

THE IMPACT OF SUPERVISOR-SUBORDINATE RELATIONSHIPS ON PUBLIC AND PRIVATE SECTOR NURSES' COMMITMENT

Nurses are in short supply in Australia (Productivity Commission, 2005) and in other OECD countries (Buchan & Calman, 2004; OECD, 2003). Past research suggests that the main factors affecting supply include: the aging population, inadequate numbers attracted to the professions and high turnover (Buchan & Calman, 2004; Buerhaus, Staiger & Auerbach, 2006; Schofield & Beard, 2005). One of the reasons suggested as explaining high turnover of nurses is poor management practices, often evidenced by low levels of perceived support from supervisors (Cheung, Bessell & Ellis, 2004). Further, an effective supervisor-subordinate relationship has been identified as the factor most likely to improve commitment and retention (Cohen, 2006; Tauton, Boyle & Woods, 1997).

Past research has identified that healthcare professionals reporting dissatisfaction with management policies and practices have a 65% higher probability of leaving than those reporting to be satisfied (Gray & Phillips, 1994; Secombe & Smith, 1997). Moreover, past research has identified affective commitment is a predictor of labour turnover and job performance (Pitt, Leyland, Foreman, and Bromfield, 1995) and organisational effectiveness (Meyer & Herscovitch, 2001). Hence, new knowledge about the impact of supervisor-subordinate relationships upon commitment is an important issue for managers because the retention of staff has been identified as a key factor affecting organisational effectiveness (Gollan, 2005; Ostroff & Bowen, 2000; Ostroff, Kinicki & Clark, 2002).

Further, when employees perceive high levels of support from management including their supervisor, they are also likely to experience high morale and commitment (Podsakoff, et al, 2000). However, healthcare research indicates morale is low for nurses in the UK, US, Sweden and Australian (See Callaghan, 2003;

Hegney, Eley, Plank, Buikstra, & Parker, 2006; Nolan, et al, 1989; 1999). Morale is a key indicator of absenteeism, commitment, turnover and productivity; however, to date, few studies have examined this issue for Australian nurses (Day et al, 2006). The leader-member exchange theory (LMX) may therefore provide a useful lens for examining the supervisor-subordinate relationship, because it captures the impact of perceptions of support from supervisors, which influences employees' morale and commitment.

There have been major changes in management practices resulting from 30 years of reforms in OECD countries such as UK, Australia and NZ (Bolton, 2003; Pollit, 1993). In theory, these reforms aimed at embedding more efficient and effective private sector management tools into the public sector; however, in practice the key focus of many of the reforms was to reduce per capita costs, and subsequently, reduce the number of nursing positions (Upenieks, 2003). In many cases, the end result for nurses was a higher workload (Buchanan & Considine, 2002; Newman, Maylor & Chansarkar, 2002). To achieve this outcome, nursing supervisors were given greater managerial prerogatives and organisational controls as a means of curtailing the autonomy and discretionary power of nurses in the workplace (Kirkpatrick, Ackroyd & Walker, 2004). Consequently, nurse supervisors (called Nurse Unit Managers (NUMs) within the Australian context) are now expected to achieve both professional goals (such as mentoring nurses) as well as organisational goals (such as increased performance monitoring), and all within a more constrained fiscal environment (Brunetto, 2002; Buchanan & Considine, 2002; Newman, Maylor & Chansarkar, 2002). This dichotomous situation for NUMs is described by Bolton (2003: 126) as difficult because they are expected to create empowering social environments, (suggesting an investment of both time and resources into developing their subordinates), whilst simultaneously operating in an environment predicated by "tight budgetary controls

and performance measures and targets” that override all other goals. This latter context suggests that time and resources are scarce and are therefore allocated somewhat prudently to complete the perceived highest priority tasks, which may no longer include the professional development of nurses. Consequently this may impact upon nurses’ perceptions of support from management.

Nursing has a strong tradition of professional development and this may be at odds with present hospital organisational policies and practices aimed at increasing efficiency (Buchan & Calman, 2004). It may be that these policies and practices have adversely affected work-based relationships, such as the supervisor-subordinate relationship, which may affect nurses’ perceptions of morale, and in turn, their affective commitment. Therefore, it may be insightful to use LMX theory to compare the impact of public and private nurses’ levels of satisfaction with their supervisor-subordinate relationship upon morale and commitment, because although past research suggests a positive relationship between employees’ perceptions of organisational support (including from supervisors), morale and commitment (Podsakoff, et al, 2000), this has not been tested within the healthcare sector. Therefore, the primary research questions are:

What is the impact of the supervisor-subordinate relationship upon the morale and affective commitment of nurses?

Is the impact the same for public and private sector nurses?

This issue is important to hospital managers because nurses are in short supply in numerous countries (Buchan & Calman, 2004) and their retention is vital in meeting the health care needs of society, both today and tomorrow. Presently, Australia needs an extra 10,000 nurses just to meet existing demand (Chang, 2005), which is approximately 3% of the registered nurses (AIHW, 2004). This new information about the impact of public and private nurses’ satisfaction with supervision practice will

inform healthcare managers in formulating new HR policies aimed at getting greater commitment from nurses to their organisation. This paper has three parts. The first part provides a targeted review of the literature from which the hypotheses emerge. The second part describes the sample and methods to test the hypotheses and address the research questions. The third part reports the results and uses the discussion section to identify pattern-matching with relevant past research and implications for hospital managers, followed by the concluding remarks.

LMX Theory

Leader-Member Exchange (LMX) theory describes how superiors develop different working relationships with their subordinates depending on the quality of their workplace relationship. For those employees that a supervisor likes and trust, LMX theory argues that a high quality LMX relationship develops characterised by a high level of mutual support, trust and respect. These employees are deemed the “in-group” and receive easy access to information, support and participation in decision-making, which in turn makes it easier for employees to undertake tasks and solve work-related problems (Gerstner & Day 1997; Mueller & Lee 2002). Additionally, where staff appear to be liked by their supervisors, irrespective of their performance (Graen & Uhl-Bien, 1995), this may lead to tangible benefits such as promotions and bonuses, and/or intangible benefits such as interesting work assignments and greater control over workloads. The benefits for supervisors include dedicated employees who show initiative in the workplace, as well as providing extra support for the supervisors’ decisions (Wayne et al., 1997). In contrast to the in-group, the “out-group” tends to suffer from poor levels of information-sharing and involvement in decision-making and in turn, lower levels of perceived morale.

The LMX concept is useful for examining the public sector because recent reforms were specifically aimed to curb the power of employees, using increased managerial prerogative along with increased organisational accountability measures (Ackroyd, Kirkpatrick, & Walker, 2007: 18). According to Hoggett (1994), the strategy has not been to attempt to directly control professionals – such as nurses - rather, it aimed to convert professionals into managers, thereby placing the responsibility for management tasks firmly in their domain. In turn, middle and senior professionals were expected to use their professional status to ensure that junior professionals embraced the required organisational changes necessary for professional managers to achieve efficiency indicators (Avis 1996). The result is that a range of healthcare professionals in the UK, USA, NZ and Australia have undergone processes aimed at standardizing the delivery of their service, based on resource utilization, resulting in work intensification for them (Ackroyd, et al, 2007). However, the extent to which employees have experienced reduced morale appears to be dependent on their supervisors' ability for “mediating the excesses of NPM” (Ackroyd et al, 2007: 21). Simultaneously, the ability of supervisors to mediate between organisational and professional goals has been constrained by higher levels of management control, dictating specific objectives to be met by supervisors. These factors are likely to have impacted negatively on the morale of public sector nurses.

Using the lens provided by LMX, the theory suggests that the ideal situation is that all employees experience high quality LMX because this will deliver the greatest benefits to both the individual and the organisation. A high quality LMX is evident by high levels of satisfaction with the supervisor-subordinate relationship probably as a result of increased access to relevant information and resources as well as an empowering relationship as a result of supervisors allocating increased levels of organisational resources (time) towards each subordinate (Sparrowe & Linden, 1997).

In addition, when high quality LMX relationships are present, supervisors provide employees with meaningful feedback (consequently increasing their access to relevant information about the organisational changes), and delegate decision-making and power (Wayne, et al., 1997; Yrie, Hartman, & Galle, 2003). Hence, using LMX theoretical frame, it seems likely that the quality of supervisor-subordinate relationship could affect nurses' perceptions of morale.

Operationalising the model for nurses

LMX is operationalised by examining the impact of nurses' levels of satisfaction with the support given by their supervisors upon their organisational outcomes. The LMX measure captures employees' perceptions of the quality of organisational support offered by the supervisor in the form of physical (such as information) and psychological (such as respect, trust and empowerment) resources (Gerstner & Day, 1997). Using LMX theory, it seems likely that employees who perceive that their supervisors' support them are also more likely to display support towards their supervisors in return (Podsakoff, et al, 2000). Podsakoff, et al, (2000) also argue that a high perception of organisational support is also associated with a higher perception of employee morale and greater commitment to the organisation. Nurses' perception of morale is operationalised using a construct within a measure of 'organisational culture'. The organisational outcome examined in this paper is 'affective commitment'. Definitions and justifications for the three variables used are provided in the methodology section of this paper.

[Insert Figure 1 here]

Morale

Within the nursing literature, morale has been conceptualised as a dependent variable by numerous researchers. For example, Day, et al. (2006) conceptualise morale as a function of intrinsic and extrinsic types of factors. Intrinsic factors are those factors that are somewhat controlled by employees. Extrinsic factors are those factors controlled by the organisation. Moreover, Day et al. (2006: 521) conclude that "... the factors that enhance [nurses'] morale appear to be intrinsic (giving good patient care, good relationships with co-workers, feeling respected and valued) whereas the extrinsic factors dominate the factors that reduce morale (excessive workloads, fear about job security ...)". Specifically, Day et al. (2006) categorised the extrinsic factors as:

1. The rigidity of organisational structures (affecting decision-making and power centralisation)
2. The operational management ethos (affecting operational issues such as funding for training, quality of patient care, staffing levels, flexibility in rosters)
3. The quality of social capital (affecting management style of NUMs, such as availability, approachability, empowerment and communication practices).

Similarly, McFadzean and McFadzean (2005) conceptualise morale as a product of three categories of variables. These are work characteristics, context and modifiers. Work characteristics comprise the work values and expectations (perception of morale, flexibility and decision-making in the workplace). Context refers to organisational practices. Modifiers are factors that can affect nurses' perceptions of work characteristics and context. These context factors are similar to Day et al.'s (2007) extrinsic factors in that they identify organisational, operational management and supervision practices as the main factors affecting the work characteristics of nurses. However, neither of these two models has been operationalised.

Rubin, Palmgreen and Sypher (1994) conceptualized morale as being a product of how well the supervisor motivates, respects, treats and trusts employees and this

conceptualization of morale is in keeping with employees' expected outcomes based on LMX theory. Using LMX theory, when employees are satisfied with their supervisor-subordinate relationship, they are likely to be treated with respect and trusted and consequently be motivated by their supervisor. For these reasons, this paper uses Rubin, et al (1994) conceptualization of morale. To test the relationship between employees' satisfaction with the supervisor-subordinate relationship and morale, the following hypothesis is proposed.

Hypothesis 1: There is a significant positive relationship between satisfaction with LMX and nurses' subsequent perceptions of morale.

Affective Commitment

Affective commitment is examined in this paper because past research suggests that it is affected by the quality of supervisor-subordinate relationships (Gerstner & Day, 1997). More over, when employees experience high quality LMX, they are likely to want to stay in the firm (Pitt, et al., 1995). Allen and Meyer (1990) define affective commitment as the emotional attachment to, and identification with, an organisation. Previous research has identified that those with high levels of affective commitment are likely to be loyal and attached to the organisation, thereby reducing their likelihood of leaving – that is, turnover is low (Meyer & Allen 1997; Pitt, Leyland, Foreman & Bromfield, 1995).

Whilst previous research has identified a positive significant relationship between LMX and the level of affective commitment for nurses (Brunetto & Farr-Wharton, 2004; 2006a; b; 2007) and for morale and job satisfaction (Judge & Watanabe, 1993) and LMX with morale (Gerstner & Day, 1997), there is minimal research linking LMX, morale and the affective commitment for nurses. To guide the

data collection that examines the link between LMX, morale and affective commitment, the following hypotheses are proposed:

Hypothesis 2: There is a significant positive relationship between nurses' perceptions of morale and their levels of affective commitment.

Hypothesis 3: There is a significant positive relationship between nurses' levels of satisfaction with LMX, their perceptions of morale and their levels of affective commitment.

Public sector versus private sector nurses

The provision of healthcare in Australia is somewhat different compared with other countries. Approximately 60 percent of hospital beds in Australia are provided by the public sector and 40% by the private sector and non profit organisations (Gee, 2005). However, since the introduction of public sector reforms, there has been a blurring of the public-private sector divide with leasing and management arrangement involving public private partnerships making the provision of healthcare complex (Brown & Barnett, 2004). However, that does not mean that public and private sector hospitals are managed identically.

Instead, Steane (1997) argues that there are subtle differences in management practices that reflect the differences in the core values of different public and private sector organisations. Moreover, the implementation of public sector reforms replacing the management model - that relied on the power and professionalism of public sector nurses, with new supervision practices focused on increased managerial prerogative and a stronger focus on achieving organisational goals (Pollitt & Bouckaert, 2000), has arguably changed the nature of the supervisor-subordinate relationship for public sector nurses. According to Currie and Procter (2002), public sector managers, such as public sector NUMs, have more managerial power compared with their private sector

counterparts. Additionally, Hoque, Davis and Humphries (2004) challenge whether the changes have delivered a more effective form of supervision in the public sector. They argue that public sector managers such as NUMs have been ill-equipped in terms of resourcing or management up-skilling to motivate their subordinates to deliver greater effectiveness in the workplace (Hoque, et al., 2004). In addition, a recent study by Hardie and Critchley (2008) suggest that the Australian public perceive that private sector hospitals deliver a higher quality of care, suggesting a better managed context. It is therefore expected that public sector nurses will experience a lower level of satisfaction with their supervisor-subordinate relationship.

Using the LMX framework, private sector nurses would be expected to experience high levels of satisfaction with their supervisor-subordinate relationship and consequently, may also experience higher perceptions of morale and as such would experience higher levels of affective commitment. By contrast, since the introduction of reforms specifically aimed at increasing managerial power, it is expected that public sector nurses will have lower levels of satisfaction with their supervisor-subordinate relationship. Moreover, because Podsakoff et al (2000) argued that high perception of morale and commitment were associated with high levels of support from management including their supervisor, it is expected that private sector nurses will experience higher levels of high morale and commitment compared with public sector nurses. To examine these premises, the following hypothesis is proposed:

Hypothesis 4: Private sector nurses experience higher levels of satisfaction with LMX, higher perceptions of morale and higher levels of affective commitment than public sector nurses.

METHODS

This research used mixed methods to capture the trends in employees' opinions (using quantitative methods) as well explanations for those opinions (qualitative methods) (Rocco, Bliss, Gallagher & Perez-Prado, 2003). A cross-sectional design was used to gather data from nurses to test whether the quality of relationships between nurses and their supervisors affects their perceptions of morale and in turn, their levels of affective commitment. Data was collected using a survey-based, self-report strategy (Ghuri & Gronhaug 2002). In addition, data from focus groups with nurses were analysed to identify the reasons for their opinions. The emerging patterns of data were then compared with the findings of previous research. In total, quantitative data was collected from 900 private sector nurses and 164 public sector nurses, while qualitative data was collected from 62 private sector nurses and 72 public sector nurses.

Quantitative Methods

All measures used in this study have been validated in previous management research. The measures included in the questionnaire are outlined as follows and a copy of each instrument is provided in Appendix 1:

- a) The leader-member exchange (LMX) validated test-bank survey traditionally measures the satisfaction of employees with the quality of the relationship with their supervisor (Mueller & Lee, 2002). In this study a seven item uni-dimensional scale (LMX-7) developed by Graen and Uhl-Bien (1995) was used. According to Gerstner & Day (1997), the uni-dimensional scale updated by Graen & Uhl-Bien (1995) is the most commonly used tool for measuring LMX quality and has the best psychometric properties of all the instruments reviewed.
- b) This paper operationalised morale using Rubin, Palmgreen and Sypher's (1994) version of an organisational culture survey developed by Glaser, Zamanou and Hacker (1987) that used employees' level of satisfaction with morale, information

flow, teamwork, involvement and supervision as independent variables.

- c) Allen and Meyer's (1990) commitment instrument was used to measure the dependent variable - affective commitment (commitment to the organisation) - using 8 items from their organisational commitment inventory. Researchers have reported Cronbach's alphas ranging between .74 and .90 for this measure (see Allen & Meyer, 1996).

Sample

Sampling choices were made based on typicality in order to ensure that the sample was arguably representative of public and private sector hospitals, urban and regional hospitals, large (metropolitan), medium and smaller hospitals, and hospitals located in at least four states of Australia. To obtain data from nurses, 4,800 anonymous surveys were randomly distributed to nurses working in the wards of 9 hospitals (2 public and 7 private sector hospitals) specifically chosen to meet the criteria listed above (See Table 1 for details about the hospitals). The survey was accompanied with a letter explaining the purpose of the survey, an invitation to voluntarily participate and a return envelop for them to use. In total, the response was 1064 completed useable surveys, inferring a response rate of approximately 23%.

Quantitative Analysis

Path analysis was used to test the impact of supervision practices on firstly, nurses' perceptions of morale and in turn, their affective commitment. In particular, path analysis using an ordinary least square (OLS) approach was used to test the hypotheses. The advantage of path analysis is that it permits more than one equation to predict the dependent variable (affective commitment) and therefore it includes the indirect impact of LMX into the bigger equation. OLS is an explanation of variance and the overall R^2 measure identifies the 'goodness of fit' overall for the proposed model

(Ahn, 2002). Another advantage of using path analysis with an OLS approach is that it estimates parameters within an independent system, which could avoid the problem of multicollinearity (Grapentine, 2000). For this reason, OLS was used for analysis of the data.

Qualitative Methods

The qualitative questions sought to solicit information about what factors affected nurses' perceptions of morale and their levels of affective commitment. In each case, only the first response from each participant was included for analysis. This response was transcribed and categorised thematically with the frequency noted (Ghauri & Gronhaug, 2002). The systematic patterns that emerged were then used to draw conclusions to address the research questions.

Over a period of four months, twenty-two 1-hour focus groups were held with nurses from the public and private hospitals in nine hospitals across four states. All nurses within the hospitals were invited to attend and in response approximately twenty-seven focus groups comprising between five and seven nurses each were undertaken yielding data from 75 public sector nurses and 62 private sector nurses in total.

RESULTS

The sample was predominantly female (1011 of 1064) and the majority (542) was aged over forty-five years of age (see Table 2): In terms of rank, 52 were either in a position of a NUM or higher, 156 were clinicians, 697 were registered nurses and 132 were enrolled nurses and 27 were "Other". In terms of length of time in their position, 152 respondents had been in the position less than 1 year, 317 between 1 and five years, 203 between 5 and 10 years, 93 between 10 and 15 years and 299 for more than 15 years.

[Insert Table 2 here]

Factor Analysis

The correlation matrix identified many correlations exceeding .3, indicating the matrix was suitable for factoring. The Bartlett's test for Sphericity was significant (Chi-square value=2491.01, $p < .001$, df 91) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .905 - well above the .6 requirement. When Principal Axis Factoring was undertaken to extract the variables, three factors had eigenvalues greater than one and 75.44% of the variance could be explained using these three factors. The factor transformation matrix suggests a relatively high correlation between factors. As stated, the advantage of using an OLS approach can avoid the problem of multicollinearity.

Correlation Coefficient

Table 3 details the correlation coefficients for each variable and the Cronbach's alpha scores, measuring reliability. All variables were significantly related to one another, except for the control variable – location.

[Insert Table 3 here]

Quantitative Results

Hypothesis 1. In order to address the first hypothesis (*There is a significant positive relationship between satisfaction with LMX and nurses' subsequent perceptions of morale*) a linear regression was undertaken with LMX as the independent variable and morale as the dependent variable. The hypothesis was accepted because:

1. All Nurses: $F=471.016$, $p<.001$, $R^2 = 30.7\%$ $\beta = .54$;
2. Private sector Nurses: $F=394.152$, $p<.001$, $R^2 = 29.5\%$ $\beta = .5$;
3. Public sector nurses: $F=272.522$, $p<.000$, $R^2 = 28.3\%$ $\beta = .45$.

Comparing the R^2 value for the groups, the findings suggest that the impact of LMX on morale is similar for both private sector nurses (29.5 per cent) and public sector nurses (28.3 percent) (see Table 4). This means that approximately thirty percent of the variance of nurses' perception of morale can be explained by their satisfaction with LMX.

[Insert Table 4 here]

Hypothesis 2. In order to address the second hypothesis (*There is a significant positive relationship between nurses' perceptions of morale and their levels of affective commitment.*) a linear regression was undertaken with morale as the independent variable and affective commitment as the dependent variable. The hypothesis was accepted because:

1. All Nurses: $F=441.683$ $p<.001$, $R^2=33.7\%$, β for morale=.55,
2. Private sector Nurses: $F=396.013$, $p<.001$, $R^2 = 30.5\%$, β for morale=.5,
3. Public sector Nurses: $F=529.381$, $p<.001$, $R^2 = 44.6\%$, β for morale=.6.

The R^2 value is relatively high for both private sector nurses (30.5%) and public sector nurses (44.6%) (see Table 5). This means that almost half of the variance of affective commitment for public sector nurses can be explained by their perceptions of morale, and nearly a third of the variance for private sector nurses..

[Insert Table 5 here]

Hypothesis 3. In order to address the third hypothesis (*There is a significant positive relationship between nurses' level of satisfaction with LMX, their perceptions*

of morale and their levels of affective commitment) a regression analyses was undertaken with LMX and morale as the independent variable and affective commitment as the dependent variable. The hypothesis was accepted because:

. The hypothesis was accepted because:

1. All Nurses: $F=227.817$ $p<.001$ $R^2=35\%$, beta for LMX= .14, beta for morale=.5,
2. Private sector Nurses: $F=209.108$, $p<.001$, $R^2 = 31.8\%$ beta for LMX= .13, beta for morale=.48.
3. Public sector nurses: $F=278.692$ $p<.001$ $R^2=49.6\%$, beta for LMX= .27, beta for morale=.5.

The R^2 value for public sector nurses suggests that the impact of both LMX and morale on their level of affective commitment was greater (49.1 percent) compared with the impact on private sector nurses (31.8 percent). This means that overall 35 percent of the variance of nurses' levels of affective commitment can be accounted for by their satisfaction with their supervision as well as their perceptions of morale (see Table 6).

[Insert Table 6 here]

Hypothesis 4. In order to address the fourth hypothesis (*Private sector employees experience higher levels of satisfaction with LMX, higher perceptions of morale and higher levels of affective commitment than public sector nurses*) an independent t-test was undertaken. The hypothesis was accepted because the findings suggest that the means for private sector nurses were significantly higher compared with the means for the public sector nurses for all variables (see Table 7).

[Insert Table 7 here]

Qualitative Findings

The demographics of the sample are presented in Table 8, showing a prevalence of females aged 30-45 years.

[Insert Table 8 here]

In response to the question “What factors affect your morale?”, the findings listed in Tables 9 and 10 indicate that workload was a negative factor for both public and private sector nurses. Poor management was also a common negative theme from both sectors. On the other hand, 31 out of 62 private sector nurses commented that great teamwork or good management were the key positive influences on their morale. In contrast, only 21 out of 75 public sector nurses commented that supportive colleagues and NUMs were a positive influence on their morale. Thus, the quality of workplace relationships (including the relationship with their supervisor) was a strong influence, but could be either positive or negative, with private sector nurses commenting more favourably. Access to training and development opportunities emerged as both positive and negative themes affecting the morale of both public and private sector nurses, while career opportunities were seen as a negative theme for both public and private sector nurses.

[Insert Tables 9 and 10 here]

DISCUSSION AND IMPLICATIONS

This paper used LMX as a lens for comparing the impact of the supervisor-subordinate relationship of public and private sector nurses upon their perceptions of morale and in turn, upon their affective commitment. Nurses are in short supply in numerous OECD countries and consequently governments have been developing specific policies aimed at importing, recruiting and retaining them. Therefore, this study aimed to examine the effects of work-related factors on the affective commitment of nurse because it is a predictor of turnover (Meyer & Allen, 1997; Pitt et al., 1995). The results of this study indicate that both LMX and morale are important contributors to the affective commitment of nurses. However, the impact of supervision practices was

stronger on morale and commitment for public sector nurses (49.1%) than for private sector nurses (31.8%). This result was supported by the qualitative findings which also suggested that the relationship with the supervisor and colleagues is a stronger theme emerging from the public sector nurses compared with private sector nurses. One explanation could be that the increased managerial prerogative of public sector nursing supervisors has a greater impact on public sector nurses. More research is required to examine this issue.

The means for morale were similarly somewhat low for both private and public sector nurses. In addition, both groups of nurses were only somewhat satisfied with their supervision, although private sector nurses were more satisfied than public sector nurses. Since nurses are only somewhat satisfied with their supervision and report that they have only some morale in the workplace, the findings suggest that the present management practices are not ideal for promoting effective workplace relationships. The findings from this paper suggest that both public and private sector nurses experience low quality supervisor-subordinate relationships and therefore do not experience easy access to resources and information. Such conditions are not ideal for promoting a perception of organisational support (Podsakoff, et al, 2000) and therefore it was not surprising that morale for both groups was somewhat low

Whilst the level of affective commitment was not high for either group, the findings suggest that private sector nurses had a significantly higher level of affective commitment compared with public sector nurses. Such conditions are probably not ideal for retaining nurses – particularly those who are well educated and trained and therefore have more employment alternatives. This is because affective commitment is a predictor of absenteeism and turnover (Eby, Adam, Russell & Gaby, 2000; Meyer & Herscovitch, 2001; Pitt, et al., 1995) as well as job satisfaction, productivity and organisational effectiveness (Judge & Watanabe 1993; Petty, McGee & Cavender,

1998). These findings may provide one explanation as to why nurses who report dissatisfaction with management policies and practices have a 65% higher probability of intending to quit than those reporting to be satisfied (Gray & Phillips, 1994; Secombe & Smith, 1997). It may also provide one explanation as to why nurses are leaving the profession. For example, between 1986 and 2001 there was a 22% decrease in nursing workers employed in aged care, and an 8% decrease in nursing workers employed in hospitals (ABS, 2005). Of all those with nursing qualifications, 22.3% worked in other occupations, and 15.5% were not in the labour force.

Another significant finding from nurses' responses was the overall difference between the public and private sector nursing environments. Private sector nurses perceived themselves as having significantly higher morale than public sector nurses. Further, private sector nurses were significantly more satisfied with their supervision than public sector nurses were. Perhaps not surprisingly then, private sector nurses also reported significantly higher levels of commitment to their organisation than public sector nurses. In other words, the findings suggest that the private sector provides a more productive nursing environment than the public sector does. The encouraging corollary of this is that positive changes to the way nurses are managed is suggested by the results to have a significantly greater influence upon public sector nurses than upon their private sector counterparts. That is, while not currently enabling the optimum performance of nurses, the impact of any positive changes to the public sector supervisor-subordinate relationship would be expected to be significant. Because past research has already established a significant positive relationship between the quality of supervisor-subordinate relationships and organisational effectiveness (Gerstner & Day, 1997; Graen & Uhi-Bien, 1995), it seems unlikely that the present conditions are ideal for achieving organisational effectiveness in either public or private organisation;

however, the private sector context appears more productive than the public sector context.

Using the OLS procedure, the goodness of fit of the model identified that supervision and morale accounted for approximately half of the variance of public sector nurses' levels of affective commitment and a third of the variance for private sector nurses. This means that the quality of workplace relationships is important to nurses (especially to public sector nurses) because not only does it contribute to their perceptions of morale, but also it significantly positively affects their levels of affective commitment. In summary, quality supervision is vital because of the influence that it has on the commitment nurses feel for the hospital/medical facility where they work. This finding is significant for healthcare management, pointing to the need to focus attention on the policies, practices and training of nurse management to assist in improving the commitment of nurses.

Implications

The implications of these results are that they identify a need for healthcare management to consider ways of improving workplace relationships because of the impact of supervisor-subordinate relationships upon firstly, nurses' morale at work and secondly, upon nurses' commitment to their hospital. Because supervision and morale account for more organisational commitment within public sector nursing, these implications may have considerable consequences (including improvement of productivity and retention rates) for public sector workplaces than for private sector workplaces. Nurses generally appear to be operating in a workplace environment where they are only slightly satisfied with supervision a practice which suggests that they are not experiencing the benefits associated with high LMX – namely the easy access to resources so as to facilitate problem-solving. The implication of these findings for

healthcare managers generally (both of public and private sector organisations) is that embedding effective workplace supervisor-subordinate relationships is likely to positively improve healthcare professionals' levels of affective commitment; and thereby be more effective in retaining valuable staff.

Healthcare managers have identified the cost of high turnover caused by poor management practices, coupled with the cost of trying to attract, train and develop new healthcare professionals, as an increasing problem (Buchan & Calman, 2004; Fitzgerald, 2002). If public healthcare organisations have adopted private healthcare management practices, then the findings support Hoque et al.'s (2004) assertion that the implementation of such practices into the public sector may not have been effective in improving management practices for public healthcare organisations. A comparison of the means for supervision, morale and affective commitment between private sector and public sector nurses provides evidence that whilst the means were significantly higher for private sector nurses, all of the means were relatively low. Hence, it may be more appropriate for healthcare management to ensure that those who manage nurses (who are expensive to train) develop and implement effective supervision practices.

This study has a number of limitations, including the use of self-report surveys causing common methods bias. However, Spector (1994) argues that self-reporting methods are legitimate for gathering data about employees' perceptions, as long as the instrument reflects an extensive literature review and pattern-matching is used to support interpretations of the data. Another limitation is the access to only two public hospitals which made the sample sizes of each group different, but the statistical analysis employed does address differences in sample size. However, the analysis conducted here cannot be seen as representative of public sector nurses or hospitals as a whole. A desirable extension to this research would therefore be to broaden it to

include more public sector nurses and other countries similarly experiencing nursing shortages and to compare the results.

CONCLUSION

Within a context of shortages of healthcare professionals in most industrialized countries, attraction and retention strategies have been widely discussed in the literature and throughout the healthcare industry. Despite the depth of discussion about retention strategies in the literature, limited consideration has been given to the exploration of morale and supervisor-subordinate relationships as impacts upon the commitment of healthcare professionals to their organization. These two antecedents were therefore investigated in 9 hospitals, including both public and private sectors, and the results suggest that both morale and the supervisor-subordinate relationship are important contributors to nurses' organisational commitment. The consequences of these findings include the implications for turnover, as affective commitment is a strong predictor of employee turnover. Yet, readers should be reminded that turnover intentions are not necessarily realised as actual turnover – they are one step removed. However, within the context of skills shortages and the high costs of turnover, any move that improves retention rates is likely a positive step for healthcare management.

The findings from this paper provide a picture of the state of nurse supervisor-subordinate workplace relationships, and the resultant perceptions of morale for Australian public and private sector nurses. The LMX lens was ideal for identifying the impact of the relationships between nurses and their supervisors, finding that it may be contributing negatively to the nurse shortage by directly impacting upon nurses' perceptions of morale and in turn, their levels of affective commitment. Notably, the findings suggest that, in general, the private sector provides a slightly better supervisor-subordinate environment than does the public sector, and reports from the perspective

of the employee, not the more usual perspective of management or employer. One explanation for the overall fairly low satisfaction with supervision in the public sector might be the influence, following the public sector reforms, of increased control-based management, emphasising compliance and obedience over commitment, authority over participation, combined with more formal written rules over informal. Organisational commitment should be enhanced by moving towards a commitment-based from a control-based philosophy, thereby enabling greater commitment and subsequent lower turnover.

One implication is that what healthcare management may have viewed as best practice may not be best practice from employees' perspectives. This study has highlighted the need for healthcare management to review their management styles, because nurses reported not being entirely satisfied with their supervisors. That is, these findings suggest a move away from control-based management to increase organisational commitment and thereby reduce turnover. The implication of these results for healthcare management is to use this new information to the advantage of their organisations to retain these high-demand healthcare professionals. Policy makers should similarly ensure healthcare working environments (and particularly those in the public sector) support participative supervisor-subordinate relationships, to improve healthcare professionals' commitment and thus increase their retention.

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TABLES

Table 1: Details about hospitals from which nurses were surveyed

	Urban/ regional	Dealing with Acute cases	Teaching Hospital	Size: Classed as Large: >500 beds Medium: 300-500 beds Smaller: <300 beds
Public Hospital 1	Urban	Yes	Yes	Large (760 beds)
Private Hospital 1	Urban	Yes	Yes	Large (578 beds)
Private Hospital 2	Urban	Yes	No	Medium (416 beds)
Private Hospital 3	Urban	Yes	No	Medium (317 beds)
Private Hospital 4	Regional	Yes	No	Small (260 beds)
Private Hospital 5	Urban	Yes	No	Small (239 beds)
Private Hospital 6	Urban	Yes	No	Small (219 beds)
Private Hospital 7	Regional	Yes	No	Small (206 beds)
Public Hospital 2	Regional	Yes	No	Small (160 beds)

Table 2:

Demographics of survey respondents

Variable		Private sector nurses	Public sector Nurses	TOTAL
GENDER	Male	33:	20	53
	Female	867	144	1011
	TOTAL	900	164	1064
AGE	Less than 30 years	74	36	110
	30 – 45 years	339	73	412
	Over 45 years	487	55	542
	TOTAL	900	164	1064

Table 3:

Means, Standard Deviation, Correlations and Cronbach's Alpha Reliability

Variable	M	SD	1	2	3	4
1. Location (control)			1			
2. LMX	4.65	.8	.007	1	(.93)	
3. Morale	3.85	.95	-.002	.5**	1	(.695)
4. Affective Commitment	4	1	-.012	.418**	.5**	1 (.87)

N = 1064

Numbers in parentheses on the diagonal are the Cronbach's alpha coefficients of the composite scales.

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Table 4:
Regression analysis detailing the relationship between LMX and nurses’ perceptions of morale (dependent variable)

Independent Variable - LMX	All Nurses’ Morale	Private sector Nurses’ Morale	Public sector Nurses’ Morale
β	.54**	.5 **	.45**
F	471.016 **	394.152 **	272.522**
R²	.317	.295	.283
N	1064	900	164

** p<.001

Table 5:
Regression analysis detailing relationship between nurses’ perceptions of morale and their affective commitment (dependent variable)

Independent Variable - Morale	Affective Commitment All Nurses	Affective Commitment Private Sector	Affective Commitment Public Sector
B	.55**	.5**	.6**
F	441.683**	396.013**	529.381**
R²	.337	.305	.446
N	1064	900	164

** p<.001

Table 6:
Regression analysis detailing relationship between LMX and nurses’ perceptions of morale and affective commitment (dependent variable)

Independent Variables	Affective Commitment All Nurses	Affective Commitment Private Sector	Affective Commitment Public Sector
β for LMX	.14**	.13**	.27**
β for Morale	.5**	.48**	.5**
F	227.817**	209.108**	278.692**
R²	.35	.318	.496
N	1064	900	164

** p<.001

Table 7:
Results from Independent Samples Test: Public and private sector nurses

	Mean (Standard Deviation)¹	Levene’s Test for equal Variance²	T-test for Equality of Means		
			t	df	Sig (2
Private sector (A)	A (N= 900)	F			

Public sector (B)	B (N= 164)				tailed)
Satisfaction with Supervision (LMX)	4.717 (1.08) 4.532 (1.09)	.469	1.995	1060	.05
Morale	3.95 (1.25) 3.29 (1.18)	1.276	6.187	1060	.001
Affective Commitment	4.05 (1.23) 3.44 (.98)	9.125*	7.021	264	.001

* p<.005

¹ 1 = *Strongly Disagree* through to 6=*Strongly Agree*

² Equal variances assumed

**Table 8:
Demographics for the qualitative data collection**

	Public sector nurses (N = 75)	Private sector nurses (N= 62)
GENDER:		
Male	8	9
Female	67	53
AGE:		
<30 years	10	20
30 - 45 years	45	24
>45 years	20	18

Table 9:

**Factors enhancing and detracting from perceptions of morale in the workplace-
Public sector nurses (N=75)**

Positive Themes	Frequency	Negative Themes	Frequency
Supportive colleagues and NUM	21	High patient/nurse ratios and/or poor skill mix making the workload too high and sometimes dangerous if there are too few experienced nurses	24
Great training and development opportunities	7	Poor management and teamwork support	14
		Poor training and development and career opportunities	9

Table 10:
Factors enhancing and detracting from perceptions of morale in the workplace-
Private sector nurses (N=62)

Positive Themes	Frequency	Negative Themes	Frequency
Great teamwork	22	High patient/nurse ratios and/or poor skill mix making the workload too high	14
Good management practices (flexible roster, great training opportunities)	9	Poor management (poor communication and too much paperwork)	9
Good working environment	3	Poor training and development and career opportunities	5

Appendix 1- Measures used in this study

Leader-Member Exchange (LMX) (the quality of supervisor-subordinate relationship) (Graen and Uhl-Bien, 1995)						
My supervisor is satisfied with my work	SD	DA	SE	SL	AG	SA
My supervisor understands my work problems and needs	SD	DA	SE	SL	AG	SA
My supervisor knows how good I am at my job	SD	DA	SE	SL	AG	SA
My supervisor is willing to use her/his power to help me solve work problems	SD	DA	SE	SL	AG	SA
I have a good working relationship with my supervisor	SD	DA	SE	SL	AG	SA
My supervisor is willing to help me at work when I really need it	SD	DA	SE	SL	AG	SA
I have enough confidence in my supervisor that I would defend and justify his / her decision if he / she were not present to do so	SD	DA	SE	SL	AG	SA
Affective Commitment (Allen & Meyer, 1990) (commitment to the hospital)						
I would be very happy to spend the rest of my career with this hospital	SD	DA	SE	SL	AG	SA
This hospital has a great deal of personal meaning for me	SD	DA	SE	SL	AG	SA
I enjoy discussing my hospital with people outside it	SD	DA	SE	SL	AG	SA
I do not feel 'emotional attached to this hospital (reverse score)	SD	DA	SE	SL	AG	SA
I feel a strong sense of belonging to this hospital	SD	DA	SE	SL	AG	SA
I feel strong ties with this hospital	SD	DA	SE	SL	AG	SA
Morale (Rubin, Palmgreen and Sypher, 1994)						
My supervisor motivates me to put in my best effort.	SD	DA	SE	SL	AG	SA
My supervisor respects its nurses.	SD	DA	SE	SL	AG	SA
My supervisor treats its nurses in a consistent and fair manner.	SD	DA	SE	SL	AG	SA
Working here feels like being part of a family.	SD	DA	SE	SL	AG	SA
There is an atmosphere of trust in this hospital.	SD	DA	SE	SL	AG	SA
Control - Location	SD	DA	SE	SL	AG	SA
Where are you located (a) Queensland, (b) NSW (C) Victoria (d) Western Australia?						

SD=Strongly Disagree DA=Disagree SE=Slightly Disagree SL=Slightly Agree AG=Agree
SA=Strongly Agree