

The Relationship of organizational justice with nurses' professional commitment

Omolbanin Akbari¹, Seyyed Abolfazl Vagharseyyedin^{2*}, Zahra Farajzadeh³

Abstract

Background and Aim: Nurses are among the main contributors to patient care and are in direct contact with patients. Nurses' professional commitment can affect their job satisfaction and retention in nursing and enhance patient safety and care quality. Therefore, identifying factors behind their professional commitment is crucial. One of the factors which may affect professional commitment is organizational justice. This study was made in 2014 to evaluate the correlation of organizational justice and professional commitment among nurses working in teaching hospitals located in Birjand, Iran.

Methods: In this descriptive-analytical study, 215 nurses working in Valiasr (PBUH) and Imam Reza (PBUH) Teaching Hospitals, Birjand, Iran, were recruited through stratified random sampling. A demographic questionnaire, the Nurses' Professional Commitment Scale, and the Organizational Justice Questionnaire were used for data collection. Professional commitment was evaluated in the five subscales of understanding of nursing, nursing compliance, involvement of nursing professionals, devotion to nursing, and retention of nursing professionals while the three assessed dimensions of organizational justice were distributive, procedural, and interactional justice. The SPSS software (v. 16.0) was used for conducting one-way analysis of variance, multiple regression analysis, and the statistical tests of independent-samples t, Tukey's post-hoc, and Pearson correlation at a significance level of less than 0.05.

Results: The mean scores of nurses' professional commitment and perceived organizational justice were respectively 3.85 ± 0.56 and 4.44 ± 1.7 , indicating high professional commitment and moderate organizational justice among the participating nurses. There was a significant correlation between organizational justice and professional commitment ($r=0.54$ and $P<0.001$). Moreover, the mean scores of professional commitment and organizational justice and all their subscales among nurses working in Imam Reza Hospital were significantly greater than the nurses working in Valiasr Hospital ($P<0.001$).

Conclusion: Healthcare managers can adopt strategies and make wise decisions for enhancing nurses' professional commitment through improving their perceived organizational justice.

Key Words: Nurses; Social Justice; Personnel Loyalty

Received: January 29, 2015

Accepted: May 5, 2015

Corresponding author; Seyyed Abolfazl Vagharseyyedin, Assistant Professor, East Nursing and Midwifery Research Center, Nursing and Midwifery College, Birjand University of Medical Sciences, Birjand, Iran
Tel: +989153624605 E-mail: waghars@bums.ac.ir

¹ MSc Student of Nursing, East Nursing and Midwifery Research Center, Nursing and midwifery College, Birjand University of Medical Sciences, Birjand, Iran;

² Assistant Professor, East Nursing and Midwifery Research Center, Nursing and Midwifery College, Birjand University of Medical Sciences, Birjand, Iran;

³ Instructor, Nursing Management Department, Faculty of Nursing and Midwifery, Birjand University of Medical Sciences, Birjand, Iran.

Introduction

The profession of nursing has special characteristics due to its unique structure among which, commitment being more distinctive (1). Commitment is a mechanism which shapes individuals' organizational behaviors. Professional commitment is developed during the process of socialization and is gained during professional experience (2). It can be defined as employees' emotional attachment to their profession which is related to their professional beliefs, respect, and values and enhances their satisfaction and retention in the profession (3, 4).

In nursing, professional commitment is defined as nurses' loyalty to and retention in the profession and is associated with enhanced professional values (5) and greater job satisfaction for nurses (2). Gould et al. (2006) interviewed 27 nurses and found that only twelve nurses tended to remain in the profession (6).

Professional commitment improves individuals' professional performance. Moreover, greater job satisfaction is associated with greater professional commitment and firmer intention to remain in the profession (7). Besides its great benefits for nurses and healthcare systems, professional commitment also affects the quality of nursing services. Teng et al. (2009) studied 348 nurses and found that professional commitment enhanced patient safety and care quality (3).

Commitment is affected by different factors such as religious beliefs, ethics, culture, sense of belongingness, financial and educational status, personality characteristics, job satisfaction, conscience, organizational attachment, income, work environment, work experience, and organizational justice (8).

Organizational justice refers to individuals' perceptions of fairness in an organization (9). In his theory, Greenberg (1987) defined organizational justice as employees' perception of fairness in distributing available resources. His theory classifies justice in three categories including distributive, procedural, and interactional justice (10). In distributive justice,

rewards and resources are distributed fairly. Procedural justice holds that employees who are subject to decisions, resource allocation, or punishment, feel that such decisions are made based on fair methods and strategies. Finally, interactional justice refers to employee's perceptions of the quality of interpersonal behaviors during organizational procedures (11).

In Iran, the results of a study done by Hatam et al. (2013) on 300 nurses working in hospitals located in Shiraz, Iran, demonstrated that most nurses (66%) perceived high levels of organizational justice. Moreover, they reported that the score of perceived organizational justice among nurses working in private hospitals was greater than nurses in public hospitals (12). Positive organizational justice is associated with higher job satisfaction (9). Mortazavi et al. (2012) studied 198 nurses and found that as a component of organizational justice, procedural justice had significant effects on nurses' job satisfaction, professional commitment, and client-oriented behaviors (13).

Organizational justice, particularly in nursing, has received considerable attention in Iran and hence, studies have assessed it from different aspects. For instance, Javadi et al. (2012) investigated the effects of organizational justice on accountability. Accountability is the responsiveness of healthcare systems to patients' nonclinical legitimate expectations. They found that organizational justice was at a moderate level. Moreover, they reported that there was no significant difference between private and public hospitals regarding the level of organizational justice while accountability was higher in private hospitals. The significant correlation of organizational justice with hospital type denotes that employees' perceptions of managers and authorities' behaviors in organizational procedures significantly affect their clinical performance and behaviors towards patients (14).

Given the above introduction, professional commitment can be considered as one of the determining factors in nurses' job satisfaction, patient

safety, and care quality. Consequently, identifying factors which affect commitment is crucial. One factor which may affect professional commitment is organizational justice. However, this subject has not yet been evaluated comprehensively. Previous studies have dealt either with professional commitment or organizational justice, leaving the relationship of these two concepts unknown. Consequently, this study was made to evaluate the correlation of organizational justice and nurses' professional commitment.

Methods

This descriptive-analytical study was conducted in 2014. A sample of 215 nurses working in Valiasr (PBUH) and Imam Reza (PBUH) Teaching Hospitals, Birjand, Iran, was recruited through stratified random sampling. Given the required sample size and the number of eligible nurses working in each hospital, a quota was primarily allocated to each hospital and then to each hospital ward. Then, eligible nurses were recruited randomly by using a list of nurses' names. The eligibility criteria were having a bachelor's degree in nursing and a minimal clinical work experience of six months. Participants were provided with explanations about the aim of the study. Moreover, they were ensured that participation in the study was voluntary and that their identity and information would remain confidential.

A demographic questionnaire, the Nurses' Professional Commitment Scale (16), and the Organizational Justice Questionnaire were used for data collection (17). The items of the demographic questionnaire were age, gender, marital status, educational status, official position, work environment, working shift, work experience, and employment status. Nurses' Professional Commitment Scale (NPCS) was developed by Lin et al. (2007) and contains 26 items in the five subscales of understanding of nursing (items 1–6), nursing compliance (items 7–10), involvement of nursing professionals (items 11–16), devotion to nursing (items 17–21), and retention of

nursing professionals (items 22–26). The 26 items of the NPCS are scored on a five-point Likert scale from 'Completely agree' (scored 5) to 'Completely disagree' (scored 1). Therefore, the total NPCS score is 26–130. Scores 0–43, 44–86, and 87–130 are respectively interpreted as poor, moderate, and great professional commitment. The reliability of the NPCS was confirmed by Lin et al (2007) with a Cronbach's alpha of 0.91 (16).

The third questionnaire of the study was the Organizational Justice Questionnaire (OJQ). Developed by Niehoff and Moorman (1993), the OJQ evaluates organizational justice in the three dimensions of distributive justice (items 1–5), official procedures (items 6–11), and interactional justice (items 12–20). This questionnaire has 20 items which are scored on a seven-point Likert scale from 'Completely agree' (scored 7) to 'Completely disagree' (scored 1). The total score of the OJQ is 20–140 from which, scores of 0–47, 48–94, and 95–140 are interpreted as poor, moderate, and great organizational justice. Devonish and Greenidge (2010) reported that the Cronbach's alpha of the three dimensions of the OJQ ranged from 0.70 to 0.90, confirming its acceptable reliability (18).

We searched the scientific databases of PubMed, ScienceDirect, SID (Scientific Information Database), and Magiran by using keywords such as the names of the aforementioned questionnaires as well as 'Iran' and found that the validity and the reliability of the Persian versions of the questionnaires have not been evaluated yet. Therefore, primarily, an expert in English and Persian languages was asked to translate these questionnaires into Persian. Then, another translator back-translated the Persian version into English. Minor differences between the original versions of the questionnaires and the translated ones were amended. Finally, ten faculty members from Birjand Faculty of Nursing and Midwifery were invited to assess the content and the face validity of the questionnaires. The Content Validity Index of the NPCS and the OJQ were respectively equal to 0.84 and 0.89. Moreover, for

reliability assessment, ten eligible nurses were recruited to complete the questionnaires. The Cronbach's alpha values of the NPCS and the OJQ were 0.93 and 0.94, respectively.

The data were analyzed by employing the SPSS software (v. 16.0). After performing data entry, descriptive statistics measures were calculated. Then, the one-way analysis of variance (ANOVA), the Tukey's post-hoc, the independent-samples t, and the Pearson correlation tests as well as multiple regression analysis were conducted for data analysis at a significance level of less than 0.05.

Results

Study participants ranged in age from 22 to 50 with a mean of 32.8 ± 7.39 years. All of the participants held bachelor's degree and worked as staff nurses. Their demographic characteristics are shown in Table 1.

The mean scores of the NPCS and its five subscales of understanding of nursing, nursing compliance, involvement of nursing professionals, devotion to nursing, and retention of nursing professionals were respectively 100.26 ± 14.57 , 3.43 ± 0.91 , 4.04 ± 0.73 , 3.99 ± 0.41 , 4.39 ± 0.53 , and 3.49 ± 0.82 . It is notable that in order to compare the mean scores of the NPCS subscales, the mean scores of these subscales were divided by the number of items of the subscales. On the other hand, the mean scores of the

Table 1: Comparing nurses' professional commitment mean score based on their demographic characteristics

Demographic characteristics		N	Professional commitment Mean±SD	Understanding of nursing Mean±SD	Nursing compliance Mean±SD	Involvement of nursing professionals Mean±SD	Devotion to nursing Mean±SD	Retention of nursing professionals Mean±SD
Gender	Female	159	3.78±0.53	3.31±0.89	3.94±0.74	3.99±0.4	4.36±0.5	3.36±0.8
	Male	56	4.07±0.57	3.7±0.88	4.33±0.64	4.01±0.42	4.47±0.6	3.86±0.74
	P		0.001	0.001	0.001	0.69	0.2	<0.001
Marital status	Single	50	3.97±0.61	3.66±0.99	4.25±0.74	4.02±0.39	4.5±0.53	3.54±0.86
	Married	165	3.82±0.53	3.36±0.87	3.98±0.72	3.99±0.41	4.3±0.53	3.48±0.81
	P		0.08	0.04	0.02	0.11	0.1	0.65
Working ward	General	159	3.87±0.56	3.48±0.9	4.05±0.74	3.99±0.42	4.4±0.55	3.54±0.81
	Critical	56	3.79±0.55	3.3±0.93	4±0.71	4±0.37	4.38±0.47	3.35±0.84
	P		0.3	0.2	0.6	0.83	0.81	0.12
Hospital	Imam Reza	80	4.26±0.43	4.05±0.8	4.54±0.48	4.16±0.28	4.66±0.47	3.99±0.69
	Valiasr	135	3.61±0.48	3.07±0.76	3.74±0.69	3.9±0.44	4.23±0.5	3.2±0.75
	P		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Working shift	Mornin g	23	4.04±0.5	3.71±0.9	4.22±0.68	4.03±0.38	4.46±0.46	3.96±0.64
	Evening	7	4.06±0.38	3.95±0.35	4.39±0.65	3.97±0.41	4.34±0.6	3.77±0.49
	Night P	185	3.82±0.56 0.09	3.38±0.91 0.08	4±0.73 0.17	3.99±0.41 0.89	4.38±0.54 0.76	3.43±0.83 0.008
Employment status	Perman ent	102	3.93±0.54	3.5±0.92	4.06±0.69	4.01±0.42	4.43±0.52	3.71±0.74
	Condi ti onal	45	3.66±0.56	3.2±0.87	3.73±0.8	3.93±0.42	4.26±0.53	3.24±0.79
	Other P	68	3.86±0.55 0.02	3.48±0.9 0.14	4.2±0.68 0.003	4.01±0.38 0.52	4.41±0.54 0.18	3.33±0.86 0.001

OJQ and its distributive, procedural, and interactional justice dimensions were respectively 88.85 ± 34 , 3.97 ± 1.92 , 4.59 ± 1.79 , and 4.59 ± 1.91 . For dimensions of the OJQ, also, the mean scores of these dimensions were divided by the number of their items. Accordingly, the professional commitment of 35 (16.3%) and 180 (83.7%) nurses was respectively poor and high. Moreover, 32 nurses (14.9%) acquired a low organizational justice score while the scores of 77 (35.8%) and 106 nurses (49.3%) were respectively moderate and high.

As it is evident from Table 1 and 2, the mean scores of the NPCS and the OJQ and all their subscales among nurses working in Imam Reza Hospital were significantly greater than the nurses working in Valiasr Hospital. Moreover, nurses with permanent official employment as well as male nurses acquired higher professional commitment and organizational justice scores compared respectively to nurses with conditional official employment and female nurses. In

addition, single nurses perceived higher levels of organizational justice than married ones. The correlation of nurses' other demographic characteristics with professional commitment and organizational justice was not statistically significant ($P > 0.05$).

The results of the Pearson correlation test reflected a significant correlation between nurses' professional commitment and their perceived organizational justice ($r = 0.57$ and $P < 0.001$). We also conducted stepwise multiple regression analysis in order to predict nurses' professional commitment based on their demographic characteristics and organizational justice total score. Categorical variables were recoded by using dummy coding. Organizational justice was entered into the model in the first step while nurses' work experience was entered in the second step. The total variance of nurses' professional commitment which was explained by all the entered variables was 0.32 ($P < 0.001$; $F = 51.71$, and $R^2 = 0.32$) (Table 4).

Table 2: Comparing nurses' organizational justice mean score based on their demographic characteristics

Demographic characteristics		N	Organizational justice (Mean $\pm$ SD)	Distributive justice (Mean $\pm$ SD)	Official procedures (Mean $\pm$ SD)	Interactional justice (Mean $\pm$ SD)
Gender	Female	159	4.15 $\pm$ 1.65	3.68 $\pm$ 1.86	4.33 $\pm$ 1.75	4.29 $\pm$ 1.91
	Male	56	5.26 $\pm$ 1.57	4.81 $\pm$ 1.85	5.33 $\pm$ 1.7	5.46 $\pm$ 1.61
	P		<0.001	<0.001	<0.001	<0.001
Marital status	Single	50	5.01 $\pm$ 1.79	4.44 $\pm$ 2.11	5.11 $\pm$ 1.81	5.25 $\pm$ 1.84
	Married	165	4.27 $\pm$ 1.63	3.83 $\pm$ 1.84	4.43 $\pm$ 1.76	4.4 $\pm$ 1.89
	P		0.007	0.06	0.01	0.005
Working ward	General	159	4.51 $\pm$ 1.72	4.07 $\pm$ 1.93	4.68 $\pm$ 1.82	4.64 $\pm$ 1.93
	Critical	56	4.23 $\pm$ 1.61	3.7 $\pm$ 1.86	4.33 $\pm$ 1.68	4.46 $\pm$ 1.86
	P		0.29	0.2	0.21	0.55
Hospital	Imam Reza	80	5.9 $\pm$ 0.95	5.04 $\pm$ 1.89	6.17 $\pm$ 0.93	6.2 $\pm$ 0.91
	Valiasr	135	3.57 $\pm$ 1.43	3.34 $\pm$ 1.63	3.66 $\pm$ 1.5	3.6 $\pm$ 1.7
	P		<0.001	<0.001	<0.001	<0.001
Working shift	Morning	23	5.03 $\pm$ 1.42	4.88 $\pm$ 1.41	5.14 $\pm$ 1.56	5.03 $\pm$ 1.72
	Evening	7	5.15 $\pm$ 1.47	3.8 $\pm$ 2.51	5.73 $\pm$ 1.17	5.5 $\pm$ 1.7
	Night	185	4.37 $\pm$ 1.72	3.86 $\pm$ 1.93	4.48 $\pm$ 1.81	4.51 $\pm$ 1.93
	P		0.1	0.05	0.05	0.2
Employment status	Permanent	102	4.34 $\pm$ 1.72	4.14 $\pm$ 1.85	4.47 $\pm$ 1.85	4.36 $\pm$ 1.98
	Conditional	45	3.92 $\pm$ 1.72	3.44 $\pm$ 1.87	4.06 $\pm$ 1.81	4.1 $\pm$ 1.88
	Other	68	4.93 $\pm$ 1.53	4.07 $\pm$ 2.01	5.13 $\pm$ 1.56	5.27 $\pm$ 1.62
	P		0.006	0.11	0.005	0.001

Table 3: The correlation of professional commitment and its subscales with organizational justice and its dimensions

Justice	Commitment					
	Professional commitment	Understanding of nursing	Nursing compliance	Involvement of nursing professionals	Devotion tonursing	Retention of nursing professionals
Organizational justice	r=0.54 P<0.001	r=0.54 P<0.001	r=0.52 P<0.001	r=0.26 P<0.001	r=0.32 P<0.001	r=0.49 P<0.001
Distributive Justice	r=0.49 P<0.001	r=0.49 P<0.001	r=0.43 P<0.001	r=0.30 P<0.001	r=0.26 P<0.001	r=0.44 P<0.001
Official procedures	r=0.53 P<0.001	r=0.39 P<0.001	r=0.49 P<0.001	r=0.42 P<0.001	r=0.30 P<0.001	r=0.45 P<0.001
Interactional justice	r=0.58 P<0.001	r=0.46 P<0.001	r=0.54 P<0.001	r=0.42 P<0.001	r=0.35 P<0.001	r=0.49 P<0.001

Table 4: Stepwise regression analysis for professional commitment

Variable	Regression coefficient	Standardized coefficient	T	R Square	Adjusted R Square	F
Constant	2.91		29.17	0.33	0.32	52.17*
Total justice score	0.18	0.56	9.98	-	-	-
Work experience	0.013	0.17	3.02	-	-	-
Step 1: total justice						
Step 2: work experience						
P value < 0.05*						

Discussion

The aim of this study was to evaluate the correlation of organizational justice and professional commitment among nurses working in teaching hospitals located in Birjand. The findings of the study revealed a significant correlation between organizational justice and professional commitment ($r = 0.54$ and $P < 0.001$). Moreover, the results of multiple regression analysis showed that the variables of organizational justice and work experience were the significant predictors of professional commitment. These findings denoted that nurses' perceived organizational justice can enhance their professional commitment.

Professional commitment can be defined as employee's emotional attachment to their profession which is related to their professional beliefs, respect, and values and enhances their satisfaction and retention in the profession (3, 4). Organizational justice also refers to employees' perceptions of fairness in an

organization (9). Moradi et al. (2013) employed the NPCS and the Meyer's Professional Commitment Scale and reported that the mean professional commitment score of nurses working in hospitals located in Qazvin, Iran, was 3.11 ± 0.40 (8). Javadi et al. (2012) also evaluated organizational justice of nurses affiliated to hospitals located in Isfahan, Iran, by using the Beugre's Organizational Justice Questionnaire and reported an organizational justice mean score of 1.9 ± 0.77 (14). The results of these two studies showed that nurses' professional commitment and perceived organizational justice were at moderate level while our findings revealed that nurses' professional commitment was strong and their perceived organizational justice was moderate.

We also found that the mean scores of the NPCS and the OJQ and all their subscales among nurses working in Imam Reza Hospital were significantly greater than nurses in Valiasr Hospital. This significant difference suggests that professional commitment is

higher in an organization whose personnel perceive greater levels of organizational justice. Nazari et al. (2012) and Malmir et al. (2013) also reported the same finding (15 and 19). They evaluated the correlation of professional commitment and organizational justice in public organizations located in Kermanshah, Iran, and found that greater organizational justice is associated with employee's higher professional commitment. The significant difference between the two hospitals can be attributed to lower number of nurses, stronger nurse-manager relationship, higher incomes, and more comfortable work environment in Imam Reza Hospital.

Among the NPCS subscales, the highest and the lowest scores were respectively related to the devotion to nursing (4.39 ± 0.53) and understanding of nursing (3.43 ± 0.91) subscales.

Nurses' loyalty to attend the profession and their attempt, as members of the profession, to enhance empowerment are among issues highlighted by Iranian nurses in other studies (20). This finding evidently expresses that while nurses may be facing problems in the nursing profession, they try to remain loyal and even attempt to enhance it.

We also found that compared with other dimensions of the OJQ, the correlation of interactional justice with professional commitment was stronger. This finding is in line with the findings reported by Nazari et al. (2012) and Malmir et al. (2013) (15, 19). On the other hand, the mean score of the distributive justice subscale was lower than the mean scores of procedural and interactional justice subscales. Hatam et al. (2013) and Javadi et al. (2012) also reported the same finding (12, 14). This finding can be related to the fact that emotional action and transaction in organizations are perceived mainly through interactional and procedural justice. Gillet et al. (2013) also investigated the correlation of organizational justice with the quality of working life among 208 nurses and 135 nursing aids and found that the mean score of interactional justice (4.68 ± 1.24) was higher than the mean scores of other dimensions of organizational justice (20).

As an essential healthcare profession, nursing is in direct contact with patients and care receivers. Therefore, improving organizational justice can enhance the quality of care services. As mentioned earlier, nurses' greater perceived organizational justice is associated with their greater job satisfaction and professional commitment. Consequently, managers can adopt strategies for improving nurses' organizational justice and hence, enhancing their professional commitment (9). Given the powerful role of professional commitment in enhancing nurses' job satisfaction (2) and the significant correlation between organizational justice and professional commitment, nurses' low perceived organizational justice can decrease their loyalty to the profession, increase nursing staff turnover, and finally negatively affect care quality and patient outcomes.

Conclusion

Considering the study findings, healthcare managers can adopt strategies and make wise decisions for enhancing nurses' professional commitment through improving their perceived organizational justice. As there is no standardized questionnaire in Iran for assessing nurses' professional commitment and perceived organizational justice, developing culturally-adapted questionnaires for Iranian nurses is recommended. Moreover, as our participants might have avoided sharing their actual opinions due to perceived negative consequences of filling out the study questionnaires, qualitative studies are needed for in-depth exploration of their experiences. Besides, our literature review yielded no study on the correlation of nurses' professional commitment and organizational justice and hence, this study is probably the first in its kind in this area. Replicating this study in other clinical settings located in different cities of Iran is recommended for evaluating the correlation of professional commitment and organizational justice with nurses' other professional characteristics.

Acknowledgement

This study emanated from a research project approved by Birjand University of Medical Sciences, Birjand, Iran, with the approval code of 32.93. We wish to thank the Research and Technology Council of that university and the nurses of Valiasr and Imam Reza Hospitals who participated in this study.

References

1. Jafaragae F, Parvizy S, Mehrdad N, Rafii F. Concept analysis of professional commitment in Iranian nurses. *Iran J Nurs Midwifery Res.* 2012; 17(7): 427-9.
2. Lu KY, Chang LC, Wu HL. Relationships between professional commitment, job satisfaction, and work stress in public health nurses in Taiwan. *J Prof Nurs.* 2007; 23(2): 110-6.
3. Teng CI, Dai YT, Lotus Shyu YI, Wong MK, Chu TL, Tsai YH. Professional commitment, patient safety, and patient perceived care quality. *J Nurs Scholarsh.* 2009; 41(3): 301-9.
4. Honyenuga BQ, Adzoyi, PN. Professional commitment of nurses in ghana: the case of the volta region. *Asia Pacific Journal of Business and Management.* 2012; 3(1): 12-27.
5. Teng CI, Lotus Shyu YI, Chang HY. Moderating effects of professional commitment on hospital nurses in Taiwan. *J Prof Nurs.* 2007; 23(1): 47-54.
6. Gould D, Fontenla M. Commitment to nursing: results of a qualitative interview study. *J Nursi Manag.* 2006; 14(3): 213-21.
7. Nogueras DJ. Occupational commitment, education, and experience as a predictor of intent to leave the nursing profession. *Nurs Econ.* 2006; 24(2): 86-93, 55.
8. Moradi M, Khatooni M, Jahani Hashemi H, Zeighami R, Sheikh M. Relationship Between Professional Commitment And Job Satisfaction in Qazvin's Pubic Educational Hospital Nurses. *Medical Ethics.* 2013; 7(24): 55-78. [Persian]
9. Leow KL, Khong KW. Organizational commitment: The study of organizational justice and leader-member exchange (LMX) among auditors in Malaysia. *International Journal of Business and Information (IJB I).* 2009; 4(2): 162-98.
10. Sjahrudin H, Sudiro AA. Organizational Justice, Organizational Commitment and Trust in Manager as predictor of Organizational Citizenship Behavior. *Interdisciplinary Journal of Contemporary Research In Business (IJCRB).* 2013; 4(12): 133-41.
11. Zarifi F, Yoosefi B, Sadeghi Borojerdi S. The Relationship between Organizational Justice and Job Involvement in Employees of Physical Education Organization of Islamic Republic of Iran. *Journal of Sport Management.* 2013; 4(15): 157-74. [Persian]
12. Hatam N, Fardid M, Kavosi Z. Perceptions of Organizational Justice Among Nurses Working in University Hospitals of Shiraz: A Comparison Between General and Specialty Settings. *Nurs Midwifery Stud.* 2013; 2(2): 77-82.
13. Mortazavi S, Kargozar N. Study of the Relationship between Organizational Justice, Job Satisfaction, and Affective Commitment on Customer Oriented Behavior of Nurses of Imam Reza Hospital, Mashhad, Iran. *The scientific Journal Of Zanzan university of medical sciences.* 2012; 20(80): 84-97. [Persian]
14. Javadi M, Karimi S, Raiesi A, Yaghoubi M, Shams A, Kadkhodaie M. Organizational justice and responsiveness in selected private and public hospitals of Isfahan, Iran. *Journal of school of public health and institute of public health research.* 2012; 9(4): 11-20. [Persian]
15. Nazari K, Savar N, Emami M, Saiedi M, Soltani HA. Relationship between Organizational Justice and Professional Commitment of Staff (Case Study in Public Organization in Kermanshah). *J Basic Appl Sci Res.* 2012; 2(8): 7813-20.
16. Lin CJ, Wang HC, Li TC, Huang LC. Reliability and Validity of Nurses job satisfaction scale and nurses professional commitment. *Mid-Taiwan Journal of Medicine.* 2007; 12(2): 65-75.
17. Niehoff BP, Moorman RH. Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Acad Manag J.* 1993; 36(3): 527-56.
18. Devonish D, Greenidge D. The Effect of Organizational Justice on Contextual Performance, Counterproductive Work Behaviors, and Task Performance: Investigating the moderating role of ability based emotional intelligence. *Int J Select Assess.* 2010; 18(1): 75-86.
19. Malmir M, Esfahani MJ, Emami M. An investigation of relation between organizational justice and professional commitment of staff: A case study of public organization in Kermanshah. *Management Science Letters.* 2013; 3(5): 1333-8.
20. Gillet N, Fouquereau E, Bonnaud-Antignac A, Mokoukolo R, Colombat P. The mediating role of organizational justice in the relationship between transformational leadership and nurses' quality of work life: A cross-sectional questionnaire survey. *Int J Nurs Stud.* 2013; 50(10): 1359-67.