

Evaluation of the relationship between leadership style of operating room head nurses and job satisfaction of operating room technologists

Neda Rashidi¹, Fardin Amiri^{2*}, Sedigheh Hanani³, Mahboobeh Rasouli⁴

¹ Master Student of Operating Room, Faculty of Para-medicine, Iran University of Medical Sciences, Iran, ² Ph.D, Assistant Professor of Nursing, Department of Operating Room, School of Allied Medical Sciences, Iran University of Medical Sciences, Tehran, Iran, ³ Instructor of Nursing Education, Department of Operating Room, School of Allied Medical Sciences, Iran University of Medical Sciences, Tehran, Iran. ⁴ Department of Biostatistics, Public Health Faculty, Iran University of Medical Sciences, Iran

Correspondence: Fardin Amiri, Ph.D, Assistant Professor of Nursing, Department of Operating Room, School of Allied Medical Sciences, Iran University of Medical Sciences, Tehran, Iran. E- mail: Amiri.fa@iums.ac.ir

ABSTRACT

Introduction & Objective: Hospital as the center of health system requires an effective leadership style and appropriate strategy to enhance the nurses' job satisfaction and patients' satisfaction to achieve its primary goals. This study was conducted to evaluate the relationship between the leadership style of the operating room head nurses and the job satisfaction of operating room technologists in the educational and medical hospitals affiliated to Iran University of Medical Sciences in 2017. **Methodology:** This cross-sectional study was conducted in 2017. The research population included all operating room technologists working in educational-medical hospitals affiliated to Iran University of Medical Sciences. The research sample included 220 students selected randomly from each hospital. Three standard questionnaires, including demographic characteristics questionnaire, multi-factor leadership style questionnaire (MLQ) and Minnesota job satisfaction questionnaire (MSQ) were used to collect data. Data were analyzed using Pearson correlation test. **Results:** The results revealed that the dominant leadership style of the operating room head nurses was transformational (65.5%), followed by task-oriented (27.7%), and non-interventional styles (6%). The job satisfaction of majority (95%) of operating room technologists was at the moderate level. Based on the results, there was a significant difference between the transformational leadership style and job satisfaction ($p = 0.001$, $r = 0.40$), there was a significant between the task-oriented leadership style and job satisfaction ($p = 0.001$, $r = 0.47$), and there was a significant relationship between non-interventional leadership style and job satisfaction ($r = 0.40$, $p = 0.000$). **Conclusion:** As transformational, task-oriented, and non-interventional leadership styles were associated with job satisfaction of the operating room technologists, the head nurses are recommended to use combination of three types of leadership style.

Keywords: Leadership style, job satisfaction, operation room head nurses, operating room technologist

Introduction

Management in health care organizations is in fact the coordination of material and human resources to achieve organizational goals. It involves four basic functions including

planning, organization, leadership and control^[1]. In this regard, leadership is one of the most basic and key elements of management, which has significant impact on the productivity of health care organizations' staff^[2]. Many experts argue that the only factor making difference between successful and unsuccessful organizations is dynamic and effective leadership. Leadership style of managers reflects the way of their interaction with staff. In health care organizations, providing desired health care services and improving the hospital processes is essential for involvement of all human resources and providing continuous, desired, and effective services to them depends on group work and leadership style of managers^[3].

Among the hospital wards, operating room is one of the most vital wards and leadership style of the operating room head

Access this article online

Website: www.japer.in

E-ISSN: 2249-3379

How to cite this article: Neda Rashidi, Fardin Amiri, Sedigheh Hanani, Mahboobeh Rasouli. Evaluation of the relationship between leadership style of operating room head nurses and job satisfaction of operating room technologists. *J Adv Pharm Edu Res* 2019;9(S2):179-185.

Source of Support: Nil, Conflict of Interest: None declared.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

nurse plays major role in staff satisfaction and their self-efficacy. The operating room is one of the most important wards of a hospital, and the operating room as the heart of the hospital plays the most important role in improving the quality and efficiency of the hospital, since the highest expenditures are spent in this ward, while the highest income of hospital is gained from this ward of hospital^[4]. The operating room is in fact one of the most expensive wards of the hospital and accounts for about 25% of the cost of a hospital^[5]. As nurses are one of the most important groups of care providers, their efforts to provide safe and high-quality care have a key role in promoting health and mitigating the suffering of patients / clients. Hence, paying attention to their job satisfaction should always be considered by hospital managers.

In the operating room, the head nurse serves as the official representative of the ward to coordinate and increase productivity of the operating room, and she or he can select different styles to lead the medical staff^[6]. One of the newest classifications of leadership styles based on personality traits is transformational, task-oriented and non-interventional styles, introduced by Bass & Avolio in 1995. In transformational leadership style, leaders and subordinates help each other achieve higher levels of motivation and ethics. These leaders pay special attention to creativity and transcendental ideas of justice, equality, freedom, and meet the goals of the organization in collaborative manner. It consists of four dimensions of idealized influence, individual considerations, mental stimulation and inspirational motivation^[7].

The leader with idealized influence shows self-sacrifice and shows his staff that they have a constructive role in the group^[8]. In the mental stimulation dimension, he forces the staff to think on problems differently and find solutions for it. In the inspirational motivation, he gives hope to staff and introduces a clear and achievable future for them and encourages individuals to raise their expectations and. In the individual considerations component, he pays more attention to individuals and gives authority for them and enhances their capabilities^[9, 10]. In the leadership style, the task-oriented leader tends to maintain the existing culture, policies and procedures of the organization, and there is no cooperative relationship between the leader and the subordinate^[11].

Bass considers the task-oriented leadership in three dimensions of contingent rewards, active exception-based management, passive exception-based management^[8, 12]. From his perspective, these leaders only pay good returns to good performance and determine the degree of achievement to the goals^[13]. In the dimension of management based on active exception, Bass argues that these leaders seek and control the deviations from standards and rules and, accordingly, they perform corrective actions^[13]. Leaders who act on based on passive exception-based management apply a corrective action only when their subordinates have not achieved the goals of organization. In other words, when take action that the standards and rules have not been observed^[14]. In the non-interventional leadership, which is the most passive style of

leadership, leader abandons his subordinates and avoids responsibilities and making decisions^[11].

Job satisfaction is one of the outcomes of leadership. Generally, it derives from one's attitude toward his or her job and refers to all positive tendencies or feelings that people have about their job^[15].

Job satisfaction represents one's positive or negative attitude towards his or her job and it is affected by several factors. Vang et al describe job satisfaction as a set of individuals' feeling to their job^[16]. A positive perception of the work status (for example, recognizing organizational justice and adapting to work) may lead to desirable variables such as job satisfaction. In fact, when staffs have a good understanding of their status workplace, they would more likely accept the organizational norms^[17]. Operating room nursing is one of the key and important jobs in healthcare settings, taking the responsibility of providing appropriate services to clients. Enhancing the job satisfaction can improve the quality of service received by patients and their satisfaction with health services. Based on studies conducted, for at least three reasons, managers should pay special attention to satisfaction of nurses. There is much evidence that dissatisfied nurses leave the organization and resign. Satisfied nurses have a better physical and mental health than the nurses who are dissatisfied. The job satisfaction affects not only the hospital, but also the private life of individuals^[18]. The International Development Association introduced evidence on the relationship between nurses' satisfaction, patient satisfaction, and loyalty and increase hospital income. In addition, nurses' satisfaction is strongly correlated with their commitment and loyalty, and both of these factors increase hospital productivity^[19].

Other studies have shown an effective relationship between nurses' satisfaction, patient satisfaction, productivity, and financial efficiency in a hospital. Dissatisfied nurses are less productive and have more absenteeism. The satisfied medical staff shows more productivity and innovation and loyalty. Increasing job satisfaction will enhance the morale of the medical staff, leading to increased productivity and satisfied medical staff will finally lead to retention of hospital clients^[20]. In general, the factors affecting satisfaction can be classified into three groups, including material factors, cultural factors, and factors related to the workplace. From another perspective, one of the factors affecting the satisfaction of the medical staff is their self-efficacy. It strongly affects the factors related to productivity and other desirable results, including commitment and satisfaction. Several studies have shown a close association between self-efficacy and job satisfaction^[21]. Thus, when the role of the medical staff is not considered, the probability of burnout and job turnover among the medical staff would increase^[22]. When the compatibility and match between the job and the personality is higher, job satisfaction would also higher, but when this compatibility and match is lower, it will cause several negative effects in the organization and the individual^[23]. The objective of this research was to evaluate the relationship between the leadership style of operating room head nurses and the job satisfaction of operating room

technologists in the educational-medical hospitals affiliated to Iran University of Medical Sciences.

Methodology

The current research is a cross-sectional type of study, conducted on operating room technologists of educational-medical hospitals affiliated to Iran University of Medical Sciences in 2017. The research population included all operating room technologists working in educational-medical hospitals affiliated to Iran University of Medical Sciences. The research inclusion criterion included having an employment history for more than 6 months and the exclusion criterion of study was the experience of head nursing in the operating room. The sample of study included 220 people who were selected by simple randomized sampling method proportional to each hospital. The tools used in this study were three questionnaires, including demographic characteristics questionnaire, multi-factor leadership style questionnaire (MLQ) and Minnesota job satisfaction questionnaire (MSQ). The questionnaires were given to the samples at the beginning of the work shift and they were completed and collected by them at the end of the same work shift. The first questionnaire included demographic characteristics of staffs such as age, gender, marital status, education, income, employment status, employment history, and type of work shift.

The range of answers to questions in the 5-option Likert spectrum (always = 5, often = 4, sometimes = 3, rarely = 2, never = 1), and the score of the questionnaire was between 180-0. The average score obtained from questions related to each type of leadership style is calculated and each style that obtains the highest average is considered to be the dominant leadership style of the head nurse. This questionnaire was validated in Iran and the Cronbach's alpha coefficient was reported to be 95% [24]. In the present study, the reliability of the questionnaire was reported using Cronbach's alpha coefficient of 0.88. The Bass multifactor leadership style questionnaire (MLQ) examines three task-oriented, transformational, and non-interventional leadership styles and has 36 questions. Transformational leadership style has 20 questions, task-oriented leadership style has 12 questions, and non-interventional leadership style has 4 questions. The mean score obtained from questions of each type of leadership style was calculated and each style with the highest mean was considered to be the dominant leadership style of the head nurse. This questionnaire was validated in Iran and its Cronbach's alpha coefficient was reported to be 95% [24]. In the present study, the reliability of the questionnaire was reported 0.88 using Cronbach's alpha coefficient.

The Minnesota Job Satisfaction Questionnaire (1967) is a well-known tool used to measure job satisfaction. It measures job satisfaction in three concepts of outer satisfaction, inner satisfaction, and overall satisfaction. This questionnaire includes 20 questions, in which inner satisfaction is assessed by questions 1 to 12, the outer satisfaction is assessed by questions 13 to 18,

and the overall satisfaction is assessed by questions 1-20. The questions are scored on 5-option Likert scale (I am strongly dissatisfied= 1, I am dissatisfied = 2, no idea = 3, I am satisfied = 4, I am strongly satisfied =5), and the range of scores in the questionnaire is from 20 to 100. The 12-items inner satisfaction is scored between 12 and 60 and the 6-item outer satisfaction scale is scored between 6 and 30. The total score is 75 and the higher score represents high level of satisfaction, and score 25 and lower represents a low level of satisfaction. The scores between 26 and 74 represent the moderate level of job satisfaction. This questionnaire has been validated in Iran and its Cronbach's alpha coefficient has been reported 0.80. In the present study, Cronbach's alpha coefficient was reported 0.88 to determine the reliability. Descriptive statistics and Pearson correlation tests were used to analyze the data. Analysis was performed using SPSS software.

Results

The operating room technologists participating in the study were 220 people, which 69.7% of them were in the age range of 21-30 years. Most of the participants (87.4%) were female, and 75.6% had a bachelor level of education. In addition, 58.8% of them were married and employment status of 27.0% of them was human resource project, and their employment history was between 1 and 10 years (Table 1).

Table 1: Frequency and percentage of samples in the gender variable

variable	type	frequency	percentage
gender	male	28	6.12
	female	192	4.87
	30-21	153	7.69
Age difference	40-31	52	5.23
	50-41	15	7.6
	associate	44	2.20
education	bachelor	166	6.75
	master	9	2.4
Marital status	Single	91	2.41
	married	129	8.58
	formal	55	2.25
Employment status	Treaty	17	7/6
	Contractual	35	16
	project	61	7.27
	Corporal	52	5.23
Work shift	fixed	28	6.12
	Rotatory	192	4.87
Employment	1-10 years	176	8.79
	11-20 years	37	8.16
	21-30 years	7	4.3
	Total	220	100

The mean score of transformational leadership style was 3.9 ± 0.49 , the mean score of task-oriented leadership style was 2.94 ± 0.53 , and mean score of non-interventional style was 2.90 ± 0.63 , and dominant leadership (65.5%) of the operating room head nurses was transformational (Table 2).

Table 2: Frequency and percentage of head nurses in terms of type of leadership style

type of leadership style	f	%
transformational	144	65.5
Task-oriented	61	27.7
Indifference	15	6.7
Total	220	100

Based on classification of job satisfaction, 95% of the samples had a moderate job satisfaction and 5% had high job satisfaction. The classification criterion is Minnesota Job Satisfaction Questionnaire (Table 3).

Table 3: Frequency and percentage of technologists in terms of job satisfaction

Level of job satisfaction	f	%
Low job satisfaction	0	0
Moderate job satisfaction	209	95
High job satisfaction	11	5
Total	220	100

Based on the Pearson correlation test, there was a significant correlation between transformational, task-oriented and non-intervention leadership styles and job satisfaction. The correlation of transformational leadership style was more than that of other styles (Table 4).

Determining the relationship between the mean scores of transformational, task-oriented and non-interventional leadership styles mean score of job satisfaction (Table 4)

Table 4:

Components	Correlation and significance	Transformational leadership style	task-oriented leadership style	non-interventional leadership style
Job satisfaction	r	0.406	0.476	407.0
	P Value	0.001	0.001	000.0

Discussion

Results revealed that the leadership style of most of the nurses (65.5%) was transformational. The results are in line with those of Bass et al [25], Asghari et al [26], Norouzi [27]. The dominance of the transformational leadership style suggests that these leaders increase the needs and motivations of subordinate and followers and make significant changes in individuals, groups and organizations [28]. Transformational leaders create this feeling in the subordinates that they are viewed as human beings and help people see the issues and problems differently [29]. Based on transformational leadership theory, a leader needs to use internal actors to perform the tasks necessary for the organization to achieve its desired goals [30]. The difference between the results of this study and those of other studies on the dominant leadership style can be justified given the different research environments in these studies. The results revealed that most operating room technologists (95%) had moderate job satisfaction. The results of Shahbazi and Salimi research

among nurses in Yazd hospitals showed that the majority of the nurses had moderate job satisfaction (83.26%) [31]. Results of research conducted by Hossein Mahmoud et al in Ardebil showed that most of the nurses had moderate and high job satisfaction [32].

The research conducted by Wyatt et al in the United States also showed that 30.3% of nurses had a high level of satisfaction, 57.7% had good level of satisfaction, 10.6% had moderate level of satisfaction, and 1.4% had poor level of satisfaction [33]. These results are consistent with those of research conducted by Afkhami [34], Khosrowzadeh [35], Sadeghi et al [36], Golbasi [37], Bingö and Karagozoglu [38], so that the level of job satisfaction among hospital staff was reported at moderate level in the mentioned studies. Although the results of these studies were not consistent with those of research conducted by Jafar Jalal [39], Mirza Beighi [40], Mogreb [41] and Nouri [42], since job satisfaction level in samples was reported at low level in the studies conducted by Jafar Jalal, Mogreb, and Mirza Beighi and high in research conducted by Nouri. Such different reports by different studies on job satisfaction indicate that job satisfaction varies from one healthcare center to another, and research findings cannot be easily generalized to other centers. In addition, job satisfaction varies depending on the social and environmental conditions, the facilities in the operating rooms, staff wages and bonuses, and their special attitudes.

Given the results of the research on moderate level of job satisfaction, the use of strategies by the authorities and nursing managers to increase the interest and motivation of technologists, including the elimination of the conditions of the working setting, the creation of diversity in the job, appreciation and timely encouragement of them can lead to their job satisfaction and prevents lethargy in providing care for patients. The results revealed a significant relationship between the transformational leadership style and job satisfaction of the operating room technologists ($p = 0.001$), and the transformational leadership style led to higher job satisfaction. The results of research conducted by Cetin et al showed a positive and significant relationship between transformational leadership style and job satisfaction ($p = .000$, $r = 0.54$) [43]. In addition, Gorbanian et al reported that transformational leadership styles had a positive and significant association with job satisfaction ($r = 0.79$, $p < 0.001$) [44]. Breaux also examined the relationship between transformational leadership style and job satisfaction on 154 operating room technologists in the United States and found a significant relationship between transformational leadership and job satisfaction ($p < 0.05$) [45]. In the research conducted by Yang [46], Hu [47], Froelich [48], a significant relationship was found between transformational leadership style and job satisfaction.

In explaining the significance of the transformational leadership style, it can be stated that head nurses with such a style gives freedom and authority to their staff and monitor them indirectly, respect their thoughts and opinions, and strengthen their morale. For this reason, they are confirmed by their staffs, leading to increased job satisfaction of head nurses. Based on the results, there is a significant relationship between task-oriented

leadership style and job satisfaction ($p = 0.001$). In his study, Handsome concluded that job satisfaction increased with the use of task-oriented leadership style ($p < 0.01$, $r = 0.63$)^[49]. These results are in line with those of research conducted by Long. Based on his studies, nurses who worked with non-interventional leadership style had the lowest level of job satisfaction, and nurses who worked with task-oriented leadership style had the highest level of satisfaction^[50]. In general, the significant and positive relationship between task-oriented leadership and job satisfaction has been confirmed in many studies^[51, 52]. In explaining the significance of task-oriented leadership style, it can be stated that nurses with task-oriented leadership style feel that they play effective role in achieving the goals and values of the organization. They also transfer such feeling to their subordinates, leading to increased job satisfaction. In other explanation, it can be stated that while people with a task-oriented leadership style control the subordinates, they meet their needs to some extent, leading to obtaining the trust of others. Thus, these characteristics increase job satisfaction.

Conclusion

In the present study, the majority of operating room head nurses had transformational leadership style and job satisfaction level of the operating room technologists was moderate and a significant relationship was found between leadership style and job satisfaction. These results suggest that each organization requires unique leadership style, and staffs undoubtedly know that their success would give more efficiency for their organisation and higher satisfaction would lead to increased self-efficacy and creativity toward thin achieving the goals of the organization, in a way accepted by the community. As work in the operating room, unlike other hospital wards, is hard and associated with high burnout, it is recommended that combination of three types of leadership style to be used by operating room technologists to use the advantages of all three types of leadership styles. They are also recommended to strengthen the effective leadership styles among managers at different levels by various ways such as training.

Acknowledgement
This paper was derived from a master thesis with the ethics code of IR.IUMS.REC1396.9513101002. We thereby appreciate all people who sincerely cooperated with us in conducting this research.

References

- Lambert V, Nugent K, editors. Leadership style for facilitating the integration of culturally appropriate health care. Seminars for nurse managers; 1999.
- Thite M. Leadership styles in information technology projects. International Journal of Project Management. 2000;18(4):235-41.
- Sorrentino EA, Nalli B, Schriesheim C. The effect of head nurse behaviors on nurse job satisfaction and performance. Journal of Healthcare Management. 1992;37(1):103.
- Cima RR, Brown MJ, Hebl JR, Moore R, Rogers JC, Kollengode A, et al. Use of lean and six sigma methodology to improve operating room efficiency in a high-volume tertiary-care academic medical center. Journal of the American College of Surgeons. 2011;213(1):83-92.
- Berry M, Berry-Stölzle T, Schleppers A. Operating room management and operating room productivity: the case of Germany. Health Care Management Science. 2008;11(3):228-39.
- Mohammad Mosadegh Rad A, Hossein Yarmohammadian M. A study of relationship between managers' leadership style and employees' job satisfaction. Leadership in Health Services. 2006;19(2):11-28.
- Judge TA, Piccolo RF. Transformational and transactional leadership: a meta-analytic test of their relative validity. Journal of applied psychology. 2004;89(5):755.
- Cetin MO, Kinik FSF. An analysis of academic leadership behavior from the perspective of transformational leadership. Procedia-Social and Behavioral Sciences. 2015;207:519-27.
- Verma SP, Krishnan VR. Transformational leadership and follower's organizational commitment: role of leader's gender. NMIMS Management Review. 2013;23:91-112.
- Sadeghi A, Pihie ZAL. Transformational leadership and its predictive effects on leadership effectiveness. International Journal of Business and Social Science. 2012;3(7).
- Cohen F, Solomon S, Maxfield M, Pyszczynski T, Greenberg J. Fatal attraction: The effects of mortality salience on evaluations of charismatic, task-oriented, and relationship-oriented leaders. Psychological science. 2004;15(12):846-51.
- Burns JM. leadership. NY. Harper & Row; 1978.
- Bass BM, Avolio BJ. Full range leadership development: Manual for the Multifactor Leadership Questionnaire: Mind Garden Palo Alto, CA; 1997.
- Hutchinson M, Jackson D. Transformational leadership in nursing: towards a more critical interpretation. Nursing inquiry. 2013;20(1):11-22.
- Liu YE, While A, Li SJ, Ye WQ. Job satisfaction and work related variables in Chinese cardiac critical care nurses. Journal of nursing management. 2015;23(4):487-97.
- Weng HC, Hung CM, Liu YT, Cheng YJ, Yen CY, Chang CC, et al. Associations between emotional intelligence and doctor burnout, job satisfaction and patient satisfaction. Medical education. 2011;45(8):835-42.
- Sheykhabani SH, Beshlideh K. Interaction of Environment and Personality in Predicting Job Satisfaction of Iranian Employees. Procedia-Social and Behavioral Sciences. 2011;15:4089-92.

18. Callea A, Urbini F, Ingusci E, Chirumbolo A. The relationship between contract type and job satisfaction in a mediated moderation model: The role of job insecurity and psychological contract violation. *Economic and Industrial Democracy*. 2016;37(2):399-420.
19. Kaura V, Durga Prasad CS, Sharma S. Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction. *International Journal of Bank Marketing*. 2015;33(4):404-22.
20. Grigoroudis E, Tsitsiridi E, Zopounidis C. Linking customer satisfaction, employee appraisal, and business performance: an evaluation methodology in the banking sector. *Annals of Operations Research*. 2013;205(1):5-27.
21. Lee MS-M, Lee M-B, Liao S-C, Chiang F-T. Relationship between mental health and job satisfaction among employees in a medical center department of laboratory medicine. *Journal of the Formosan Medical Association*. 2009;108(2):146-54.
22. Arndt A, Arnold TJ, Landry TD. The effects of polychronic-orientation upon retail employee satisfaction and turnover. *Journal of Retailing*. 2006;82(4):319-30.
23. Peltokorpi V, Froese F. Expatriate personality and cultural fit: The moderating role of host country context on job satisfaction. *International Business Review*. 2014;23(1):293-302.
24. Mogali, D, Designing Transformational Leadership Model in Iranian Administrative Organizations. *Management Knowledge Quarterly Journal* (not published). 2003; 16 (2).
25. Bass BM, Avolio BJ. Transformational leadership and organizational culture. *The International Journal of Public Administration*. 1994;17(3-4):541-54.
26. Asgari A, Silong AD, Ahmad A, Samah BA. The relationship between transformational leadership behaviors, organizational justice, leader-member exchange, perceived organizational support, trust in management and organizational citizenship behaviors. *European Journal of Scientific Research*. 2008;23(2):227-42.
27. Noruzy A, Dalfard VM, Azhdari B, Nazari-Shirkouhi S, Rezazadeh A. Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*. 2013;64(5-8):1073-85.
28. Gardner L, Stough C. Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership & organization development journal*. 2002;23(2):68-78.
29. Landrum NE, Howell JP, Paris L. Leadership for strategic change. *Leadership & Organization Development Journal*. 2000;21(3):150-6.
30. Bass BM, Riggio RE. *Transformational leadership*: Psychology Press; 2006.
31. Shahbazi L, Salimi T. Job satisfaction of nurses in hospitals in the provinces of Yazd. *Journal of Shaeed Sdoughi University of Medical Sciences Yazd*. 2002;10(3):70.
32. Hussein Mahmood A, Dehqan Nayeri N, Hajibabae H. Evaluation of job satisfaction and burnout among nurses working in hospitals of Erbil, a city in Kurdistan region of Iraq, and the relationship between them during 2015-16: *Tehran University of Medical Sciences*; 2016.
33. Wyatt J, Harrison M. Certified pediatric nurses' perceptions of job satisfaction. *Pediatric Nursing*. 2010;36(4):205-8.
34. Afkhami A, Yazdani P, Kamali Z, Rastegar K, Falahti M, Dehgan Z, et al. Relationship between job satisfaction and marital satisfaction in Welfare Organization of Yazd City. *J Toloo behdasht*. 2013;12(1):119-32.
35. Khosrozadeh M, Hosseini M, Kashaninia Z, SEDGHI GN, Amini M. The correlation between organizational justice and job satisfaction among nurses. 2016.
36. Sadeghi A, Goharloo Arkawaz A, Cheraghi F, Moghimbeigi A. Relationship between head nurses' servant leadership style and nurses' job satisfaction. *Quarterly Journal of Nursing Management*. 2015;4(1):28-38.
37. Golbasi Z, Kelleci M, Dogan S. Relationships between coping strategies, individual characteristics and job satisfaction in a sample of hospital nurses: cross-sectional questionnaire survey. *International journal of nursing studies*. 2008;45(12):1800-6.
38. Karagozoglul S, Bingöl N. Sleep quality and job satisfaction of Turkish nurses. *Nursing Outlook*. 2008;56(6):298-307. e3.
39. Jafar Jalal E, Joolae S, Hajibabae F, Bahrani N. Evaluating the relationship between nurses' occupational satisfaction and patients' satisfaction with nursing service. *Iranian Journal of Nursing Research*. 2015;10(1):25-34.
40. Mirzabeigi G, Salemi S, Sanjari M, Shirazi F, Heidari S, Maleki S. Job satisfaction among Iranian nurses. *Journal of hayat*. 2009;15(1):49-59.
41. Mogharab M, Madarshahian F, ALI AN, Rezaei N, Mohammadi A. Investigating job satisfaction among nurses in teaching hospitals of Birjand in 2004. 2006.
42. Nouri A, Sabahi P, Salahian A, Samim R. Investigation of relationship between job satisfaction and perceived organizational justice with organizational citizenship behavior: Demographic variables. *Contemp Psychol*. 2012;7(1):49-60.
43. Çetin M, Karabay ME, Efe MN. The effects of leadership styles and the communication competency of bank managers on the employee's job satisfaction: the case of Turkish banks. *Procedia-Social and Behavioral Sciences*. 2012;58:227-35.
44. Ghorbanian A, Bahadori M, Nejati M. The relationship between managers' leadership styles and emergency

- medical technicians' job satisfaction. *The Australasian medical journal*. 2012;5(1):1.
45. Breaux PJ. An investigation of the relationships between Emergency Medical Technician's ratings of Emergency Medical Service (EMS) director's transformational leadership and job satisfaction in rural EMS environments: Our Lady of the Lake University; 2009.
46. Yang Y-F. An investigation of group interaction functioning stimulated by transformational leadership on employee intrinsic and extrinsic job satisfaction: An extension of the resource-based theory perspective. *Social Behavior and Personality: an international journal*. 2009;37(9):1259-77.
47. Hu Y. Transformational leadership of sales managers and job satisfaction of sales associates in the fast moving consumer goods industry in Taiwan (China). 2005.
48. Froelich SD. The impact of transformational leadership behaviors on nurses' job satisfaction and organizational commitment. 1996.
49. Handsome JD. The relationship between leadership style and job satisfaction: Walden University; 2009.
50. Long JD. Factors that influence nurse attrition: An analysis of the relationship between supervisor leadership style and subordinate job satisfaction. 2004.
51. Medley F, Larochelle DR. Transformational leadership and job satisfaction. *Nursing management*. 1995;26(9):64JJ.
52. Walumbwa FO, Orwa B, Wang P, Lawler JJ. Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and US financial firms. *Human resource development quarterly*. 2005;16(2):235-56.