Original Article

A survey on relationship between job stress and three dimensions of organization commitment among nursing managers in educational hospitals of Isfahan University of Medical Sciences

Maryam Yaghoubi*, Mohammad Hossein Yarmohammadian**, Mina Afshar***

Abstract

BACKGROUND: One of the effective factors in human resources in hospitals is organization commitment. The most common definition for organization commitment is considering it as "a kind of emotional dependence in organization" or "a kind of loyalty feeling to organization".

METHODS: This was a descriptive analytic survey. The population of study was all 110 nursing managers of 9 educational hospitals. Data gathering was done via Job Stress questionnaire and organization commitment questionnaire. Data analysis was done in SPSS software.

RESULTS: The mean score of organization commitment was 65.6 (12.1) among nursing mangers. There was a significant relationship between organization commitment and age and also job experience based on ANOVA test. There was not any relationship between job stress and job experience. Generally there was a relationship between job stress and organizational commitment.

CONCLUSION: Study results showed that organization commitment is in a good level among nursing mangers of educational hospitals of Isfahan University of Medical Sciences. The study also revealed that there was a significant correlation between job stress and organization commitment. An organization cannot be successful without managers' commitment, so the organizations especially hospitals should plan for more commitments. On the other hand a stressful work environment can influence on mangers' organization commitment and if the stress in work decreases, the positive effects on organization commitment will happen.

KEY WORDS: Organization commitment, job stress, nursing managers, educational hospitals.
organization outcome will be increased if the commitment goes up.\textsuperscript{6,7} Commitment can be a useful indicator of the effectiveness of an organization.\textsuperscript{8} Meyer and Allen have divided organization commitment to three aspects (Figure 1):

1) Affective commitment (A.C.): emotional dependence of staffs on coping with organization and participate in organization programs with a positive feeling.\textsuperscript{2,6} The staff stays in work because they want to.\textsuperscript{2}

2) Continuance commitment (C.C.): it is based on organization’s value and staffs are a part of organization’s life. They stay in work because they need to stay and the staffs have a high loyalty to organization.\textsuperscript{2,9}

3) Normative commitment (N.C.): it is based on personnel’s feelings about necessity of staying in work.\textsuperscript{2} They stay in work because they must.\textsuperscript{9}

Figure 1. Aspects of organization commitment

Since hospital atmosphere is stressful because of its special characteristics it has many problems, and these problems mainly should be handled by the managers of the hospital, so they get more stress as a result. Stress has been recognized as pest for human resources. The destroying effects of stress on individuals and their social life are completely obvious and manager is the most damageable person against stress. Although there is a long history of using the word "stress" in psychiatry it is used more common in management psychology and organizational behavior recently, and as the social life is full of stress, a part of organization concerns is devoted to stress.

Many researchers in Iran and other countries have worked on improving psychological health of job environment as important factors in promotion and development of human resources in organization in recent decades.\textsuperscript{10} Psychologists and other researchers have surveyed on the role of stress in different situations and concluded that stress has more effects on health services staffs because of their job complexity.\textsuperscript{11} Also stress has organizational consequences such as, decreasing organizational performance, job satisfaction and job commitment and increasing absence of work and resignation among staffs and managers.\textsuperscript{12}

This article aimed to determine the relationship between job stress and the O.C. among nursing managers in educational hospitals of Isfahan University of Medical Sciences (IUMS).

**Methods**

This was a descriptive analytic and cross-sectional survey performed in 2007. The population of study was 110 nursing managers of 9 educational hospitals (consisting: matrons, supervisors and head nurses). Data gathering was done with two questionnaires. The first was Stress questionnaire by RS Elliot. The mentioned researcher divided people to four groups based on the level of stress: A, B, C and D.

A. People with high self control and self esteem.

B. People with a normal life and ability of controlling their life.

C. People who feel depression most of the time.

D. People who have chaos and psychological problems in their lives.

The second one was O.C. questionnaire by Mowday, Steers and Porter. It measures O.C. before analyzing the data. The reliability of the scales was assessed by computing Cronbach’s alpha coefficients. Content validity was assessed using instrument validity.

Data analysis was done with SPSS\textsubscript{13} software using ANOVA, t-test and chi-square test.
**Results**

5% of population was men and 95% women. As the men were few, no statistical analysis was conducted to reveal the relationship between sex of managers and O.C. and stress. About 18.9% had Master of Science degree and 81.1% had Bachelor of Science.

2.7% of managers were 20-30 years old, 34.9% were 31-40, 49.7% were 41-50 and the rest (5.4%) were 51-60. Actually almost half of them were 40-50 years old.

From the work experience point of view 1.3% of managers had less than 5 years experience, 8.7% had 5-10 years, 19.5% had 11-15, 29.5% had 16-20, 20.1% had 21-25, and 14.8% had 26-30 years job experience. Only 0.7% of managers had more than 30 years experience.

Generally, O.C. has been 65.6 (12.1) among nursing managers, A.C had the highest amount as 67.7 (7.5) and N.C the least as 64 (14.7). To determine the range of job stress, as it’s said before, there are 4 levels for stress consisting A, B, C and D. No one in this research had the D level of stress. About 15.7% were classified in group A, 78.7% in group B and 5.6% in group C.

**Table 1.** The relation of organization commitment with demographic factors in nursing managers

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>P value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.061</td>
<td>0.080</td>
</tr>
<tr>
<td>Job experience</td>
<td>0.387</td>
<td>0.001</td>
</tr>
<tr>
<td>Level of education</td>
<td>2.7</td>
<td>0.29</td>
</tr>
</tbody>
</table>

P < 0.05 considered as meaningful

According to table 1, there is a significant relationship between O.C. and age based on ANOVA test (F = 0.61, p = 0.080). Also there is a significant correlation between O.C. and job experience based on ANOVA test too (F = 4.19, p = 0.001). And there is no significant correlation between O.C and level of education based on ANOVA test (F = 2.7, p = 0.29). But generally there is a significant correlation between the O.C. and its different aspects (p < 0.05).

Data analysis demonstrated that there is no significant correlation between job stress and demographic variables like age, job experience and level of education (p > 0.05) based on chi-square test (Table 2).

**Table 2.** The relation of job stress with demographic factors in nursing managers

<table>
<thead>
<tr>
<th>Stress variable</th>
<th>Chi-square</th>
<th>D.F</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>2.5</td>
<td>5</td>
<td>0.75</td>
</tr>
<tr>
<td>Job experience</td>
<td>4.41</td>
<td>12</td>
<td>0.53</td>
</tr>
<tr>
<td>Level of education</td>
<td>4.4</td>
<td>8</td>
<td>0.65</td>
</tr>
</tbody>
</table>

P < 0.05 considered as meaningful

There was a significant correlation between job stress and O.C. and also the different aspect of O.C. consisting: Affective Commitment, Continuous Commitment, and Normative commitment (Table 3).

**Table 3.** The relation of job stress with dimensions of organizational commitment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Organizational commitment</th>
<th>Affective commitment</th>
<th>Continuous commitment</th>
<th>Normative commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job stress p</td>
<td>0.085</td>
<td>r = 0.085</td>
<td>r = 0.299</td>
<td>r = 0.009</td>
</tr>
<tr>
<td>p</td>
<td>0.003</td>
<td>p = 0.002</td>
<td>p = 0.001</td>
<td>p = 0.003</td>
</tr>
</tbody>
</table>

P < 0.05 considered as meaningful

**Discussion**

Study results showed that O.C. was in a good level among nursing managers of educational hospitals of IUMS and affective commitment had the highest level in comparison with other ones, because those staffs with higher level of affective commitment stay in an organization since they want to stay. On the other hand there was a significant correlation between O.C. and age and job experience which means that the more the age and job experience of staffs are, the more their interest and commitment to organization is. As it's said before, people was divide to 4 categories of A, B, C and D considering the level of stress which the people in A category have the less level of stress and the people in D category have the highest level. There
was no one in D category in this study. Generally 15.7% classified in group A, 78.7% in group B, and 5.6% in group C.

Actually it means that 15.7% of managers have high self control and self esteem and 78.7% have a normal life and ability of controlling their life.

The study also revealed that there was a significant correlation between job stress and O.C. Stressful work environment can influence on managers' O.C. and if the stress in work decreases, the positive effects on O.C. will happen.

O.C. influences on staff's behaviors. Commitment can be a sign of identification and dependence to organization in staffs.

The managers who have more commitment have more loyalty in their job, and remain in organization and work more for it. Managers should keep their own and their personals commitment and loyalty toward the organization and improve them. On the other hand it is known that stress has an important role on staffs' operation. A normal level of stress has the best influence on staffs' operation, and if the stress is less or more than a specific level, their performances will decrease.13

Study of Mossadegh Raad on O.C. among IUMS staffs and its relationship with job satisfaction showed the affective commitment had been in a good level and normative and continuance commitment in a moderate level. He also stated that there had been a significant correlation between O.C. and some other factors such as the level of education, age, salary and job experience, so that the staffs who have higher education or are older than 30 years or get more money, have more commitment compared to the others.14 There are similar results in the current paper. Mossadegh Raad et al also considered the relationship between organizational culture and O.C. and concluded that age, field, organizational level, work experience, education and the kind of employment influence on O.C. in staffs of educational hospital of Isfahan.15 This paper had the similar results about age and job experience.

Steers found that there had not been any significant correlation between O.C. and staffs' level of education, similar to this study. And there was a significant correlation between age and O.C.16

Dale et al in a research titled leadership style and O.C. mediating effect of role stress proved that there was no relationship between stress and O.C. They considered stress as a mediating.17

Chu et al conducted a survey on nurses of hospitals in Taiwan and found that stress has influence on O.C. and consequently on organizational behavior.18 Finally we should say organization needs effective leaders to achieve their goal in the way of multilateral growth and development nowadays.19 On the other hand commitment is an important factor influencing improvement of managers' performance, so it must be noticed and developed as an important factor. Work stress is also considerable among leaders and staffs. Organizations should provide in order to manage and decrease job stress and plan to get the good result. Work stress influences on other items in an organization as O.C. surely, therefore we hope researchers study theses items also.

Finally there are some strategies and recommendation to promote O.C. and manage work stress:

1) To employ expert and educated managers who have the experience related to hospital management and the special wards.
2) To make friendly atmospheres in work groups in order to have a convenient psychological space in the organization.
3) To create potential for managers' innovations.
4) To create conditions for suggesting new ideas and strategies by the managers without fear and stress.
5) To make a good situation in order to increase O.C. and dependence on organization in managers.

The Authors declare that have no conflict of interest in this study and they have surveyed under the research ethics.
References

14. Mossadegh Raad AM. A survey about the relationship between job satisfaction and organizational commitment among staffs of Isfahan University of Medical Sciences hospitals. [Research project]. Isfahan: Isfahan University of Medical Sciences, School of Management and Medical Information Science; 2005. (Persian).
15. Mossadegh Raad AM, Malekpour J. A survey about the relationship between organizational culture and organizational commitment among staffs of Isfahan University of Medical Sciences educational hospitals. [MSc thesis]. Isfahan: Isfahan University of Medical Science, School of Management and Medical Information Services; 2004. (Persian).