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Extrinsic and Intrinsic Work Values: Their Impact on Job Satisfaction in Nursing

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Aims

The aim of this study was to identify the intrinsic and extrinsic work values that were perceived by the members of the Queensland Nurses Union (QNU) in Queensland, Australia, to influence job satisfaction.

Background

The current shortage of nurses in Australia has been the focus of many recent studies and national inquiries. This shortage is experienced internationally in both developed and developing nations. Few studies, however, have examined the results of surveys from the model of intrinsic and extrinsic work values and their impact on job satisfaction.

Methods

Following a pilot study, a questionnaire was posted to 2800 assistants-in-nursing, enrolled and Registered Nurses in October 2001, who were members of the QNU. The sampling of nurses was undertaken from three sectors – public, private and aged care and therefore the results are reported separately for these three sectors. A total of 1477 nurses responded to the survey, equating to a total overall response rate of 53%. It should be noted that the study was limited to members of the QNU, and therefore does not represent nurses who are not members of the Union.

Results

The results show that intrinsic and extrinsic work values do impact upon job satisfaction and therefore intention to leave employment. The results also indicate that work stress was high and morale was low and decreasing.

Conclusions

The findings of this study give some indication of what should be included in a nursing workforce planning strategy, the need for which in Australia is 'fundamental and urgent' (Senate Community Affairs References Committee 2002, p. xiii). The findings of this study also suggest that a 'one size fits all' solution across sectors will not work.

Introduction

In 2002, there were two Australian national inquiries into the nursing shortage (Department of Science, Education and Training 2002, Senate Community Affairs References Committee 2002). This shortage is not limited to Australia, rather it is experienced internationally in both developed and developing nations (Edwards 2001, Zungolo 2001, Aiken et al. 2002, Valentino 2002).

Satisfaction with employment is influenced by the environment in which the nurse is employed and the personal attributes of the nurse (Wheeler 1997, Taylor et al. 1999, Tovey & Adams 1999, Adams & Bond 2000). There is a substantial body of published literature linking the variables influencing job satisfaction with retention in the nursing workforce (Adams & Bond 2000, Aiken et al.

2002, Ingersoll et al. 2002). However, no study has linked these variables to the model of intrinsic and extrinsic work values.

Some authors note that nurses who are required to expand and extend their role may find this enhances their job satisfaction, whereas other nurses may experience a lessening of job satisfaction when role expansion is accompanied by a lack of career advancement (Adams et al. 1998, Furlong & Glover 1998). Linked to this role expansion is an increasing autonomy of practice, also associated with job satisfaction (Adams & Bond 2000, Stordeur et al. 2001, Tummers et al. 2002). Additionally, there is some evidence that the job level of the nurse influences job satisfaction with nurses in more senior management positions experiencing greater satisfaction (Adams & Bond 2000). Further, the increasing need to use technical resources has been linked to job satisfaction (Stordeur et al. 2001, Tummers et al. 2002), as has the personal development opportunities of the nurse (Tovey & Adams 1999, Adams & Bond 2000).

Flat organizational structures involving a nursing director with a strong position in the management executive, decentralized decision-making, good communication between peers and medical colleagues, positive leadership qualities of the ward manager and good rostering practices have all been linked with improved job satisfaction (Hart & Rotern 1995, Morrison et al. 1997, Adams & Bond 2000, Healy & McKay 2000, Hegney & McCarthy 2000, Rosenstein 2002). In contrast, poor management practices including lack of support and feedback and poor supervision (Taylor et al. 1999, Edwards et al. 2000, Healy & McKay 2000, Hegney et al. 2002a,b) and lack of pride in the quality of services delivered (Adams & Bond 2000) have been associated with job dissatisfaction.

Job dissatisfaction is consistently linked to high levels of stress, burn-out or mental and physical exhaustion (Blegen et al. 1993, Adams & Bond 2000, Aiken et al. 2002, Tummers et al. 2002), high workloads, inappropriate skills-mix and increasing complexity of care caused by high patient acuity (Taylor et al. 1999, Tovey & Adams 1999, Adams & Bond 2000, Edwards et al. 2000, Healy & McKay 2000, Stordeur et al. 2001, Tummers et al. 2002). Some authors note that increasing stress related to increased workloads results in nurses being exhausted at the completion of shifts (McNeese-Smith 1999). Consequently, several authors have linked the stressors arising from the nature of nursing work to poor job satisfaction (Taylor et al. 1999, Stordeur et al. 2001). As would be expected, other studies associate low levels of morale to poor job satisfaction (Farrell & Dares 1999, Taylor et al. 1999, Edwards et al. 2000). The significance of remuneration is unclear with the suggestion that remuneration is only relevant if nurses perceive a discrepancy between their own remuneration and those of other professionals (Tovey & Adams 1999).

Whilst many of the aforementioned studies demonstrate that job satisfaction in the workplace is largely determined by the interaction between personal and environmental characteristics (Lewin 1951 cited in Taris & Feij 2001), they rarely segregate the variables impacting upon nursing job satisfaction according to these characteristics. In the wider literature, the congruence or fit between a person and the work environment (P-E fit) is considered to be an important predictor of job satisfaction (Taris & Feij 2001). Further, within the P-E fit literature, several types of fit are identified including Kristof's (1996) person-organization fit, person-vocation fit, person-group fit and person-job fit.

An important category of person variables studied in person-organization fit research is work values (Locke 1976 cited in Taris & Feij). These values are defined as 'enduring beliefs that a specific mode or conduct or end-state is preferable to its opposite, thereby guiding the individual's attitudes, judgements and behaviours' (Taris & Feij 2001, p. 3). With regard to work values, a commonly used differentiation in this domain is intrinsic and extrinsic work values. Intrinsic work values 'refer to the degree to which employees value immaterial aspects of their jobs that allow for self-expression as important, for example, job variety and autonomy' (Taris & Feij 2001, p. 3). Extrinsic work values 'refer to the degree to which employees value material or instrumental work aspects, such as salary and opportunity for promotion, as important' (Taris & Feij 2001, p. 3).

The variables affecting job satisfaction in nursing could therefore be re-arranged into intrinsic work values (the satisfaction of nursing work, being able to complete the tasks during working hours) and extrinsic work values (remuneration and career progression). The importance of re-assessing the nursing job satisfaction literature using these work values is highlighted by the results of studies suggesting that job satisfaction decreases when intrinsic work values are not met (Taris & Feij 2001).

Further, these authors suggest that extrinsic work aspects and social relations at work not only affect job satisfaction, but also intention to leave the current position. For example, Taris and Feij (2001) suggest that an employee's intention to leave decreased until the employee's valued level for this extrinsic value was reached. If the extrinsic supply was increased over the valued level then an

employee was more likely to leave the company rather than stay (Taris & Feij 2001). This finding was not apparent for intrinsic work values.

Method

Aim

The study aimed at identifying the intrinsic and extrinsic work values that were perceived by the members of the Queensland Nurses Union (QNU) in Queensland, Australia, to influence job satisfaction. For the purpose of this study, job satisfaction was defined as the degree of positive affect towards a job or its components (Adams & Bond 2000).

Procedure

This study involved a postal survey questionnaire of members of the QNU in October, 2001. One follow-up mailing to non-respondents was made 2 weeks after the initial mailing.

Ethics approval was obtained from the University of Southern Queensland. To ensure anonymity of the survey participants, codes were generated by the QNU to identify each participant and the QNU posted the surveys to the participants. These codes were used by the project team to identify non-respondents and to notify the QNU to post a reminder package to them. As a result of this coding individual participants cannot be linked to responses.

Sample and sampling design

The Queensland Nurses Union (QNU) provided the database of nurse participants from which the samples were drawn. There were three employment sectors of nurses included in the random sample. First, the public sector nurses employed in acute hospitals and community health. The public sector provides free health services. The second sample involved nurses employed in the fee-for-service private sector who were employed in for-profit and not-for-profit acute-care hospitals. The third sample was comprised of nurses employed in the aged-care sector, which included both public and private providers. The sampling frame was restricted to financial members of the QNU to reduce the number of non-active nurses selected.

The nurses who were surveyed included Registered Nurses (RNs), enrolled nurses (ENs) and assistants-in-nursing (AINs). In Australia, the work of RNs and ENs is controlled by State/Territory-based regulating authorities. Assistants-in-Nursing, whilst completing a technical college qualification, are considered to be unregulated care providers. The RNs in Australia are employed at different pay levels, which reflect their level of management and clinical responsibility. Level 1 nurses form the major part of the nursing workforce and could be described as providing direct patient care. Level 2 and level 3 nurses have management responsibilities and/or are employed as clinical nurse specialists. Level 4 and level 5 nurses have traditionally been referred to as Assistant Directors of Nursing (level 4) and Directors of Nursing (level 5), although all of these classifications are related to industrial awards and do change over time.

A pilot study involving random samples of 40 nurses from each sector was carried out to disclose potential problems with the protocol of the main study and with the survey instrument and to provide information concerning response rates and variability in key measures. A total sample size of 2800, equally divided among the three sectors, was determined to be adequate to achieve a precision in key measures of ± 0.05 in population proportions at 95% confidence and of better than 90% power for differences in proportions of 0.10 across the sectors at the 5% level of significance.

Of these 2800, the total number of completed surveys returned for analysis was 1477. This represented a response rate of 53%. After eliminating 41 cases where the work sector could not be precisely determined and adjusting for differences in identification of work sector between the QNU database and the survey itself (about 5% of cases), the final sample sizes and response rates in the main study were: 441 aged care (47%); 497 public acute care (56%); and 498 private acute care (56%).

The survey instrument

While the questionnaire addressed a wide range of issues, this paper focuses upon the participants' level of agreement with 16 of the 17 positive or negative statements concerning their experiences in

nursing (Table 1). Workload issues have been the subject of a separate paper (Hegney et al. 2003). Responses were elicited according to a seven point ordinal scale, ranging through 'extremely positive', 'quite positive', 'slightly positive', 'neither positive nor negative', 'slightly negative', 'quite negative' to 'extremely negative'. All questions were examined for relevance, potential for bias, appropriateness of scales of response and so on. Following this development, the questionnaire was pretested among 15 nurses to assess its content validity before being piloted.

Table 1. Questions asked of respondents

Work is emotionally challenging	Work is not emotionally challenging
Workload is heavy (not included in this paper)	Workload is light (not included in this paper)
The work is physically demanding	The work is not physically demanding
Pay rate is good	Pay rate is poor
Work hours are inconvenient	Work hours are convenient
Career prospects are good	Career prospects are limited
Skills and experience are not rewarded	Skills and experience are rewarded
Nursing is seen as a high status career	Nursing is seen as a low status career
Work stress is high	Work stress is low
Lacks teamwork and support from colleagues	Good teamwork and support from colleagues
Workplace is safe	Workplace is unsafe
Autonomy is encouraged	Autonomy is discouraged
Nursing staff morale is good	Nursing staff morale is poor
Nursing staff morale is deteriorating	Nursing staff morale is improving
Workplace is well equipped/supplied	Workplace is poorly equipped/supplied
Nursing work is valued by the community	Nursing work is not valued by the community
Nursing work is valued within the health system	Nursing work is not valued within the health system

The 16 items dealing with job satisfaction were divided into those primarily concerned with intrinsic work values and those primarily concerned with extrinsic work values. A rotated factor analysis of these items confirmed these two groupings as comprising the dominant factors within each sector. The results were consistent across sectors with an explained variance ranging between 35% and 37% of the total. The reliability of responses was further assessed using Cronbach's alpha. Satisfactory values of 0.70 or better were obtained in each sector for each of the intrinsic and extrinsic sets of items.

Limitations

The response rates for each sector were relatively high for a study of this type. Nonetheless, there is still considerable potential for non-response bias if the attitude of respondents and non-respondent differ markedly on particular issues. No systematic trends in the time order of receipt of the surveys are present with respect to the responses that are the focus of this paper. A comparison between the samples and QNU membership on the demographics variables available on the QNU membership database revealed no differences of significance among the private and public sector respondents in terms of gender balance and job designation. A discrepancy was apparent in the distribution of nurse types in the aged-care sector. Compared with the QNU membership in this sector, RNs are significantly over-represented while AINs are significantly under-represented among respondents. Also, the mean age of respondents (weighted across sectors) at about 43 years is higher than that of the QNU membership at just above 41 years. This can be explained by the over-representation of RNs compared with AINs in the aged-care sector.

An assessment of the effect of the apparent imbalance in the sample across nurse designation in the aged-care sector has been made on the results reported in this paper. At most the impact is a difference of 3% points in estimated percentages. On 12 of the 16 items described the impact is >1% point. The reported levels of significance are unaffected.

It should be emphasized that the samples used in this study are not necessarily representative of all Queensland nurses working in the public, private or aged-care sectors during October 2001 since QNU membership may not be representative of all nurses in these sectors. Because the most recent population figures were 5 years old at the time of this study (Australian Institute of Health and Welfare 1998), and AINs are not included in these statistics, comparisons between the available data describing QNU and Queensland nursing populations may not be valid. For information purposes, however, it is estimated that between 65% and 75% of nurses active in Queensland are members of the QNU and a comparison on demographic variables including job classification, age and gender suggest that the

samples used in this study are representative in terms of job classification but not necessarily in terms of age and gender balance. The samples studied are older on average by 3 or 4 years and slightly less representative of male nurses than the respective Queensland populations.

Data analysis

Quantitative data were analysed using SPSS® for Windows, SPSS Inc., Chicago, IL, USA (Release 10.0.5). To protect against Type I errors, in view of the considerable number of extant comparisons, only results that were significant at the 1% level (two-sided) are reported except where an otherwise non-significant effect is significant at the 1% level in one of the other sectors. In these cases, a threshold of 5% is used. Significant differences in the distribution of percentages across the seven-point scale for the various populations of nurses were identified using the chi-square test of independence. Categories were collapsed to ensure sufficient numbers in each cell of the analysis. Differences in median responses on each of the 16 items across the three sectors were assessed using the Kruskal Wallis test. Measures such as means and percentages aggregated across the three sectors are weighted to reflect QNU membership across the three sectors. These weighting are 19.6, 63.2 and 17.2% for the aged-care, public and private sectors respectively.

Qualitative data from the questionnaire were transcribed verbatim and subsequently analysed separately by two members of the research team for prominent themes according to work sector and the designation of the nurse. Consultation following the initial analysis allowed for corroboration of the themes arising from these data that are presented in this paper.

Results

Intrinsic work values

The emotional challenges of nursing work

Averaged across the three sectors, 81% of nurses believed that nursing was extremely or quite emotionally challenging (Figure 1). There were differences, however, between the three sectors, with nurses in the aged-care sector perceiving nursing work to be more emotionally challenging than nurses in the other two sectors ($\chi^2(12) = 34.6, P = 0.001$).

The physical demands of nursing work

Over 63% of nurses believed that nursing was extremely or quite physically demanding. There was very strong evidence of differences across the sectors [$\chi^2(12) = 84.0, P < 0.001$], with a higher proportion of nurses from the aged-care sector perceiving nursing work to be extremely physically demanding than nurses from the other sectors (Figure 2). Differences exist among job level and designation with regard to perceptions of the physical demands of nursing work. With decreasing designation level (from RN to EN to AIN) the physical demands of nursing work are perceived to increase in the aged care [$H(5) = 40.1, P < 0.001$] and public sectors [$H(3) = 28.7, P < 0.001$]. In the private sector, the physical demanding nature of nursing work decreases with seniority of RN [$H(3) = 20.3, P < 0.001$].

Work stress and morale

There was strong evidence of a difference between the sectors with respect to the level of work stress [$\chi^2(12) = 57.2, P < 0.001$]. In particular, the proportion of respondents reporting extremely high stress was greater in the aged-care sector (Figure 3).

Nearly 48% of nurses believed that staff morale was extremely or quite poor (Figure 4). In the private sector, there was strong evidence of a difference in the perceived levels of staff morale by job designation [$H(3) = 17.3, P = 0.001$]. For example, on average, ENs and levels 3–5 RNs perceived a higher level of staff morale than level 1 and level 2 RNs.

Overall, 45% of nurses believed that nursing staff morale was extremely or quite deteriorating and this was consistent across all sectors (Figure 5). In the private sector, there was strong evidence of differences in perception regarding morale deterioration between level 3 and level 5 RNs, level 1 and level 2 RNs and ENs ($H(3) = 21.2, P < 0.001$). On average, levels 3–5 RNs perceived less deterioration in staff morale than ENs and level 1 and level 2 RNs.

Autonomy

There was weak evidence of a difference across the sectors with respect to the perceived level of encouragement of autonomy [$\chi^2(12) = 22.2, P = 0.04$]. Nurses employed in the public sector were most likely to believe that autonomy was quite or extremely discouraged (19%, $n = 85$; Figure 6). In the aged care sector, there was strong evidence of a difference across designations regarding perceptions of the encouragement of autonomy [$H(4) = 37.5, P < 0.001$], with aged-care sector AINs and level 1 RNs reporting that autonomy was less encouraged than ENs and level 2 and above RNs. In the private sector, ENs and levels 3–5 RNs were more likely to perceive that autonomy was encouraged than level 1 and level 2 RNs [$H(3) = 20.1, P < 0.001$].

The value of nursing work

Responses were elicited regarding nurses' perceptions of the value placed upon their work by the community and the health system. There was evidence of a difference across sectors with respect to the respondents' perception of the value the community place upon nursing work [$\chi^2(12) = 27.8, P = 0.006$]. Nurses in the aged care (12%, $n = 47$) and public sectors (12%, $n = 53$) were more likely to perceive that nursing was extremely or poorly regarded by the community than those in the private sector (7%, $n = 34$). In the private sector, there was also strong evidence of a difference in the perceived value of nursing work by the community between RNs and ENs [$H(3) = 17.8, P < 0.001$] with ENs perceiving their work to be more valued than RNs.

With regard to the perception of the value placed upon nursing work by the health system, there was strong evidence of a difference across the sectors [$\chi^2(12) = 43.1, P < 0.001$], with a higher proportion of nurses in the aged-care sector believing nursing was valued within the health system than nurses from the other sectors (Figure 7). Further, in the aged-care sector there was evidence of difference according to job designation [$H(2) = 10.0, P = 0.007$] with, on average, ENs perceiving higher values than AINs, who perceive a higher value upon their work than RNs. This evidence was further supported by analysis of the public [$H(4) = 15.5, P = 0.004$] and private sectors [$H(3) = 22.8, P < 0.001$], where ENs were more likely to perceive their work was valued by the health system than RNs. There was also some evidence that level 4 and level 5 RNs in the public sector perceive nursing work to be more highly valued than levels 1, 2 and 3 RNs.

Extrinsic work values

Remuneration

The data provide strong evidence of differences across the sectors [$\chi^2(12) = 68.9, P < 0.001$] with over 53% of nurses from the aged-care sector believing their pay rate was extremely or quite poor. Nurses in the private sector were less satisfied with their pay rates than nurses in the public sector, with 178 (40%) stating it was extremely or quite poor, compared with the 127 (29%) of public sector nurses. This difference between the sectors was evident in the qualitative data, where nurses in the aged care and private sectors were also more likely to spontaneously report dissatisfaction with pay rates. Dissatisfaction centered upon the lack of parity between the public sector (which is paid at a higher rate) and the private sector. In addition to lack of parity between nurses in the public and private sectors, respondents noted that other similarly educated and accountable professions, such as teaching are paid at a higher rate than nurses. As one private sector nurse commented:

‘...Why should Queensland nurses be paid less than nurses in New South Wales etc? Why also should the private acute sector nurses be paid less than the public sector?’

The public sector data differed from the other two sectors in one significant regard; the length of time spent in nursing was associated with the level of satisfaction with pay rates [$H(5) = 20.6, P = 0.001$], with the newest recruits to the public sector less satisfied with remuneration than those who had been there longer.

Rewards for skills and experience

The data suggested that nurses perceived their skills and experience as extremely or quite unrewarded (36% aged care, 42% public and 42% private) within the workplace. Whilst there was only weak evidence across the sectors of differences with regard to whether nurses perceived their skills and experience were rewarded [$\chi^2(12) = 20.2, P = 0.06$], in the aged care sector, there was evidence of a

difference regarding the perception of reward for skills and experience, according to the seniority of the nurse [$H(4) = 15.9$, $P = 0.003$]. For example, more senior nurses (those employed in a management position as level 2 RNs and higher) were more likely to perceive that skills and experiences were rewarded adequately than nurses providing care at the bedside (AINs, ENs and RNs).

Working conditions

There was strong evidence of a difference across the sectors with respect to nurses' perceptions of the convenience of working hours ($\chi^2(12) = 30.3$, $P = 0.002$). For example, nurses in the public sector ($n = 100$, 22%) were more likely to perceive working hours as extremely or quite inconvenient compared with nurses in the aged care ($n = 67$, 17%) and private ($n = 71$, 16%) sectors.

There was evidence of a difference across the sectors with respect to the perceived level of colleague support and teamwork in nursing ($\chi^2(12) = 27.7$, $P = 0.006$). Overall, 38% of nurses believed that collegial support and teamwork were quite or extremely evident in their workplace. Perceptions of poor collegial support and teamwork were more evident in the aged-care sector than in the other two sectors (aged care $n = 110$, 29%; public sector $n = 97$, 22%; private sector $n = 93$, 21%).

Thirty-eight percent of nurses across the sectors believed that their workplace was extremely or quite well equipped and 19% across sectors believed it was extremely or quite poorly equipped. Additionally, >11% of nurses believed their workplace to be extremely or quite unsafe, and there was strong evidence of a difference across the sectors in this regard [$\chi^2(12) = 32.3$, $P = 0.001$] with nurses in the public sector more likely to believe that the workplace was extremely or quite unsafe (13%, $n = 59$) than nurses in the private (9%, $n = 39$) or aged care (9%, $n = 33$) sectors.

Perceptions of nursing as a career

Across sectors, 23% of nurses believed their nursing career prospects were extremely or quite good, compared with 34% who believed they were extremely or quite limited (Figure 8). There was strong evidence of a difference across the sectors [$\chi^2(12) = 36.5$, $P < 0.001$] with nurses in the aged-care sector indicating a difference in the perception of career prospects according to level of seniority [$H(5) = 20.2$, $P = 0.001$]. Nurses employed at level 2 and above perceived better career prospects than level 1 nurses. In this sector, AINs (41%) were also more likely to believe they had extremely or quite limited career prospects than ENs (35%) or RNs (31%).

There was very strong evidence of a difference across the sectors with respect to the perception of the status of nursing as a career [$\chi^2(12) = 35.4$, $P < 0.001$]. In particular, nurses employed in the aged-care sector ($n = 64$, 17%) were more likely to believe that nursing was an extremely or quite high status career, compared with 28 (6%) public and 30 (7%) private sector nurses. Further, public sector nurses who had been employed for >35 years reported a relatively high perception of the status of nursing as a career compared with other public sector nurses [$H(5) = 17.4$, $P = 0.004$]. In contrast, there was a relatively low perception of the status of nursing as a career amongst nurses with 5- to 10-year-experience. Additionally, there was evidence in the public [$H(3) = 12.6$, $P = 0.006$] and private sectors [$H(3) = 20.1$, $P < 0.001$] of differences in the perceived status of nursing as a career according to level of seniority with ENs in the public and private sectors tended to perceiving nursing as a higher status career than RNs.

Discussion

Intrinsic work values

The intrinsic work values in this study such as the emotionally challenging and physically demanding nature of nursing work, work stress, morale and the level of autonomy have all previously been associated with job satisfaction (Cavanagh 1990, Cavanagh & Coffin 1992, Irvine & Evans 1995, Adams & Bond 2000, Aiken et al. 2002, Ingersoll et al. 2002). How each of these variables influences job satisfaction has been the subject of debate in the previous studies (Cavanagh 1992).

The findings of this study suggest that nursing work continues to be both emotionally challenging and physically demanding and therefore a source of workplace stress (Taylor et al. 1999, Tummers et al. 2002). However, the data also suggest that nurses' perceptions vary according to job level, job designation and employment sector.

Work stress, which was high, and morale, which was low and decreasing in this study, have also previously been reported to influence job satisfaction (Blegen et al. 1993, Adams & Bond 2000, Aiken et al. 2002). Tyler and Cushway's (1995) finding that high job levels in nursing have higher work stress was not confirmed by this study. An important finding, however, was the difference in perception of morale between nurses in this study, with nurse managers having different perceptions of morale than nurses who provide 'hands-on' clinical services.

Autonomy has also been linked to job satisfaction (Adams & Bond 2000, Tummers et al. 2002). No previous studies have reported the difference in levels of autonomy across employment sectors between job designation and job level of nurses. The results suggest that, with the exception of the ENs in the aged care sector, autonomy increases with increasing seniority of the nurse. As levels 3–5 RNs do not normally provide clinical care, the data suggest that the nurses who are providing clinical care report less autonomy, particularly in the public sector.

The differences across the sectors in perceptions of how the community and health sector value nursing work as well as the differences between the job designation and job level of the nurse have not previously been reported. All of these intrinsic work factors have the potential to influence job satisfaction and the intention to leave employment. The intrinsic work value results in this study indicate a workforce in crisis (Senate Community Affairs References Committee 2002).

Extrinsic work values

Similarly, many of the extrinsic work values in this study have been the focus of previous studies into job satisfaction (McNeese-Smith 1999, Queensland Health 1999, Tovey & Adams 1999, Adams & Bond 2000, Adams & Bond 2000, Healy & McKay 2000, Hegney & McCarthy 2000, Silvestro & Silvestro 2000).

Differences across sectors, and/or job designation and/or job level were apparent in perceptions of the rate of pay, rewards for skills and experience, the convenience of working hours, collegial support and teamwork, the safety of the workplace, nursing career prospects and the status of nursing as a career. The only variable not exhibiting differences across sectors is how well the workplace was equipped.

With regard to remuneration, it was apparent that nurses report dissatisfaction with pay rates particularly when they perceive there is lack of parity between sectors and other professionals', such as teachers (Tovey & Adams 1999). A further finding of this study is that length of employment can influence nurses' perceptions of the adequacy of remuneration. This finding is important as it was the newly employed nurses who were most dissatisfied. Retention of the nursing workforce, particularly newly recruited nurses, should be a priority for all employers.

Previous studies have suggested that role extension or expansion can decrease job satisfaction (Adams & Bond 2000), particularly if this occurs in the absence of professional recognition and career development opportunities (Furlong & Glover 1998). In this study, whilst perceptions differed between sectors, it was apparent that many nurses believed they were poorly rewarded for their skills and experience (Queensland Health 1999, Adams & Bond 2000).

Working hours are influenced by rostering practices and the data from this study suggest that the public sector nurses were those most likely to perceive their working hours to be unsatisfactory. It is possible that this difference can be explained by the high level of continuous shift workers (55%) from the public sector in this study. Working hours and rostering practice have both previously been linked to job satisfaction (Hegney & McCarthy 2000, Silvestro & Silvestro 2000, Senate Community Affairs References Committee 2000).

Whilst there were differences across sectors, only 20% of participants identified a lack of teamwork and collegial support. This finding is supported by other studies that suggest that relationships with colleagues are the best predictors of job satisfaction (Tovey & Adams 1999, Adams & Bond 2000, Healy & McKay 2000).

This study, however, does support previous research indicating that the prospect of career advancement is important to nurses' job satisfaction (Dodds et al. 1991). Whilst this study did not specifically ask nurses if career advancement was important to them, it did ascertain that the nurses in this study believed that their career prospects were limited rather than good. The respondents' perceptions of how nursing is perceived as a career in addition to its correlation with low job satisfaction, are also consistent with previous studies (Adams & Bond 2000).

Conclusion

At a time of international shortages of nurses, it is apparent that the intrinsic and extrinsic work values influence nurses' job satisfaction, and therefore nursing retention rates. As Taris and Feij (2001) note, intrinsic and extrinsic work values and social relations at work affect job satisfaction and the intention to leave employment. The findings of this study give some indication of what should be included in a nursing workforce planning strategy both within Australian and internationally. From an Australian perspective, the need such a strategy is 'fundamental and urgent' (Senate Community Affairs References Committee 2002, p. xiii).

Whilst the data confirm some findings from previous studies aspects not discussed these reports were the impact of job designation, job level and the employment sector. The findings of this study suggest that a 'one size fits all' solution across sectors within Australia and possibly across both developed and developing nations will not work. It is therefore important that further research into job satisfaction take into consideration the job designation, job level and employment sector.

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References

- Adams A.E. & Bond S. (2000) Hospital nurses' job satisfaction, individual and organizational characteristics. *Journal of Advanced Nursing* 32, 536–543.
- Adams A., Bond S. & Hale C.A. (1998) Nursing organisational practice and its relationship with other features of ward organization and job satisfaction. *Journal of Advanced Nursing* 27, 1212–1222.
- Aiken L.H., Clarke S.P., Sloane D.M., Sochalski J. & Silber J.H. (2002) Hospital nurses staffing and patient mortality, nurse burnout, and job dissatisfaction. *JAMA* 288, 1987–1993.
- Australian Institute of Health and Welfare (1998). *Nursing Labourforce*. Australian Institute of Health and Welfare, Canberra.
- Blegen M.A., Goode C., Johnson M., Maas M., Chen L. & Moorhead S. (1993) Preferences for decision-making autonomy. *Image: Journal of Nursing Scholarship* 25, 339–344.
- Cavanagh S.J. (1992) Job satisfaction of nursing staff working in hospitals. *Journal of Advanced Nursing* 17, 1369–1376.
- Clarke H.F., Laschinger H.S., Giovannetti P., Shamian J., Thomson D. & Tourangeau A. (2001) Nursing shortages: workplace environments are essential to the solution. *Hospital Quarterly* 4 (4), 50–57.
- Department of Science, Education and Training (2002). *National Review of Nursing Education*. Commonwealth of Australia, Canberra.
- Dodds A.E., Lawrence J.A. & Wearing A.J. (1991) What makes nursing satisfying: a comparison of college students' and registered nurses' views. *Journal of Advanced Nursing* 16, 741–753.
- Edwards K. (2001) Welcome to Britain?...nurses should not be 'poached' from countries where they are needed. *Royal College of Nursing Magazine Autumn*, 23–26.
- Edwards D., Burnard P., Coyle D., Fothergill A. & Hannigan B.A. (2000) Stress and burnout in community mental health nursing: a review of the literature. *Journal of Psychiatric and Mental Health Nursing* 7, 7–14.
- Farrell G.A. & Dares G. (1999) Nursing staff satisfaction on a mental health unit. *Australian and New Zealand Journal of Mental Health Nursing* 8, 51–57.
- Furlong S. & Glover D. (1998) Confusion surrounds piecemeal changes in nurses' roles. *Nursing Times* 94, 54–55.
- Hart G. & Rotern A. (1995) The clinical learning environment – nurses' perceptions of professional-development in clinical settings. *Nurse Education Today* 15, 3–10.
- Healy C.M. & McKay M.F. (2000) Nursing stress: the effects of coping strategies and job satisfaction in a sample of Australian nurses. *Journal of Advanced Nursing* 31, 681–688.
- Hegney D. & McCarthy A. (2000) Job satisfaction and nurses in rural Australia. *Journal of Nursing Administration* 30, 347–350.
- Hegney D., McCarthy A., Rogers-Clark C. & Gorman D. (2002a) Retaining rural and remote area nurses: the Queensland, Australia, experience. *Journal of Nursing Administration* 32, 128–135.

- Hegney D., McCarthy A., Rogers-Clark C. & Gorman D. (2002b) Why nurses are attracted to rural and remote practice. *Australian Journal of Rural Health* 10 (3), 178-186.
- Hegney D., Plank A. & Parker V. (2003) Nursing workloads: the results of a study of Queensland nurses. *Journal of Nursing Management* 11, 307-314.
- Ingersoll G.L., Olsan T., Drew-Cates J., DeVinney B.C. & Davies J. (2002) Nurses' job satisfaction, organizational commitment, and career intent. *Journal of Nursing Administration* 32 (5), 250-263.
- Kristof A.L. (1996) Person-organisation fit: an integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology* 49, 1-49.
- McNeese-Smith D.K. (1999) A content analysis of staff nurse descriptions of job satisfaction and dissatisfaction. *Journal of Advanced Nursing* 29, 1332-1341.
- Morrison R.S., Jones L. & Fuller B. (1997) The relationship between leadership style and empowerment on job satisfaction of nurses. *Journal of Nursing Administration* 27, 27-34.
- Queensland Health (1999) Ministerial Taskforce: Nursing Recruitment and Retention. GoPrint, Brisbane.
- Rosenstein A.H. (2002) Nurse-physician relationships: impact on nurse satisfaction and retention. *American Journal of Nursing* 102 (6), 26-34.
- Senate Community Affairs References Committee (2002). *The Patient Profession: Time for Action*. Commonwealth of Australia, Canberra.
- Silvestro R. & Silvestro C. (2000) An evaluation of nurse rostering practices in the National Health Service. *Journal of Advanced Nursing* 32 (2), 525-535.
- Stordeur S., D'Hoore W. & Vanderberghe C. (2001) Leadership, organisational stress, and emotional exhaustion amongst hospital nursing staff. *Journal of Advanced Nursing* 35, 533-542.
- Taris R. & Feij F.A. (2001) Longitudinal examination of the relationship between supplies-values fit and work outcomes. *Applied Psychology* 50 (1), 52-81.
- Taylor S., White B. & Muncer S. (1999) Nurses' cognitive structural models of work-based stress. *Journal of Advanced Nursing* 29, 974-983.
- Tovey E.J. & Adams A.E. (1999) The changing nature of nurses' job satisfaction: an exploration of sources of satisfaction in the 1990s. *Journal of Advanced Nursing* 30, 150-158.
- Tummers G.E.R., Landeweerd J.A. & van Merode G.G. (2002) Organization, work and work reactions: a study of the relationship between organizational aspects of nursing and nurses' work characteristics and work reactions. *Scandinavian Journal of Caring Sciences* 16, 52-58.
- Tyler P. & Cushway D. (1995) Stress in nurses - the effects of coping and social support. *Stress Medicine* 11, 243-251.
- Valentino L.M. (2002) Future employment trends in nursing: the nursing shortage has struck just about everywhere in the United States and there's no relief in sight. *American Journal of Nursing* 2, 24-28.
- Wheeler H. (1997) Nurse occupational stress research. 3: a model of stress for research. *British Journal of Nursing* 6 (16), 944-949.
- Zungolo E. (2001) Tomorrow is ours to win or lose: responding to a heightened demand for nurses amidst a national crisis. *Nursing and Health Care Perspectives* 22, 278.

Figures

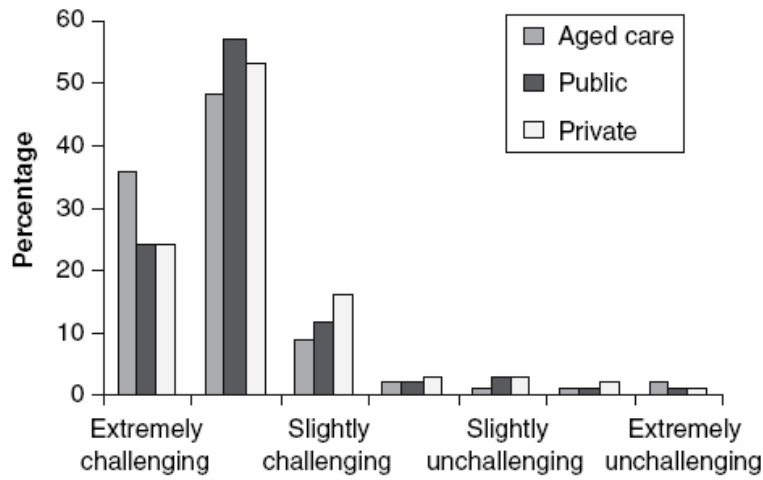


Figure 1. The emotionally challenging nature of nursing work: a comparison between sectors ($n[\text{aged}] = 373$, $n[\text{pub}] = 442$, $n[\text{pvt}] = 450$).

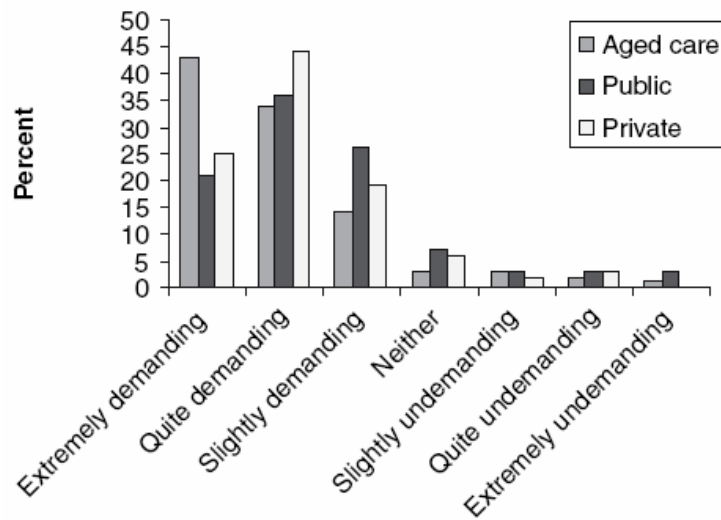


Figure 2. Physically demanding nature of nursing work: a comparison between sectors ($n[\text{aged}] = 382$, $n[\text{pub}] = 445$, $n[\text{pvt}] = 449$).

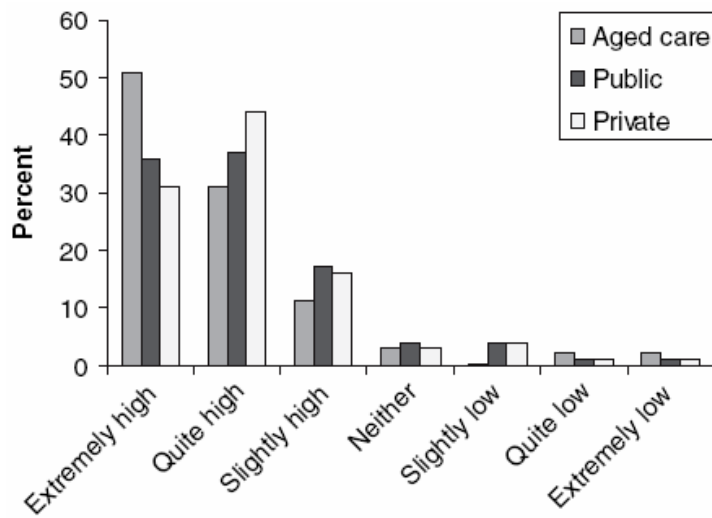


Figure 3. Perceptions of work stress: a comparison between sectors ($n[\text{aged}] = 381$, $n[\text{pub}] = 447$, $n[\text{pvt}] = 450$).

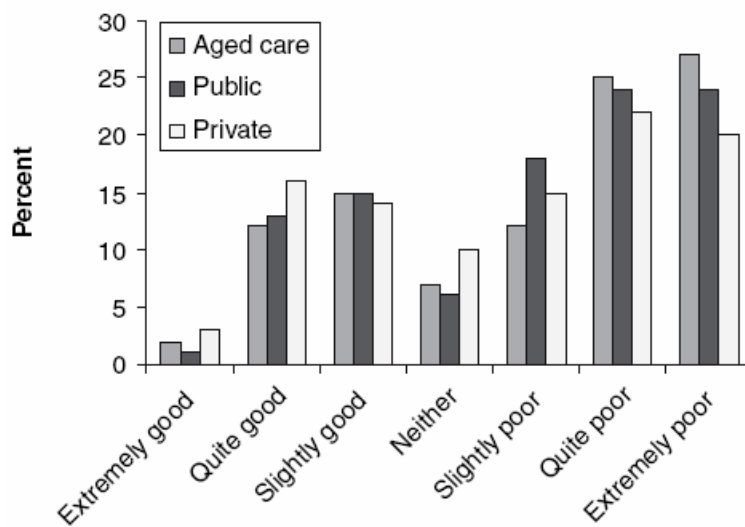


Figure 4. Perceptions of the level of nursing staff morale: a comparison between sectors ($n[\text{aged}] = 387$, $n[\text{pub}] = 446$, $n[\text{pvt}] = 451$).

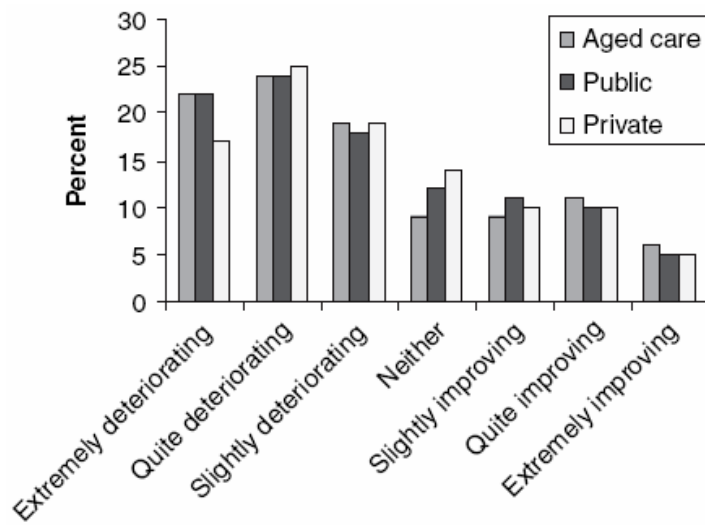


Figure 5. Deteriorating nursing staff morale: a comparison between sectors ($n[\text{aged}] = 381$, $n[\text{pub}] = 447$, $n[\text{pvt}] = 453$).

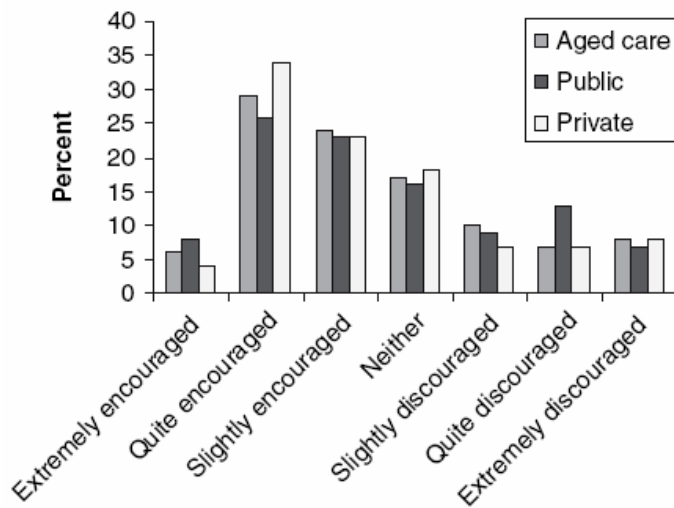


Figure 6. Autonomy in nursing practice: a comparison between sectors ($n[\text{aged}] = 352$, $n[\text{pub}] = 439$, $n[\text{pvt}] = 440$).

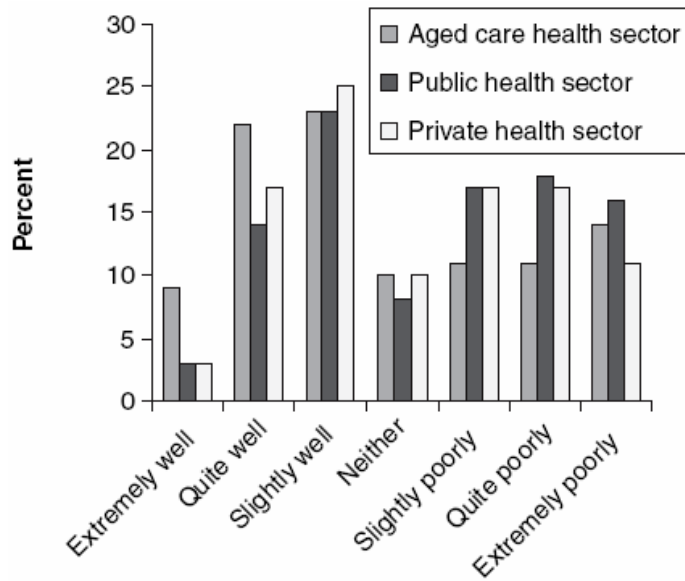


Figure 7. The perceived value of nursing work within the health system: a comparison between sectors ($n[\text{aged}] = 384$, $n[\text{pub}] = 449$, $n[\text{pvt}] = 453$).

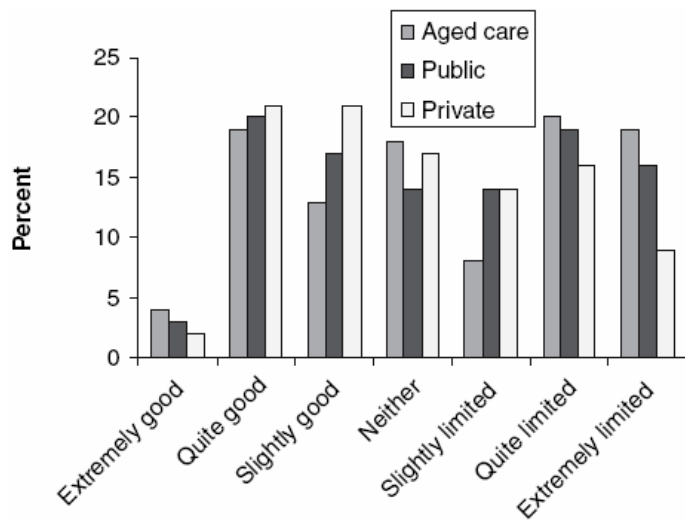


Figure 8. Perceptions of nursing career prospects: a comparison between sectors ($n[\text{aged}] = 377$, $n[\text{pub}] = 449$, $n[\text{pvt}] = 453$).