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A COMPARISON OF THE IMPORTANCE OF SUPERVISOR-NURSE RELATIONSHIPS, ENGAGEMENT, WELLBEING, AFFECTIVE COMMITMENT AND RETENTION OF PRIVATE SECTOR NURSES

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Abstract

This paper examines the relationship between supervisor-nurse relationships, engagement, psychological wellbeing, affective commitment and turnover intentions for English and Australian using Social Exchange Theory (SET). This theory argues that there is value for the individuals who interact because over time a reciprocal relationship develops and delivers intangible and tangible outcomes such as resources and support, which benefit individuals and the organisational overall. Using SET, the theory argues that effective supervisor-nurse relationships engage nurses, which in turn, promote high levels of psychological wellbeing and affective commitment and in turn, low turnover intentions. Such conditions are ideal for ensuring the wellbeing of patients.

This empirical paper reports findings from nurses working at 5 Australian hospitals and 15 English hospitals. Data was collected using a survey-based, self-report strategy. Regressions and MANOVA analysis are used to test the impact of supervisor-nurse relationship on firstly, nurses' perception of engagement, wellbeing and affective commitment and in turn, turnover intentions.
Introduction

There is a shortage of nurses in many OECD countries (OECD, 2006) and one reason for the shortage in high turnover rates (Cohen, 2006). Whilst there is a lot of research about why reasons leave, there is growing evidence that high quality relationships provide an attachment “anchoring” nurses to a workplace and making them committed nurses (Brunetto, et al., 2010; 2011, 2012 and Rodwell et al, 2009). A theoretical lens used to explore the role of workplace relationships on organisational outcomes is Social Exchange Theory (SET). SET argues that over time continual positive interactions with others within an organisation creates a build-up of positive behaviours such as reciprocity in behaviours (Cropanzano & Mitchell, 2005). SET has been used to understand the benefits emerging from numerous exchange relationships including the relationship between the supervisor and employees - explaining how workplace social interactions lead to an exchange of resources, knowledge, time and emotional support.

The supervisor-subordinate relationship is typical of a process model in that the greater the number of tangible and intangible resources exchanged between the supervisor and the subordinate, the greater the quality of the relationship and therefore the individuals and the organisation benefits from the increased productivity of more effective employees (Cropanzano & Mitchell, 2005). However, not all supervisor-subordinate relationships develop into mutually reciprocal bond and the differences in associations result in differences in the quality of relationships between supervisors and subordinates. This paper compares the correlations between the quality of supervisor-subordinate relationships, engagement, wellbeing, affective commitment and turnover intentions for nurses working in Australia and England. The following research questions were therefore developed to guide the data collection:
**RQ1:** What is the relationship between nurses’ supervisor-subordinate relationship, engagement, wellbeing, affective commitment and turnover intentions for all nurses?

**RQ2:** What are the similarities and differences in the quality of relationship between nurses’ supervisor-subordinate relationship, engagement, wellbeing, affective commitment and turnover intentions for nurses working in Australia and England?

This research is important for the better management of nurses because nursing is an occupation characterised by high job demand because Ackroyd *et al.* (2007: 18) argue that the role of the supervisor is critical in cushioning nurses facing high job demands with adequate job resources. Without an effective supervisor-subordinate relationship, nurses are likely not to be engaged and consequently are likely to suffer low level of wellbeing as well as low commitment to their hospital, and as such are more likely to have higher turnover intentions.

**Background**

**Social Exchange Theory**

As stated, SET is a good lens for examining the impact of workplace exchange relationships. The basic assumption is that effective workplace relationships build trust and over time mutual reciprocity emerges giving employees’ access to information, resources, respect, emotional support and interesting jobs, which in turn benefits the organisation because it makes employees more productive (Shore, Bommer, Rao and Seo, 2009; Cropanzano and Mitchell, 2005; Yukl and Michel, 2006).

Using the lens provided by SET, the theory suggests that in the ideal context, all employees would experience higher quality supervisor-subordinate relationships and consequently, would perceive themselves as engaged (energetic) in the job, and therefore this would enhance their perception of wellbeing and commitment to the hospital. As a result,
they are likely to have low intent to leave. The next section examines the concepts used in this study.

**Supervisor-subordinate relationships**

Leader-member exchange theory (LMX) can be used to conceptualize supervisor-subordinate relationships. LMX theory is derived from SET because it also provides a lens for examining the impact of workplace relationships. LMX theory posits that supervisors do not treat employees in the same way because they form better relationships with some employees compared with others, some LMX relationships are of a high quality and are therefore characterised by a high level of mutual support, trust and respect (Gerstner and Day 1997; Mueller and Lee 2002) where staff appear to be liked by their supervisors, irrespective of their performance (Graen and Uhl-Bien, 1995). As a result, the “in-group” receives job resources in the form of information, support and participation in decision-making, access to interesting tasks, greater autonomy in specific jobs, promotions and bonuses. In return, supervisors receive 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” is likely to face high job demands with inadequate job resources to cope effectively.

The context of nursing is high job demands and recent reforms have increased the control supervisors have over the work context. When LMX theory is applied to the nursing context, the importance of the relationship to match job resources with job demands is amplified. As stated numerous authors suggest that without the mediating power of supervisors, nurses will find it difficult with resulting poor outcomes for commitment (Bolton, 2003; Ackroyd, Kirkpatrick & Walker, 2007; Maynard-Moody and Musheno, 2003, Farr-Wharton et al, 2011). Without the support of the supervisor – that is an effective supervisor-subordinate relationship, nurses’ perception of wellbeing and commitment (Brunetto, et al., 2010; 2011;
Rodwell et al., 2009) is compromised as their sense of social support diminishes, and in turn, stress increases, leading to higher turnover intentions (Thomas & Lankau 2009; Cropanzano & Mitchell, 2005; Hodson, 2004).

**Engagement**

Employee engagement is a relatively new concept to management and therefore there have only been some empirical studies and only a few factors that affect it have been identified (Saks, 2006). Kahn (1990) defines engaged workers as those that find work meaningful and therefore apply themselves in the workplace to achieve personal and career benefits. Such employees tend to be energetic and passionate employee. Previous research suggests that engagement affects work outcomes which, in turn, affects the public’s satisfaction with services provided (Harter et al., 2002).

One factor suggested as likely to affect engagement is the quality of the supervisor-subordinate relationship (May et al., 2004; Richman, 2006). In a study of teachers, Bakker et al. (2007) found that when job resources (supportive supervisor and/or organizational climate) were plentiful, it helped to shield them against the negative effects of high job demands. They argued that the support of supervisors acted to reduce stress. Hence, we expect that nurses, who are satisfied with their supervisor-subordinate relationship, will perceive themselves as engaged in nursing and consequently report higher levels of wellbeing.

**H1:** Nurses who are satisfied with their supervisor-subordinate relationship, will perceive themselves as engaged in nursing.

**H2:** Nurses who perceive themselves as engaged in nursing, are likely to report higher levels of wellbeing.

**Wellbeing**
Wellbeing has been examined by numerous researchers across different disciplines and has multiple definitions, conceptualizations and measurements. An assessment of available literature identifies three categories: a) psychological wellbeing (which examines employees’ levels of satisfaction with workplace processes and practices), b) physical wellbeing (employees’ health outcomes, from stress and accidents for example), and c) social wellbeing (the quantity and quality of workplace social networks, plus employees’ perceptions of fairness and equity) (Grant, et al., 2007). Psychological wellbeing is defined as employees’ attitudes and feelings about the work context (Diener, 2000). It differs from job satisfaction because it encapsulates more than an employee’s satisfaction with the job, and includes satisfaction with both tangible and intangible work context aspects. For nurses, we expected a positive relationship between engagement and wellbeing.

Additionally, researchers have identified a link between wellbeing and job outcomes, such as job satisfaction (Judge and Watanabe, 1993; Wright and Cropanzano, 2000). This is of particular relevance, because nursing has been shown to suffer from negative wellbeing as a result of the emotional nature of their daily work (e.g. Wright et al., 2006). Hence, we expected nurses’ levels of wellbeing to be positively associated with their affective commitment.

**Affective Commitment and Turnover Intentions**

There is a strong correlation between engaged and committed employees (Coffman and Gonzalez–Molina, 2002; Meyer and Allen, 1991). Allen and Meyer (1990) defined affective commitment as the emotional attachment to and identification with an organization, making the employee loyal and attached to the organization. An effective supervisor-subordinate relationship predicts high commitment to a hospital for nurses (Brunetto, et al 2011, 2012). Luchak and Gellatly, (2007) argue that their commitment is a consequence of receiving
adequate organizational support and being treated and valued fairly and justly. There is an significant inverse relationship between affective commitment and turnover intentions (Meyer & Allen, 1997; Pitt et al. 1995; Meyer et al, 2002). Similarly, Hartmann and Bambacas (2000) found that low affective commitment predicted higher intention to quit for casual academic staff in an Australian tertiary institution.

**H3:** Nurses who perceive themselves as having a high perception of wellbeing are also expected to be committed.

**H4:** There is an inverse relationship between commitment and turnover intentions.

**H5:** Affective commitment is affected by the quality of supervisor-subordinate relationships, engagement and wellbeing.

**H6:** Turnover Intentions are affected by the quality of supervisor-subordinate relationships, engagement and wellbeing and affective commitment.

**Nurses in UK and Australia**

Australian hospital beds are provided by a combination of public sector funding (60%) and private funding (40%) (Gee, 2007). In the UK, the National Health System (NHS) delivers 92% of healthcare and the remaining 8% is delivered via the private healthcare system (Ham, 2004). In Australia there is a growing tendency towards the use of public-private sector partnerships, such that public patients are treated in the private sector and vice versa. Whilst this trend is beginning in the UK, at the present time the UK private system tends to focus on specialist services, however, over time, the NHS is beginning to contract out some services to the private system. Across all hospitals in Australia, the clinical work undertaken and the patient mix are similar (Brown & Barnett, 2004), but may be somewhat different across the public and private sector in England (Ham, 2004).
The approach to healthcare and healthcare structures are similarities across Australia and England (Degeling Hill, Kennedy & Maxwell, 2000). The implication for nursing is that nurses’ move from Australia to work in the UK and vice versa with ease (Buchan & Seccombe, 2006). Both nations have engaged in the professionalisation and have adopted nurses systems of formal registration for nursing, and have implemented systems of levels within registered nursing positions (Francis & Humphreys, 1999), along with a change in focus on training (Cunich & Whelan, 2010). Additionally, nursing management across the UK and Australia similarly share difficulties with recruitment (Frijters, Shields & Wheatley-Price, 2006) and retention (Cunich & Whelan, 2010). Moreover, in terms of Hostede’s (1980) dimensions of cross-cultural characteristics, Australia and UK are similar in national culture particularly in terms of the power distance dimension (measuring the degree to which unequal power distribution is tolerated in the society), which means that the supervisor-subordinate relationship for Australian and English nurses should be similar.

Further, nurses in both nations are likely to have been affected by the implementation of reforms aimed at increased efficiency and cost-cutting (Adcroft & Willis, 2005). However, because English nurses have been more affected by the separation of policy development from service provision (Adcroft & Willis, 2005), and Australian employees have been more affected by the increased managerial control given to supervisors (Carroll & Steane, 2002), it is therefore expected that, when compared with Australian nurses, UK nurses will be more satisfied with supervisor-subordinate relationships, which may affect their satisfaction with organisational culture and give them a perception of higher levels of discretionary power. The following hypothesis is therefore proposed:

**H7**: Nurses in England have a significantly higher level of satisfaction with their supervisor-subordinate relationships, a high perception of engagement, wellbeing and
affective commitment and in turn a lower perception of turnover intentions than nurses in Australia.

METHODS

This research uses a cross-sectional design to gather data to test the relationship between nurses’ satisfaction with supervisor-subordinate relationships, engagement, wellbeing, affective commitment and turnover intentions. Data were collected using a survey-based, self-report strategy (Ghauri & Gronhaug 2002) during 2009 - 2011. The emerging patterns of data were then compared with the findings of previous research.

Sample

All nurses in the study are from hospitals operating in acute clinical settings. The patient case mix is similar across the public and private Australian and English public context. It is unclear whether the case mix of private English nurses is similar because the English private sector focuses on the delivery of specialist services. The Australian sample included nurses from one Australian states working in private sector small (<300 beds), medium (300-500 beds) or large (>500 beds) hospitals. The private sector UK nurse sample came from 15 small hospitals across England.

To gather data from Australian nurses, 1600 anonymous surveys were distributed to 5 hospitals. The response was 510 useable surveys - approximately 31.5% response rate. To gather data in England, 800 anonymous surveys were distributed to 15 hospitals. The response was 290 useable surveys - approximately 36% response rate.

Measures
The measures were generated from the extant literature and presented using statements to be rated on a 6-point Likert-type scale, with 1 = strongly disagree, ranging to 6 = strongly agree. Appendix 1 details the items used in the survey.

Satisfaction of nurses with the quality of their supervisor-subordinate relationship was measured using a seven-item uni-dimensional scale (LMX-7), developed by Graen and Uhl-Bien (1995). Employee Engagement was measured using a nine-item scale from Schaufeli and Bakker (2003) including, “I find the work that I do full of meaning and purpose”. Affective Commitment measured nurses’ commitment to their organization using Allen and Meyer’s (1990) eight-item affective commitment scale. Items included, “I feel a strong sense of belonging to my organization”. Wellbeing was measured using a four-item scale by Brunetto et al. (2011) to measure psychological wellbeing. Items included “Most days I feel a sense of accomplishment in what I do at work”. Turnover Intention (the dependent variable) was measured using a three-item scale adopted from Meyer, Allen and Smith (1993). Items included, “It is likely that I would search for a job in another organization”.

Data analysis

Survey data were analysed using PASW 18. Correlations and regression analyses were undertaken to test nurses’ satisfaction with supervisor-subordinate relationships, engagement, wellbeing, affective commitment and turnover intentions. Additionally, a MANOVA was used three times to firstly examine the impact of being in an English or Australian hospital. If the multivariate F value is significant, then it means that there is a significant difference in the means for nurses’ satisfaction with supervisor-subordinate relationships, engagement, wellbeing, affective commitment and turnover intentions across Australian-English hospitals.

RESULTS
The Australian private sector nursing sample comprised 868 females and 32 males, of which 486 were aged over 45 years of age, 341 were aged between 30 and 45 years of age and 74 were aged below 30 years of age. The English private sector sample comprised 263 females and 27 males, of which 171 were aged over 45 years of age, 96 were aged between 30 and 45 years of age and 23 were aged below 30 years of age.

In terms of job status, the sample included: (a) Supervisors (55 from the Australian private sample and 28 from the English private sample); (b) Registered Nurses (RNs) (629 from the Australian private sample and 169 from the English private sample); (c) Enrolled Nurses (ENs) (103 from the Australian private sample and 10 from the English private sample); (d) Nurse Assistants (4 from the Australian private sample and 5 from the English private sample).

Exploratory Factor Analysis

Each variable has been developed and validated in previous research. Hence the findings detailed here are the results of a 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=16,418.708, p<.001. df 406) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .947 - well above the .7 requirement. When Principal Axis Factoring was undertaken to extract the variables, five factors had eigenvalues greater than one and 67.636% of the variance could be explained using these five factors (supervisor-subordinate relationship, engagement, wellbeing, affective commitment and turnover intentions). Table 1 shows the results of a factor Analysis using Principal Axis Factoring as the extraction method and Varimax with Kaiser Normalization as the Rotation method. During the process, three of the engagement factors had to be removed from the construct because of poor factor loading (See Table 1).
Results from analysis

Table 2 identifies statistically significant correlation coefficients between Supervisor-Subordinate Relationships, Engagement, Wellbeing, Affective Commitment, Turnover Intentions as well as for the ‘Australian-English’ variable.

Response to Hypotheses

H1 (Nurses who are satisfied with their supervisor-subordinate relationship, will perceive themselves as engaged in nursing) is supported because the means for both supervisor-subordinate relationships and engagement are similar which means that nurses on average, think that their supervisor-subordinate relationship is somewhat satisfactory and they are at least slightly engaged (See Table 3). Additionally, Table 2 indicates a significant correlation between the two factors.

H2 (Nurses who perceive themselves as engaged in nursing, are likely to report higher levels of wellbeing) is supported because the means for both engagement and wellbeing are similar which means that nurses on average, think that they are somewhat engaged and that their level of wellbeing is somewhat satisfactory (See Table 3). Additionally, Table 2 indicates a significant correlation between the two factors.

H3 (Nurses who perceive themselves as having a high perception of wellbeing are also expected to be committed) is supported because the means for both wellbeing and commitment are in the same direction although nurses perceive a higher level of wellbeing compared with their commitment to their hospitals (See Table 3). Additionally, Table 2 indicates a significant correlation between the two factors.

H4 (There is an inverse relationship between commitment and turnover intentions) is supported with nurses being slighted committed to their organisation and in slight
disagreement that they intend to leave. Additionally, Table 2 indicates a significant correlation between the two factors.

**H5** (*Affective commitment is affected by the quality of supervisor-subordinate relationships, engagement and wellbeing*) is supported because the regression analysis indicates that in model 3, these three factors account for 47.3% of their commitment to the hospital. It must also be noted that demographic factors (particularly age) and whether nurses where nursing in England or Australia accounted for 6.1% of nurses’ commitment to the hospital.

**H6** (*Turnover Intentions are affected by the quality of supervisor-subordinate relationships, engagement and wellbeing and affective commitment*) is supported because the regression analysis indicates that in model 3, these four factors account for 41.4% of their turnover intentions, with demographic factors (particularly age) and whether nurses where nursing in England or Australia accounting for 6% of nurses turnover intentions.

**H7** (*Nurses in England have a significantly higher level of satisfaction with their supervisor-subordinate relationships, a high perception of engagement, wellbeing and affective commitment and in turn a lower perception of turnover intentions than nurses in Australia*) is only somewhat supported because there is a significant difference in the means for engagement, affective commitment and turnover intentions with nurses from England being significantly more engaged and more commitment to the organisation and significantly less intent on leaving the organisation (See Table 3). However, there were no significant differences in the perceived quality of the supervisor-subordinate relationship or wellbeing. Consequently, the findings suggest that some of the affective commitment and turnover intentions of nurses can be accounted for the impact of nursing in a particular country.

**Discussion**
This paper compared the quality of supervisor-subordinate relationships engagement, wellbeing, affective commitment and turnover intentions for nurses working in Australia and England. Few papers have examined engagement (Saks, 2006) and even less have examined the relationship between supervisor-subordinate relationships and engagement, wellbeing (May et al., 2004; Richman, 2006) for nurses in England and Australia. Hence the contributions to the literature is in providing new information about how these variables relate similarly and differently for nurses in Australia and England.

The findings suggest that nurses working in England and Australia were more than somewhat satisfied with their relationship with their supervisor, were similarly somewhat engaged in the job, and had a perception of experiencing a good sense of wellbeing in the workplace and being somewhat committed to their hospital and had only some turnover intentions. In terms of the relationship between engagement and other variables, the findings for this study confirm research by May et al., (2004) and Richman (2006) in that we found a significant positive relationship between engagement and the quality of supervisor-subordinate relationships. Whilst it was expected that this relationship would be significant, the findings provide further evidence of the importance of supervisor-subordinate relationships in affecting a range of workplace outcomes as argued by SET (Shore, Bommer, Rao and Seo, 2009; Cropanzano and Mitchell, 2005; Yukl and Michel, 2006). Previous research has identified that LMX does affect different outcomes such as stress, morale, learning outcomes on the job, wellbeing and affective commitment (Brunetto et al, 2011, 2012; Rodwell et al 2009); the contribution of this paper is that it also affects the engagement for nurses. Further, nurses in England are more engaged than those in Australia. One explanation is that the supervisors in Australia have been expected to use their increased discretionary power to ensure nurses undertake more tasks related to paperwork and accountability rather than
clinical work and this competing role for nurses in Australia may make them less engaged than their counterparts in England.

Additionally, the findings suggest a strong link between engagement and wellbeing which adds new information to the literature and confirms previous research findings about the significant link between wellbeing and affective commitment (Brunetto et al, 2011). Further, these findings confirm the significant inverse relationship between affective commitment and turnover intentions as previously identified for different types of employees (Meyer & Allen, 1997; Pitt et al. 1995; Meyer et al, 2002) for nurses as well.

This study adds new information about the similarities and differences for nurses working in England and Australia. Previous research suggested similarities in structures and work conditions for nursing in Australia and England (Degeling Hill, Kennedy & Maxwell, 2000; Buchan & Seccombe, 2006). The contribution of this paper is that it identifies similarities in satisfaction with the supervisor-subordinate relationship and in the wellbeing of nurses in the workplace. In contrast, the findings also identify significant differences in engagement and commitment to the hospital with nurses in England being more engaged and more committed and shows that nurses in England are less likely to leave. One explanation for the differences is the impact of reforms on Australian employees has been more affected by the increased managerial control given to supervisors as argued by Carroll and Steane (2002). The findings provide new knowledge for those seeking to retain nurses in Australia and must be of significance for nurse management.

**Study Limitations**

There were some limitations to this study which need to be considered before discussing the results. First, the Australian and English sample is both from the private sector health system and therefore generalisability to the all healthcare system requires extreme
caution – especially in the case of the sample from England. Second, common method bias is a possibility within self-report cross-sectional studies (Podsakoff, MacKenzie, Lee & Podsakoff, 2003), where common method variance may influence the significance of relationships between variables. However, Spector (1994) argues that self reporting methods is legitimate for gathering data about employees’ perceptions, as long the instrument reflects an extensive literature review and pattern-matching is used to support interpretations of the data. Third, this study was limited to two nations and therefore cannot be generalised beyond those nations.

**Conclusion**

There is a shortage of nurses in many OECD countries – including Australia and England (Cohen, 2006). These findings provide further evidence of the importance of the quality of the supervisor-subordinate relationship in “anchoring” nurses to a workplace. In this study, almost half of nurses’ commitment to a particular hospital can be explained by the quality of the supervisor-subordinate relationship, engagement and their perception of wellbeing. Therefore these are important factors for healthcare management to consider in framing how they manage if achieving committed nurses is management’s goal. Past research suggests that the real agenda of reforms was to increase efficiency (Brunetto et al, 2006, 2007). Additionally, over 40 percent of nurses’ turnover intentions can be explained by these variables. Consequently, if healthcare managers are keen to retain skilled nurses, then again, the quality of the supervisor-subordinate relationship, engagement, their perception of wellbeing and affective commitment are the key factors that management must address.

Presently healthcare managers’ focus mainly on efficiency and accountability and the issue of ensuring engaged, committed employees is an afterthought. This may be an appropriate management strategy if employees’ skills are expendable and easily replaceable. However,
Atencio et al (2003) argues that turnover of nurses’ costs up to twice a nurses’ salary to replace and has implications for increased mortality, drug errors and infection rates AHWAC (2004) argues that reduced nurse staffing levels have hidden costs evident in increased mortality and infection rates and therefore cannot be ignored by management. The issue of improving management practices cannot be ignored because it has implications for longer term sustainability (costs over time). It may time for senior management to embed performance indicators for all levels of management linked to ensuring effective workplace relationships. Over time the impact of such actions would be engaged and committed nurses. More research is required across different countries to determine how generalisable these finding are within different healthcare systems across national boundaries.
REFERENCES


**TABLES**

**Table 1:** Factor Analysis using Principal Axis Factoring as the extraction method and Varimax with Kaiser Normalization as the Rotation method (used to classify variables)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor 1</th>
<th>Factor 2</th>
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<td>My supervisor is satisfied with my work</td>
<td>.870</td>
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<td>My supervisor understands my work problems and needs</td>
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<td>My supervisor is willing to use her/his power to help me solve work problems</td>
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<td>I have a good working relationship with my supervisor</td>
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<td>My supervisor is willing to help me at work when I really need it</td>
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<td>My NUM recognises my potential</td>
<td>.68</td>
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<td>I have enough confidence in my NUM that I would defend and justify his/her decisions even if he/she was not present</td>
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<td><strong>Wellbeing</strong></td>
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<td>Overall, I am reasonably happy with my work life</td>
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<td>Most days I feel a sense of accomplishment in what I do in the workplace</td>
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<td>Overall, I fulfil an important purpose in my work life</td>
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<td>Overall, I fulfil an important purpose in my work life</td>
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Affective Commitment
I would be very happy to spend the rest of my career with this hospital  .819
This hospital has a great deal of personal meaning for me  .776
I enjoy discussing my hospital with people outside it  .761
I feel a strong sense of belonging to this hospital  .582
I feel strong ties with this hospital  .536
I do not feel emotionally attached to this hospital  -.433

Engagement  .633
At my work, I feel bursting with energy  .598
I am enthusiastic about my job
When I get up in the morning, I feel like going to work  .717
I am immersed in my work  .566
Time flies when I’m working  .519
I feel happy when I am working intensely  .301

Turnover  .754
I frequently think about leaving my current employer
It is likely that I would search for a job in another organization  .732
It is likely that I would actually leave the organization within the next year  .690

Table 2: Correlations and Cronbach’s alpha coefficients

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### Table 3: Results from MANOVA: Testing for differences in Means for Nurses in Australia and England

<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>UK</th>
<th>F score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean(^a)</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Gender</td>
<td>1.94</td>
<td>.24</td>
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<td>Supervisor-Subordinate Relationship</td>
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<td>4.85</td>
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<td>Affective Commitment</td>
<td>4.01</td>
<td>1.1</td>
<td>4.214</td>
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<td>Turnover Intentions</td>
<td>2.798</td>
<td>1.3</td>
<td>2.32</td>
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</table>

\(^a\) Aust N= 511  \(^b\) UK N = 289  \(^\text{**}\) Mean for last 5 variables: 1 = Strongly Disagree, through to 6 = Strongly Agree.  ** Correlation is significant at the 0.001 level (2-tailed).
Table 4: Regression analysis: Predictors of Nurses’ perception of Affective Commitment

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 - Affective Commitment</th>
<th>Model 2 - Affective Commitment</th>
<th>Model 3 - Affective Commitment</th>
<th>Model 4 - Affective Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
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<td>.042</td>
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<td>.222**</td>
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<td>-.03</td>
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<tr>
<td>Aust-Eng</td>
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<td>.106*</td>
<td>.06*</td>
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<td>LMX</td>
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<td>.120**</td>
<td>.108**</td>
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<tr>
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<td>.34**</td>
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<tr>
<td>Wellbeing</td>
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<td>.342**</td>
<td>.352**</td>
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<td>F</td>
<td>13.98**</td>
<td>12.811**</td>
<td>110.66**</td>
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<td>R²</td>
<td>.05</td>
<td>.061</td>
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** Correlation is significant at the 0.01 level (2-tailed). * p < .05

Table 5: Regression analysis: Predictors of Nurses’ perception of turnover intentions

<table>
<thead>
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<th>Model 1 - Turnover Intention</th>
<th>Model 2 - Turnover Intention</th>
<th>Model 3 - Turnover Intention</th>
<th>Model 4 - Turnover Intention</th>
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<td>Aust-Eng</td>
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<td>LMX</td>
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<td>-.147**</td>
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<tr>
<td>Engagement</td>
<td>-.063</td>
<td>-.078*</td>
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</tr>
<tr>
<td>Wellbeing</td>
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<td>-.225**</td>
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<tr>
<td>Affect Commitment</td>
<td>-.308**</td>
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<tr>
<td>( F )</td>
<td>8.238**</td>
<td>12.976**</td>
<td>76.45**</td>
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<td>( R^2 )</td>
<td>.03</td>
<td>.06</td>
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** Correlation is significant at the 0.01 level (2-tailed). * \( p < .05 \)