HR Practices and Employee Outcomes: A Study of Job Satisfaction and Organisational Commitment in Taiwanese Nursing

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ABSTRACT
The purpose of this paper is to propose a simple framework of Taiwanese nurses' job satisfaction. Based on extensive literature review, a three-tiered conceptual model of job satisfaction is developed. The first tier of the proposed model is the determinants of job satisfaction, including leader-member exchange, autonomy, opportunity to learn, co-worker interaction, and work atmosphere. The second tier is job satisfaction, while the third tier is the consequence of job satisfaction (organisational commitment). This paper can provide nursing management with insights of how to make job satisfaction work via LMX, autonomy, co-worker interaction, work atmosphere, and opportunity to learn, as well as contributes to the value of job satisfaction in enhancing organisational commitment.

Keywords: Cross cultural human resource management, Human resource management and organisational performance

In the past two decades, a large amount of research has been expended on exploring the relationships between human resource management (HRM) strategies and practices and organisational performance. The results of these efforts according to some researchers remain mixed and understanding the complex nature of human behaviour remains elusive (Boselie et al. 2005: 82). According to Conway and Monks (2008: 72) there is now widespread agreement amongst researchers that there is a need to explore in much greater detail the employee experience of HRM and the influence of contextual factors. One of the significant challenges facing health work is the high level of labour turnover amongst health workers, particularly nurses (Timo 2008). The high turnover rate among nursing staff has been recognised as a worldwide crisis (Hegney et al. 2005, Lee et al. 2000), posing a serious challenge for health care administrators in developing appropriate HRM strategies to alleviate this problem (Archibald 2006). As elsewhere, Taiwan is experiencing a dwindling nursing workforce with many seeking other forms of employment. There are a number of challenges. A high turnover rate amongst nurses results in a wastage of hospital resources, as the cost to recruit professional employees continues to climb (Chu et al. 2004). It is also a loss in human capital as it takes a great amount of resources to train new employees to acceptable health care standards (Lan et al. 2006). Job satisfaction has attracted the attention of health administrators as one way of tackling nurse turnover. This has become evident in exit surveys that show that job satisfaction is the most often mentioned factor linked with the decision by nurses to exit their employment (Blegen 1993). In Taiwan, nurses’ job satisfaction has been linked to positive organisational outcomes, such as nursing
quality care (Tzeng 2002a), and most importantly, has been found to be linked with a patient’s satisfaction with the quality of nursing care (Tzeng and Ketefian 2002, Tzeng et al. 2004) and preparedness to return to the hospital for services (Tzeng and Yang 2005). However, while there is a growing literature on nursing, the factors that contribute to Taiwanese nurses’ job satisfaction remains unclear (Tzeng 2002b). In order to redress this issue, we develop a conceptual model of job satisfaction for Taiwanese nurses, which has implications for HRM strategies and practices.

LITERATURE REVIEW

Antecedents of Nurses’ Job Satisfaction

The search for the causes of nurses’ job satisfaction has been extensive and fruitful. Research has found that antecedents of nurses’ job satisfaction include: the opportunity for alternative jobs outside of the employing hospital (Blegen and Mueller 1987, Price and Mueller 1981), routinisation (Blegen and Mueller 1987, Price and Mueller 1981), job participation (Price and Mueller 1981), instrumental communication (Price and Mueller 1981), promotional/career opportunities (Blegen and Mueller 1987, Price and Mueller 1981), distributive justice (Blegen and Mueller 1987), amount of work performed and work intensity (Price and Mueller 1981, Blegen and Mueller 1987), kinship responsibility (Blegen and Mueller 1987), age and gender (Price and Mueller 1981), bureaucratic work (ward) culture (Lok and Crawford 2001), leadership style (Lok and Crawford 2001), patient-centred climates (Rathert and May 2007), department type (Sagie and Krausz 2003), job demands (Sagie and Krausz 2003), scheduling control (Sagie and Krausz 2003), decision making and empowerment (Laschinger et al. 2001), trust (Laschinger et al. 2001), professionalism (Hampton and Hampton 2004), and market orientation or workplace (Hampton and Hampton 2004). However, to our knowledge, none of these antecedents have been researched with Taiwanese nurses. According to Tzeng (2002b), the factors contributing to Taiwanese nurses’ job satisfaction remain unclear. This provides an ideal opportunity to investigate the antecedents of Taiwanese nurses’ job satisfaction.

There are a number of factors that might shape Taiwanese nurses attitudes towards work. For example, ongoing learning and education is important. Taiwanese nurses generally hold a positive attitude towards continuous learning, however, factors such as, shift rotation, lack of subsidies towards tuition,
travelling costs and a lack of formal study leave impacts adversely on their job satisfaction (Pan, 1993). This suggests that when management is willing to provide nursing staff with financial support and flexible work shifts for learning, nurses may be more satisfied with their job. Noe and Wilk (1993) suggested that congruence between employee and organisational perceptions of development and learning needs influences employee satisfaction. Van Gelderen, Van der Sluis, and Jansen (2005) found that learning opportunities were partially related to satisfaction for small business starters in the Netherlands. Armstrong-Stassen and Cameron (2005) proposed that training opportunities provided by organisations would influence the career satisfaction of older managerial and professional women. However, their result did not show a significant relationship between the variables. The extant literature appears to suggest a positive relationship between opportunity to learn and job satisfaction, but little empirical evidence exists to support such a relationship. In addition, the relationship between opportunity to learn and Taiwanese nurses’ job satisfaction has not been examined yet. Likewise, the influence of management in the form of subsidy and study leave on employee learning has been overlooked. Therefore, the relationship between opportunity to learn and Taiwanese nurses’ job satisfaction requires further investigation.

One factor that may be important to Taiwanese nurses is co-worker interaction. Co-worker interaction is an individual’s encounter with certain colleagues regarding task-related professional interaction, non-task-related interaction at work, and non-work-related private interaction. After working in an organisation for a period of time, an individual may become close to certain colleagues. The individual may ask help from these colleagues to solve work problems, may have lunch with them, and may invite them to his/her place for social gathering etc creating bonds of collegiality and friendship. During these interactions, the individual may exchange his/her opinions towards the job and the workplace with colleagues, which in turn may affect their attitudes (Hodson 1997, Raabe and Beehr 2003). Evidence indicates that nurses who work with supportive, caring, professional colleagues are more satisfied with their job (Chu et al. 2003, Wang et al. 2006, Way and MacNeil 2006). However, the extant literature just focuses on the impact of co-worker characters on nurses’ job satisfaction. The influence of encounters among colleagues on nurses’ job satisfaction has been
overlooked. Hence, there is a need to investigate the relationship between co-worker interaction and nurses’ job satisfaction.

In addition to co-worker interaction, work atmosphere is another variable that may affect Taiwanese nurses’ job satisfaction (Tzeng 2002b). Conceptually, ‘work atmosphere’ may represent dimensions of trust, culture and climate. However, work atmosphere is also a perception. Work atmosphere, culture and climate are important determinants. When individuals come to work, they would want to work in a pleasant and supportive environment, so that they feel comfortable working in the unit and maintain a good mood at work. Tzeng (2002a) found that working conditions and atmosphere are related to Taiwanese nurses’ job satisfaction. Lok and Crawford (2001) found that ward culture is a significant predictor of Australian nurses’ job satisfaction. Along a similar line, Sikorska-Simmons (2006) found that organisational culture and climate were significantly related to job satisfaction with health care staff in 61 assisted living facilities. Likewise, Rathert and May (2007) found that patient-centred climate is a significant predictor of nurses’ job satisfaction. The extant literature has suggested work atmosphere to be a predictor of nurses’ job satisfaction. However, the evidence is based on working conditions, ward and/or organisational culture, and climate rather than work atmosphere itself. Therefore, caution needs to be taken when drawing any final conclusions on the relationship between work atmosphere and Taiwanese nurses’ job satisfaction.

Work level relationships between supervisors and supervised are also important. Leader-member exchange (LMX) theory identifies the unique relationship developed between a supervisor and a subordinate (Mueller and Lee 2002), and is another factor that may influence Taiwanese nurses’ job satisfaction. The extant literature has found that LMX is a positive determinant of job satisfaction (Janssen and Van Yperen 2004, Liden and Graen 1980, McClane et al. 1991, Sagas and Cunningham 2004), and organisational commitment (McClane et al. 1991, Borchgrevink and Boster 1994, Basu and Green 1997, Epitropaki and Martin 1999). There is yet a lack of empirical evidence that supports a positive relationship between LMX and job satisfaction/organisational commitment in the context of nursing. Hence, caution needs to be taken when generalising the positive relationship between LMX and job satisfaction/organisational commitment to nurses.
The notion of LMX suggests that supervisors develop varied relationships with employees; thus, there may be a group of favourite and non-favourite employees and LMX may affect co-worker interaction in different ways. Sherony and Green (2002) found that when two co-workers had similar type of relationship with their supervisor, the pair would develop a close relationship. However, Sherony and Green (2002) focused on only two co-workers, rather than a number of specified colleagues as defined in co-worker interaction in this research paper. The relationship between LMX and co-worker interaction appears unclear, thus requires further investigation.

LMX may also influence the subordinate’s opportunity to learn. Research indicates that staff development is determined by the employer (Lin and Liang 2007), and that support from supervisors for training influences employees’ decisions to participate in training activities (Bartlett 2001) and has been found to influence nurses attitudes towards participating in training (Pan 1993). However, the existing literature focuses only on the power and support aspects of supervisors in relation to learning, and overlooks the potential influence of the supervisor-subordinate relationship on opportunity to learn. Hence, a gap exists regarding the relationship between LMX and opportunity to learn.

The LMX, along with co-worker interaction, may have impact on work atmosphere. Dunegan, Tierney, and Duchon (1992) noted that managers and colleagues influenced employee perceptions of climate, suggesting that there may be a relationship between LMX/co-worker interaction and work atmosphere. Purcell and Hutchinson (2007) suggested that LMX is important as a transmitter of work climate and Moorkamp (2005) argued that more relaxed and easy going colleagues seem to be related to much pleasanter work atmosphere. Sundin, Bildt, Lisspers, Hochwalder, and Setterlind (2006) suggested that job control and job content are more effective predictors of supportive work atmosphere, however, research shows that gender and ethnicity are also factors (Chow and Crawford 2004). The existing literature has not yet investigated the influence of LMX and co-worker interaction on work atmosphere. As a result, the relationship between LMX/co-worker interaction and work atmosphere is worth exploring.
Job Satisfaction and Organisational Commitment

Job satisfaction has increasingly attracted the attention of healthcare administrators as research has shown that nurses who are more satisfied with their job are more likely to remain in the employing organisation (Price and Mueller 1981, Yin et al. 2001). Evidence also shows that nurses with higher job satisfaction are more committed to their employing organisation (Lok and Crawford 2001, Price and Mueller 1981). Organisations value commitment from employees, because employees with higher organisational commitment are less likely to be absent from work (Caykoylu et al. 2007), which in turn may increase firm performance. Likewise, committed employees are less likely to leave the organisation (Mathieu and Zajac 1990), which in turn reduces turnover rate and recruitment costs. Studies have found that job satisfaction is a predictor of organisational commitment (Caykoylu et al. 2007, Lok and Crawford 2001, Price and Mueller 1981). In contrast, Lu et al. (2007) found that organisational commitment was a significant predictor of job satisfaction for nurses in Mainland China. There is also evidence showing job satisfaction is a correlate of organisational commitment for nurses in the States and Taiwan (Blegen 1993, Lan et al. 2006). There appears no clear link between job satisfaction and organisational commitment in relation to the nursing literature. This relationship, together with the gaps identified between LMX/opportunity to learn/co-worker interaction/work atmosphere and job satisfaction, require further investigation.

MODEL AND HYPOTHESIS DEVELOPMENT

In the literature review section, a number of research gaps have been identified in the extant literature concerning Taiwanese nurses’ job satisfaction. The first is the relationship between opportunity to learn and job satisfaction. The second relates to the relationship between co-worker interaction and job satisfaction, followed by work atmosphere and job satisfaction. The next gap is about the relationship between LMX and job satisfaction/organisational commitment, followed by LMX and co-worker interaction, and opportunity to learn. Then, there is the relationship between LMX/co-worker interaction and work atmosphere. A number of hypotheses are developed as set out below.

The relationship between leader-member exchange and job satisfaction

When a supervisor is close to a subordinate, the supervisor understands the subordinate’s work problems and needs. Since there is friendship in the dyad, the supervisor would use his/her available
power to help solve the subordinate’s work problems, just like what one would do for a friend. Receiving support from the supervisor would make the subordinate contented because one would not feel disappointed if they receive assistance when needed. Best and Thurston (2004) specified that nursing job satisfaction has been positively related to support of supervisors. Therefore, good LMX relationship can have a significant positive influence on job satisfaction. As a result, a hypothesis is proposed that:

_Hypothesis 1. LMX is a positive determinant of job satisfaction._

The relationship between leader-member exchange and organisational commitment

When a close relationship exists between a supervisor and a subordinate, the pair would share information with each other, and the supervisor would be willing to help the subordinate when he/she really needs it. Thus, the subordinate senses support at the organisational level, in turn leading to a sense of belonging in the organisation. Jalonen, Virtanen, Vahtera, Elovaainio, and Kivimaki (2006) revealed that there was a strong relationship between the managers’ willingness to support/to share information with their staff and organisational commitment of the nurses. In addition, perceived organisational support was a predictor of organisational commitment (Jalonen et al. 2006). Therefore, good LMX can have a significant positive influence on organisational commitment. Consequently, a hypothesis is proposed that:

_Hypothesis 2. LMX is a positive determinant of organisational commitment._

The relationship between leader-member exchange and opportunity to learn

When a close relationship exists between a supervisor and a subordinate, the supervisor would understand the subordinate’s ability. The supervisor may therefore encourage the subordinate to attend training sessions to gain new knowledge and skills. Bartlett (2001) noted that support from supervisors for training influenced employees’ decisions to participate in training activities. Therefore, it is argued that good LMX can have a significant positive impact on opportunity to learn. Accordingly, a hypothesis is proposed that:

_Hypothesis 3. LMX is a positive determinant of opportunity to learn._
The relationship between leader-member exchange and co-worker interaction
When a supervisor is loving and friendly, subordinates will find him/her caring and approachable, in turn leading to good relationships between the supervisor and subordinates. The supervisor’s loving character may therefore shape subordinates’ behaviours toward each other so that the subordinates care about each other and support each other. In other words, a good relationship with the supervisor leads to more interactions with colleagues. This is what Sherony and Green (2002) indicated that LMX quality influenced the development of subordinate relationships. Thus, it is argued that good LMX can have a significant positive impact on co-worker interaction. As a result, a hypothesis is proposed that:

Hypothesis 4. LMX is a positive determinant of co-worker interaction.

The relationship between leader-member exchange and work atmosphere
When a supervisor establishes a close relationship with a subordinate, the supervisor may use his/her power to help the subordinate when necessary. The supervisor’s supportive actions will therefore cultivate a positive and supportive work environment, which Sundin et al. (2006) described as supportive work atmosphere. Lok et al. (2005) found that leadership style was a significant determinant of supportive subculture. Thus, it is argued that LMX can have a significant positive impact on work atmosphere. Accordingly, a hypothesis is proposed that:

Hypothesis 5. LMX is a positive determinant of work atmosphere.

The relationship between co-worker interaction and work atmosphere
After working for a while, an employee would become friends with some colleagues. They would have lunch together, discuss work methods and problems, share personal feelings, and hang out after work. This close relationship among colleagues creates a pleasant and friendly work environment which Chow and Crawford (2004) described as work atmosphere. Raabe and Beehr (2003) suggested that colleagues can influence the workplace. Therefore, it appears that co-worker interaction can have a significant positive impact on work atmosphere. Accordingly, a hypothesis is proposed that:

Hypothesis 6. Co-worker interaction is a positive determinant of work atmosphere.

The relationship between opportunity to learn and job satisfaction
When an organisation offers training courses for its employees to learn new skills and to enhance expertise, the employees would not feel bored in their job because they can apply the new skills and
expertise to their job, which brings alternatives and variety to their job (Noe and Wilk 1993). This will make the job more interesting. In addition, employees may feel satisfied with their job if the organisation encourages them to learn by providing subsides and study leaves. Van Gelderen et al. (2005) found that learning opportunities were related to job satisfaction for small business starters in the Netherlands. We argue that more opportunity to learn can have a significant positive impact on Taiwanese nurses’ job satisfaction. Accordingly, a hypothesis is proposed that:

**Hypothesis 7. Opportunity to learn is a positive determinant of job satisfaction.**

**The relationship between co-worker interaction and job satisfaction**

When employees are able to make friends with their colleagues, they would feel happier in their job because they can share their personal feelings with their colleagues and acquire emotional support from them. Best and Thurston (2004) indicated that colleague relationships were strongly related to nurses’ overall job satisfaction, suggesting that interactions among colleagues are related to nurses’ job satisfaction. Therefore, it is argued that good co-worker interaction can have a significant positive impact on job satisfaction. As a result, a hypothesis is proposed that:

**Hypothesis 8. Co-worker interaction is a positive determinant of job satisfaction.**

**The relationship between work atmosphere and job satisfaction**

When employees sense a positive and supporting atmosphere at work, they would find their job pleasant because they work in a nice environment and they could acquire required help when they face problems. This is consistent with Moorkamp’s (2005, p. 482) finding that one of her participants stated “it is just more fun being in a more caring atmosphere”. Therefore, it is argued that work atmosphere can have a significant positive impact on job satisfaction. Accordingly, a hypothesis is proposed that:

**Hypothesis 9. Work atmosphere is a positive determinant of job satisfaction.**

**The relationship between job satisfaction and organisational commitment**

When employees are satisfied with their job, they would find enjoyment in the job and consider their job more pleasant and interesting than other jobs. Subsequently, employees would keep working in the job because they really like it, suggesting that the employees may remain with the organisation for the rest of their career because their emotional attachment to the job. This is similar to what Jalonen et
al. (2006) indicated in their study that job satisfaction predicted intent to stay with the organisation. Therefore, job satisfaction can have a significant positive impact on employees’ organisational commitment. Accordingly, a hypothesis is proposed that:

**Hypothesis 10.** Job satisfaction is a positive determinant of organisational commitment.

[Insert Figure 1 here]

**CONSTRUCT DEVELOPMENT**

**Leader-member exchange**
LMX describes different kinds of exchange relationships developed between supervisors and subordinates. The 7-item LMX instrument (LMX-7) in Mueller and Lee (2002) will be used for this study. This is because LMX-7 has the highest reliability with Cronbach alpha consistently in the .80-.90 range, and it has been used widely by researchers (Liden et al. 1993, Green et al. 1996, Gerstner and Day 1997, Liden and Maslyn 1998, Epitropaki and Martin 1999, Varma and Stroh 2001, Mueller and Lee 2002). The LMX-7 consists of seven items, and respondents will indicate the extent to which they agree with each item on a 7-point Likert scale ranging from 1=to a very little extent to 7=to a very great extent.

**Co-worker interaction**
Co-worker interaction is defined as an individual’s three types of encounters with certain colleagues (task-related professional interaction, non-task-related interaction at work, and non-work-related private interaction). It will be measured with five items from Raabe and Beehr (2003) (items 1-5 in Table 2), two items from Armstrong-Stassen and Cameron (2003) (items 6-7 in Table 2), and one item from Thoms, Dose, and Scott (2002) (item 8 in Table 2). We believe that an individual has these interactions with certain colleagues; hence ‘some of my colleagues’ was used to replace ‘my colleagues’ in the original items. Additionally, we believe that individuals have the aforementioned interactions with colleagues; therefore, combining items from these three studies measures exactly what we intend to measure for co-worker interaction. Respondents will indicate the extent to which they agree with each item on a 7-point Likert scale ranging from 1=strongly disagree to 7=strongly agree.
Work atmosphere
Work atmosphere refers to employees’ perceptions of the spirit and the partnership within the unit they act, and will be measured with six items. The items are created based on the literature, because there is a lack of suitable measures in the existing literature. Two items are created based on Chow and Crawford (2004) (items 1-2 in Table 3), two from Moorkamp (2005) (items 3-4 in Table 3), and the other two from Sundin et al. (2006) (items 5-6 in Table 3). Respondents will indicate the extent to which they agree with each item on a 7-point Likert scale ranging from 1=strongly disagree to 7=strongly agree.

Opportunity to learn
Opportunity to learn is defined as management’s attitude and willingness to let employees attend training courses and learn. Opportunity to learn will be measured with two items borrowed from Armstrong-Stassen and Cameron (2005) (items 1-2 in Table 4), and with four items created based on Tharenou and Conroy (1994) (items 3-6 in Table 4). ‘Nursing employees’ was used to replace ‘older managerial and professional employees’ in the items from Armstrong-Stassen and Cameron (2005). We believe that the types of training courses and encouragement from management towards employee learning are equally important; hence, combining items from these two studies will measure exactly what we intend to measure for opportunity to learn. Respondents will indicate the extent to which they agree with each item on a 7-point Likert scale ranging from 1=strongly disagree to 7=strongly agree.

Job satisfaction
Job satisfaction is defined as an overall feeling an individual has towards his/her job. The job satisfaction instrument in Brady, Judd, and Javian (1990) will be used for this study because the instrument measures overall job satisfaction. Although Brady et al. (1990) used the instrument to assess dentists’ overall job satisfaction, dentists, like nurses, are also health-related employees. In addition, the Cronbach alpha of the instrument was .91 in the study, demonstrating high reliability for the instrument. Respondents will indicate the extent to which they agree with each item on a 7-point Likert scale ranging from 1=strongly disagree to 7=strongly agree.

Organisational commitment
Organisational commitment is defined as employees’ affective attachment to the organisation. The affective organisational commitment instrument in Allen and Meyer (1990) will be used for this study,
because the instrument measures employees’ emotional attachment, identification with, and involvement in the organisation. The Cronbach alpha of this instrument was .87 in Allen and Meyer (1990), demonstrating high reliability for the instrument. Respondents will indicate the extent to which they agree with each item on a 7-point Likert scale ranging from 1=strongly disagree to 7=strongly agree.

CONCLUSION AND CONTRIBUTION

This paper has discussed the antecedents and consequences of job satisfaction for Taiwanese nurses. LMX, opportunity to learn, co-worker interaction, and work atmosphere have been proposed as antecedents of job satisfaction, which leads to the consequence of organisational commitment. Ten hypotheses have been established accordingly. It has been hypothesised that LMX can positively influence opportunity to learn, co-worker interaction, work atmosphere, job satisfaction, and organisational commitment. In addition, it has been proposed that opportunity to learn, co-worker interaction and work atmosphere can positively affect job satisfaction. Likewise, co-worker interaction can positively affect work atmosphere. Finally, job satisfaction is hypothesised to have a positive influence on organisational commitment. The extant literature possesses a number of research gaps, for example, the impact of co-worker interaction on job satisfaction has not previously been tested in the literature; nor has the impact of opportunity to learn on job satisfaction been examined. This study proposes an empirical testable framework that can fill the gaps. Thus, this paper represents a potential increase in the knowledge of job satisfaction literature. From the practical point of view, this paper can provide nursing management with insights of how to make job satisfaction work via LMX, co-worker interaction, work atmosphere, and opportunity to learn, as well as contributes to the value of job satisfaction in enhancing organisational commitment.

Future research

At the next stage of this research, we propose to interview Taiwanese nurses to strengthen the proposed conceptual model, as well as to develop items that measure the constructs. At the final stage, we suggest conducting an empirical survey to test the proposed conceptual model.
REFERENCES


Figure 1: Relationship between Variables
Table 1: Leader-Member Exchange (LMX) Measurement Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To what extent do you know how satisfied or dissatisfied your immediate supervisor is with what you do?</td>
</tr>
<tr>
<td>2</td>
<td>To what extent does your immediate supervisor understand your work problems and needs?</td>
</tr>
<tr>
<td>3</td>
<td>To what extent do you feel your immediate supervisor recognises your potential?</td>
</tr>
<tr>
<td>4</td>
<td>Regardless of how much formal authority your immediate supervisor has built into his/her position, to what extent would he/she be inclined to use his/her available power to help you solve problems in your work?</td>
</tr>
<tr>
<td>5</td>
<td>Again, regardless of how much formal authority your immediate supervisor has, to what extent can you count on him/her to “bail you out” at his/her expense when you really need it?</td>
</tr>
<tr>
<td>6</td>
<td>To what extent do you have confidence in your supervisor’s decisions such that you would defend and justify them even if he or she were not present to do so?</td>
</tr>
<tr>
<td>7</td>
<td>How effective would you characterise your working relationship with your supervisor?</td>
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</tbody>
</table>
### Table 2: Co-worker Interaction Measurement Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I share personal problems with some of my colleagues.</td>
</tr>
<tr>
<td>2</td>
<td>I socialise with some of my colleagues after work.</td>
</tr>
<tr>
<td>3</td>
<td>I exchange confidences with some of my colleagues.</td>
</tr>
<tr>
<td>4</td>
<td>I consider some of my colleagues to be friends.</td>
</tr>
<tr>
<td>5</td>
<td>I often go to lunch with some of my colleagues.</td>
</tr>
<tr>
<td>6</td>
<td>Some of my colleagues go out of their way to make my work life easier for me.</td>
</tr>
<tr>
<td>7</td>
<td>Some of my colleagues can be relied on when things get tough at work.</td>
</tr>
<tr>
<td>8</td>
<td>Some of my colleagues are interested in the methods I use to perform my job.</td>
</tr>
</tbody>
</table>

### Table 3: Work Atmosphere Measurement Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The atmosphere in our department is intolerable.</td>
</tr>
<tr>
<td>2</td>
<td>Staff are friendly to each other.</td>
</tr>
<tr>
<td>3</td>
<td>Colleagues are supportive and approachable.</td>
</tr>
<tr>
<td>4</td>
<td>The atmosphere in our department seems much pleasanter than that in other departments.</td>
</tr>
<tr>
<td>5</td>
<td>We have a team work atmosphere.</td>
</tr>
<tr>
<td>6</td>
<td>We usually work individually on our tasks, but we will work as a team when it is necessary.</td>
</tr>
</tbody>
</table>
Table 4: Opportunity to Learn Measurement Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My organisation is targeting nursing employees for training to update current job skills.</td>
</tr>
<tr>
<td>2</td>
<td>My organisation is targeting nursing employees for training so we can learn new skills and expertise.</td>
</tr>
<tr>
<td>3</td>
<td>My organisation is offering external training courses.</td>
</tr>
<tr>
<td>4</td>
<td>My organisation is offering internal training courses.</td>
</tr>
<tr>
<td>5</td>
<td>Participation in training courses is prevented from my organisation.</td>
</tr>
<tr>
<td>6</td>
<td>My organisation refuses to pay for study leave.</td>
</tr>
</tbody>
</table>

Table 6: Job Satisfaction Measurement Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am satisfied in my job.</td>
</tr>
<tr>
<td>2</td>
<td>I find my job more interesting than I would in another job.</td>
</tr>
<tr>
<td>3</td>
<td>I am not bored in my job.</td>
</tr>
<tr>
<td>4</td>
<td>I consider my job pleasant.</td>
</tr>
<tr>
<td>5</td>
<td>I am not disappointed in my job.</td>
</tr>
<tr>
<td>6</td>
<td>I am happier in my job than most other people.</td>
</tr>
<tr>
<td>7</td>
<td>I find enjoyment in my job.</td>
</tr>
<tr>
<td>8</td>
<td>I definitely like my job.</td>
</tr>
</tbody>
</table>
### Table 7: Organisational Commitment Measurement Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I would be very happy to spend the rest of my career with this organisation.</td>
</tr>
<tr>
<td>2</td>
<td>I enjoy discussing my organisation with people outside it.</td>
</tr>
<tr>
<td>3</td>
<td>I really feel as if this organisation’s problems are my own.</td>
</tr>
<tr>
<td>4</td>
<td>I think that I could easily become as attached to another organisation as I am to this one.</td>
</tr>
<tr>
<td>5</td>
<td>I do not feel like ‘part of the family’ at my organisation.</td>
</tr>
<tr>
<td>6</td>
<td>I do not feel ‘emotionally attached’ to this organisation.</td>
</tr>
<tr>
<td>7</td>
<td>This organisation has a great deal of personal meaning for me.</td>
</tr>
<tr>
<td>8</td>
<td>I do not feel a strong sense of belonging to my organisation.</td>
</tr>
</tbody>
</table>