Abstract

Job satisfaction is a multifaceted phenomenon and it affects nurses’ productivity and performance, cost saving, quality of patient care, patient safety, commitment to the organization and the profession. Besides, job dissatisfaction affects to the rate of absenteeism, turnover, intent to leave and migration. No studies have conducted to study the predictability of organizational structure and leadership form of nurse managers on nurses’ job satisfaction in Sri Lanka. The objective of this study was to examine the level of job satisfaction among nurses in a government hospital in the central province, Sri Lanka and to assess the predictability of organizational structure and leadership of nurse managers on job satisfaction among nurses. The sample consisted of 160 registered nurses in government hospital in the central province in Sri Lanka and completed measures on the job satisfaction (McCloskey/Mueller Satisfaction Scale), organizational structure (Alexander Structure Instrument) and perceived leadership form of nurse managers (Perceived Leadership Form Questionnaire). The results of the study showed that this sample of nurses was moderately satisfied with their job. Further, transformational leadership form of nurse mangers explained 32.9% of predictability in job satisfaction among nurses. The results suggest that transformational leadership form of nurse mangers as an important predictor of nurses’ job satisfaction. These findings also serve as foundation knowledge for developing strategies to enhance job satisfaction among nurses.

Key words: nurses, job satisfaction, organizational structure, leadership form.
Introduction

Job satisfaction is a multifaceted phenomenon. It affects nurses’ productivity and performance, the extent to which they engage in cost saving, the quality of their patient care, patient safety, and nurses’ commitment to their organization and profession [1]. Furthermore, dissatisfaction increases rates of absenteeism, staff turnover, intention to leave and migration [2,3] resulting overall in nursing shortages.

Sri Lanka is experiencing a severe nursing shortage in both central and provincial statutory hospitals [4,5]. According to Canadian Health Services Research Foundation, inpatient units, patient-nurse ratio of 4:1 is expected, [6] whereas in critical care units, the patient-nurse ratio should not exceed 2:1. However, a study conducted revealed that patient-nurse ratio of the medical ward in the teaching hospital, Peradeniya, Sri Lanka was 12:1 [7]. Inadequate staffing of nurses translates into delays in the treatment of patients and shifts the care of patients to family members [6]. Furthermore, with high patient: nurse ratios, nurses are more likely to experience the job dissatisfaction that produces the nursing shortages in the first place [7]. Given that combating the nursing shortage is a primary concerns of health administrators, enhancing job satisfaction should perhaps be a priority. The first step however is to explore levels of satisfaction and the factors associated with dissatisfaction.

Job satisfaction can be defined as the ‘degree of positive affective orientation toward the employment’ [8]. Maslow was the first theorist to link the satisfaction of human needs to motivation [9]. He hypothesized a hierarchy of needs incorporating physiological needs, safety needs, love and belonging or social needs, self esteem needs and the need for self-actualization at the top of the hierarchy. Basic to Maslow’s theory was the premise that needs at a lower level of the hierarchy must be ‘largely’ satisfied before needs at the next higher level become operative [10]. Based on this theory, McCloskey conceptualized job satisfaction among nurses in terms of three dimensions: safety rewards, extrinsic rewards and psychological rewards. Bring these elements together in order to develop an instrument with which to measure nurses’ job satisfaction, Mueller and McCloskey identified eight factors that impacted upon job satisfaction among nurses: extrinsic rewards, scheduling, family and work balance, co-workers, interaction, professional opportunities, praise and recognition and control and responsibility [8]. Indeed, numerous factors have been found to influence the job satisfaction among nurses including demographic factors [1], job stress, autonomy, interpersonal communication, collaboration, organizational structure [12] as well as leadership of nurse managers [14]. Moreover, results from many studies demonstrated that there was a high predictability of organizational structure and leadership of nurse managers on job satisfaction [15,18].

The organizational structure can be defined as the allocation of work roles and administrative mechanisms to control work activities and the hierarchical relations among members of the organization [19]. In addition, leadership form is a type of interaction between two or more members of a group that often involves a structuring or restructuring of the situation and the perceptions and expectations of members [20].

Taking this range of factors into account the objectives of this study was to examine the level of job satisfaction among nurses in a District General Hospital, central province, Sri Lanka and to assess the impact of organizational structure and perceptions of nurse managers’ leadership upon job satisfaction.

Methodology

Design and Sample:

A descriptive predictive design was conducted at a District General hospital in the central province of Sri Lanka using simple random sampling method. Self administrated questionnaires were completed by 160 nurses giving the response rate of 85.49%.
Instruments

Data were collected using a set of questionnaires that included the demographic data recording form, the McCloskey/Mueller Satisfaction Scale, the Alexander Structure Instrument and the Perceived Leadership Form Questionnaire.

The McCloskey/Mueller Satisfaction Scale (MMSS) was used to measure eight components of job satisfaction: extrinsic rewards, scheduling, family and work balance, co-workers, interaction, professional opportunities, praise and recognition and control and responsibility[10]. The MMSS is a 31 item, five-point Likert type scale. Overall mean score was classified into three levels of low (1.00-2.33), moderate (2.34-3.66) and high (3.67-5.00). The reliability of the eight sub scales ranged between .65 and .84 and Cronbach's alpha for the total scale was .86.

The Alexander Structure Instrument was used to measure organizational structure. This is a 14 item, five point Likert type scale based on three dimensions of organizational structure: vertical participation, horizontal participation and formalization. A score of 42 suggested an even balance between mechanistic and organic organizational structure. The reliability of the instrument subscales ranged from .75 to .81 and Cronbach's alpha for the total scale obtained was .83.

The Perceived Leadership Form Questionnaire (PLFQ) was developed by the researchers based on Bass's model of leadership. PLFQ includes six subscales: charismatic-inspirational leadership; intellectual stimulation; individualized consideration; contingent reward; management-by-exception; and passive-avoidant leadership. It is a 36 item, five point Likert type scale. The content validity of this modified scale was tested by a panel of 3 experts and CVI was .91. Reliability of PLFQ overall was .86, whilst the reliability of coefficient of the instrument subscales ranged from .72 to .84.

Data Analysis

Descriptive statistics were used to examine the distribution of the nurses’ demographic characteristics, and independent and dependent variables. Stepwise multiple regression analysis was performed to assess the predictability of organizational structure and perceptions of nurse managers’ leadership form on nurses’ job satisfaction.

Results

Descriptive Analysis Results

The majority of participants were female (88.8%). The sample was mixed in terms age: 26-35 years (36.90 %); 36-45 years (40.60%) and more than 46 (22.50%). The majority was married (89.4%) and most had Advanced level educational qualifications (95%). A much smaller proportion had Ordinary level qualifications (3.1%) and bachelor degrees (1.9%). With regard to experience, approximately half the participants (47.5%) had more than 15 years experience in nursing, 24.4% had 5 to 10 years experience, 15% had 10 to 15 years experience, and only 13.1% had less than 5 years experience. With regard to working units, majority of the participants worked in a surgical unit (25.6%). In terms of why they had become nurses the majority reported having had an interest in nursing (71.9%); 19.4% reported having had no other choice; and 8.8% engaged in nursing for the salary.
Table 1 shows the descriptive results of job satisfaction among nurses.

<table>
<thead>
<tr>
<th>Dimensions of job satisfaction</th>
<th>Mean</th>
<th>SD</th>
<th>Satisfaction Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coworkers</td>
<td>3.72</td>
<td>0.89</td>
<td>Moderate</td>
</tr>
<tr>
<td>Control and Responsibility</td>
<td>3.47</td>
<td>0.8</td>
<td>Moderate</td>
</tr>
<tr>
<td>Praise and Recognition</td>
<td>3.37</td>
<td>0.88</td>
<td>Moderate</td>
</tr>
<tr>
<td>Scheduling</td>
<td>3.35</td>
<td>0.7</td>
<td>Moderate</td>
</tr>
<tr>
<td>Interaction Opportunities</td>
<td>3.31</td>
<td>0.87</td>
<td>Moderate</td>
</tr>
<tr>
<td>Extrinsic Rewards</td>
<td>3.22</td>
<td>0.89</td>
<td>Moderate</td>
</tr>
<tr>
<td>Balance of Family and Work</td>
<td>2.99</td>
<td>0.86</td>
<td>Moderate</td>
</tr>
<tr>
<td>Professional Opportunities</td>
<td>2.5</td>
<td>0.97</td>
<td>Moderate</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td>3.23</td>
<td>0.62</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Mean, standard deviation and level of job satisfaction scores among nurses (n=160). The overall mean score for job satisfaction among nurses was 3.23 (SD= 0.62). Among the eight sub scales of job satisfaction, coworkers showed the highest mean score 3.72 (SD= 0.89) whereas professional opportunities showed the least mean score 2.50 (SD= 0.97).

Table 2 shows the descriptive results of organizational structure.

<table>
<thead>
<tr>
<th>Organizational Structure</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Organizational Structure</td>
<td>24-52</td>
<td>40.90</td>
<td>6.28</td>
</tr>
</tbody>
</table>

Mean standard deviation and range of organizational structure (n=160). The overall mean score of organizational structure was 40.9 (SD=6.28).

Table 3 shows the descriptive results of leadership form of nurse managers.

<table>
<thead>
<tr>
<th>Dimensions of Leadership Form</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership Form</td>
<td>3.35</td>
<td>0.64</td>
</tr>
<tr>
<td>Transactional Leadership Form</td>
<td>3.25</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Mean and standard deviation of perceived leadership form scores. The mean score for perceived transformational leadership form was 3.35 (SD= 0.64) and it was more than that for perceived transactional leadership form (x̄ = 3.25, SD= 0.45).
**Multiple Regression Analysis Results**

The results of stepwise multiple regression analysis is given in Table 4.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership Form</td>
<td>0.56</td>
<td>0.06</td>
<td>0.57</td>
<td>8.79</td>
<td>0.00**</td>
</tr>
</tbody>
</table>

Multiple regression analysis of the variables predicting job satisfaction among nurses

*Note* $R^2 = .329$, Constant = 1.36, **Significant level = 0.05

**Discussion**

In this sample, the mean score of job satisfaction among nurses was 3.23 suggesting a moderate level of satisfaction. This finding is similar to that of several other studies conducted in countries with health care systems different to that in Sri Lanka [15, 17, 21, 22]. The main exception is in California where nurse practitioners indicated high level of job satisfaction [23].

Considering subscales of MMSS, nurses indicated satisfaction with coworkers. Analysis of each item indicated that nurses were satisfied with their nursing peers and also with the physicians they worked with. This finding may indicate good interpersonal relationship between nursing peers and also between nurses and physicians. In Sri Lanka, high value is given to harmony with others. It may therefore be the case that relationships tend to be relatively harmonious. Alternatively it may be that participants were unwilling to express dissatisfaction with colleagues. However, this finding is consistent with previous research findings from other countries [24,25].

The nurses in this study were least satisfied with professional opportunities. Again, this finding is similar to those of some previous studies [25,27]. However, Brady-Schwartz [26] revealed that nurses at Magnet hospital in the United States demonstrated significantly high levels of satisfaction with professional opportunities. The reasons for this situation were developing a nursing research program appropriate to the organizational setting, collaborating with expert nurses in the community to support research, educating nurses at all levels in research and encouraging nurses within and outside the organization to conduct research and provide resources for this process in magnet hospitals [26]. In the present study nurses were least satisfied with opportunities to participate in research and opportunities to write and publish. A study of nurses in West Bank of Palestine [11] also found most dissatisfaction in relation to with these two items. A key point is that opportunities to participate in research and publishing are limited in this particular nursing population as there is no policy to support the research activities of nurses in Sri Lanka, for example by providing grants.

According to the results of this study, the working environment in this hospital could be described as a little inflexible, and rather centralized and bureaucratic, and participation of nurses in decision making was relatively low. This is not untypical of government agencies in Sri Lanka.

The leadership of nurse managers in this hospital, as perceived by the nurses participating in this study, included both transformational and transactional forms. However, subjects perceived their nurse managers more transformational than transactional. In the study reported here, when the leadership form was highly transformational, this tended to be related to high job satisfaction. This is similar to the findings of Ramey and Erkutu [28,29]. A possible reason for the relationship between a transformational leadership form and high job satisfaction is that transformational leaders act as change agents and good role models, create and articulate a clear vision for an organization, empower subordinates to achieve at higher standards, act in ways that make others want to trust them and give meaning to organizational life...
This perhaps explains why this form of leadership may positively affect job satisfaction of nurses. Indeed, the results of this study showed that transformational leadership form of nurse managers explained 32.9% of predictability in job satisfaction among nurses.

**Conclusion**

The unique contribution of this study is that it addresses a gap in the literature relating to levels of job satisfaction among Sri Lankan nurses and the factors that determine job satisfaction there. It is the first study to examine both organizational structure and leadership forms of nurse managers in relation to job satisfaction amongst nurses in Sri Lanka. These findings also serve as foundation knowledge for developing strategies to enhance job satisfaction among nurses.

**References**


[16]. Bennett TM. 2009. The relationship between the subordinate's perception of the leadership style of it managers and the subordinate's perceptions of manager's ability to inspire extra effort, to be effective, and to enhance satisfaction


