The Role of Advice Network on Job Satisfaction of Novice Nurses

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Abstract: - Nurses’ job satisfaction is an important issue and it receives a lot of attention in the international nursing literature. But research about the influencing factors of novice nurses’ job satisfaction is yet insufficient, especially a newcomer’s advice network. This study explored the influence of network outdegree in the same division and across divisions on job satisfaction, as professional commitment, and perceived organizational culture were included as control variables. A total population of nurses recruited within 3 months in the Far Eastern Memorial Hospital was surveyed. The results support the different effects of advice network outdegree in the same division and across divisions on job satisfaction.

Key-Words: - social network; advice network, outdegree across divisions; job satisfaction; novice nurse

1 Introduction
Since researchers have predominantly investigated job satisfaction as central determinants of turnover, many organizational scholars have devoted on research of job satisfaction. And many researchers have predominantly investigated job attitudes and labor market conditions as central determinants of voluntary quits [1,2]. Despite decades of inquiry, these variables have only modestly predicted turnover [3, 4]. In the wake of such findings, scholars are exploring other determinants to enhance turnover prediction and understanding. Foremost among recent theoretical developments is the introduction of relational constructs to capture the quality and nature of workplace relationships [5-7]. Now, the workplace relationships will be scrutinized in this study.

The widespread nursing shortage and nurses’ high turnover has become a global issue [8]. In Taiwan, the turnover rate among novice nurses was 30% in 2005, compared with a turnover of just 10% ten years earlier [9]. Chen, et al. [10] used a longitudinal design to study the turnover factors and found that of there were 42.9% leavers and 57.1% stayers in the second wave.

A literature review [11] revealed that the absence of a robust causal model incorporating organizational, professional and personal variables is undermining the development of interventions to improve nurse retention. In this review, organizational commitment, cohesion of the ward nursing team were identified as the strong predictors of job satisfaction, and professional commitment, communication with supervisor/peers were moderate correlated with job satisfaction.
However, the organizational commitment is the psychological attachment of an employee to an organization. It cannot occur in a vacancy by newcomers. The cohesiveness of the ward nursing team was mentioned as a strong predictor, but not ever a direct measurement was applied to evaluate this variable. The basic element of cohesive team is interpersonal relationship, but the main stream of research about job satisfaction is focused on the individual characteristics, but not the interpersonal relationships.

In this study, advice network is used as a measurement of interpersonal relations, professional commitment and organizational culture will be included as control variables of job satisfaction, and then the model incorporates organizational, professional and personal variables.

2 Literature Review

2.1 Job satisfaction of nurses
Job satisfaction is perhaps the most widely studied work orientation over the last four decades of organizational research. It is obviously complex because of a multitude of variables associated with it [12]. In Taiwan, Chang, Lin, Kuo, Teng, and Lee [13] showed that interpersonal relationship was the highest factor of job satisfaction. And, the research of Bjork and his colleagues in a Norwegian population of nurses found that interaction, followed by pay and autonomy were the most important job factors [14].

A research in Taiwan demonstrated a significant, direct, and positive effect of professional commitment on job satisfaction [15]. And in Mainland China revealed that job satisfaction could be explained by organizational commitment, professional commitment and other factors[16]. Seo, Ko, Price [17] constructed a causal model of job satisfaction and showed that four structural variables (workload, supervisory support, routinization, and pay), two psychological variables (positive and negative affectivity), and one environmental variable (job opportunity) had a significant net effect on hospital nurses’ job satisfaction.

2.2 Organizational culture
Organizational culture refers to a system of shared meaning held by members that distinguishes the organization from other organizations [18]. Organizational culture is concerned with how employees perceive the characteristics of an organization’s culture, not with whether or not they like them [18].

Tzeng, Ketefian, Redman [19] found that strength of organizational culture predicted job satisfaction well and positively.

2.3 Professional commitment
Professional commitment is a person’s involvement, pledge, promise or resolution towards his/her profession [20]. Irving, Coleman, and Cooper [21] have already argued that occupational commitment might escalate in importance as a compensation for the loss of organizational commitment. Felfe, Schmook, Schyns, and Six [22] indicated that commitment to the form of employment explains variance of organizational outcomes over and above organizational commitment. Fang’s study [20] of Singaporean nurses demonstrated that job satisfaction was significantly and positively related to professional commitment. Professional commitment is positively related to the job satisfaction of nurses [23]. Harrison, Newman, and Roth [24] tested that overall job attitude is fundamentally important for understanding work behavior. In their study, overall job attitude was defined as job satisfaction and organizational commitment. Lu, Chiou, Chang [25] discovered that the scores of overall commitment and four factors of professional commitment decreased from nursing students to registered nurses significantly.

2.4 Advice network
Literature documents that individuals will have benefits through their social networks. Takase, Oba, Yamashita [26] found the issues in interpersonal relationships were frequently cited causes that made nurses consider leaving their jobs. Bjorvell and Brodin’s [27] found social support might reduce personnel turnover in hospitals. Greater social support and pay can reduce turnover by their positive impact on job satisfaction [28]. ‘‘Social support”, which is usually categorized into supervisory support, peer support, and kinship support, refers to the assistance with job-related problems.

In organizational settings, Hodson [29] convincingly argued, the social relations of the workplace may make a key contribution to employees’ job satisfaction, productivity, and well-being. Ibarra [30] posited that instrumental relationships are related primarily to work situations, whereas expressive relationships address emotional matters.
In understanding the advice network, one seeks to know “who consults who on work related matters?” [31]. This allows for the identification of the individuals consulted when one faces specific problems related to one’s tasks. Flap and Volker [32] collected data using name-generating questions and the analysis revealed that having advice relations with colleagues as well as with managers does promote job satisfaction.

3 Problem Solution

3.1 Research design and sample
A cross-sectional survey design utilizing questionnaires was selected to fulfill the research objectives. A total population of 56 nurses recruited within 3 months in the Far Eastern Memorial Hospital was surveyed. Forty six nurses completed the questionnaire representing a response rate of 82.1%. Of these respondents, 2 were married and 1 was male. They were excluded and there were 43 participants in the analysis.

3.2 Instruments
The instruments included social network nomination, professional commitment scale, perceived organizational culture scale, and nurses’ job satisfaction scale (NJSS).

Social network nomination was applied to derive the participants’ advice networks. The advice network was measured as “I will acquire information from this person when it is needed to do my work”. They were asked to nominate up to 18 persons either in the same division or across divisions.

Professional commitment scale is a 6-point Likert type scale (1 = strongly disagree, 6 = strongly agree) with 3 items. The Cronbach’s alpha was 0.84 in this study.

Perceived organizational culture scale is a 6-point Likert type scale (1 = strongly disagree, 6 = strongly agree) with 14 items. The sum of these 14 items represents the degree of innovation, attention to detail, aggressiveness, and people orientation. The Cronbach’s alpha was 0.98 in this study.

The NJSS was adopted from Lin, Wang, Li, & Huang [9]. It was applied to measure job satisfaction in 3 domains of human relationship, feedback, and benefit and promotion. The questions were scored on a 6-point Likert scale ranging from 1 point (very dissatisfied) to 6 points (very satisfied). The measurement had strong internal consistency with all multiple-item constructs achieving Cronbach’s alpha ranged between 0.89 and 0.98, exceeding the 0.7 threshold commonly suggested for exploratory research [33].

4 Results

4.1 Characteristics of respondents
The description information of studied variables is presented as table 1. The job satisfaction in 3 domains was over medium, signifying the newly recruited nurses were satisfied with benefit and promotion, human relations, and feedback moderately. The advice network outdegree in the same division is between 0 and 6, while the advice network outdegree across divisions is between 0 and 21. It means that they have many friends who can offer advice in the other divisions.

As table 2, the correlation matrix shows that the 3 domains of job satisfaction all are correlated with the other variables, but not outdegree. It shows that the advice network outdegree in the same division is not correlated with any other variable, while the outdegree across divisions is correlated with two dimensions of job satisfaction. Besides, professional commitment and perceived organizational culture are correlated with the 3 domains of job satisfaction.

4.2. Regression model of job satisfaction
The regression model of job satisfaction was constructed, using advice network outdegree across divisions, professional commitment, and perceived organizational culture as independent variables. As table 3, the results showed that R square for each model is 0.55-0.72. For benefit and promotion, and feedback, advice network outdegree across divisions and perceived organizational culture are good predictors. While for human relationship, only perceived organizational culture is a significant predictor. And the professional commitment did not have effect on job satisfaction.

Table 1. Descriptive information of studied variables
### Table 2. Intercorrelations and alpha reliabilities among study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Alpha (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
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<tbody>
<tr>
<td>Job satisfaction</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Benefit and promotion</td>
<td>.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human relations</td>
<td>.92 0.81**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback</td>
<td>.89 0.91**</td>
<td>0.86**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advice network outdegree in the same division</td>
<td>-0.20</td>
<td>-0.18</td>
<td>-0.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advice network outdegree across divisions</td>
<td>.30*</td>
<td>0.23</td>
<td>0.41**</td>
<td>-0.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional commitment</td>
<td>.84 0.46**</td>
<td>0.54**</td>
<td>0.54**</td>
<td>-0.01</td>
<td>0.34*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived organizational culture</td>
<td>.98 0.78**</td>
<td>0.73**</td>
<td>0.80**</td>
<td>-0.10</td>
<td>0.15</td>
<td>0.61**</td>
<td></td>
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</tbody>
</table>

Note: Item numbers are reported in parenthesis.
** Correlation is significant at the .01 level (2-tailed).
*Correlation is significant at the .05 level (2-tailed).

### Table 3. Regression model of job satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Benefit and promotion</th>
<th>Human relationship</th>
<th>Feedback</th>
</tr>
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<tbody>
<tr>
<td>constant</td>
<td>0.75</td>
<td>0.74</td>
<td>0.73</td>
</tr>
<tr>
<td>Advice network outdegree across divisions</td>
<td>0.03(0.02) 0.037</td>
<td>0.01(0.02) 0.425</td>
<td>0.05(0.01) 0.001</td>
</tr>
<tr>
<td>Professional commitment</td>
<td>-0.03(0.04) 0.392</td>
<td>0.04(0.04) 0.384</td>
<td>-0.01(0.03) 0.709</td>
</tr>
<tr>
<td>Perceived organizational culture</td>
<td>0.88(0.13) 0.000</td>
<td>0.70(0.14) 0.000</td>
<td>0.82(0.11) 0.000</td>
</tr>
<tr>
<td>R square</td>
<td>0.65</td>
<td>0.55</td>
<td>0.72</td>
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</table>

### 5 Discussion and Conclusion

The results show that perceived organizational culture is correlated with job satisfaction, while professional commitment and advice network outdegree across divisions are correlated with only 2 domains of job satisfaction. In addition, the effect of professional commitment disappeared in the regression model. Furthermore, the effects on job satisfaction are different for advice network outdegree in the same division and across divisions.

5.1 General findings

5.1.1 Perceived organizational culture is the strongest predictor of job satisfaction of novice nurses
The results show that if a nurse perceives more innovative organizational culture, she also has higher job satisfaction. Before a person decides to apply a new job, he/she must perceive the organizational culture congruence with his/her value. The positive correlation between perceived organizational culture and job satisfaction means
that nurses who perceive organizational culture congruence with their value may have higher job satisfaction. Even if the organizational culture is not concerned with whether or not they like them [18], it is predictable that a newcomer with higher job satisfaction must be pleased with the organizational culture.

5.1.2 Friendship across divisions is correlated with professional commitment of novice nurse

Research on the generations of nurses showed that the younger generation had higher value on their work but not on organization. Takase, Oba, Yamashita [26] found the ‘generation X’ rated their needs and values more highly than other generations. Since the participants just graduated from school, they were born as the ‘generation X’. They had higher value on their professional work, and highly valued their own need and values.

5.1.3 Advice network outdegree across divisions is important for job satisfaction, but not outdegree in the same division

The results show that if a novice nurse has more friends across divisions to consult on work related matter across divisions, she will have higher job satisfaction. However, the number of friends in the same division had not such effect. How could a newcomer have friends across divisions? We suspect that the friends across divisions are their schoolmates or friends’ friends. And this is the reason why they applied to be a staff of this hospital.

A beginning professional nurse just entering hospital, or stepping into her first professional position, draws on knowledge not only from the curricula, readings, and interactions at the professional settings but also from the personal experience of interactions, relationships, and communities situated in the work place. As the result, the relationship across divisions is extremely influencing and should not be ignored.

5.1.4 Advice network outdegree across divisions is more important then professional commitment for novice nurses’ job satisfaction

In the regression models, the advice network outdegree across divisions is a significant predictor for two domains of job satisfaction. If the novice nurses have friends in the other divisions, they may explore information about the organization administrative affairs, such as the benefit and promotion, and feedback.

Within the theory of social capital, personal networks are considered to be a means to achieve individual goals. Networks are a means to achieve goals and achieve performance.

5.2 Practical implications

The implication from this study that job satisfaction and friendship network have relationship due to the interaction of advice networks across divisions. The formal and informal relationships newcomers form with friends and co-workers has been an important source of perceived organizational culture. A newcomer learns from their friends inside the hospital about the skills and routines required to perform jobs. This process helps them be integrated into the organization.

References:


