WEPAU

Intergenerational Comparisons of the Career Choice Decision: Evidence from Nursing

by

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Alison's research interests expand across a broad range of social and economic issues relating to women, including women's employment and pay, labour market structures, paid maternity leave, superannuation, ageing and access to welfare support. Financed by various large ARC grants, her current research focus is on nurse labour markets, career formation, pay equity and pension policy.

Alison publications include a book on wage determination as well as articles in leading journals such as the (Australian) Economic Record, (Australian) Journal of Industrial Relations, Applied Economics and the British Journal of Industrial Relations. She is a co-editor of the Australian Journal of Labour Economics and a government appointee to the WA Women's Advisory Council.

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ABOUT WEPAU

The Women's Economic Policy Analysis Unit ("WEPAU") was founded in April 1999 in response to a growing void - within Australia and internationally - in the gender analysis of the economic and social policy issues that confront women. To most effectively address this void, WEPAU was established as an inter-disciplinary research program, spanning two divisions of Curtin University, the Curtin Business School (CBS) and the Division of Humanities.

WEPAU is committed to producing high quality quantitative and qualitative feminist research on a broad range of issues that women identify as undermining their ability to achieve equity and autonomy in the current context. Meeting this commitment is enabled by the breadth of experience and expertise brought to WEPAU by an increasing range of researchers.

Through its academic and consultancy research into women's experiences of social and economic policies WEPAU provides a meaningful gender analysis of policy. An analysis strongly put forward via active contribution to government policy debates.

Our broad objectives include:

Identifying the cases and causes of women's disadvantaged social and economic status and to contribute appropriate policy initiatives to address this disadvantage;

Demonstrating the way in which social factors, particularly gender, influence the construction of economic theory and policy;

Extending current theory and research by placing women and their social context at the centre of analysis;

Contributing an interdisciplinary approach to the understanding of women's position in society. In turn, this should enable the unit to better reflect the interrelatedness of the social, economic and political discourses in policy and their consequent implications for women;

Fostering feminist research both nationally and internationally;

Expanding linkages with industry;

Establishing and supporting a thriving Curtin University postgraduate research community with a common interest in feminist scholarship.

For further details see: http://www.cbs.curtin.edu.au/wepau and/or email wepau@cbs.curtin.edu.au.

Intergenerational Comparisons of the Career Choice Decision: Evidence from Nursing

ABSTRACT

This paper uses data from a large scale survey of Registered Nurses to shed light on the determinants of nursing as a retrospective, 'with-hind-sight', career choice. Determinants are found to vary across generations, with younger cohorts (aged 28-37) attaching significantly more importance to pay satisfaction and within-workplace pay relativities (those more satisfied with pay and their pay relativities being more inclined to again choose nursing). From a managerial and policy perspective the results highlight the need to understand intergenerational differences in the weights attached to various job attributes and the need to tailor recruitment and retention policies in a way that addresses such diverse needs.

1. INTRODUCTION

It is fair to say that women's increased participation in higher education and increased involvement in paid employment rate amongst the most significant labour market developments of recent decades. In 1971, for example, the female participation rate1 in Australia stood at 37.1 per cent; by 2001 it had reached 55.3 per cent.2 Women are now a significant source of labour supply and are increasingly integrating into the labour market. Broadening career opportunities, equal pay initiatives, and changing attitudes towards women and work have facilitated these developments.

There remain, however, many hurdles in the path towards labour market gender equality. Women, for example, continue to act as the main or only care givers and many believe it is difficult to be a mother and have a career at the same time.3 That said, there are some specific career alternatives that are generally believed to allow or complement the competing demands of work and family. Teaching and Nursing are two such examples, with attractive features believed to include the hours of work, hours flexibility and ease of return after career interruptions.4

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[1]   The participation rate measures the share of persons (women) participating in the labour market (i.e. either employed or unemployed) as a proportion of all working age people (women).

[2]   These statistics are sourced, respectively, from Daly (1990, p.28) (based on Australian Census data) and ABS 6203 Labour Force Survey (time-series data (labpr9b.xls)).

[3]   In a recent survey of Registered Nurses in Western Australia 72.1 per cent of the female respondents agreed with the statement that "It is difficult for women today to be mothers and have a career at the same time" (Nowak et al 2002).

[4]   Of the female RN respondents to the Nowak et al. (2002) survey, 50.9 per cent indicated that the 'ability to combine work and family commitments' was an important factor in their decision to train as a nurse; 61.3 per cent indicated that 'opportunities for travel' had an important/very important bearing on their occupational choice decision.

Notwithstanding the apparent ease of combining work and family demands within Nursing and Teaching, recruitment problems plague both professions. The latter may stem from media coverage of the many industrial disputes over pay and working conditions. Whilst such coverage has undoubtedly raised community awareness of the struggles within these professions, it is highly probable that this same coverage has discouraged some from entering these professions.5 Of perhaps more significance, however, is the (changing) environmental and societal context within which career choice decisions are made and the changing work demands and responsibilities within these jobs.

In the past Nursing and Teaching could draw on a guaranteed source of labour – women. Expanding career opportunities for women together with changing patterns of family formation (marriage and children) are now impacting on this source of female labour and contributing to observed shortages. The image of nursing as a female job has exacerbated the problem. Men remain reluctant to move into such highly feminised occupational areas. Indeed, notwithstanding efforts to engender greater sex-integration within the labour market the share of female Registered Nurses (RNs) increased from 91.6 per cent to 92.7 per cent between 1991 and 2002 (ABS 6203, supercube data).

For the foreseeable future maintenance of the nurse labour force will, therefore, continue to be dependent on the recruitment of women. Understanding the underlying factors affecting the female decision to pursue or not pursue a career in nursing is therefore an important research objective. This paper contributes to this objective through an analysis of the retrospective occupational choice decisions of existing RNs, disaggregated by age cohort; specifically older-baby boomers (born 1945 to 1954) and generation-x'ers (defined in thus study as those born 1965 to 1974). Typical studies of this genre model occupational choice as the probability of being in either occupation x or y given a set of determining characteristics such as education, parental background, wealth etc. However, its highly probable that a significant portion of any occupational group remain within their current occupation because of inertia factors (such as the cost to retrain). A retrospective (with-hind-sight) analysis thus affords clearer insight into the attractive (or otherwise) features of a particular job (in this case nursing) and sheds light on what may be motivating some to remain within or leave the profession.

The paper is organized as follows. Section 2 outlines theoretical perspectives associated with the occupational choice decision. Section 3 discusses the data set to be used in the empirical analysis. Section 4 outlines the model, variables and model specification. Section 5 discusses the results. The paper ends (Section 6) with a summary and conclusion.

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5   Dolton and Mavromaras (1994, p.860) make a similar point in their study of teachers and suggest that the "perceived deterioration in working conditions has … taken its toll [on supply]."

2.   THEORETICAL PERSPECTIVES

The literature on occupational and career choice is extensive and reflective of the on-going debate in relation to the role of gender in career choice decision-making.

Within the economic literature the dominant paradigm or theoretical framework is the human capital model which posits that individuals choose the career which offers the highest future lifetime earnings stream. Women who anticipate having time out of the labour market (eg. on account of child-rearing activities) are predicted to opt for jobs where the financial penalty attached to such job interruptions are smaller. Complementary arguments emphasize the non-pecuniary attributes of particular jobs, such pleasant work environment, flexible hours and the ability to balance anticipated work and family commitments (Becker 1975).

Feminist critiques of this neo-classical 'choice' framework have illuminated on the non-labour marked influences on occupational choice (such as society attitudes towards mothering) and highlighted the 'constrained' choices that most women face. In other words they challenge the assumption that anticipated household responsibilities (responsibilities which in turn are believed to influence choice of career, working hours etc.) are, in themselves, exogenously determined. Gender treatment effects within households (such the placement of different values on male and female education) may have similarly constrained the choices open to many women, particularly when the cost of education is taken into consideration.

Other contributors to career choice theory have focused on psychological variables (such as the weights attached to status, esteem, respect) and maternal variables such as the relationships between young women and their mothers. In the same vein parent's social and educational status is believed to have a significant impact on the educational attainment and choices of young people in the sense that they are 'socialised' into particular streams.

Much of the literature on occupational choice focuses on the early career strategies and decisions of young people. The rational here is that these early career decisions are believed to provide a close approximation of their life time choices with factors such as the transaction costs associated with re-training contributing to occupational inertia (Dolton and Mavromaras 1994). However, the economic, political and social context within which young and older labour market participants think and re-think their occupational choice decision is continually changing such that mid-career (occupational) changes are an increasingly acknowledged and accepted practice.[6] Viewed within this context we may theorize occupational choice as "the evolving sequence of a person's work experiences over time" (Arthur, Hall and Lawrence, 1989, p.8). In other words, as individuals move through the life course the weights they attach to different occupational attributes change. This may, in turn, lead to mid-career change (so long as the perceived benefits (pecuniary and non-pecuniary) of this action outweigh the perceived costs).

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[6]   We acknowledge that there are a variety of different understandings attached to the term 'career'. Our use of the term here fits with the definition proposed by Wilensky (1961, p.523) where career is defined in structural terms "A career is a succession of related jobs, arranged in a hierarchy of prestige, through which persons move in an ordered (and more or less predictable) sequence."

Viewing the determinants of occupational choice in this broader way helps understand the complexities faced in efforts to retain qualified nurses and market the desirable features of nursing to potential entrants.

3.   DATA

The data in the analyses below derive from a recent large scale survey of Registered Nurses (RNs) in Western Australia (WA) undertaken in August and September of 2002. The questionnaire was sent to a sample of 5000 Nurses registered with the WA Nurses Registration Board.[7] Valid responses were received from 1884 individuals (1776 (94.3 per cent) women and 108 (5.7 per cent) men). After allowing for undelivered surveys[8] the overall survey response rate was 40 per cent, which is relatively high for a survey of this length and complexity.[9] The following table provides some insight into the characteristics of respondents to this survey. Our focus is restricted to the sample of female respondents who are currently employed and working as an RN (n=1549). Data in columns (ii) and (iii) further disaggregate these select characteristics and features by age – Group A (aged 28 to 37) and Group B (aged 48 to 57). Our rational for the selection of these age cut-off points is outlined in the following section.

It is apparent from these data that the average female nurse at the time of the survey was well into her career as measured by average years of experience as an RN (equal to 19). The average age was correspondingly high, equal to 44 years. With the expected age at retirement averaging 59 years it is likely that pressures associated with the current nursing shortages will intensify over the next 15 years.

An important component of overall nurse labour supply includes actual hours supplied. Estimates from these data suggest that the average nurse works on a part-time basis. Only 37 per cent were employed full-time (defined as 35 hours or more per week) in their main job. However, a relatively large proportion of the sample (24 per cent) hold second jobs and in 77 per cent of cases these second jobs are in nursing. Anecdotal information suggests that nurses use these second jobs to achieve desired hours flexibility.

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[7]   For confidentiality reasons the WA Nurses Registration Board randomly selected the names and mailed the questionnaire to the selected sample on our behalf.

[8]   A sizeable number were returned to sender (perhaps indicative of our efforts to raise awareness of the survey through local media and the placement of adverts in local nursing journals).

[9]   The survey contained mix of 97 open and closed questions. The survey is more fully described in Nowak et al (2002a).

Table 1: Select Characteristics of Currently Employed Female RNs in Western Australia, 2002.

	All Women	Aged 28-37	Aged 48-57
% whose career in Nursing was their 1st preference.	64	57	66
% who entered RN training straight from school.	53	52	50
% who would still choose Nursing if could go back in time.	61	55	60
% working full-time (35 or more hours per week)	37	41	41
% holding a second job.	24	25	22
% of RNs holding second job with the second job in nursing.	77	85	77
% working shifts.	68	80	61
% holding a non-nursing tertiary qualification.	14	9	17
% born in Australia.	61	65	58
% who are married (spouse present).	67	61	67
% who have children.	73	51	85
% who's mother generally did not work whilst they were in high school.	44	29	55
% who's mother was a nurse or other care-giver whilst they were in high school.	16	20	11
Mean			
Age (age)	44	33	52
Years of experience as a qualified RN. (years)	19	10	26
Expected age at retirement. (age)	59	56	61
Average weekly hours worked in main job. (hours)	29	28	30
Average weekly pre-tax income main job (including shift and overtime allowances). ($)	731	700	806
Average weekly hours worked by full-timers.	39.5	39.2	39.7
Average weekly pre-tax income main job earned by full-timers. ($)	943	952	987
Average hourly income in main job. ($)	27	27	29
Pay position: average weekly total earnings of RNs employed full-time relative to non-managerial adult males employed full-time (May 2002) (%)[a]	104.1	105.1	108.9
Pay position: average weekly total earnings of RNs employed full-time relative to average weekly total earnings of WA females employed full-time (Aug.02) (%)[b]	123.9	125.0	129.6

Source: Nowak et al (2002).
Notes: (a) This relativity is computed as the common ratio of RN (full-time) average weekly total earnings and the total earnings of non-managerial adult males employed full-time. Estimates for the latter are derived from ABS 6305.0 and are for the period May 2002. (b) the denominator for this relativity is derived from ABS Cat. 6303.0 (Average Weekly Earnings), Table 12e (Western Australia), August 2002.

Current salary information and pay relativities are shown at the bottom of Table 1. At the time of the survey the average weekly (pre-tax) income of nurses (including shift and overtime allowances) was $731.0 per week or $28.0 per hour. When compared to national male average total (full-time) earnings it is apparent that the pay premium enjoyed by female RNs in Western Australia is relatively small, equal to 4.1 per cent. However, research elsewhere has drawn attention to the low pay position of women in Western Australia relative to males and females nationally (Preston 2000). A within state (and within gender) comparison shows that relative to women employed full-time nurses in Western Australia who are employed full-time earn around 24 per cent more per week.

Turning to dimensions of the career choice decision it is interesting to note that a sizeable share of RNs in the sample indicated that a career in nursing

was not their first preference. Only half of the sample actually entered RN training straight from high school, with 48 per cent of this group having first worked (but not in a nursing related capacity). Notwithstanding the varied experiences of entrants into the profession a similarly sizeable share (39 per cent) indicated that if they could go back in time they would *not* choose a career in nursing again. The fact that they remain in the profession suggest that the transaction costs associated with mid-career change outweigh any perceived benefits. Indeed, responses from the sample groups shown in Appendix B show that 73.1 per cent of those indicating they would not choose nursing again remain within the profession because it is too costly to change professions now, a further 77.1 per cent remain because changing would involve considerable personal sacrifice; 75 per cent remain because it is too difficult to change professions. The majority (69.3 per cent) do not feel obligated to remain within the profession.

4.   MODEL & SPECIFICATION

A typical approach to the study of occupational choice within the economic literature is to model the probability of being in a particular occupation as the choice likely to maximize their expected utility. This probability is generally modeled as a function of a vector of job characteristics in occupation i (x_i), earnings and earnings growth equations for occupation i (w_i) or current job, and a vector of personal characteristics (such as education, parents employment and economic status and social class, marital status and non-labour income (wealth)).

The approach adopted in this paper is slightly different in that we model the dichotomous choice of RNs to pursue nursing (if they could choose again). Our aim is an identification of determinants which significantly impact on this decision.

The dependent variable, as indicated, captures the hypothetical dichotomous choice of whether or not an RN would choose to a career in nursing, if they could go back in time and choose again. Given the binary nature of the dependent variable the probability of choosing nursing can be modelled using the logit model. Thus the probability model is given by:

$$\mathrm{Pr}ob(Y = 1) = \frac{e^{\beta x}}{1 + e^{\beta x}} \tag{1}$$

where β is a vector of parameters and x is a vector of characteristics which explain the probability of being a nurse. This model can be estimated using the method of maximum likelihood. A detailed discussion of the logit model can be found in Greene (2002).

In our analysis below the above model is first specified for the whole sample of female RNs who are currently employed and working as an RN. To examine whether or not there are specific inter-generational differences in this choice we re-estimate the model but over a sub-sample, controlling for birth. Two groups are compared. Group A (born 1965 to 1975) and Group B (born 1945 to 1954). Our rational for imposing these cut-off points is two-fold. First it is generally acknowledged that it takes a few years for graduates to settle into their chosen career. The career an individual is in 7 years after graduation

(assumed to be aged 28) is likely to be a fair reflection of their intended long-term career.[10] Our second rational is that each age cohort has been exposed to quite different economic, political and social contexts and may, therefore, have different expectations and understandings of career, work and family roles, and what it is to be nurse. Whether or not there are intergenerational differences in the decision to pursue nursing given the choice again is, of course, an empirical question.

Specification

The probability of choosing nursing is, as noted above, modelled on a sample of female nurses who are currently employed and working as an RN. The data are derived from the 2002 Survey of RNs in Western Australia (Nowak et al 2002). After removing observations with missing variables within the sets of identified independent variables (as identified below) the sample of female RNs who are currently employed and working as an RN fell to 904. Of particular importance for this study is the attitudinal information on nursing, pay and work environment contained within this data set.

The following table sets out our empirical specification used. Summary statistics for the variables used in the estimation are provided in Appendix A. Included within the set of independent variables are economic variables capturing human capital attributes, hours of work (including whether or not works shift) and attitudes to pay, including perspectives on pay relativities (three controls: (a) within the workplace; (b) within the industry; and (c) relative to jobs requiring similar skills and responsibilities within other industries) and whether or not the individual is satisfied with their own pay as a nurse.

Demographic variables are included to capture the effects of stage in life on the attractiveness or otherwise of nursing as a career. Age is entered in a non-linear form to pick up life-cycle effects. Related life-cycle determinants include marital status and whether or not have children. We also control for birthplace although there is no theoretical justification for this variable. Whether or not Australian born are more or less inclined, with the benefit of hind-sight, to choose nursing as a career is an empirical question.

Our final sets of independent controls include attitudinal variables and environmental variables. The literature on nursing regularly asserts the importance of respect, both from within the profession (eg. by management and by other health professionals) and from outside (eg. community) as factors affecting the attractiveness of nursing as a career. These attitudinal perspectives are controlled for via set of dummy variables.

The literature similarly emphasizes the effects of work environment as a critical determinant with poor facilities, abused and stress all likely to negatively impact on the joys of nursing.

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[10]   A similar approach is adopted in Dolton and Mavromaras (1994).

Table 2: Empirical Model Used to Examine Factors Affecting the Decision to Pursue a Career in Nursing

Variable Label	Variable Description
Dependent Variable	
(nrse_agn)	Given the Opportunity to Choose Again the Individual Would Still Choose Nursing (binary variable: 1, 0).
Independent Variables	
	Economic
	Human Capital
(school)	Rates their performance at school as well above average (1,0).
(rnl1)	Registered Nurse level 1.
(rnl2)	Registered Nurse Level 2.
(cnl2)	Clinical Nurse Level 2.
(cnl3)	Clinical Nurse Level 3.
(nurother)	Other (nurse educator, nurse manager, nurse researcher).
	Hours
(ft=1)	Whether or not works full-time in main job (1,0).
(shift=1)	Whether or not works shift in main job (1,0).
	Pay
(pay-wp)	Believes pay of a nurse is low compared to other jobs within the workplace (1,0).
(pay_ind)	Believes pay of a nurse is low relative to other jobs requiring similar skills and responsibilities within the health industry (1,0).
(pay_occ)	Believes pay of a nurse is low relative to other jobs requiring similar skills and responsibilities within other industries (1,0).
(pay_sat)	Fairly/Very Satisfied with their pay as a nurse (1,0).
	Demographic
(married)	Married (spouse present) (1,0).
(haskids)	Has children (1,0).
(bornoz)	Born Australia (1,0).
(Age)	Age.
$(Age)^2$	Age squared.
	Attitudinal
(rspct_hp)	Disagrees/strongly disagrees with the statement "nurses are respected by other health professionals" (1,0).
(rspct_mg)	Agrees / strongly agrees with the statement "nurses are respected by management" (1,0).
(rspct_cm)	Agrees / strongly agrees with the statement "nurses are respected in the Community" (1,0).
(prestige)	Agrees / strongly agrees with the statement that "nursing is a highly Prestigious occupation" (1,0).
(pubrgd)	Agrees /strongly agrees with the statement that "nurses are well regarded by the public" (1,0).
	Environmental Variables
(envi_ok)	Agrees / strongly agrees with the statement that "the physical working environment for nurses is very pleasant".
(stressed)	Agrees / strongly agrees with the statement "I find nursing stressful".
(abused_f)	Agrees / strongly agrees with the statement "I regularly experience physical abused from members of the public" (1,0).
(abused_v)	Agrees / strongly agrees with the statement "I regularly experience verbal abuse from members of the public" (1,0)..

5.   RESULTS

The results form the estimates of the determinants of the probability to decide to, retrospectively, pursue a career in nursing are summarised in Table 3 below. Two models or specifications are compared. One with and one without PAYSAT (an explanatory variable set equal to one if the individual is fairly or very satisfied with their pay as a nurse). PAYSAT is a highly significant determinant of the retrospective decision pursue (or not pursue) a career in nursing. Those indicating that they are either fairly or very satisfied with their pay are significantly more likely than other groups to again choose a career in nursing. When this variable is not controlled for other determinants, such as place of work and whether or not the individual has children show up as significant.

Table 3: Summary Results: Key Determinants of the Decision to, Retrospectively, Pursue a Career in Nursing

	ALL Female Employed RNs (Aged 21-71)		(GROUP A) AGED 28-37		(GROUP B) AGED 48-57		Difference Group A & Group B	
	Model.a	Model.b	Model.a	Model.b	Model.a	Model.b	Sig.	Sig.
Constant								
SCHL_GAV	(-) ***	(-) ***			(-) *	(-) *		
FTMJ			(+) *	(+) *				
NURHOME				(-) *				
HASKIDS		(+) *						
BORNOZ			(+) **	(+) **			**	**
PAY_WP	(-) *	(-) **	(-) **	(-) **			**	**
PAY_IND	(-) *		(-) ***	(-) ***	(-) *	(-) *		
PAYSAT	(+) ***		(+) ***				*	
RSPCT_HP	(-) ***	(-) ***		(-) **	(-) ***	(-) **		
PRESTIG	(+) ***	(+) ***	(+) **	(+) **	(+) **	(+) *		
PUBRGD	(+) **	(+) ***	(+) **	(+) ***				
ENVI_OK								
STRESSED		(-) **						

Notes: ***, ** and * indicates that the variable was significant at the 1%, 5% and 10% level, respectively. The sign in parentheses indicates the sign on the coefficient (either positive or negative). Descriptors to the variable labels are given in Table 2. Full results associat4ed with model (a) are presented in Appendix A. The variable PAYSAT has been excluded from model (b). This is the only difference between the two specifications.

In the case of the full-sample of female RNs who are currently employed and working as RNs, the important determinants (as revealed by model (a) with PAYSAT included) include: their self-assessed aptitude at school, with those who considered that they were well above average (76 percentile or above) indicating that, given the choice again, they would not pursue a career in nursing. This variable is not a significant determinant of the younger cohort retrospective decision, but it is a significant determinant of the older-cohort decision and is most likely indicative of the limited career alternatives available to the older cohort at the time of making their initial decision to pursue a career in nursing.
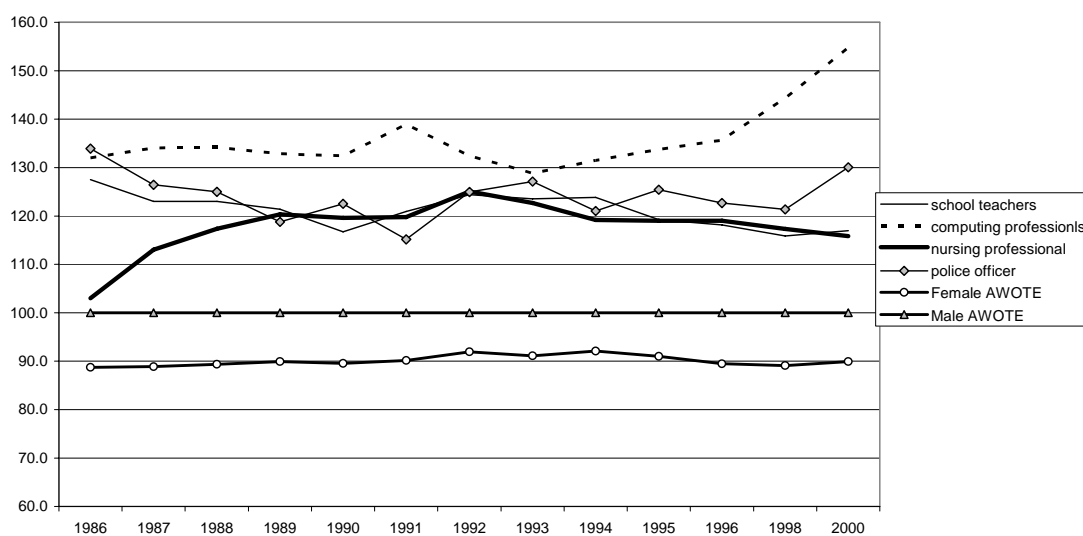
Attitudinal variables, specifically, whether or not the individual believes nursing is a highly prestigious occupation, whether or not the individual believes nurses are well regarded by the public and whether or not the

individual believes nurses are respected by other health professionals are particularly important factors affecting the probability that the individual would pursue a career in nursing again. Nurses who are of the opinion/strong opinion that nurses are *not* respected by other health professionals (RSPCT_HP) are significantly less likely to choose a career in nursing if given the choice again. However, nurses who regard nursing as a highly prestigious occupation and those who believe nursing is well regarded in the community are significantly *more* likely to choose nursing if given the choice again. The strength of these associations indicates the importance of these attitudinal variables both in the attraction and retention of nurses. Moreover, although the relative weights attached to these predicators appear to vary at the inter-generational level (RSPCT_HP is not an important determinant of the group A 'choose-nursing' decision), statistically there is no significant inter-generational difference in the importance of these attitudinal factors.

The effects of the pay-related variables on the probability of choosing nursing are, perhaps, the most interesting and revealing. There is much debate and discussion within the nursing literature about the importance of pay in the attraction and retention of nursing personnel. Buchanan and Considine's (2002) report for the NSW Nurses' Association helps sum up the complexity of the issues involved. Some participants expressed frustration that pay did not adequately reflect nursing skills and responsibilities. Others indicated that they would trade-off pay for improved working conditions. However, all participants felt nursing was poorly paid relative to jobs outside nursing. They similarly stressed that current rates of pay were unfair compared with past levels, due to the changing nature of nursing work.

Figure 1 below provides some insight into trends in nursing pay in Australia nationally. Between May 1992 and May 2002 (ie. Following the finalization of the minimum rates adjustment exercise (August 1991) designed to bring pay relativities into alignment and post the introduction of enterprise bargaining in October 1991) the relative pay position of RNs has fallen by 9.2 per cent when benchmarked to the average weekly earnings of males employed full-time.

Pay Relativities for Select Occupations, May-86 to May-00 (Average Weekly Ordinary Time Earnings, Benchmarked to Adult, Male, Full-Time, Non-Managerial Employees)

Source: unpublished ABS 6306.0

Returning to our discussion of the results, the findings with respect to the pay-related variables show that those who are either very or fairly satisfied with their pay are significantly more likely to choose nursing if given the opportunity to choose again. The importance of this variable as a determinant of the nurse-choice decision does vary over generations. PAYSAT is a significant (and positive) determinant of the nurse-choice probability amongst the younger group (those aged 28-37), whereas it is not an important determinant of the older group (those aged 48-57). The importance of pay for the younger cohort appears to reflect inter-generational differences in attitude to pay and money. These differences are further illustrated in Table 4. It is apparent from these data that starting salary and future earnings potential were not important criteria in the decision of older baby boomers to pursue careers in nursing; 63.6 per cent and 41.9 per cent rated starting salary and future earnings potential, respectively, as either of minor or no importance in their decision to pursue nursing (corresponding estimates for the Gen-X group were 41.5 and 25.9 per cent, respectively). Social considerations, such as the common perception that 'nursing was good career for women' appeared to be a much more important determinant in the initial choice decision of these women.

Table 4: Attitudes to salary in the career choice decision, disaggregated by age.

"When choosing nursing as your career, how important, if at all, were the following"	Aged 28-37 (n=226)	Aged 48-57 (n=238)
Starting Salary		
Minor/No Importance	41.5%	63.6%
Some Importance	34.4%	20.8%
Important/Very Important	24.1%	15.7%
Future Earnings Potential		
Minor/No Importance	25.9%	41.9%
Some Importance	34.8%	26.1%
Important/Very Important	39.3%	32.1%
Nursing was a Good Career for Women		
Minor/No Importance	40.6%	16.9%
Some Importance	21.4%	19.5%
Important/Very Important	37.9%	63.6%

Source: (Nowak et al 2002)

Perception of nurse pay relative to pay for other jobs within the workplace also emerged as a highly significant determinant. Again there is a voluminous literature on the importance attached to relative pay and the disharmony and discontentment that arises when pay relativities are disturbed (for an overview of aspects of this literature see Preston 2001). Registered nurses who perceived they were under paid relative to other jobs in their workplace (PAY_WP) and low relative to jobs requiring similar skills and responsibilities within the health industry (PAY_IND) were significantly less likely to indicate they would again choose a career in nursing .

Differences in the weights attached to these factors are, however, present at the inter-generational level. The younger cohort appears to attach much more weight to the importance of workplace relativities than the older cohort. There is, however, no significant inter-generational difference attached to the effects of perception of pay position within the health industry. Both cohorts

are more likely to choose some other career alternative if they perceive nurse pay to be relatively low when compared to other health jobs.

6. SUMMARY AND CONCLUSION

Nursing and Teaching are two occupations which have, traditionally, been seen or considered as 'good careers for women'. However, notwithstanding the apparently attractive features both jobs offer women wishing to pursue professional careers, Teaching and Nursing have suffered, and continue to suffer, acute difficulties in attracting and retaining personnel. Whereas in the past both professions recruited from a guaranteed labour pool, broadening career opportunities for women, combined with shifting societal attitudes towards women and work have increased competition from within this pool, thus contributing to the shortages.

In this paper we used data from a recent large scale survey of Registered Nurses (RNs) to model and compare intergenerational occupational choice decisions. Our analysis is restricted to a pool of female RNs who are currently employed and working as RNs. The dichotomous decision of whether or not to pursue nursing (if given the choice again) is modeled as a function of economic variables (such as human capital, job position, work hours), demographic variables (such as marital status, children, birthplace), attitudinal variables in relation to pay and perspectives and images of nursing, and environmental variables such as violence and stress.

Our findings provide valuable insight into attractive and less attractive features of nursing – features that play an important role in the attraction and retention of staff. Important amongst them are attitudes. Nurses who are satisfied with their pay are significantly more likely to indicate that they would again choose nursing if given the opportunity to choose again. However, the significance and weight attached to this variable varied across generations. Satisfaction with pay was not a significant determinant in the nursing choice decision of older cohorts (in our analysis those aged between 48-57), consistent with other data showing the lower weight this cohort attaches to monetary returns. Younger cohorts were also significantly less likely than their older cohorts to choose nursing where they perceived the pay of nurses was low relative to other jobs within their workplace.

Overall the findings in this paper indicate a need to understand the sensitivities different cohorts attach to different features and characteristics of nursing. For example, whereas in the past nursing was seen as a good career for women (with this perception playing an important role in the decision of 64 per cent of the older cohort to choose nursing) the significance or importance attached to this factor had significantly fallen by the time younger cohorts were making their career choice decision. From a policy perspective the results indicate a need to adopt differentiated approaches to the attraction and retention of nursing personnel.

APPENDIX A: RESULTS AND SUMMARY STATISTICS (MEANS)

Variable	ALL Coef	t-stat.		Mean	AGED 28-37 Coef	t-stat.		Mean	AGED 48-57 Coef	t-stat.		Mean
Constant	1.310	0.850			11.774	0.436			12.337	0.203		
SCHL_GAV	-0.449	-2.821	***	0.33	0.105	0.282		0.30	-0.611	-1.741	*	0.29
RNL1	0.259	1.033		0.49	0.524	0.870		0.59	0.323	0.641		0.42
RNL2	0.336	1.332		0.26	0.590	0.817		0.17	0.197	0.417		0.30
CNL2	0.141	0.357		0.05	0.730	0.863		0.07	0.287	0.318		0.04
CNL3	0.015	0.038		0.04	-0.925	-0.995		0.05	-0.420	-0.528		0.05
AGEP	-0.064	-0.914		43	-0.769	-0.464		33	-0.486	-0.208		52
AGESQ/100	0.080	1.010		20	1.220	0.482		11	0.521	0.233		27
FTMJ	0.227	1.287		0.38	0.790	1.793	*	0.41	0.188	0.528		0.42
SHIFT	0.075	0.361		0.68	-0.214	-0.390		0.81	-0.366	-0.914		0.61
HOSPITAL	-0.047	-0.239		0.31	-0.158	-0.374		0.30	-0.652	-1.456		0.29
NURHOME	-0.027	-0.083		0.07	-2.067	-1.446		0.02	-0.406	-0.760		0.13
WHERE_O	-0.201	-0.820		0.20	-0.733	-1.073		0.10	-0.740	-1.542		0.25
CITY	-0.138	-0.712		0.76	-0.096	-0.207		0.78	-0.239	-0.576		0.77
MARRIED	0.103	0.563		0.69	-0.279	-0.648		0.63	0.089	0.246		0.71
HASKIDS	0.316	1.413		0.73	0.620	1.217		0.52	0.489	0.954		0.87
BORNOZ	0.130	0.819		0.62	0.826	2.114	**	0.69	-0.134	-0.407		0.59
PAY_WP	-0.324	-1.842	*	0.63	-0.953	-2.436	**	0.62	0.015	0.043		0.61
PAY_IND	-0.412	-1.623	*	0.81	-1.844	-2.679	***	0.83	-1.034	-1.734	*	0.82
PAY_OCC	0.135	0.401		0.91	1.016	1.355		0.91	0.533	0.720		0.90
PAYSAT	0.688	4.501	***	0.57	1.078	2.908	***	0.58	0.274	0.854		0.54
RSPCT_HP	-0.647	-3.946	***	0.37	-0.563	-1.561		0.41	-0.919	-2.606	***	0.37
RSPCT_MG	-0.026	-0.127		0.19	0.444	0.765		0.12	0.200	0.471		0.21
RSPCT_CM	0.144	0.822		0.28	0.463	1.095		0.27	0.286	0.719		0.24
PRESTIG	0.980	3.226	***	0.11	1.559	1.950	**	0.08	1.083	1.819	**	0.13
PUBRGD	0.401	2.421	**	0.48	0.797	2.101	**	0.45	0.219	0.591		0.53
ENVI_OK	0.290	1.527		0.22	-0.416	-0.874		0.19	0.467	1.131		0.22
STRESSED	-0.234	-1.482		0.59	-0.082	-0.223		0.59	-0.210	-0.652		0.57
ABUSED_F	-0.199	-0.836		0.16	0.440	0.884		0.21	0.029	0.057		0.15
ABUSED_V	-0.046	-0.249		0.38	-0.561	-1.301		0.46	-0.491	-1.223		0.34
McFadden R^2	0.122				0.246				0.159			
Mean of Dep. Var				0.604				0.553				0.601
Sample Size	904				226				238			

Notes: ***, ** and * indicate significance at the 1%, 5% and 10% levels, respectively.

APPENDIX B:

Attitudes to nursing held by female RNs who are currently employed and working as an RN and who have indicated that, given the choice again, they would *not* choose nursing.

	% who agree-strongly agree with the statement:		
	All	Aged 28-37	Aged 48-57
	(n=357)* %	(n=101) %	(n=95) %
I am proud to be in the nursing profession	54.0	52.5	57.4
Changing professions now would be difficult for me to do	75.7	70.0	81.9
I do not feel any obligation to remain in nursing	69.3	75.2	65.3
Nursing is important to my self-image	15.5	15.0	17.0
Even if it were to my advantage, I do not feel it would be right to leave nursing at the moment	12.4	4.0	21.1
I am still in nursing because of a sense of loyalty to it	13.3	10.9	22.3
I regret having entered the nursing profession	34.2	32.7	29.5
There are no pressures to keep me from changing professions	36.3	35.0	41.8
I dislike being a nurse	16.3	18.8	11.6
I would feel guilty if I left nursing	10.7	25.7	9.6
I have put too much into the nursing profession to consider changing now	25.8	17.0	36.2
I do not identify with the nursing profession	14.1	9.9	15.1
It would be costly for me to change my profession now	73.4	68.7	76.8
Changing professions now would require considerable personal sacrifice	77.1	75.0	81.1
I believe people who have been trained in a profession have a responsibility to stay for a reasonable period of time	10.5	4.0	13.7
I am enthusiastic about nursing	27.0	22.8	32.6
Too much of my life would be disrupted if I were to change my profession	56.7	57.4	60.6
I feel a responsibility to the nursing profession to continue in it	9.0	6.9	11.6
Nursing is a highly prestigious occupation	4.5	3.0	5.3
Nurses are well regarded by the public	36.7	30.7	40.0
Nurses are respected in the community	39.2	34.7	48.4

Source: Nowak et al. (2002). * Notes: observations with missing values on the independent variables in the model estimated above have been excluded from this analysis.

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