	29	18	42	6	0

At 6 months: grads n = 106, dips n = 1281 . At 18 months: grads n = 49, dips n =954 . At 3 yrs: grads n = 48, dips n = 772.

Significance: 6 months not significant; 18 months p = 0.002; 3 years p = 0.001

Satisfaction with grade in relation to level of responsibility was only measured at 18 months and three years after qualification as it was assumed that in the first six months after qualification, nurses were likely to have had only a limited awareness of the responsibilities commensurate with their grade. Similar, if less strong, patterns emerged with grade as with pay in relation to level of responsibility (as indicated in Table 9.6). At 18 months, 13% more graduates than diplomates reported a level of dissatisfaction with their grade in relation to level of responsibility. At three years after qualification, this difference was found to be 16%.

Table 9.6: Satisfaction with grade in relation to level of responsibility

	Very satisfied		Fairly satisfied		Neither satis nor dissatis		Fairly dissatisfied		Very dissatisfied		Not applicable	
Grade	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
18 months	10	12	35	29	17	12	22	33	12	14	3	0
3 years	11	6	34	29	17	17	24	29	8	19	6	0

At 18 months: grads n = 49, dips n =954 . At 3 yrs: grads n = 48, dips n = 772.

Significance: 18 months not significant; 3 years p = 0.015

9.3.2 Opportunities to reflect upon practice

The dissatisfaction of graduates with opportunities to reflect upon practice, was greater the further after qualification it was measured (see Tables 9.7i-iii). This was particularly the case with opportunities to reflect upon practice on their own at work and with a group of colleagues. At six months, 14% and 9% more graduates than diplomates were to some extent dissatisfied with opportunities to reflect upon practice on their own at work and with a group of colleagues respectively.

Table 9.7i: Satisfaction with opportunities to reflect upon practice at six months after qualification

6 months after qualification	Very satisfied		Fairly satisfied		Neither satis' nor dissatis'		Fairly dissatisfied		Very dissatisfied	
	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
1. Opportunity to reflect on my own practice on my own while at work	10	9	28	20	26	17	21	26	8	17
2. Opportunity to reflect on practice with someone of higher grade/position	11	9	27	26	21	20	27	29	9	11
3. Opportunity to reflect on practice with a group of colleagues	9	11	24	20	26	20	19	28	12	12

Graduates n = 106, Diplomates n = 1281

Significance: 1 p = 0.024; 2,3 not significant

Table 9.7ii: Satisfaction with opportunities to reflect upon practice at 18 months after qualification

18 months after qualification	Very satisfied		Fairly satisfied		Neither satis' nor dissatis'		Fairly dissatisfied		Very dissatisfied	
	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
1. Opportunity to reflect on my own practice on my own while at work	11	10	25	33	28	18	17	27	8	10
2. Opportunity to reflect on practice with someone of a higher grade/position	12	14	28	37	23	20	21	14	8	14
3. Opportunity to reflect on practice with a group of colleagues	9	14	26	22	25	20	19	22	8	16

Graduates n = 49, Diplomates n = 954

Significance: 1, 2 and 3 not significant

Table 9.7 iii: Satisfaction with opportunities to reflect upon practice at three years after qualification

3 years after qualification	Very satisfied		Fairly satisfied		Neither satis' nor dissatis'		Fairly dissatisfied		Very dissatisfied	
	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
1. Opportunity to reflect on my own practice on my own while at work	12	4	26	33	24	17	19	27	9	17
2. Opportunity to reflect on practice with someone of a higher grade/position	12	8	29	25	20	21	21	27	9	17
3. Opportunity to reflect on practice with a group of colleagues	10	4	26	31	24	19	21	21	9	23

Graduates n = 48, Diplomates n = 772

Significance: 1, 2 and 3 not significant

At 18 months, these differences were 12% and 11% respectively. At three years after qualification, these differences were even higher – 16% and 14% more graduates than diplomates were to some extent dissatisfied with opportunities to reflect upon practice on their own at work and with a group of colleagues respectively. Interestingly, graduates reported at 18 months that they were more satisfied than diplomates at the opportunity to

reflect upon practice with someone of a higher grade/position (11% difference of those reporting some level of satisfaction). However, those who reported at three years after qualification contrastingly indicated a greater dissatisfaction about this than diplomates (14% more graduates than diplomates attributed a level of dissatisfaction).

9.3.3 Opportunities to provide good quality care

Responses to the item 'Opportunities to provide good quality care' are presented in Table 9.8. The six months measurement yielded few differences of interest. At 18 months and three years after qualification graduates indicated a higher level of dissatisfaction than diplomates with the opportunities available to them to provide a good standard of care. For example, at 18 months, 35% (17) of graduates compared with 22% (210) of diplomates reported some level of dissatisfaction with opportunities to provide good quality care. This difference measured at three years was far higher, with 48% (23) of graduates reporting dissatisfaction with this aspect compared with 23% (178) of diplomates.

Table 9.8: Satisfaction with opportunities to provide good quality care at three time points

	Very satisfied		Fairly satisfied		Neither satis nor dissatis		Fairly dissatisfied		Very dissatisfied		Not applicable	
Quality care	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
6 months	15	20	37	34	14	8	23	26	8	8	2	4
18 months	21	27	41	33	12	6	18	27	4	8	4	0
3 years	25	15	34	27	11	10	18	31	5	17	6	0

At 6 months: grads n = 106, dips n = 1281 . At 18 months: grads n = 49, dips n =954 . At 3 yrs: grads n = 48, dips n = 772.

Significance: 6 and 18 months not significant; 3 years p <0.001

9.3.4 Areas of professional development

Considerable differences were apparent between graduates' and diplomates' level of satisfaction regarding certain areas of professional development (see Tables 9.9i-iii). At six months after qualification, graduates reported a higher level of satisfaction than diplomates over the areas of professional development measured. These differences were particularly strong (6-13% differences) for satisfaction with regard to opportunities to go on study days, workshops, and courses, and career development discussions (21% of both graduates (22), and diplomates (267), reported not having career discussions).

Table 9.9i: Satisfaction with professional development at six months

6 months after qualification	Very satisfied		Fairly satisfied		Neither satis' nor dissatis'		Fairly dissatisfied		Very dissatisfied	
	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
1. Opportunity to go on study days/ workshops	20	25	33	41	12	12	18	12	15	6
2. Opportunity to go on courses other than study days/ workshops	13	21	19	23	21	17	23	25	19	9
3. Constructive feedback on my work from staff of a higher grade/position	12	16	32	36	21	14	22	19	10	10
4. Frequency of discussions about developing my career	5	7	15	22	27	25	26	29	24	14
5. Quality of discussions about developing my career	5	7	15	19	25	25	19	20	13	6

Graduates n = 106, Diplomates n = 1281

Significance: 1 p = 0.004; 2 p = 0.008; 3 not significant; 4 p = 0.028; 5 p = 0.041

However, at 18 months after qualification, only very minor differences were apparent, with this graduate cohort no longer showing a higher level of satisfaction in comparison with the diplomate cohort (again 18% of both graduates, 9, and diplomates, 173, reported not having career discussions). On closer analysis of the data, it appeared the reason behind the differences between time point measurements was not that graduate satisfaction was necessarily lower after 18 months, but that diplomate satisfaction with these areas of professional development rises after the six months measurement, with the average proportion of responses for very dissatisfied falling from 16% at six months to 10% at 18 months.

Table 9.9ii: Satisfaction with professional development at 18 months

18 months after qualification	Very satisfied		Fairly satisfied		Neither satis' nor dissatis'		Fairly dissatisfied		Very dissatisfied	
	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
1. Opportunity to go on study days/ workshops	21	22	39	41	11	12	16	16	8	8
2. Opportunity to go on courses other than study days/ workshops	19	16	31	35	16	14	19	20	10	14
3. Constructive feedback on my work from staff of a higher grade/position	14	27	34	18	21	29	18	22	8	4
4. Frequency of discussions about developing my career	9	14	21	22	26	16	25	31	15	16
5. Quality of discussions about developing my career	9	12	20	24	24	12	18	24	7	8

Graduates n = 49, Diplomates n = 954

Significance: 1,2,3,4,5 all non significant

By three years after qualification, the earlier trends had reversed, as graduates reported a lower level of satisfaction with professional development than diplomates. Across all items, more graduates indicated less satisfaction and more dissatisfaction than diplomates

regarding opportunities to go on study days, workshops, and courses (11-13% more dissatisfied), constructive feedback from staff of a higher grade/position (11% more dissatisfied) career development discussions (14-18% more dissatisfied), contents of appraisals (15% more dissatisfied), and support with the development of a Personal Development Plan (15% more dissatisfied). It appears that the changes in differences between the two groups were a result of diplomates becoming more satisfied/less dissatisfied and the graduate cohort at three years being less satisfied/more dissatisfied than the graduate cohort at six months.

Table 9.9iii: Satisfaction with professional development at three years

	Very satisfied		Fairly satisfied		Neither satis' nor dissatis'		Fairly dissatisfied		Very dissatisfied	
3 years after qualification	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %	Dips %	Grads %
1. Opportunity to go on study days/ workshops	27	13	38	46	9	13	12	15	7	15
2. Opportunity to go on courses other than study days/ workshops	24	13	31	33	13	17	18	21	7	17
3. Constructive feedback on my work from staff of a higher grade/position	14	2	32	33	22	29	17	23	8	13
4. Frequency of discussions about developing my career	8	2	22	17	26	25	24	29	14	27
5. Quality of discussions about developing my career	9	0	22	17	24	25	19	25	7	15
6. Contents of appraisal(s)	10	2	22	21	17	10	10	23	4	6
7. Support with developing my Personal Development Plan (PDP)	6	2	20	13	18	10	17	25	8	15

Graduates n = 48, Diplomates n = 772

Significance: 1 p = 0.016; 2 p = 0.017; 3 p = 0.031; 4 p = 0.007; 5 p = 0.007; 6 p = 0.013; 7 p = 0.007

9.3.5 Further areas in which graduates had a lower level of satisfaction than diplomates

Further parts of working life contributed to graduates' lower level of satisfaction compared with that of diplomates. Three years after qualification, 13% more diplomates than graduates reported being satisfied and 13% more graduates than diplomates reported being dissatisfied with the emotional support received from their immediate line manager ($p = 0.025$). Similarly at three years after qualification, graduates were more dissatisfied than diplomates regarding combing work hours with social life (a 14% difference, $p = 0.010$), opportunities to introduce or implement changes to aspects of practice (a 13% difference, $p = 0.016$), and the availability of equipment (a 16% difference, $p = 0.049$).

9.3.6 Further areas in which graduates had a higher level of satisfaction than diplomates

Other than satisfaction with professional development at six months after qualification, areas in which graduates had a higher level of satisfaction than diplomates at any time point were rare. Two areas in which this was the case was satisfaction with the time spent on paperwork and composition of co-worker groups, be that ratio of permanent to agency/bank staff or ratio of qualified to unqualified staff. At six months, 12% more graduates than diplomates expressed a level of satisfaction regarding time spent on paperwork (10% more diplomates expressed dissatisfaction, $p = 0.024$). This difference was smaller with the groups at 18 months and three years after qualification; the graduate cohort at 18 months after qualification were only slightly more satisfied (not significant) with time spent on paperwork (a 7% difference), and the three year graduate cohort were actually more dissatisfied (not significant) with time spent on paperwork compared with diplomates (a 9% difference). In terms of composition of co-worker groups, despite graduates having a lower level of satisfaction overall at three years after qualification, graduates were actually more satisfied than diplomates about their work groups at this point, although not sufficiently so for statistical significance to be achieved. More graduates than diplomates reported some level of satisfaction with the ratio of permanent staff to agency/bank staff both on days (a 15% difference) and on nights (a 13% difference), and similarly for the ratio of qualified to unqualified staff on days (9%) and on nights (18%). However, this was not recorded at 18 months, with graduates actually reporting a higher level of dissatisfaction in comparison to diplomates regarding the number of staff on nights (a 19% difference, not significant, $p = 0.066$) and the ratio of qualified to unqualified staff on nights (a difference of 11%, not significant).

9.4 SUMMARY

A summary of the findings on satisfaction with working life is presented below:

- There are broad similarities between graduates and diplomates on the sources of satisfaction and dissatisfaction
    - shared sources of satisfaction were:
        - most highly, the relationships and support from colleagues or peers
        - availability of supplies and equipment
        - proportion of time providing direct or ‘hands on’ client care
    - shared sources of dissatisfaction were:
        - most highly, pay (and grade) in relation to level of responsibility

  - frequency and quality of discussion about career development
  - time spent doing paperwork
  - opportunities to reflect upon practice

- At six months the overall level of satisfaction for diplomates and graduates was similar. At 18 months the overall level had fallen for both groups. At three years the diplomates were more satisfied than they were at six months, whereas this was not the case for graduates. At three years the diplomates had a significantly higher overall level of job satisfaction than graduates.
- Graduates had significantly lower levels of satisfaction with pay in relation to level of responsibility at 18 months and three years and grade in relation to level of responsibility at three years.
- For aspects of continuing professional development, graduates were significantly more likely than diplomates to be satisfied at six months, equally likely at 18 months and significantly less likely at three years.
- Graduates were less likely than diplomates to be satisfied with opportunities to reflect on practice and to provide good quality care.

CHAPTER 10:
COMPETENCE

Research question 7: Are there differences between the competencies of graduate and diplomate nurses in the early post-qualification period?

This chapter presents findings on Part B of the project investigating the level of competence of graduate and diplomate nurses. Information is presented on nurses from all branches one year, two years and three years after qualification. These data were gathered via self-reports of the graduate and diplomate nurses and ratings of the immediate line-managers of graduate and diplomate nurses.

An updated version of the Nursing Competencies Questionnaire (NCQ) was used to assess the competencies of graduate and diplomate nurses. The NCQ asks the respondent to rate how often each of the different tasks/functions as depicted in 103 items (e.g. 'Consult clinical nurse specialists appropriately to assist in the investigation of nursing problems') had been performed over the previous six months, with options of 'always', 'usually', 'occasionally' and 'never' being the possible responses. Eighty of the 103 items in the updated NCQ could be combined to represent eight underlying constructs (Bartlett *et al.* 1998; the original NCQ consisted of 78 items, however after pilot work, one of these items was split into three separate items). These constructs were Leadership, Professional Development, Assessment, Planning, Intervention, Cognitive Ability, Social Participation and Ego Strength (see Table 10.1 for definitions).

Table 10.1: Definitions of the eight NCQ constructs

Construct	Definition
Leadership	The ability to lead and make decisions
Professional Development	The participation in continuing education and upgrading of professional standards
Assessment	The ability to observe and diagnose client needs
Planning	The ability to plan accurate nursing actions
Intervention	The ability to carry out nursing actions effectively and with flexibility; the ability to evaluate nursing actions accurately and objectively
Cognitive Ability	The ability to analyse, judge and think critically
Social Participation	The participation and concern in social affairs
Ego Strength	Confidence and assertiveness

There are therefore a further 23 additional items in the updated NCQ, as discussed in Section 4.7.2. Data from the items are analysed both independently and as two new constructs created from several of the additional 23 items, proposed to tap competencies

related to ‘graduateness’. Background variables were also collected and their influence on competence scores investigated. Self-report background information included age and sex of respondent, branch, grade, length of time in job and highest educational qualification. Background information collected on the line-managers was age, sex, grade, length of time in job, if they had a degree and their route to qualification.

Findings are presented, firstly, on the established eight constructs. This is followed by findings on the additional two constructs. Finally, information is presented on the additional items.

10.1 NCQ CONSTRUCTS

Sections 10.1.1 to 10.1.3 present findings from the self-report data regarding the eight NCQ constructs, and section 10.1.4 introduces the line-managers data regarding the NCQ constructs and compares these with the self-report data.

10.1.1 Descriptives

As the self-report data presented in Table 10.2 indicate, there appear to be neither major differences nor trends between graduates and diplomates in their scores on the eight NCQ constructs when looking across the time points after qualification. The construct means indicate that both groups of nurses perceived themselves as undertaking the activities in those constructs somewhere between ‘usually’ and ‘always’ in the previous six months, with the exception of Social Participation, in which nurses indicated they undertook such activities of a frequency between ‘occasionally’ and ‘usually’, from one year to three years after qualification. As such, the assertion that the level of competence would change over time in any systematic way for either group would not be supported by these findings. It should be noted, however, that these data are cross-sectional, and that a longitudinal study would be more suitable for monitoring changes over time within the same individuals and that the numbers of responses at some time points are admittedly low.

10.1.2 Multivariate analyses

The numbers of graduates and diplomates from whom it was possible to collect data proved insufficient for multivariate analyses to be undertaken at each time point. The score means do not suggest any large differences or trends between the time points, as shown in Table 10.3, indicating that competencies are stable over time (year of qualification was also explored for covariance and found not to be significant). Instead, all data were combined for the multivariate analyses to investigate the main effect of

being a graduate or diplomate on level of competence (i.e. the 'Total' rows in Table 10.2).

The outcome of the MANOVA confirmed that there was no significant difference between graduates' and diplomates' level of overall competence, i.e. considering all constructs together, as no multivariate effects existed (Wilks' lambda = .961, F = 1.74, p = .088).

The background variables of time point after qualification, branch, age, sex, grade, highest educational qualification and length of time in current job were then analysed for covariance. These variables, when entered into the multivariate analyses, all produced either non-significant effects as independent factors or as covariates, or violated the multivariate assumption of homogeneity of variance/covariance (Box's M test), which is especially important when group sizes are unequal, as in this case.

Table 10.2: NCQ construct means at the three time points

Diplomates	3 years	Mean	3.35	3.26	3.40	3.44	3.56	3.28	2.72	3.03
		n	34	34	34	34	34	34	34	34
		St. dev	0.42	0.37	0.39	0.42	0.30	0.40	0.50	0.45
	2 years	Mean	3.40	3.34	3.41	3.52	3.62	3.44	2.85	3.23
		n	61	61	61	61	61	61	61	61
		St. dev	0.39	0.38	0.42	0.32	0.28	0.35	0.44	0.42
	1 year	Mean	3.31	3.23	3.36	3.48	3.57	3.39	2.72	3.17
		n	93	93	93	93	93	93	93	93
		St. dev	0.37	0.36	0.40	0.38	0.30	0.38	0.44	0.41
	Total	Mean	3.34	3.27	3.38	3.49*	3.58	3.39	2.76*	3.16
		n	188	188	188	188	188	188	188	188
		St. dev	0.39	0.37	0.41	0.37	0.29	0.37	0.46	0.42
Graduates	3 years	Mean	3.50	3.38	3.37	3.41	3.58	3.36	2.76	3.17
		n	18	18	18	18	18	18	18	18
		St. dev	0.35	0.32	0.42	0.31	0.27	0.36	0.48	0.33
	2 years	Mean	3.34	3.29	3.39	3.43	3.59	3.40	2.64	3.15
		n	41	41	41	41	41	41	41	41
		St. dev	0.38	0.35	0.39	0.38	0.27	0.33	0.42	0.34
	1 year	Mean	3.26	3.24	3.28	3.38	3.52	3.32	2.65	3.10
		n	107	107	107	107	107	107	107	107
		St. dev	0.38	0.36	0.38	0.37	0.28	0.37	0.48	0.38
	Total	Mean	3.31	3.26	3.32	3.40*	3.54	3.35	2.65*	3.12
		n	166	166	166	166	166	166	166	166
		St. dev	0.38	0.35	0.39	0.37	0.28	0.36	0.46	0.37

* - indicates a significant difference in construct mean between graduates and diplomates at p<.05 level
Figures for 3 years after qualification are low because only 6 colleges offered both diploma and degree courses at this point

10.1.3 Univariate analyses

A series of univariate ANOVAs were carried out to look at the effect of several variables upon each of the eight constructs independently. Although significant differences and interactions were found, caution should be taken in interpreting the 'meaningfulness' of these findings. Significant results suggest that the observed difference or interaction is not due to 'chance', which is certainly important in order to trust a result. However, significant differences in construct means between groups in this study are generally only around 0.1 to 0.2. Such a small difference lying between 'always' or 'usually' on the NCQ scale, no matter if it is repeatedly found on the NCQ, is unlikely to reflect observable differences in nursing performance in care-giving settings.

Independent differences were found between graduates and diplomates on two of the eight constructs. Significant differences were recorded for the constructs of Planning ($F = 5.26$, $p = .022$) and also Social Participation ($F = 4.93$, $p = .027$), with the diplomate cohort having higher mean scores on these constructs (see Table 10.2).

i) Sex and course type

Figures for construct means of women and men are supplied in Table 10.3. The means indicated that sex and course type may have an interactive relationship on NCQ scores.

Table 10.3: Construct means for male and female respondents

			Leadership	Professional development	Assessment	Planning	Intervention	Cognitive ability	Social participation	Ego strength
Female	Dips	Mean	3.37	3.29	3.42**	3.52**	3.62*	3.41	2.77*	3.19
		n	162	162	162	162	162	162	162	162
		St. dev	0.37	0.35	0.38	0.35	0.27	0.36	0.46	0.42
	Grads	Mean	3.30	3.26	3.30**	3.40**	3.54*	3.34	2.66*	3.11
		n	154	154	154	154	154	154	154	154
		St. dev	0.37	0.35	0.38	0.37	0.27	0.36	0.47	0.36
	Total	Mean	3.33	3.27	3.36	3.46	3.58	3.38	2.71	3.15
		n	316	316	316	316	316	316	316	316
		St. dev	0.37	0.35	0.39	0.36	0.27	0.36	0.47	0.39
Male	Dips	Mean	3.19	3.13	3.17	3.31	3.36	3.25	2.72	3.01
		n	26	26	26	26	26	26	26	26
		St. dev	0.48	0.47	0.48	0.43	0.34	0.43	0.46	0.41
	Grads	Mean	3.45	3.37	3.52	3.42	3.53	3.41	2.66	3.19
		n	12	12	12	12	12	12	12	12
		St. dev	0.50	0.36	0.47	0.35	0.38	0.38	0.40	0.44
	Total	Mean	3.28	3.21	3.28	3.35	3.41	3.30	2.70	3.07
		n	38	38	38	38	38	38	38	38
		St. dev	0.49	0.45	0.50	0.41	0.36	0.41	0.44	0.42
Interaction sex*course			p<.05	p<.05	p<.001	n/s	p<.05	n/s	n/s	n/s

* - indicates a significant difference in construct mean between graduates and diplomates at p<.05 level

** - indicates a significant difference in construct mean between graduates and diplomates at p<.01 level

N.B Sample sizes for men do not permit statistical inference, however, there are small differences in some means

As the inclusion of the variable sex in multivariate analyses violated multivariate assumptions (variance was not homogenous across the different groups), this variable could only be included in univariate comparisons of graduates and diplomates. The outcomes of these analyses produced several interactions between type of course and sex. Significant interactions were found for the constructs of Leadership ($F = 5.55$, $p = .019$), Professional Development ($F = 4.22$, $p = .041$), Assessment ($F = 10.61$, $p = .001$) and Intervention ($F = 5.94$, $p = .015$). These findings suggest that the female diplomates and male graduates scored slightly higher than female graduates and male diplomates on these constructs. However, it is strongly suggested that these particular findings be treated with caution due to the relatively small number of male respondents (diplomates, $n = 26$; graduates, $n = 12$).

Although a MANOVA comparing female graduates and female diplomates proved to be non-significant (Wilks' lambda .954, $F = 1.850$, $p = .068$), several univariate differences were found that are perhaps worthy of note. Female diplomates scored significantly higher than female graduates on four of the eight constructs: Assessment ($F = 7.24$, $p = .008$), Planning ($F = 8.70$, $p = .003$), Intervention ($F = 6.15$, $p = .014$) and Social Participation ($F = 4.89$, $p = .028$). Construct means would similarly suggest male graduates having higher scores than male diplomates. Again, however, numbers do not allow statistical inference. Indeed, if the groups are ranked in terms of their group means alone, female diplomates and male graduates appear to have roughly equivalent scores. Female graduates would then be the next highest scoring group, with male diplomates scoring the lowest out of all four groups. However, caution is again urged over whether, statistically significant or not, all of these suggested differences are actually 'meaningful' and indicate a recognizable differentiation in competence.

10.1.4 Line-managers data and comparisons

The line-managers NCQ construct data (presented in Table 10.4) indicates that there was little difference between the competence of graduates and diplomates, providing support for the cautious interpretation of the self-report differences. A MANOVA confirmed the lack of multivariate difference between graduates' and diplomates' level of competence over the eight constructs (Wilks' lambda = .936, $F = .871$, $p = .543$), with univariate comparisons indicating no significant differences between construct means independently. However, attention is drawn to the low response rates of line-managers when interpreting these results (see Section 4.9).

Table 10.4: Comparison of line-manager and nurse NCQ construct means

			Leadership	Professional development	Assessment	Planning	Intervention	Cognitive ability	Social participation	Ego strength
Line-manager	Dips	Mean	3.25	3.40	3.39	3.51	3.56	3.41	2.96*	3.18
		n	51	51	51	51	51	51	51	51
		St. dev	0.55	0.42	0.46	0.49	0.44	0.49	0.56	0.54
	Grads	Mean	3.23	3.34	3.40	3.52	3.56	3.31	2.92**	3.27
		n	60	60	60	60	60	60	60	60
		St. dev	0.57	0.46	0.43	0.43	0.38	0.51	0.61	0.54
	Total	Mean	3.24	3.37	3.40	3.52	3.56	3.36	2.94***	3.23
		n	111	111	111	111	111	111	111	111
		St. dev	0.56	0.44	0.44	0.46	0.41	0.50	0.59	0.54
Nurse	Dips	Mean (Total group)	3.34 (3.34)	3.29 (3.27)	3.42 (3.38)	3.53 (3.49)	3.61 (3.58)	3.40 (3.39)	2.69* (2.76)	3.14 (3.16)
		n	51	51	51	51	51	51	51	51
		St. dev	0.35	0.30	0.37	0.26	0.26	0.33	0.46	0.46
	Grads	Mean (Total group)	3.35 (3.31)	3.34 (3.26)	3.39 (3.32)	3.46 (3.40)	3.59 (3.54)	3.45 (3.35)	2.71** (2.66)	3.22 (3.12)
		n	60	60	60	60	60	60	60	60
		St. dev	0.35	0.32	0.34	0.33	0.24	0.33	0.41	0.34
	Total	Mean (Total group)	3.35 (3.33)	3.32 (3.26)	3.40 (3.35)	3.49 (3.45)	3.60 (3.56)	3.43 (3.37)	2.70*** (2.71)	3.18 (3.14)
		n	111	111	111	111	111	111	111	111
		St. dev	0.35	0.31	0.35	0.30	0.25	0.33	0.43	0.40
	(Pearson's r)		.09	.15	.14	.21°	.04	.10	.21°	.13

* - indicates a significant difference in construct mean between line-manager and self-rating at p<.05 level

** - indicates a significant difference in construct mean between line-manager and self-rating at p<.01 level

*** - indicates a significant difference in construct mean between line-manager and self-rating at p<.001 level

° - indicates a significant correlation between line-manager and nurse response at p<.05 level

Also presented in Table 10.4, are comparison data indicating relationships between line-manager and nurse responses to the NCQ constructs. Correlations (Pearson's r) are reported of the possible comparisons that were made of the construct means from the corresponding self-report and line-manager ratings (n=111). Total group means are also presented to indicate how representative this sample of nurses are of the total cohorts. While a significant correlation was evident between the constructs of Planning (Pearson's r = .21, p = .027) and Social Participation (Pearson's r = .21, p = .024), the relationships between the remaining construct responses were weak. Oddly, perhaps, it is within one of these two constructs that significant differences in mean was recorded between line-manager and nurse-ratings: line-managers reported significantly higher scores for Social Participation for the graduates (t = 3.05, p = .003), diplomates (t = 2.58, p = .013) and these nurses combined (t = 3.91, p = .000) than the nurses did for themselves. However, no significant differences existed between line-manager and self-reports on any of the other constructs.

10.1.5 Comparison with Bartlett *et al.* (1998) findings

Comparisons can be made with some of the findings from the Bartlett *et al.* (1998) study. In the Bartlett *et al.* (1998) study, data were collected using the original NCQ at graduation, six months and one year after qualification. A comparison can therefore be made with the one-year data from this study. Table 10.5 presents the comparisons of graduate and diplomate means of the self-reported NCQ construct means of this study and of the Bartlett *et al.* (1998) study. While the findings are largely similar (the largest difference is only 0.26), the greater differences between graduates and diplomates found by Bartlett *et al.* (1998), especially those indicating graduates scoring higher, are not replicated in this study. The larger numbers of respondents in this study would suggest the recent findings are perhaps more representative of both populations.

Table 10.5: Comparison of self-report NCQ construct means at one year after qualification between this study and Bartlett et al. (1998) findings

			Leadership	Professional development	Assessment	Planning	Intervention	Cognitive ability	Social participation	Ego strength
This study	Dips	Mean	3.31	3.23	3.36	3.48	3.57	3.39	2.72	3.17
		n	93	93	93	93	93	93	93	93
	Grads	Mean	3.26	3.24	3.28	3.38	3.52	3.32	2.65	3.10
		n	107	107	107	107	107	107	107	107
Bartlett *et al.* (1998)	Dips	Mean	3.27	3.09	3.31	3.22	3.44	3.22	2.59	3.23
		n	21	21	21	21	21	21	21	21
	Grads	Mean	3.18	3.29	3.45	3.32	3.48	3.24	2.49	3.35
		n	38	38	38	38	38	38	38	38

10.2 ADDITIONAL CONSTRUCTS

Two new constructs were proposed in this study aimed at assessing competencies suggested to be associated with the preparation of nurses by degree courses (see Section 4.7.2). These constructs were ‘Awareness/use of research’ and ‘Awareness/ knowledge of practice and policy developments’. However, as Table 10.6i indicates, there were no significant differences in self-report means between graduates and diplomates and no meaningful patterns emerging across the time points. This was confirmed by a non-significant MANOVA (Wilks’ lambda = .998, F = .310, p = .733).

Similarly, scores from the line-manager’s responses suggested no difference between graduates and diplomates on the constructs ‘Awareness/use of research’ and ‘Awareness/ knowledge of practice and policy developments’. A MANOVA proved non-significant in this respect (Wilks’ lambda = .979, F = .733, p = .484). Means are presented in Table 10.6ii. Furthermore, a significant difference was found regarding ‘Awareness/use of

research' (F = 6.84, p = .010), with line-managers scoring nurses higher than the nurses scored themselves. Correlations between self-report and line-manager responses to the additional constructs were small and non-significant.

Table 10.6: i)'Research' and 'Practice and Policy' means at the three time points & ii) Line-manager comparison

i.

			Research	Practice and policy
Diplomates	3 years	Mean	2.64	3.05
		n	34	34
		St. dev	0.60	0.41
	2 years	Mean	2.85	3.21
		n	61	61
		St. dev	0.51	0.40
	1 year	Mean	2.79	3.09
		n	93	93
		St. dev	0.51	0.39
	Total	Mean	2.78	3.12
		n	188	188
		St. dev	0.53	0.40
Graduates	3 years	Mean	2.98	3.10
		n	18	18
		St. dev	0.46	0.32
	2 years	Mean	2.74	3.14
		n	41	41
		St. dev	0.52	0.37
	1 year	Mean	2.74	3.07
		n	107	107
		St. dev	0.48	0.43
	Total	Mean	2.77	3.09
		n	166	166
		St. dev	0.49	0.40

ii.

			Research	Practice and policy
Line-manager	Dips	Mean	3.02	3.20
		n	51	51
		St. dev	0.57	0.52
	Grads	Mean	2.97	3.20
		n	60	60
		St. dev	0.63	0.53
	Total	Mean	2.99**	3.20
		n	111	111
		St. dev	0.60	0.52
Nurse	Dips	Mean	2.75	3.12
		(Total group)	(2.78)	(3.12)
		n	51	51
		St. dev	0.50	0.38
	Grads	Mean	2.85	3.12
		(Total group)	(2.77)	(3.09)
		n	60	60
		St. dev	0.45	0.37
	Total	Mean	2.80**	3.12
		(Total group)	(2.78)	(3.11)
		n	111	111
		St. dev	0.45	0.37
Correlation (Pearson's r)			.14	.12

** - indicates a significant difference in construct mean between line-manager and nurse-ratings at p<.01 level

10.3 ADDITIONAL ITEMS

Means of graduate and diplomate self-report responses to the 23 additional items are presented in Table 10.7. A MANOVA could not be performed because the data set here violated the multivariate assumption of homogeneity of variance (Box's M test). Despite this, the data would again suggest very little difference between graduates and diplomates in terms of their scores on the additional items. Diplomates have a significantly higher score on the item 'Ensure the confidentiality and security of written and verbal information about clients' (F = 9.78, p = .002). However, the difference in score means is only 0.15 on this item, and the other item means do not indicate any clear pattern or direction towards either diplomates or graduates.

Table 10.7: Mean scores for additional items for self-report data

Additional items	Diplomate n = 188		Graduate n = 166	
	Mean	SD	Mean	SD
Identify unsafe practice and respond appropriately to ensure a safe outcome	3.57	0.64	3.51	0.61
Ensure the confidentiality and security of written and verbal information about clients	3.89**	0.33	3.76**	0.44
Demonstrate fairness and sensitivity when responding to clients from diverse circumstances	3.75	0.46	3.70	0.47
Demonstrate respect for the values, customs and beliefs of clients and their family/friends	3.80	0.42	3.76	0.43
Act to protect the rights of clients and their families	3.73	0.47	3.70	0.49
Develop and maintain professional caring relationships with clients	3.81	0.40	3.80	0.41
Use appropriate tools/measures when assessing clients	3.49	0.60	3.46	0.54
Use risk assessment tools appropriately to identify any potential risks to clients	3.36	0.72	3.25	0.75
Write clear reports/records on clients	3.72	0.50	3.77	0.45
Negotiate care plans with clients and others as appropriate	3.20	0.77	3.17	0.85
Critically evaluate the evidence base that underpins safe nursing practice	3.03	0.78	2.97	0.71
Demonstrate sound clinical decision making which can be justified even when made on the basis of limited information	3.24	0.62	3.29	0.61
Work collaboratively with healthcare professionals from other disciplines	3.70	0.50	3.64	0.53
Make correct numerical calculations	3.59	0.54	3.63	0.55
Demonstrate the computing skills relevant to care delivery	3.10	0.89	3.28	0.86
Transfer skills and knowledge to a variety of circumstances	3.40	0.55	3.50	0.54
Identify personal professional development needs by reflecting in and on practice	3.40	0.63	3.39	0.63
Address and identify knowledge and skills deficit likely to affect the delivery of care	3.45	0.62	3.46	0.59
Demonstrate effective leadership in establishing and maintaing safe practice	3.36	0.67	3.22	0.71
Undertake research in a competent manner	2.43	0.95	2.61	0.90
Informed about health and social policy	3.01	0.63	2.88	0.66
Informed about new initiatives/developments in clinical care	2.96	0.67	3.01	0.62
Informed about policies and procedures of employing organisation	3.12	0.69	3.10	0.71

Line-manager data also provided support for the similarity of graduate and diplomate scores on the additional items (see Table 10.8). Neither multivariate nor univariate differences were found between mean scores of graduates and diplomates on these additional items for the line-manager data. The line-manager ratings and the self-report data were not significantly correlated on any of the items and indicated some small significant differences on three items. Nurses rated themselves more highly at developing and maintaining professional caring relationships with clients and demonstrating effective leadership in establishing and maintaining safe practice while line-managers rated the nurses more highly at critically evaluating the evidence base that underpins safe nursing practice.

Table 10.8: Comparison of mean scores for additional items for self-report and line-manager data

Additional items	Nurse self-report			Line-manager		
	Dips (n = 51) Mean	Grads (n = 60) Mean	Total (n = 111) Mean	Dips (n = 51) Mean	Grads (n = 60) Mean	Total (n=111) Mean
Identify unsafe practice and respond appropriately to ensure a safe outcome	3.69	3.48	3.58	3.51	3.46	3.48
Ensure the confidentiality and security of written and verbal information about clients	3.88	3.73	3.80	3.76	3.76	3.76
Demonstrate fairness and sensitivity when responding to clients from diverse circumstances	3.78	3.67	3.72	3.73	3.61	3.66
Demonstrate respect for the values, customs and beliefs of clients and their family/friends	3.73	3.72	3.72	3.73	3.75	3.74
Act to protect the rights of clients and their families	3.78	3.67	3.72	3.65	3.69	3.67
Develop and maintain professional caring relationships with clients	3.88*	3.83	3.86**	3.71*	3.69	3.70**
Use appropriate tools/measures when assessing clients	3.52	3.52	3.52	3.59	3.50	3.54
Use risk assessment tools appropriately to identify any potential risks to clients	3.48	3.31	3.39	3.29	3.37	3.34
Write clear reports/records on clients	3.69	3.78	3.78	3.71	3.77	3.74
Negotiate care plans with clients and others as appropriate	3.22	3.12	3.16	3.41	3.25	3.32
Critically evaluate the evidence base that underpins safe nursing practice	3.02	3.10	3.06*	3.25	3.28	3.27*
Demonstrate sound clinical decision making which can be justified even when made on the basis of limited information	3.31	3.30	3.30	3.29	3.30	3.30
Work collaboratively with healthcare professionals from other disciplines	3.71	3.67	3.68	3.67	3.65	3.66
Make correct numerical calculations	3.59	3.65	3.62	3.60	3.67	3.64
Demonstrate the computing skills relevant to care delivery	3.16	3.34	3.26	3.10	3.31	3.21
Transfer skills and knowledge to a variety of circumstances	3.49	3.54	3.52	3.39	3.45	3.42
Identify personal professional development needs by reflecting in and on practice	3.53	3.50	3.51	3.41	3.52	3.47
Address and identify knowledge and skills deficit likely to affect the delivery of care	3.56	3.53	3.55	3.47	3.38	3.42
Demonstrate effective leadership in establishing and maintaining safe practice	3.39*	3.32	3.35*	3.12*	3.17	3.14*
Undertake research in a competent manner	2.38	2.73	2.56	2.53	2.61	2.58
Informed about health and social policy	2.94	2.93	2.93	3.00	2.98	2.99
Informed about new initiatives/developments in clinical care	2.96	3.05	3.01	3.18	3.12	3.15
Informed about policies and procedures of employing organisation	3.28	3.21	3.24	3.27	3.25	3.26

* - indicates a significant difference in construct mean between line-manager and self-rating at p<.05 level

** - indicates a significant difference in construct mean between line-manager and self-rating at p<.01 level

10.4 LIMITATIONS OF NCQ

There still remain question marks about the reliability and validity of the NCQ, and also issues concerned with the instrument's scaling. These limitations are discussed in more depth in Section 11.1.4. The NCQ should be understood as being in a stage of development and at present is not as precise a measure of nursing competence as one may hope for. The authors would therefore suggest further caution in interpretation of these

findings. Without complete confidence in the instruments available for measuring nursing competence, a conservative analysis should be taken from this chapter, with strong recommendations for further scale development.

10.5 SUMMARY

- The dominant finding is that course type alone has little impact upon the competencies of nurses within the first three years after qualification, with both graduates and diplomates scoring highly on the NCQ
- Some small differences were found, however it is debatable whether the size of the differences would have any impact on nursing performance in care-giving settings
    - female diplomate nurses were fractionally more able regarding planning nursing actions and the participation and concern in social affairs
    - female diplomates and male graduates appear to be very slightly more able than their counterparts in the areas of:
        - leadership and decision making
        - participating in CPD and upgrading professional standards
        - observing and diagnosing client needs
        - carrying out nursing actions effectively and with flexibility and evaluating those actions accurately and objectively
- Self-ratings and line-manager ratings of nursing competencies were usually unrelated
- A conservative interpretation of findings is necessary due to the developmental status of the NCQ and the small group sizes.

CHAPTER 11:
DISCUSSION

This research investigated the careers and competencies of nurses qualifying from three-year degree courses and three-year diploma courses. It provides the most comprehensive assessment to date of outcomes from these two courses and as such contributes to the current debate about the future shape of pre-registration nurse education. This final chapter discusses the main findings and considers their implications for policy and for further research.

The first section outlines the limitations to the approaches taken in this study. The second section is a summary and overview of the key findings and of the themes emerging across the chapters. As a result of this process, research question 6, regarding 'retention' in nursing, is answered. The third section considers the patterns in these findings as a whole, together with reasons for differences and similarities between graduates and diplomates. The fourth section considers policy implications of the outcomes of the project and the final section focuses on suggestions for future research.

11.1 LIMITATIONS OF THE STUDY

As demonstrated in chapter four, the most robust methodological approach was adopted within the time and resources available. Nonetheless, it is important to consider the limitations of the design. Before the main findings of this research are discussed further, these limitations are highlighted so as to provide additional context for interpretation. Five main limitations of the design are considered: comparing cross-sectional and longitudinal data; non-respondents; time period of the study; small cohort numbers and the limitations of the NCQ.

11.1.1 Comparing cross-sectional and longitudinal data

The effect of chronological time is at its most apparent when comparing diplomates and graduates 'at qualification' and remains largely unknown. These two cohorts are separated in time by three years. The time span difference for other comparisons is shorter and therefore the effect of temporal change is less important.

The potential cohort effect amongst graduates resulting from the retrospective design was a concern. The fact that no major differences emerged between graduate cohorts suggests a lack of such an effect; however, this can never be stated with absolute certainty because

of the nature of the design. The solution to these limitations is a prospective study with a common starting point. The drawback, as ever, are the resource and time implications.

11.1.2 Non-respondents

Although response rates in this study were generally good (see chapter four), the issue over systematic non-response and random non-response remains an interesting difficulty. Exploration of the mechanisms of non-response was confined to the diplomate cohort. Associations between baseline ('at qualification') data and non-response are weak and we have assumed that non-response is primarily a random phenomenon in the sample as a whole. More caution would be required if greater focus were placed on sub-group analysis. Non-response could be related to some other factor that has not been measured in this study or to the different methods of data collection. Unfortunately we are not in a position to disentangle the effect of method although it is clear that non-response was noticeably higher at each time-point (cohort) for graduates than diplomates except at three years post qualification (44% vs. 43%). The diplomate cohort clearly becomes more self-selecting over time with a higher proportion of respondents who were women; were white British; entered with at least basic course entry requirements (i.e. not required to take a DC test or access course); were younger (20-24) or older (30 and over). The lower response rates for all the graduate cohorts might suggest they have more in common with the diplomate cohort at three years. We do not have the data to confirm this though it might be reasonable to assume that a similar mechanism maybe at work.

11.1.3 Time period of the study

The time period covered by this study was only up to three years after qualification. At three years after qualification the nurses were still in the early stages of their careers. Thus, although few differences were detected between graduates and diplomates in their career pathways it is possible that differences may only emerge at later stages.

11.1.4 Small cohort sizes

Certain groups within the study, most notably the graduate cohorts at 18 months and 3 years after qualification, were relatively small in number and the following points should be noted. Firstly, reference to the group sizes upon which analyses were based is consistently made throughout the findings sections. The number of respondents in each group (*n*) is presented in all tables so as to provide context for percentages and means for each group. Additionally, where numbers are small, appropriate caution over interpretation has been recommended in the text. Secondly, it is further recommended that the reader continue to note the implications of these issues as the findings are discussed and conclusions drawn.

Putting these limitations into some perspective, the small sample sizes do not necessarily make these groups unrepresentative. The reader is referred back to chapter four and the methods and response rates for this research. Full censuses of qualifiers from three-year degree courses were approached for their participation and a somewhat exhaustive recruitment method was used. Over 43% of every qualifier between 1998 and 2001 completed a questionnaire, which is a reasonable response rate for a postal survey. The small cohort sizes resulted from the initial small number of total graduate qualifiers from which recruitment was made (129 in 1998 and 110 in 1999). It would therefore be incorrect to presume that the small cohort sizes result from a lack methodological rigour and therefore limit representativeness. Instead, the responses in this study can be seen as being reasonably representative of the small number of graduates that qualified from three-year degree courses between 1998 and 2001. The limitations of the small group sizes in this study are that the potential is higher for extreme results to have a strong effect on group aggregations.

Despite the small size of the graduate cohorts, difference did arise between graduates and diplomates that were statistically significant. The approach taken to reporting differences taken throughout this report and in this chapter is as follows: when significant differences are part of a series of comparisons attention is also drawn to those differences that are in the same direction.

11.1.5 Limitations of the NCQ

The NCQ was chosen to measure nursing competencies because it was the best instrument available. It could be used to gain access to information from the largest number of qualifiers and managers possible and resources were not available to develop a new instrument from scratch (as outlined in chapter four). The NCQ does, however, have several weaknesses and areas of required development. Firstly, while the items in the NCQ have been found to be reliable (Bartlett *et al.* 1998, Norman *et al.* 2000), very little evidence exists that it is valid to assert that the suggested constructs do underlie the items. Indeed, these existing items may arguably tap alternative constructs or the suggested constructs may be better tapped by fewer or different items. Such analyses have not been attempted throughout the instrument's development. Secondly, all of the items in the NCQ are socially desirable items, and there are no negatively worded items. That is, if a respondent responds negatively to any item, it would be a highly critical assessment socially. Response bias could lead to an inflation of estimated scores. Thirdly, the interaction of the scale used for the NCQ, which is a Likert-type 'always-usually-occasionally-never' scale, and the item content is problematic for measuring competence due to a restriction of range. Many of the items refer to very basic nursing tasks or

functions and leave no scope to differentiate a very high level of performance from an average but very acceptable level of performance. As a result, responses to the items cluster highly around the 'always' or 'usually' ratings, thus leading to a very low level of variability within the scores. The NCQ appears to be more appropriate for assessing whether a nurse can carry out basic nursing functions and it is possible that the instrument may lack the necessary sensitivity to detect differences in more sophisticated or higher level nursing competencies. Finally, the NCQ cannot take into account barriers to the provision of care. For example, a nurse may be highly competent at initiating changes in the delivery of care, yet if the organisation is unsupportive and the nurse can only initiate change 'occasionally', then that nurse will receive a low competency score on the NCQ.

11.2 SUMMARY OF KEY FINDINGS

The research questions were set up to investigate any differences in diversity, career plans, career pathways, continuing professional development, satisfaction with aspects of working lives, retention and the competencies of graduates and diplomates. In order to draw themes together across the chapters, findings are presented in the following sections: diversity; career expectations; careers followed; satisfaction; career plans; competence, and retention.

11.2.1 Diversity

In terms of the profile of graduates and diplomates, the large majority of both groups were white, female and in their twenties. There were, however, some differences between graduates and diplomates. Graduates were significantly younger than diplomates; two years on average. Diplomates were significantly more likely to have partners and children and to have had pre-course work experience. Graduates were significantly more likely to have higher academic qualifications prior to course entry and significantly less likely to have entered without formal academic qualifications.

It therefore appears that the two courses do attract slightly different kinds of individuals, and this can be interpreted in two different ways. First, in terms of diversity, having the two courses running simultaneously would appear to attract the most mixed group of nurses and create the most diversity within the workforce. Though it is important to consider the possibility that if there was only one course, then all the nurses in our study might still have entered nursing through that course. Secondly, the findings suggest that increasing the proportion of graduates, or indeed moving to all graduate entry, may encourage a lower level of diversity in terms of age, childcare and work experiences, and academic background than retaining the current proportion of diploma prepared nurses. There is some support provided therefore for the argument that an all-graduate entry into

nursing would perhaps discourage certain individuals, such as more mature candidates or candidates with lower academic qualifications, to consider nursing as a possible career (see Payne 1994, Newton 1998, Hakesley-Brown 1999). The counter argument would be that graduates, due to their higher level of academic qualification, may have developed a greater learning potential and be more academically able and that patient care requires these higher level skills (see Clarke and Warr 1995, RCN 1995). However, this would not necessarily be the case and the transfer of skills may not occur.

There are two final points to make with regard to the level of diversity of qualifiers from both courses. On a positive note, what level of diversity that existed in both groups was generally retained during the first three years after qualification. However, less positive was the finding that the diversity of both groups falls short of the proportions of men and members of ethnic minority groups entering the workforce aimed for in policy documents.

11.2.2 Career Expectations

Graduates are more likely than diplomates to be 'career-minded' and to have higher expectations than diplomates. Evidence for this can be found in their reasons for starting their nursing course, reasons for preferring the NHS as an employer, jobs plans, and plans for continuing professional development.

Graduates and diplomates differed in the emphasis placed on various reasons for starting their respective courses. Graduates were significantly more likely than diplomates to rate the following as very important: gaining a professional qualification; wanting an occupation with career prospects, and the belief that nursing would offer a variety of career pathways. Reasons for preferring the NHS revealed that graduates were more likely than diplomates to cite the reasons of more opportunities for professional development and the provision of better career opportunities. Clearly, the themes of professional and career development are more strongly associated with graduates.

Moving on to particular job plans, graduates were more certain than diplomates about the job they wanted to hold at future time-points. When asked about grade that hoped to reach in the future, graduates were significantly more likely to specify a higher grade at each time point investigated. The greater ambitions of graduates were also expressed in their continuing professional development plans, with graduates being more likely to plan to undertake courses when asked at 6 months, 18 months and 3 years (the difference was significant at the first two time points). So not only are graduates more 'career-minded',

but they aim higher and are also more certain of their career plans, and perhaps see this within the context of lifelong learning.

It seems, therefore, that more graduates have entered nursing to start to develop a 'career'. While it is positive that these individuals have chosen nursing within which to base this 'career', their higher expectations of vertical career progress, underpinned by CPD, require supportive opportunity structures more so than the expectations of diplomates to allow for fulfilment.

11.2.3 Careers followed

There were very few differences between graduates and diplomates in either the jobs or courses undertaken during the first three years after qualification. The majority of graduates and diplomates were working in nursing jobs in the NHS at the various time points after qualification. There was then little sense of attrition of either graduates or diplomates from the profession, or from the NHS. Up until 18 months after qualification, the majority of both graduates and diplomates working in nursing jobs, held a job at D grade. At some stage, between 18 months and three years after qualification, over half of graduates and diplomates working in nursing have moved onto jobs at E grade and above. Concerns that graduate nurses would be working at a higher level (Newton 1998) or would leave the profession (Akid 2001) have not been borne out in the early years after qualification at least.

Some differences did emerge, however, in the specialties in which graduates and diplomates worked and in which they planned to work. The study did not include respondents' reasons for choosing different specialties. In the absence of this information and information about recruitment policies in different specialties, it is difficult to interpret these differences between the two groups of qualifiers.

There was little difference between graduates and diplomates in terms of their CPD experiences. The findings indicate an unmet demand from graduates and diplomates for both courses and for preceptorship. Despite the demand for preceptorship, a substantial minority of graduate and diplomate nurses had not received preceptorship. Those respondents who had received preceptorship indicated a substantial unmet demand for various aspects, particularly those involving the development of new skills. There was also substantial unmet demand for career guidance during the degree and the diploma course, particularly on continuing education opportunities and on future career pathways.

11.2.4 Satisfaction

Both graduates and diplomates shared the same sources of satisfaction and dissatisfaction with their working lives and as such, these can be viewed as common to the nursing profession rather than specific to either group of qualifiers. In terms of areas of their work with which they were most satisfied, both graduates and diplomates expressed satisfaction with relationships and support from colleagues or peers, the availability of supplies and equipment and the proportion of time spent providing direct or 'hands-on' care. Shared areas of dissatisfaction were pay and grade in relation to level of responsibility, frequency and quality of discussion about career development, time spent doing paperwork and opportunities to reflect upon practice.

There were differences, however, in the levels of satisfaction and dissatisfaction between groups. Graduates had significantly lower levels of satisfaction with pay in relation to level of responsibility at 18 months and three years, and grade in relation to level of responsibility at three years. For aspects of continuing professional development, graduates were significantly more likely than diplomates to be satisfied at 6 months, equally likely to be satisfied at 18 months and significantly less likely to be satisfied at three years. Graduates were less likely than diplomates to be satisfied with opportunities to reflect on practice and to provide good quality care. Furthermore, at three years, graduates had a significantly lower mean score for overall satisfaction than diplomates.

It perhaps should not be surprising that many areas of graduate dissatisfaction are areas in which they have greater expectations. Thus, expectation is matched with dissatisfaction with regards grade and CPD at specified time points. Whilst it is not possible to assert causal relationships from these data, it may be speculated that there is a relationship between expectation and satisfaction, and more probably, between high expectations not being fulfilled and dissatisfaction. If this speculation is taken further, then it would appear that graduates may be more dissatisfied than diplomates because they have higher expectations that are either unrealistic or not being supported by the opportunity structures within the NHS.

11.2.5 Career plans

The majority of both graduates and diplomates planned to be working in nursing in the future. Those graduates and diplomates who planned to be working in nursing, were overwhelmingly planning to work in the NHS and, at qualification, both equally so. However, once graduates began working as a nurse, they were significantly less likely than diplomates to think it likely they would work in nursing in the future. To quote a

figure, after 18 months of working in nursing, 49% of graduates foresaw themselves as a nurse ten years in the future, compared with just under two-thirds of diplomates.

Yet, this finding should not be interpreted at 'face-value', and this report would not suggest that it is highly likely that half of graduates will leave the profession in the near future. Research elsewhere has highlighted the varied and often limited relationship between intention to leave and actual turnover (e.g. Vandenberg and Nelson 1999). It appears that while many individuals may plan to leave their job in the future, often a far smaller proportion actually carry out this intention. However, intention to leave still remains one of the strongest predictors of turnover (Borda and Norman 1997). As such, this finding remains valid, since it shows that even if such a high proportion of graduates do not leave nursing in the future, it is still likely that the proportion who do leave will be higher than that of diplomates. Thus, the fears of Akid (2001) and many others that degree-qualified nurses are more likely to leave nursing may well become justified. Even a more conservative interpretation, that the high level of plans to leave nursing is an indication that graduates are more disaffected with nursing than diplomates, is still a finding of concern.

11.2.6 Competence

The findings on perceived competencies revealed few differences between graduates and diplomates, alleviating concerns that the graduate course would not prepare nurses adequately in terms of practical skills, or that diploma courses prepare nurses to a substantially lower level than degrees. However, this finding raises the question identified by Girot (2000a) about what are the advantages to nursing of training nurses to a 'degree standard'. Indeed, very small, but statistically significant, differences in self-report scores suggested that diplomates were more able at planning nursing actions and participate more and show a greater concern in social affairs and, if anything, were more competent than graduates (although numerical differences were so small it is highly debatable if this would make an observable difference in care settings). No differences were found in the line-manager ratings of competence of graduates and diplomates.

A rather strange finding was that of the role of course type and sex together on competence when self-reported. Although these differences were again small, data suggested that female diplomates and male graduates were more able than their counterparts. Why this would be the case is unclear.

11.2.7 Current retention and future plans

Drawing together these findings, it is now possible to answer research question 6: 'how do graduate nurses compare with diplomate nurses in terms of retention in nursing?'

Some of our questions related to nursing generally while others focused on the NHS specifically. Many of the issues raised by the findings have a greater concern at an organizational level, i.e. for the NHS. As between 93% and 99% of nurses in this study were working for the NHS at the various time points investigated, we have regarded intent to leave nursing as virtually synonymous with intent to leave the NHS.

Retention in nursing is problematic as there are many different ways in which to understand it as a concept. The way the concept of retention in nursing is operationalised in this study was to look at movement and intention to move away from both the NHS and nursing, and also movement or intention to move away permanently. Findings indicated that in terms of observable movement away from both the NHS and nursing over the first three years after qualification, no differences were found between graduates and diplomates. However, due to the relatively short time period covered in this study, it is not possible to tell from the data provided whether the small proportion of graduates and diplomates who were not working for the NHS or in nursing were planning on returning to such work or if they had been lost to the profession for good. Investigations of such activity should be pursued in future research.

What is apparent from the career plans data, however, and one of the most important differences between graduates and diplomates found in this study, are the differences in potential future retention of the two groups. If career plans of our respondents are to be believed, then the proportion of qualifiers from degree courses working in nursing will be smaller than the proportion of qualifiers from diploma courses so doing. Thus, a possible conclusion to draw from these findings is that graduate entry poses a potential retention problem for nursing. However, the extent to which career plans can be believed depends upon the motives behind the intentions and alternative opportunities (Vandenberg and Nelson 1999) and not enough is known as yet for more substantive conclusions. Possible reasons as to why more graduates plan to leave nursing than diplomates include: higher expectations not being matched; lower levels of satisfaction with working life; fewer opportunities for vertical career moves; being less likely to have children to provide for, or all four together.

11.2.8 Overview

An important point to make first in this brief overview is that, all in all, the findings indicated that in the early years after qualification there is little difference in the career pathways and competencies of degree and diploma qualified nurses, with the large majority of both groups having the same work experiences. There are, however, a few important areas in which graduates and diplomates are dissimilar. These dissimilarities

are generally not *objective* differences; in terms of what they had observably done during the first three years of their nursing career or in terms of how they performed their job, they are very similar. However, it is *subjective* differences that distinguish the two groups, in terms of different expectations, aspirations and attitudes. Therefore, during the first three years after qualification, graduate nurses are objectively similar to, but subjectively different from diplomate nurses. The distinction between subjectivity and objectivity has long been discussed within the careers literature (e.g. Hughes 1937). Theory would suggest that while externally individuals' careers can appear to be very alike, internally the same careers hold different meanings for those different individuals (Bailyn 1989). Within these subjective differences lie the potential for future objective differences. Unless graduate attitudes are changed or the NHS changes to match graduate ambitions, problems over satisfaction and retention may result for nursing some time in the future, if the lower satisfaction is not already a problem. Three-year degrees and the NHS do not appear to be perfect partners from this evidence.

11.3 OVERALL PATTERNS IN THE FINDINGS

The aim of this section is to move beyond the direct findings towards a richer understanding of the effects of degree courses. First reasons for differences or similarities between graduates and diplomates are considered further to gain a better grasp upon the mechanisms behind them. Second the findings as a whole are considered in the context of Person-Environment Fit theory (Holland 1959) as a means of allowing a more powerful interpretation and locating this research within a wider theoretical context.

11.3.1 Mechanisms underlying the differences and similarities

In order to interpret these findings further, it is useful to perhaps backtrack a little to consider why it is we would expect there to be a difference in the careers and competencies of graduates and diplomates. In doing so, it is possible to develop hypotheses about the mechanisms producing the differences or similarities between graduates and diplomates that can further develop the interpretation of these findings and provide directions for future research.

There would appear to three possible reasons why there would be differences between graduates' and diplomates' careers and competencies. Firstly, degree courses may be attracting different kinds of people to diploma courses (individuals with different backgrounds, knowledge, motivations, expectations, abilities or attitudes). Secondly, degree courses may change students in different ways to diploma courses (in terms of developing different types of knowledge, motivations, expectations, abilities or attitudes). Thirdly, others may view graduates differently in comparison to diplomates due to their

status, be these peers, supervisors or management. This section explores the possibilities that it is any of these three hypotheses that underlie the differences between graduates and diplomates.

As discussed already (section 11.2.8), the differences between graduates and diplomates are subjective differences, centring on graduates' higher level of career ambition and expectation and coupled with a lower level of satisfaction with their work. Differences were also found with regard to the profile of the two groups. Clearly this last point would support the first hypothesis, that degrees attract different types of people in terms of background. However the subjective differences could be a result of either or both of the first two hypotheses, that degrees attract different people or degrees make people subjectively different. This would be an important distinction to make, as it would inform any intervention aimed at reducing these potential retention problems. Whether individuals start their courses with these differences or whether they are developed as a result of learning or socialisation during the course would direct any interventions towards either recruitment or course structure and content respectively. Whilst our findings would suggest graduates emphasise their career as a reason for starting their course, and hence be different from the outset, this is far from conclusive. The third hypothesis would not appear to be true, as line-managers did not indicate a difference in competence between graduates and diplomates and there appeared to be no difference in terms of promotions.

Clearly, more research is needed to establish exactly why graduates are subjectively different to diplomates. A useful control group in any further research over a longer period of time would be diplomates who have subsequently obtained a degree after qualification. Through investigating such a group alongside graduates, one could isolate whether differences were due to the course and what was developed during the course, or due to differences of initial intake onto the pre-registration courses. Hardwick and Jordan (2002) have recently carried out a study with post-registration degree graduates. Focusing on the development and utilisation of knowledge and learning, they found that graduates believed themselves to have gained new and more sophisticated skills as a result of their degree, but rarely were they able to offer practical examples. Thus, similarly to the present research, it is subjective differences, as opposed to objective differences that seem to be emerging from assessment of graduates.

11.3.2 Graduate-NHS Fit

A further explanatory tool is Holland's (1959) original theory of Person-Environment Fit. This theory posits that there are characteristics of a person that will suit certain working

environments better than others and that there are characteristics of a working environment that will suit certain individuals better than others. As such, certain types of individuals will 'fit' certain environments, and *vice versa*, better than others. Problems occur when this fit is not achieved and incongruence develops. If in this instance, graduates and diplomates are taken as the two types of individuals, it is possible to examine how they 'fit' with nursing, in terms of how they fulfil the needs of the NHS (the environment), and how the NHS fulfils the needs of graduates and diplomates.

Findings from this research suggest that diplomates have a better fit with the NHS than graduates. It appears that graduates and diplomates have different characteristics but both enter the same NHS. The present research suggested that graduate ambition and expectation cannot be supported by the NHS, which does not offer them what they require to fulfil their own needs. Similar findings regarding the mismatch between graduates and the hospital setting have been found elsewhere (Kelly 1996), with graduates reporting a high level of stress and a high likelihood of leaving nursing as a result. Evidence for this comes from several different findings.

Firstly, the satisfaction with working life findings indicate that diplomates are substantially more satisfied than graduates with their work, at three years. Secondly, graduates and diplomates have similar career plans at qualification, but once graduates enter the NHS, more and more consider leaving nursing. Thirdly, and suggested to be the main cause of incongruence, is the higher expectations and ambitions exhibited by graduates. The NHS, as it stands at the moment, does not appear to have the capacity to cater for the needs of all such individuals, who want vertical career progression at pace, as there are not enough opportunities available. It is also likely that the thwarted ambition and unfulfilled expectations may play a role in the lower satisfaction and higher intent to leave nursing associated with graduates. The diplomates, who as a group exhibit lower career expectations, are both more satisfied and are more likely to plan on staying in nursing.

There is evidence elsewhere of the existence of 'expectations' gaps (Porter and Steers 1973) and it has been linked to violation of the psychological contract between employer and employee (Morrison and Robinson 1997). Indeed, recent research with non-nursing graduates during their early career has indicated that failure to meet expectations was related to lower work commitment and the extent to which the graduates felt that they 'fitted in' was central in their motivation to remain with an employer (Sturges and Guest 2001).

As mentioned, a lack of fit between individual and employer is often likely to lead to that individual leaving that employer. Currently, it is the diploma course that is perhaps providing better fitting nurses for the NHS. In order to create a better fit between employee and employer, one or both of two things need to change: the employee or the employer. Whether or not the NHS is capable of changing to accommodate potentially valuable graduates is debatable and will be discussed in the following policy section.

11.4 POLICY IMPLICATIONS

Findings from this study can inform several key policy debates regarding the effects of nursing degrees and graduate entry. Broad similarities exist in the careers and competencies of graduates and diplomates, yet there are also some important differences that may have implications for future policy agendas. What this study cannot recommend, however, is that any definitive decision be made regarding the future of nursing degrees or the case for or against all-graduate entry. The findings do not necessarily suggest that one route to qualification is uniformly better than the other but rather set out new and valid cases for and against three-year degree courses in nursing.

11.4.1 Current recruitment

In terms of total numbers of students being recruited onto nursing degree courses, degrees have been a relative success (UKCC 1999). The 2001 annual report of the English National Board for Nursing, Midwifery and Health Visiting (ENB 2001) showed that numbers of students entering nursing degrees leading to a first registration rose from 1,244 for the 1998/1999 academic year to 1,997 for the 2000/2001 academic year. In terms of the proportion of nursing students overall who are taking a degree, that is a rise from 7.4% to 10.2%. Indeed, the concurrent running of both nursing diplomas and nursing degrees as routes to registration has seen total course recruitment rise by 16% over the same period. Some data support a continued future growth in demand for degree courses, both pre- and post-registration (e.g. Stock 2002). However, others argue that the rise in both degree and diploma course intake is now actually showing signs of slowing down (Seccombe 2002).

Our findings provide information on the diversity of those recruited onto three year degree and diploma courses. Degrees have attracted a greater proportion of nurses with higher educational qualifications. However, the profile of degree qualifiers has greater similarity with that of those who took the certificate route to registration as a general nurse prior to the implementation of the diploma course (Robinson et al 1995) than with the more diverse profile found among diploma qualifiers. As such, the graduates in this study are unlikely to reflect the life experiences of the service users in the local

population to the same extent as diplomates. Moreover, the findings offer some support for the argument that an all-graduate entry into nursing would perhaps discourage certain individuals, such as more mature candidates or those with lower academic qualifications to consider nursing as a possible career (Payne 1994, Newton 1998, Hakesley-Brown 1999). Neither course, however, is achieving the level of diversity specified in numerous policy documents with regard to attracting more men and members of ethnic minority groups.

11.4.2 Future retention

It is in the area of retention that potential problems exist as a result of degree courses. More graduates indicate that they will be leaving the profession in the near future than diplomates, although no differences are apparent in actual turnover by three years after qualification. Similarly to Section 11.2.7, we refer to the 'NHS' as synonymous to 'nursing' when discussing retention.

It may be that the greater intent to leave is related to graduates' higher level of career ambition and expectancy being unsupported in the NHS, culminating in low satisfaction with work. It is further suggested that structures and opportunities are not available within the NHS to fulfil the needs of many graduates, and therefore graduates do not yet 'fit' with the NHS. Either graduate expectations and ambitions need to be modified or more opportunity structures need to be made available to support the careers of graduates, hence changing the NHS. Indeed, such structures are being slowly implemented by the Department of Health (1999a), for example with roles, such as the nurse consultant. However, the proportions of graduates in this study aiming for high grades would suggest that if numbers of graduates increased further, a serious problem would emerge of the NHS not being able to meet their demand for vertical progressions.

The findings suggest that three-year degrees might make the nursing workforce more motivated towards career success and ambitions, however this is a mixed blessing. If the NHS does not have capacity to cope with such career-mindedness, this may force many such individuals to look elsewhere for career success. It would be regrettable to lose these individuals who were committed to nursing at qualification.

11.4.3 Competencies

No substantive differences were recorded in the perceived competencies of graduates and diplomates and, as such, no advantages for degree courses were demonstrated. It is possible that what is usually assumed to be the 'higher' level and more abstract and transferable knowledge and skills associated with degree courses may not become apparent until graduates reach more senior roles. Equally, it could be that diploma courses

are performing at a higher rate than expected. However, as discussed in section 11.4.5, several limitations of the instrument used to assess competency exist. It is possible that the NCQ is not sensitive enough to detect the different level of competencies that educators intend to develop through degree courses. Yet, while confusion exists regarding the different competencies or level of competencies that students are supposed to develop through the degree course, over and above what is developed through the diploma course (see chapter three), such a measurement would appear to be a difficult task.

11.4.4 The future of three-year degrees

The policy implications of this report offer a conundrum regarding the future of three-year degrees. On the one hand, the findings would not lead to the recommendation of the abolition of these nursing degree courses, but on the other hand findings certainly caution against an immediate move to all-graduate entry. Yet, as mentioned, the mixed economy, despite the recruitment advantages, is not an ideal long-term solution either. The problem of retaining graduates places a question mark beside three-year degree courses, as does the apparent lack of perceived additional competency development. In this last chapter, graduates' higher level of career ambition and expectation has largely been discussed in term of its negative effects. However, if such motivation could be supported, thereby retaining more graduates in the profession, graduates could become a valuable group for the NHS. Nevertheless, investing in three-year degree courses as routes to registration remains a high-risk option. The potential for long-term retention difficulties, combined with little evidence of on-the-job graduate benefits to nursing, suggest that a re-evaluation is required of the role of three-year degree courses in nursing.

It is not possible to say with any certainty whether our findings would be replicated if the graduate population were to increase substantially. The data presented in this study were collected during a period of graduates comprising around 3.5% (1998) to 7% (2001) of qualifiers. As such, it is possible that they were regarded (and regarded themselves), rightly or wrongly, as an 'elite' group entering the workforce. The effect of this may well have been to raise expectations. If the proportion of graduates increased, they would become less of an 'elite' and more of a norm. Under such circumstances, it would be unlikely that a similarly high level of expectation would be sustained. Alternatively, one could take the view that, whatever routes are available to registration, a relatively set number of individuals will want to enter nursing. It could then be the case that degrees have attracted the most ambitious of this group of individuals. Therefore, as the proportion of graduates increase, the characteristics of high career ambitions and expectations would become less common within the group. Logically, if this were the

case, all-graduate entry would not result in a more serious retention issue than there is under the current system.

The recommendation from this research is that it would be a mistake to increase the number of graduates entering the workforce until a more recent, and proportionately larger, cohort of graduates have been investigated over a longer period of time. This would, firstly, determine whether the characteristics found to be associated with the graduates in this study are characteristic of nurses qualifying from three-year degree courses or just the 'elite' of course applicants and, secondly, refute or verify that a higher proportion of graduates would leave the profession.

In the meantime, investment could be made to increase the likelihood of retaining existing graduates in the workforce. Interventions could be aimed at problem areas indicated by this research: either the currently high and unrealistic career expectations need to be modified in some way or the opportunities within the NHS need to be changed to make graduate expectations less unrealistic. Interventions could target graduates specifically, either during the degree course or within the workplace. Sturges and Guest (2001) recommended a more realistic and honest approach during the recruitment process about what the job will entail in practice to reduce expectations and enhance retention of non-nursing graduates. Such would be a recommendation of this research, as there is a potential problem of targeting specific sections of the workforce, once recruited and trained, for intervention since it may be potentially divisive. Such targeted investment would also be a commitment to a group of whom, on current evidence, many appear to be planning on leaving the NHS to pursue their careers elsewhere. Therefore, investment in opportunities for career enrichment and success for all nurses within the workplace would also be recommended as a more credible and potentially successful solution.

11.5 FUTURE RESEARCH

When researching an area in which little or no previous exists, it is often the case that more questions than answers are introduced. While this study has been able to answer the research questions it set out to answer, and has also been able to extend beyond these research questions in some areas, the findings still highlight how little is actually known in terms of the outcomes of the introduction of three-year degree courses in nursing. Several potentially rich areas of research exist for smaller projects. Indeed, most of the findings presented in this report provide departure points for logical follow-up studies. As discussed in section 11.2.8, the mechanisms that produce the differences between graduates and diplomates need to be understood. Factors behind graduates' high level of career expectation need to be explored, as does the relationship between satisfaction,

retention and these expectations. Also, as the proportion of graduates of total qualifiers is set to rise, an evaluation of this larger group has also been suggested.

Most strongly recommended therefore are two follow-up studies. Firstly, this research provides findings on the early years after qualification only. Thus one can only conclude that the lack of differences between graduates in diplomates in terms of career pathways, CPD experiences, and retention in the profession hold for this period of time alone. Furthermore, it has been speculated (section 11.2.8) that subjective differences in satisfaction and plans may lead to objective differences in the future, in terms of retention in the profession and career pathways. It is recommended, therefore, that a follow-up study be undertaken at an appropriate time in the future that will assess the extent to which career pathways and retention differ between graduates and diplomates over a longer period after qualification. Secondly, as discussed in section 11.4.4, there is need for a similar study to be undertaken now that degree students comprise a larger proportion of students currently enrolled on courses than hitherto. This would provide the opportunity for replication and thus verification or refutation of the findings of this research. It has been suggested that the fact the graduates in this study comprised only a small proportion of the workforce may have influenced their attitudes. It is vitally important to find out whether or not graduate attitudes would change as their proportion with diplomates became more even. Ideally such a study would comprise a longitudinal prospective study of cohorts of graduates and diplomates to overcome some of the problems presented by the design adopted for the current study.

The NCQ was used to assess the competencies of graduates and diplomates. The limitations of this instrument were discussed in section 11.1.5. It is recommended here that substantial further work needs to be undertaken to either develop this instrument further in terms of its reliability and validity (which has already been started as a result of the pilot work in this project), or a new instrument needs to be developed to measure nursing competence. Ideally, a more comprehensive competency framework should be developed. Within such a framework, a set of valid nursing competencies should be identified. Subsequently, pre-registration nurse education and CPD systems can be designed to develop these competencies in both students and staff. It is only when this framework is developed that an instrument can be designed to enable valid and reliable measurements of these competencies. Such an instrument could then serve a number of functions, from being used as a research tool, to being used for client/patient ratings of care, to being part of appraisal and skill development packages.

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