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Comparing Supervisor-Subordinate Relationships on Public and Private Sector Nurses'

Commitment

Abstract

This paper used Social Exchange Theory as a lens for comparing the impact of the supervisor-

subordinate relationship on public and private nurses' perceptions of autonomy and affective

commitment. Many OECD countries are experiencing nurse shortages and this theoretical

framework proved insightful into factors contributing to turnover.

The findings suggest that private sector nurses are significantly more satisfied with their

supervision, enjoy greater autonomy and are more committed to their organisations. However,

both groups were only slightly satisfied with their supervisor-subordinate relationships, implying

that present management practices are not ideal for promoting effective workplace relationships.

Implications for healthcare management are discussed.

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Keywords: supervisor-subordinate relationships, Social Exchange Theory, affective

commitment, autonomy

Comparing Supervisor-Subordinate Relationships on Public and Private Sector Nurses' Commitment

Numerous OECD countries are facing a shortage of skilled labour (OECD, 2003) particularly in the healthcare industry (Buchan & Calman, 2004) and this is an important issue for managers because the retention of skills has been identified as a key factor affecting organisational effectiveness (Gollan, 2005; Ostroff & Bowen, 2000; Ostroff, Kinicki & Clark, 2002). One of the reasons suggested to explain high turnover (which has contributed to the growing shortage of nurses) is the poor levels of social capital embedded within workplaces. Drucker (2006) argues that we are entering the age of the 'knowledge worker', whereby wealth creation is more a product of skills and knowledge (controlled by the employee) rather than capital and equipment (controlled by the organisation). Such change has implications for the way knowledge workers (those with specialized skills and experience) are managed, because even though they may have a supervisor, they probably have more power than traditionally has been ascribed to 'subordinates' (Drucker, 2006: 147). In particular, Covey (2006) challenges the worth of using a traditional command management style previously employed in many organisations, suggesting the need for more empowering supervisory relationships based on trust.

The arrival of the age of the knowledge worker has coincided with an ageing population, exacerbating the shortage of skilled employees. Therefore, the retention of skilled labour has received increased attention – particularly in the healthcare sector (Robinson, Murrells & Clinton, 2006). In response, some governments have introduced specific policies aimed at retaining those knowledge workers in industries facing shortages (see Department of Health,

(2000) for strategies aimed at addressing nurse shortages and the introduction of "Magnet hospital" management model in the USA). This type of management model aims to engage and retain key healthcare professionals using empowerment engagement strategies (Buchan, 1999; Laschinger & Wong, 1999). Similarly, Covey (2006) suggests that the quality of supervisor-subordinate relationship may be an important issue to examine when considering the retention of knowledge workers because the quality of relationships either positively enhances or negatively thwarts employees' perceptions of autonomy.

This is particularly applicable to nursing because there have been major changes in the nursenurse unit manager's relationship in public sector healthcare facilities over the past thirty years in some OECD countries such as UK, Australia and NZ (Bolton, 2003; Pollit, 1993). The agenda involved implementing private sector management strategies in the public sector so as to make public organisations as efficient and effective as private sector firms (Polllitt & Bouckaert, 2000). One strategy involved increasing managerial power so as to curtail the power of public sector employees and reduce their autonomy in the workplace. Consequently, in the case of nursing, supervisors (called Nurse Unit Managers (NUMs) are now expected to achieve both professional goals (such as mentoring nurses) as well as organisational goals (such as increased performance monitoring) 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 (suggesting that time and resources are scarce and are therefore allocated somewhat prudently to complete the perceived highest priority tasks, and this may no longer be mentoring).

Nursing has a strong professional tradition of mentoring 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 in turn, may be affecting nurses' perceptions of autonomy, and in turn, their affective commitment. Therefore, it may be insightful to examine the main differences in the quality of supervisor-subordinate relationship between public and private sector nurses. Hence, because nurses are an example of knowledge workers in short supply in numerous OECD countries, the relationship between nurses and their NUMs may be interesting to examine using Social Exchange Theory (SET). This theoretical framework might prove insightful into the factors contributing to turnover.

In particular, this paper uses SET as a lens for comparing the impact of one type of workplace relationship – the supervisor-subordinate relationship - on the work outcomes of an example of a knowledge worker – nurses. SET argues that when employees and supervisors/managers develop good workplace relationships, a reciprocal arrangement develops that not only benefits the individuals involved, but also benefits the organisation as a whole (Cole, Schaninger & Harris 2002; Wayne, Shore & Linden 1997). This is because, as Bernerth, Armenakis, Feild, Giles and Walke (2007) argue, SET rests on the assumptions of perceived equivalence in mutuality and reciprocity, in turn leading to increased stability in the workplace. These same conditions are also likely to optimize employees' perceptions of autonomy. The benefits for employees are that when supervisor-subordinate relationships are effective, they have greater access to information,

resources, emotional support, trust and goodwill and therefore can solve workplace problems efficiently and effectively (Haskins, 1996). The benefit for the organisation is that when employees are effective, their productivity rises once they feel more satisfied with their job. Whilst effective workplace relationships would benefit any workplace that relies on sharing knowledge and resources to solve workplace problems, the benefits are probably even greater for professionals working in cost-constrained environments (Brunetto & Farr-Wharton, 2007). Some researchers have linked employees' satisfaction with the quality of their supervisor-subordinate relationships and their resulting perceptions of autonomy (See Gerstner & Day, 1997). This is important because knowledge workers now have greater power, and their perception of autonomy has been identified as a significant factor affecting their employment choices. Therefore, the primary research questions are:

What is the impact of the supervisor-subordinate relationship upon the work outcomes 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. 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.

SOCIAL EXCHANGE THEORY (SET)

As stated, SET argues that when workplace relationships are effective, then the organisation benefits and therefore it is an important management task (particularly, for first level managers supervisors) to ensure that effective workplace networks develop (Graen & Scandura, 1987; Graen & Uhl-Bien, 1995). Using SET, employees who experience mutual reciprocity of resources, information, respect and power with supervisors in particular and management generally should also experience high perceptions of autonomy. Moreover, they would be satisfied with the resources, information and support offered by the supervisor, as well as the job generally – hence, they would be committed to staying in the organisation. In contrast, those employees operating in a workplace dictated by a poor flow of information and resources within a hierarchical bureaucratic workplace would be more likely to have a low level of satisfaction with their supervision. It is expected that such employees would also experience a low level of autonomy and would therefore have a low level of satisfaction with the organisation and hence be more likely to leave.

Operationalising the model for nurses

SET is operationalised by examining the impact of nurses' levels of satisfaction with the support given by their supervisors upon their organisational outcomes. This measure should be a product of their perceptions of the quality of reciprocity of physical (such as information) and psychological (such as respect, trust and empowerment) resources from their supervisor (Gerstner & Day, 1997). This variable is operationalised using a Leader Member Exchange (LMX) instrument (see Figure 1). Nurses' perception of autonomy is operationalised using a measure for 'self-determination'. 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]

The Quality of LMX

LMX theory argues that supervisors manage employees differently which in turn leads to different outcomes from different groups of employees. Over time, the quality of "social exchanges" leads to a diverse quality of relationships between supervisors and subordinates. Effective (high quality) LMX relationships are characterised by a high level of mutual support, trust and respect (Gerstner & Day 1997; Mueller & Lee 2002) where staff appear to be liked by their supervisors, irrespective of their performance (Graen & Uhl-Bien, 1995). As a result, such an "in-group" receives increased access to information, support and participation in decision-making, which in turn makes it easier for them to undertake tasks and solve work-related problems. 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 ingroup, the "out-group" tends to suffer from poor levels of information-sharing and involvement in decision-making and in turn, lower levels of perceived autonomy.

The LMX concept is useful to examine within the public sector because as stated, recent reforms specifically aimed to curb the power of employees, using managerial autonomy to increase their 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 professionals in healthcare in the UK, USA, NZ and Australia have undergone processes aimed at standardizing the delivery of their service, based on resource utilization with resultant work intensification for those employees (Ackroyd, et al, 2007). However, the extent to which employees have experienced reduced autonomy appears to be dependent on their supervisors' ability for "mediating the excesses of NPM" (Ackroyd et al, 2007: 21; Kirkpatrick & Ackroyd, 2003). However the ability of supervisors to mediate between organisational and professional goals has been constrained by the increased managerial autonomy imposed by higher levels of management dictating specific objectives to be met by supervisors.

Using the lens provided by SET, 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 associated with increased information flow and empowering relationships 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 SET, it seems likely that the quality of LMX could affect employees' perceptions of autonomy.

Autonomy

A review of the empowerment literature suggests that employees' perceptions of autonomy (also referred to as self-determination) have already been identified as an important construct affecting organisational outcomes (Conger & Kanungo, 1988; Gomez & Rosen, 2001; Seibert, Silver & Randolph, 2004; Spreitzer, 1995; 1996; Thompson & Prottas, 2006). It is defined as the extent to which employees perceive that they have power to make decisions and undertake tasks in the workplace. Four facets of autonomy emerge from the literature: "meaning" (which refers to a work goal moderated against an employee's own beliefs and values), "competence" (self-efficacy about an employee's capabilities to undertake tasks), "self-determination" (an employee's sense of autonomy about workplace choices) and "impact" (an employee's beliefs about their impact in the workplace) (Gomez & Rosen, 2001; Keller & Dansereau, 1995; Spreitzer, 1995; 1996).

Using SET, employees would feel most autonomous when they have adequate information, resources and trust to solve problems, are empowered to make relevant decisions about work related matters, and work in an environment embedded with mutual respect. This will in turn affect their perception of self-determination in deciding how and when to undertake job tasks as well as their perception of how satisfied they are in their workplace (which is probably affected by their access to appropriate information and resources) and how competent they are in undertaking the tasks. To examine this premise, the following hypothesis is proposed.

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

Affective Commitment

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). Moreover, past research has identified affective commitment as a predictor of labour turnover and job performance (Pitt, et al., 1995), and affective commitment is considered a major determinant of organisational effectiveness (Meyer & Herscovitch, 2001).

Whilst previous research has identified the positive significant relationship between LMX and the level of affective commitment for nurses (Brunetto & Farr-Wharton, 2004; 2006a; b; 2007) and the links between autonomy and job satisfaction (Judge & Watanabe, 1993) and LMX with autonomy (Gerstner & Day, 1997), there is minimal research linking LMX, autonomy and affective commitment for nurses. To guide the data collection that examines the link between LMX, autonomy and affective commitment, the following hypotheses are proposed:

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

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

Public sector versus private sector nurses

As stated, the implementation of public sector reforms aimed at replacing the public sector management model that relied on the power and professionalism of public sector nurses to ration the distribution of public goods and services, with a private sector model focused on delivering outcomes (Pollitt & Bouckaert, 2000). This new model relied on increased managerial autonomy to reduce the power of nurses. However, Currie and Procter (2002) argue that public sector managers, such as public sector NUMs, have more managerial power compared with their private

sector counterparts. Moreover, Hoque, Davis and Humphries (2004) challenge whether the changes have delivered a more effective form of management. They argue that public sector managers such as NUMs have been ill equipped in terms of resourcing or management upskilling to motivate their subordinates to deliver greater effectiveness in the workplace (Butterfield, Edwards & Woodall, 2005; Hoque, et al, 2004). It is therefore important to examine whether the workplace organisational experience of public sector nurses is similar to that of their private sector counterparts.

Using the SET framework, private sector nurses would be expected to experience high levels of satisfaction with LMX, high perceptions of autonomy and as such would experience higher levels of affective commitment. By contrast, since the introduction of reforms specifically aimed at increasing managerial power and reducing the autonomy of nurses, it is expected that public sector nurses will have lower levels of satisfaction with LMX, lower perceptions of autonomy and as such would experience lower levels of affective commitment. To examine these premises, the following hypothesis is proposed:

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

METHODS

This research uses a cross sectional design to gather data in order to test whether the quality of relationships between nurses and their supervisors affects their perceptions of autonomy and in turn, their levels of affective commitment. This means that data was collected using a survey-based, self-report strategy (Ghauri & Gronhaug 2002). The emerging patterns of data were then compared with the findings of previous research. Data was collected from:

- 1. Private sector nurses (N=900)
- 2. Public sector nurses (N=238)

Measures

The measures included in the questionnaire are outlined as follows:

- 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 & Uhl-Bien (1995), was used. An example of a question includes "I am certain to what extent my LM will go to back me up in my decision-making."
- **b**) This paper operationalised autonomy using Spreitzer's (1996) measure of self-determination, which is used because it has the strongest correlation to organisational effectiveness. There were four items used to measure self-determination. An example of one of those survey questions includes "I make my own decisions with respect to what is done in my work"
- 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 representative of:

1. Public and private sector hospitals,

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2. Urban and regional hospitals

3. Big (metropolitan), medium and smaller hospitals

4. 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 10 hospitals (3 public and 7 private sector hospitals) specifically chosen to meet the criteria listed above. 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 1138 completed useable surveys, inferring a response rate of

approximately 24%.

Analysis of Data

Path analysis is used to test the impact of supervision practices on firstly, nurses' perceptions of

autonomy and in turn, their affective commitment. In particular, path analysis using an ordinary

least square (OLS) approach is 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 R² 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 is used for analysis of the data.

RESULTS

The demographics of the respondents are listed below (and see Table 1):

1. Gender: 123 males and 1015 females.

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- 2. Age: 115 respondents were aged less than thirty years of age, 453 were aged between 35 and 45 years of age and 570 were aged over forty-five years of age.
- 3. Rank: 72 were either in a position of a NUM or higher, 156 were clinicians, 797 were registered nurses and 86 were enrolled nurses and 27 were "Other".

[Insert Table 1 here]

Correlation Coefficient

Table 2 details the correlation coefficients for each variable. All variables were significantly related to one another except for the control variable – location. The Cronbach's alpha scores, measuring reliability, are also included.

[Insert Table 2 here]

Results from analysis

Hypothesis 1. In order to address the first hypothesis (Hypothesis 1: There is a significant positive relationship between LMX and nurses' subsequent perceptions of autonomy) a linear regression was undertaken. The hypothesis was accepted because:

- 1. All Nurses: F=89.971, p<.001, $R^2 = 10.8\%$ beta= .28;
- 2. Private sector Nurses: F=72.815, p<.001, $R^2 = 9\%$ beta= .27;
- 3. Public sector nurses: F=93.43, p<.000, $R^2 = 11.5\%$ beta= .29.

Comparing the R² value for the groups, the findings suggest that the impact of LMX on autonomy is similar for both private sector nurses (10.8 per cent) compared with public sector

nurses (11.5 percent) (see Table 3). This means that over ten percent of the variance of nurses' perception of autonomy can be explained by their satisfaction with LMX.

[Insert Table 3 here]

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

- 1. All Nurses: F=135.23 p<.001, $R^2=11\%$, beta for autonomy=.31,
- 2. Private sector Nurses: F=117.911, p<.001, $R^2=11.6\%$, beta for autonomy=.34,
- 3. Public sector Nurses: F=104.722, p<.001, $R^2 = 8.5\%$, beta for autonomy=.29.

The R² value is similar for both private sector nurses and public sector nurses (see Table 4). This means that eleven percent of the variance of affective commitment can be explained by nurses' perception of autonomy.

[Insert Table 4 here]

Hypothesis 3. In order to address the third hypothesis (Hypothesis 3: There is a significant positive relationship between nurses' level of satisfaction with LMX, their perceptions of autonomy and their levels of affective commitment) a regression analyses was undertaken. The hypothesis was accepted because:

- 1. All Nurses: $F=139.905 \text{ p} < .001 R^2 = 23.4\%$, beta for LMX= .35, beta for autonomy=.25,
- 2. Public sector Nurses: F=161.854, p<.001, $R^2=33.1\%$ beta for LMX= .5, beta for autonomy=.15.

3. Private sector nurses: F=123.75 p<.001 $R^2=21.6\%$, beta for LMX= .33, beta for autonomy=.25,

The R² value for public sector nurses suggests that the impact of both LMX and autonomy on their level of affective commitment was greater (33.1 percent) compared with the impact on private sector nurses (21.6 percent). This means that overall 23.4 percent of the variance of nurses' level of affective commitment can be accounted for by their satisfaction with their supervision as well as their perception of autonomy (see Table 5).

[Insert Table 5 here]

Hypothesis 4. In order to address the fourth hypothesis (Hypothesis 4: Private sector employees experience higher levels of satisfaction with LMX, higher perceptions of autonomy 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 (see Table 6).

[Insert Table 6 here]

DISCUSSION AND IMPLICATIONS

This paper used SET as a lens for comparing the impact of the supervisor-subordinate relationship of public and private sector nurses upon their perceptions of autonomy 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. The results of this study indicate that both LMX and autonomy are important contributors to the affective commitment of nurses. However, the impact of supervision practices was stronger on autonomy and commitment for public sector nurses (33.1%) than for private sector nurses (21.6%).

The means for autonomy were similarly somewhat low for both private and public sector nurses. In addition, both groups of nurses were only somewhat satisfied with their supervision. Since nurses are only somewhat satisfied their supervision and perceive that they have only some autonomy in the workplace, the findings suggest that the present management practices are not ideal for promoting effective workplace relationships. SET argues that employees' perceptions of their supervisor-subordinate relationships are in turn a reflection of the types of relationships embedded within the workplace (Cole et al, 2002). The findings from this paper suggest that both public and private sector nurses work in organisations that do not embed effective workplace relationships that would facilitate reciprocity of resources, information and respect between themselves and their supervisors.

Moreover, the findings suggest that there is a significant difference in the level of affective commitment of private sector nurses compared with public sector nurses. These same conditions are probably not ideal for retaining nursing – particularly those who are well educated and trained and therefore have more choices. 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, at the Australian population census in 1996, 19.8% of persons (aged 15-64 years) with a highest qualification in nursing were not nursing (Productivity Commission, 2005).

Another significant finding from nurses' responses about LMX, autonomy and affective commitment was the overall difference between the public and private sector nursing environments. Private sector nurses perceived themselves as having significantly more autonomy than public sector nurses did. Additionally, 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 did. In other words, the findings suggest that the private sector provides a more productive nursing environment than the public sector does. 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 the 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 autonomy accounted for approximately a third of the variance of public sector nurses' levels of affective commitment and a fifth of the variance for private sector employees. 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 autonomy, but also it significantly positively affects their levels of affective commitment. In sum, 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 and practices of nurse management to assist in improving the retention rates of nurses.

Implications

The implications of these results include the need for healthcare management to consider how the quality of supervisor-subordinate relationships and the levels of available autonomy at work can be improved so that nurses perceive them favourably. Because supervision and autonomy 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 management processes are not ideal for improving the flow of resources so as to facilitate problem-solving. As such, the findings challenge the value of continuing management practices that have increased managerial autonomy and led to significant increases in workloads – as is the case for nurses in public sector hospitals in the UK, Australia and NZ (Buchan & Calman, 2004; Buchanan & Considine, 2002). 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 challenge Hoque's et al. (2004) assertion that the implementation of such practices into the public sector provides a more effective form of management for public healthcare organisations. A comparison of the means for supervision, autonomy 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 scarce knowledge workers (who are expensive to train) develop and implement management practices that promote effective and mutually-empowering workplace relationships, especially in relation to supervisor-subordinate relationships.

These findings also provide evidence that traditional control management practices used in bureaucratic organisations are probably no longer effective in retaining knowledge workers, as argued by Drucker (2006) and Covey (2006). The lesson for healthcare managers must be to promote the development of empowering supervisor-subordinate relationships. For all employees, but particularly professionals, not only will they be more productive when they experience high quality supervision because it will promote information and resource-sharing and participatory decision-making, but also these same conditions will also enhance their perception of autonomy and consequently encourage them to remain.

This study has a number of limitations. The main limitation is 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. A desirable extension to this research would be to broaden it to other countries similarly experiencing nursing shortages and 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 as a means to address such a staffing and skills challenge. Despite the depth of discussion about retention strategies in the literature, limited consideration has been given to the exploration of autonomy and supervisor-subordinate relationships as impacts upon the commitment of healthcare professionals to their organization. In an attempt to further understand how healthcare professionals' affective commitment is affected by factors at work, this study sought to investigate how autonomy and the supervisor-subordinate relationship make such an impact.

The findings from this paper provide a picture of the state of nurse supervisor-subordinate workplace relationships, and the resultant perception of autonomy for Australian public and private sector nurses. The SET lens was ideal for identifying the impact of supervisor-subordinate relationships between nurses and their supervisors, finding that it may be contributing negatively to the nurse shortage by directly impact on nurses' perceptions of

autonomy and in turn, their levels of affective commitment. Notably, the findings suggest that the private sector provides a more productive nursing environment than does the public sector.

One model that may be appropriate for Australian, UK and NZ hospitals is the 'Magnet Hospital' management model, operating in some USA hospitals. One of its cornerstones is the reempowering of nurses as a means of retaining them (Buchan, 1999; Laschinger & Wong, 1999). Such models challenge the traditional control management practices used in bureaucratic organisations and develop and nurture effective workplace relationships based on mutual respect and autonomous decision-making. Hence, aspects of such a management model may have applicability for those countries experiencing high turnover rates and in turn, shortages of nurses. Understanding the consequences of these workplace influences is vital in the development of sustainable competitive advantage in organizations.

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TABLES

Table 1:
Demographics of respondents

Variable		Private sector	Public sector	TOTAL
		nurses	Nurses	
GENDER	Male	33:	90	123
	Female	868	147	1015
	TOTAL	901	237	1138
AGE	Less than 30 years	74	41	115
	30 – 45 years	340	113	453
	Over 45 years	487	83	570
	TOTAL	901	237	1138

Table 2:
Means, Standard Deviations, Correlations and Cronbach's Alpha Reliability

Variable	M	SD	1	2	3	4
1. Position (control)	4.69	1.08	1			
2. LMX	4.65	.8	.1	1	(.93)	
3. Autonomy	4.72	.95	008	.28**	1	(.895)
4. Affective Commitment	4	1	.034	.35**	.25**	1 (.87)

N = 1138. Numbers in parentheses on the diagonal are the Cronbach's alpha coefficients of the composite scales.

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

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

Table 3: Regression analysis detailing relationship between LMX and nurses' perception of autonomy

uutonomy						
	All Nurses'	Private sector	Private sector			
Independent	Autonomy	Nurses'	Nurses' Autonomy			
Variable		Autonomy				
	Statistically	Statistically	Statistically			
	significant beta	significant beta	significant beta			
	scores	scores	scores			
	F=89.971 p<.001	F=72.815 p<.001	F=93.43 p<.000			
	R ² =10.8%	R ² =9%	R ² =11.5%			
LMX	.28 (p<.001)	.27 (p<.001)	.29 (p<.001)			

Table 4:
Regression analysis detailing relationship between nurses' perceptions of autonomy and their affective commitment

	Affective	Affective	Affective				
Independent	Commitment	Commitment	Commitment				
Variable	All Nurses	Private Sector	Public Sector				
	Statistically	Statistically	Statistically				
	significant beta	significant beta	significant beta				
	scores	scores	scores				
	F=135.23 p<.001	F=117.911 p<.001	F=104.722 p<.001				
	R ² =11%	R ² =11.6%	R ² =8.5%				
Autonomy	.31 (p<.001)	.34 (p<.001)	.29 (p<.001)				

Table 5: Regression analysis detailing relationship between LMX and nurses' perception of autonomy and Affective Commitment

	Affective	Affective	Affective
Independent	Commitment	Commitment	Commitment
Variable	All Nurses	Private Sector	Public Sector
	Statistically	Statistically	Statistically
	significant beta	significant beta	significant beta
	scores	scores	scores
	F=139.905 p<.001	F=123.75 p<.001	F=161.854 p<.001
	R ² =23.4%	R ² =21.6%	R ² =33.1%
LMX	.35 (p<.001)	.33 (p<.001)	.5 (p<.001)
Autonomy	.25 (p<.001)	.25 (p<.001)	.15 (p<.001)

Table 6: Results from Independent Samples Test: Public and private sector nurses

A= Public sector	Mean	Levene's		t-test	Equality
nurses N= 237	(Standard	For equ.			Means
	Deviation)	Variance			
B= Private sector	=Strongly	* Equal			
nurses N= 900	Disagree	variances			
	through to	assumed			
	6=S. Agree				
	A	F	T	Df	Sig (2
	В				tailed)
Satisfaction with	4.199 (1.33)	31.18**	5.537	322	.001
Supervision (LMX)	4.7165 (1.1)				
Autonomy	3.948 (1.1)	2.731	5.924	1136	.001
	4.384 (.97)				
Affective	3.44 (.97)		7.079	317	.001
Commitment	4.06 (1.2)	9.628**			

FIGURES

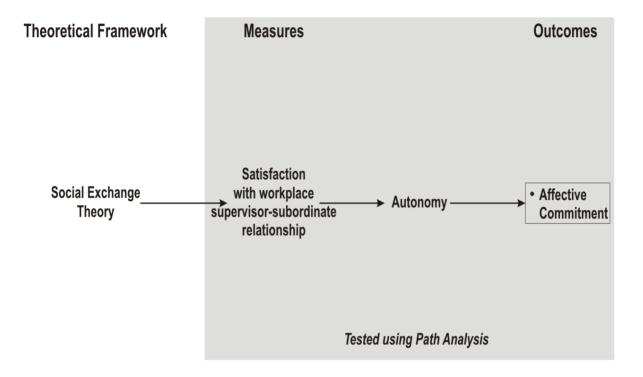


Figure 1: Using SET to operationalised the impact of the supervisor-subordinate relationship on nurses' organisational outcomes

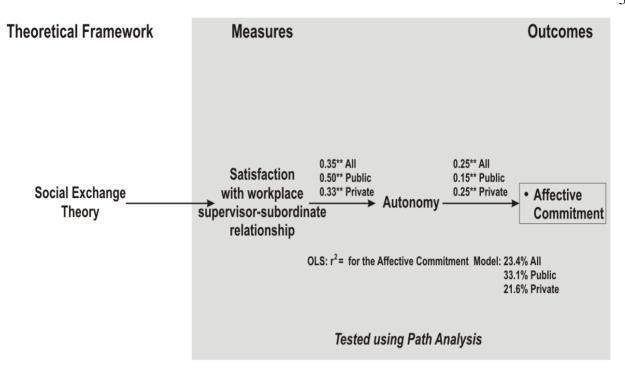


Figure 2: Nurses' LMX, Autonomy, Affective Commitment