

Job Involvement and Organizational Commitment of Employees of Prehospital Emergency Medical System

Alireza Rahati,^{1,*} Hossein Sotudeh-Arani,² Mohsen Adib-Hajbaghery,³ and Majid Rostami⁴

¹Department of Management, Naragh Branch, Islamic Azad University, Naragh, IR Iran

²Department of Economy, Management and Accounting, Payame-Noor University, Tehran, IR Iran

³Trauma Nursing Research Center, Kashan University of Medical Sciences, Kashan, IR Iran

⁴Department of Mathematics, Naragh Branch, Islamic Azad University, Naragh, IR Iran

*Corresponding author: Alireza Rahati, Department of Management, Naragh Branch, Islamic Azad University, Naragh, IR Iran. Tel: +98-9132606038, Fax: +98-3155432094, E-mail: ems.rahati@gmail.com

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Abstract

Background: Several studies are available on organizational commitment of employees in different organizations. However, the organizational commitment and job involvement of the employees in the prehospital emergency medical system (PEMS) of Iran have largely been ignored.

Objectives: This study aimed to investigate the organizational commitment and job involvement of the employees of PEMS and the relationship between these two issues.

Materials and Methods: This cross-sectional study was conducted on 160 employees of Kashan PEMS who were selected through a census method in 2014. A 3-part instrument was used in this study, including a demographic questionnaire, the Allen and Miller's organizational commitment inventory, and the Lodahl and Kejner's job involvement inventory. We used descriptive statistics, Spearman correlation coefficient, Kruskal-Wallis, Friedman, analysis of variance, and Tukey post hoc tests to analyze the data.

Results: The mean job involvement and organizational commitment scores were 61.78 ± 10.69 and 73.89 ± 13.58 , respectively. The mean scores of job involvement and organizational commitment were significantly different in subjects with different work experiences ($P = 0.043$ and $P = 0.012$, respectively). However, no significant differences were observed between the mean scores of organizational commitment and job involvement in subjects with different fields of study, different levels of interest in the profession, and various educational levels. A direct significant correlation was found between the total scores of organizational commitment and job involvement of workers in Kashan PEMS ($r = 0.910$, $P < 0.001$).

Conclusions: This study showed that the employees in the Kashan PEMS obtained half of the score of organizational commitment and about two-thirds of the job involvement score. Therefore, the higher level managers of the emergency medical system are advised to implement some strategies to increase the employees' job involvement and organizational commitment.

Keywords: Commitment, Emergency Medical Services, Emergency Care, Involvement, Job Satisfaction, Organizations, Prehospital

1. Background

Job involvement has been defined as internalizing values of "goodness and importance of working" among people. It is a subjective condition that makes people devoted to their work (1). It is a desirable feature that makes people spend energy and do their best in their work and organizational roles (2). Although, it is not associated with a plethora toward job, it causes workers to enjoy their work and reduces their fatigue (3). Job involvement not only increases the workers' job satisfaction, organizational commitment (4), organizational citizenship behavior, emotional attachment to the organization, voluntary actions beyond the job description, and participation in organizational decisions, but also reduces the desire to leave the job (5).

Studies have shown an association between work outcomes, work quality, organizational efficiency and

the employees' job involvement (6-8). Job involvement would not only result in timely presence at work, employees' feeling of success in their job, and a sense of goal attainment and optimism about the organization but also would lead to the belief of congruency between personal and organizational goals. Some jobs are more likely to provide both internal and external motivations to enhance peoples' job involvement (3-8). However, some people may devote their time so much to work and be preoccupied with the organizational goals so that they forget their personal lives (9). People who work in jobs with high workloads and necessity for overtime working may present some job involvement behaviors; however, they eventually would experience exhaustion, job dissatisfaction, and desire to quit their job (9,10).

In recent years, several studies have been published on

organizational commitment as a major factor in increasing organizations' workforce efficiency and performance (11, 12). These studies generally linked the employees' organizational commitment to factors such as type of employment, job security, job satisfaction, and managers' behaviors (12-14). Some studies in Taiwan (15), South Africa (16), and Canada (17) have also investigated the nurses' job involvement and connected it to work values and organizational commitment (15), job satisfaction (16), and career commitment (17, 18). Also, several studies are available on organizational commitment and job involvement of employees in different Iranian organizations (11, 18, 19). Of them, a few studies have paid attention to the Iranian healthcare providers' organizational commitment and job involvement such as nurses and employees in the prehospital emergency medical system (PEMS). In one of these studies, Ravangard et al. reported that not only the nurses' personality trait was moderately appropriate to their job, but also their job involvement was at moderate level (20). In another study, Ghaderi and Shamsi studied the job involvement and emotional intelligence of nurses in Jiroft City, Iran and reported that nurses had a moderate job involvement that was significantly higher among married and experienced nurses (21). However, all the published studies in Iran were conducted on hospital nurses and no study is available on job involvement and organizational commitment of the employees of PEMS.

2. Objectives

This study aimed to investigate the organizational commitment and job involvement of employees of PEMS and the relationship between these two variables in the prehospital emergency staff.

3. Materials and Methods

This is a cross-sectional study conducted on the employees of PEMS affiliated to Kashan University of Medical Sciences in 2014. All of 160 workers in the Kashan PEMS were enrolled in the study using a census method. Inclusion criteria consisted of working in the PEMS of Kashan City, and willingness to participate in the study. Exclusion criteria were decision to withdraw from the study after accepting to take part and incomplete respond to the study questionnaire.

A 3-part instrument was used to gather the study data. The first part included questions about respondents' demographic characteristics, including education level, age, work experience, field of study, and the level of interest in the profession. The Allen and Miller's organizational commitment inventory (OCI) was the second part. This tool consists of 24 items that measure the individual's level of organizational commitment in 3 domains of affective commitment, continuing commitment, and normative commitment. These items are rated on a 5-point Likert-type scale from strongly disagree (= 1) to strongly

agree (= 5). The range of the total grade is 24-120; and higher scores indicate more organizational commitment. OCI is used frequently in nursing research and its content validity index and Cronbach's α is reported as 0.89 and 0.87, respectively (19, 22). The third part included the Lodahl and Kejner's 20-item job involvement inventory (JII). All these items are responded on a 5-point Likert scale format from strongly disagree (= 1) to strongly agree (= 5). The total score ranges from 20 to 100 and a higher score indicates a higher job involvement. The content validity of the job involvement inventory was assessed by the faculty members in the Azad University, Naragh Branch. The Cronbach's α of the JII was also calculated after a pilot study on 30 nurses and it was 0.713.

After obtaining the necessary permissions, the first researcher referred to the study setting, found the potential participants, explained them the study objectives, distributed the study questionnaires and explained them how to answer the questions. Then, he invited them to complete the questionnaires in a private environment and return it to the researcher next day when the researcher referred to them again.

3.1. Ethical Considerations

The Ethics Committee of the Kashan University of Medical Sciences approved the study protocol. The approval letter was issued on 8 April 2015 with the code No. 420. All the subjects were briefed on the study objectives by the researcher and, assured about the confidentiality issues before participation in the study. To assure the confidentiality, they were asked not to write their name on the questionnaire. All participants also signed a written informed consent. All questionnaires were kept in a locked cabinet in the researcher's office and destroyed 2 months after the study.

3.2. Data Analysis

Data analysis was performed using SPSS software version 11.5. Descriptive statistics (percentage, mean, standard deviation) were used to summarize the data. The Kolmogorov-Smirnov test was used to examine the normal distribution of the quantitative variables. The distribution of organization commitment scores was normal but it was not the case in job involvement. The Spearman correlation coefficient was used to test the association between organization commitment and job involvement scores. Analysis of variance and Tukey post hoc test was used to test the statistical difference between the organization commitment scores in terms of the categorical demographic variables such as education level, work experience, field of study, and the level of interest toward the profession. However, the Kruskal-Wallis test was used to examine the statistical difference between the job involvement scores in terms of such variables. Moreover, the Friedman test was used to compare the mean ranks of the organizational commitment

components. The significance level was considered less than 0.05 in all tests.

4. Results

Of 160 questionnaires distributed, 130 ones were returned and among them, 20 questionnaires were responded incompletely and therefore excluded and finally 110 questionnaires were analyzed.

Among the 110 workers in the prehospital emergency system, 45 ones (40.9%) had a bachelor degree, 42 (38.2%) had a work experience from 11 to 20 years, 30 (27.3%) were nurses, and 70 (63.7 %) expressed a moderate to very high interest in their profession as an emergency medical system (EMS) staff (Table 1). The mean \pm SD job involvement and organizational commitment scores were 61.78 ± 10.69 and 73.89 ± 13.58 , respectively. Moreover, the mean \pm SD organizational commitment scores were 24.52 ± 5.04 , 25.19 ± 3.71 , and 24.17 ± 5.49 for the domains of affective, continuing, and normative commitment, respectively.

A significant difference was observed between the mean scores of job involvement in subjects with different work experience ($P = 0.043$) (Table 2). Tukey post hoc test was performed and showed that the difference in scores was significant between the two categories of work experience subjects of 10 - 20 years and the ones with over 20 years of work experience ($P = 0.007$). However, no signifi-

cant differences were observed between the mean scores of job involvement in subjects with different fields of study, different levels of interest in the profession, and various education levels (Table 2).

In addition, a significant difference was observed between the mean scores of organizational commitment in subjects with different work experience ($P = 0.012$) (Table 2). Tukey post hoc test was performed and showed that the difference in scores was significant between 2 categories of work experience subjects of 10 - 20 years and the ones with over 20 years of work experience ($P = 0.012$). However, no significant differences were observed between the mean scores of organizational commitment in subjects with different fields of study, different levels of interest in the profession, and various education levels (Table 2).

A direct significant correlation was found between the total scores of organizational commitment and job involvement of workers in Kashan prehospital emergency system ($r = 0.910$, $P < 0.001$). Moreover, a significant correlation was observed between the scores of job involvement and the scores of affective commitment ($r = 0.923$, $P < 0.001$), continuing commitment ($r = 0.814$, $P < 0.001$) and normative commitment ($r = 0.863$, $P < 0.001$). Using Friedman test, no significant difference was found between the mean ranks of the 3 components of organizational commitment (Table 3).

Table 1. Distribution of the Personal Characteristics of Workers in Prehospital Emergency Medical System in Kashan, Iran

Variables Studied	Frequency (%)
Education degree	
Associate degree	31 (28.2)
Bachelor degree	45 (40.9)
Master degree	23 (20.9)
PhD	11 (10.0)
Work experience, y	
Less than 10	41 (37.2)
10 - 20	42 (38.3)
Over 20	27 (24.5)
Field of study	
Operating room technician	23 (20.9)
Anesthesiology	26 (23.6)
Medical emergencies technician	20 (18.2)
Nursing	30 (27.3)
General physician	11 (10.0)
The interest in the profession	
Very little	16 (14.5)
Low	24 (21.8)
Average	22 (20.0)
High	19 (17.3)
A lot	29 (26.4)

Table 2. Comparison Between the Organizational Commitment and Job Involvement Scores in Terms of the Individual Characteristics of the Subjects^a

Individual Characteristics	Job Involvement	Organizational Commitment
Education degree		
Associate degree	61.19 ± 8.88	73.90 ± 12.96
Bachelor degree	62.08 ± 12.16	74.13 ± 14.21
Master degree	63.17 ± 11.22	74.60 ± 15.21
PhD	59.27 ± 8.33	71.36 ± 10.05
P value	0.575	0.930
Work experience, y		
Less than 10	63.07 ± 10.50	75.32 ± 14.12
10 - 20	57.92 ± 10.29	69.33 ± 12.75
Over 20	65.85 ± 10.15	78.81 ± 12.50
P value	0.028	0.012
Field of study		
Operating room technician	63.78 ± 10.71	76.73 ± 12.84
Anesthesiology	64.00 ± 12.47	76.53 ± 14.74
Medical emergencies	59.52 ± 8.66	72.82 ± 12.67
Nursing	58.93 ± 10.56	70.00 ± 14.35
Medicine	63.21 ± 8.95	73.92 ± 11.34
P value	0.148	0.339
The interest in the profession		
Very little	56.12 ± 10.66	66.37 ± 13.50
Low	61.37 ± 9.15	72.70 ± 11.71
Average	63.27 ± 10.22	77.04 ± 13.70
High	62.42 ± 10.28	74.31 ± 11.82
A Lot	63.68 ± 12.04	76.34 ± 15.16
P value	0.159	0.122

^aAll data are presented as mean ± SD.

Table 3. The Mean Rank of the 3 Components of Organizational Commitment in Friedman Test

Components of Organizational Commitment	Mean Rank
Affective commitment	1.97
Continuing commitment	2.12
Normative commitment	1.90
χ^2	3.007
P value	0.222

5. Discussion

The present study showed that approximately half of the organizational commitment score was obtained by the employees of Kashan PEMS. This finding indicates that the participants lacked a high level of organizational commitment. No previous study is available on organizational commitment of Iranian PEMS staff. However, a study in Taiwan reported that nurses had a moderated level of organizational commitment (15). Organizational

commitment represents the people's attitude, acceptance, and loyalty to their organizations (23). Also little attention has been paid to this issue in the Iran's health care system; however, our findings should be an alarm for the higher level authorities to investigate this problem and take some steps to increase their employees' organizational commitment.

According to the present study, among the variables

studied, only the work experience of the staff showed a significant relationship with their organizational commitment. Consistent with some previous studies, this finding shows that organizational commitment is mostly affected by organizational and managerial factors not by individual factors. Evidence shows that the affective component of organizational commitment is mainly affected by the job characteristics. At the same time, the component of continuing commitment indicates the staffs' attitudes toward the costs of leaving the organization. The normative commitment also shows the employees' feeling of responsibility to remain and do their best in the organization (24). Several studies have confirmed the relationship between organizational success, employees' performance, and organizational commitment with their job satisfaction, job security, the managers' ability to induce them a sense of occupational identity, and effective using of the employees capacities (15, 23, 25, 26). Then, the high level managers in PEMS should strive to increase their employees' organizational commitment; otherwise people might try to find more favorable work settings and leave the organization. Using the employees collective wisdom in decision-making and appointing managers, as well as improving the managers' communication with their employees are among the crucial steps that should be implemented to enhance the employees' organizational commitment and the PEMS quality of services.

A comparison between the organizational commitment score of employees with different qualifications, showed that (although not significantly different) nurses had the lowest level of organizational commitment among all employees in the Kashan PEMS. Also, only 15% of all employees have been studied in medical emergencies. Perhaps the inconsistency between the field of study and the working area had played a role in decreasing the employees' organizational commitment. However such a premise needs more investigations to be confirmed.

This study showed that the employees of Kashan PEMS obtained a mean score of 73.89 from the job involvement inventory which comprises about 74% of the total job involvement score. This score represents a relatively favorable level of job involvement in the participants. Moreover, according to the present study, among all demographic variables, only the work experience of the employees showed a significant relationship with their job involvement. However, some studies have shown that full-time employees, those with permanent employment and the employees with higher levels of authority show higher levels of job involvement (27-29). Although, we did not study variables such as the type of employment and the level of authority, we can suppose that the permanent employees and those with high level authority are among those with more work experience. Previous studies have also shown that higher levels of job involvement is connected to increased job satisfaction, better job performance, increased productivity, more effectiveness (23, 27), higher levels of self-esteem, feeling of empower-

ment, and a sense of performing an important job (27-29). Although these factors have not been examined in our study, more than 63% of employees surveyed expressed a moderate to very high interest in their job. Moreover, given the high mean score of job involvement in the present study, it can be concluded that the participants were in favorable condition in terms of job satisfaction, feeling of being empowered, and having an important job.

In the current study, a significant correlation was found between the scores of job involvement and organizational commitment of the employees in Kashan PMES. Moreover, significant correlations were observed between job involvement and the components of organizational commitment. This finding is consistent with the results of Ho et al. in a study of job involvement and organizational commitment among Taiwanese nurses. Although they reported that only 16% of changes in organizational commitment can be explained by job involvement (15).

Presumably, variables other than job involvement and demographic characteristics affect the employees' organizational commitment that neither considered in the present study nor in the study of Taiwanese nurses. Therefore, further investigations on the factors affecting the employees' job involvement and organizational commitment are necessary. However, the direct association between job involvement and organizational commitment shows the necessity to implement some strategies to increase the employees' occupational identity, feeling of empowerment, and job satisfaction. Then, their organizational commitment and job involvement would be increased.

In conclusion, this study showed that the employees in the Kashan PEMS obtained half of the score of organizational commitment and about two-thirds of the score of job involvement. Therefore, the higher level managers of the EMS are suggested to implement some strategies to increase the employees' job involvement and organizational commitment.

Creating an effective feedback system, holding meetings for the employees to express their views, establishing programs to improve the employees skills in decision-making and problem solving, holding work groups and committees to strengthen the team working, providing workshops on communication skills for the employees, supervisors and managers, and increasing the employees involvement in organizational policy making are among the applicable strategies for promoting the employees organizational commitment and job involvement.

The study method was cross-sectional, and it was conducted on a small sample in one city. Therefore, the results might not be generalized to EMS employees countrywide. We also failed to consider all variables affecting the organizational commitment and job involvement. Hence, larger multicentre studies with considering a wide range of affecting variables are suggested. Furthermore, the instruments we used were originally designed in other countries and might not be fully appropriate for

employees working in Iranian healthcare organizations. Thus, designing and using native questionnaires for assessing organizational commitment and job involvement are suggested.

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Footnotes

Authors' Contribution:Alireza Rahati wrote the manuscript and correspondent article. Hossein Sotudeh-Arani was counselor master. Mohsen Adib-Hajbaghery developed the original idea and the protocol. Majid Rostami analyzed data.

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