

Research Paper

The Relationship Between Organizational Justice and Job Burnout in Pre-hospital Emergency Nurses



Zhila Yousefi¹, Hossein Feizollahzadeh^{2*}, Esmail Khodadadi³

1. Student Research Committee, Tabriz University of Medical Sciences, Tabriz, Iran.

2. Department of Medical Surgical Nursing, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran.

3. Iranian Social Security Organization, Urmia, Iran.



Citation Yousefi Z, Feizollahzadeh H, Khodadadi E. The Relationship Between Organizational Justice and Job Burnout in Pre-hospital Emergency Nurses. *Health in Emergencies and Disasters Quarterly*. 2023; 8(4):259-268. <http://dx.doi.org/10.32598/hdq.8.4.481.1>

<http://dx.doi.org/10.32598/hdq.8.4.481.1>



Article info:

Received: 22 May 2022

Accepted: 13 Sep 2022

Available Online: 01 Jul 2023

ABSTRACT

Background: Personnel working in emergency departments are exposed to a lot of burnout due to their nature and occupational factors; therefore, it is very important to pay attention to the factors that cause and aggravate burnout. In the meantime, the existence of organizational justice is an important principle in employee efficiency that can also affect the quality of employee services. Therefore, this study was conducted to investigate the relationship between organizational justice and burnout in emergency department personnel of Tabriz hospitals in 2019.

Materials and Methods: The present study is a descriptive cross-sectional correlational study that was performed on 140 pre-hospital emergency personnel in Tabriz, Iran in 2021. The sampling method was census. Data were collected using a three-part questionnaire including participants' personal demographic information form, Niehoff and Moorman organizational justice questionnaire, and Maslach burnout inventory (MBI). For data analysis, SPSS software, version 22 was used through descriptive statistics and analytical statistics. The significance level was considered at 0.05.

Results: The results showed that the level of organizational justice and job burnout of participants was in the moderate range. Also, the results of the correlation statistical test showed that there was a significant reverse relationship between organizational justice and job burnout of pre-hospital emergency personnel ($P < 0.05$).

Conclusion: The findings of this study showed that organizational justice is not very desirable from the perspective of pre-hospital emergency personnel and their sense of burnout can be largely related to this situation. Therefore, based on the findings of the present study, it is suggested that managers and officials of pre-hospital medical centers and emergencies by adopting new administrative policies and creating a favorable organizational climate based on human dignity can take positive steps to improve organizational justice and reduce job burnout.

Keywords:

Organizational justice,
Job burnout, Pre-hospital
emergency, Nurses

* Corresponding Author:

Hossein Feizollahzadeh, Associate Professor.

Address: Department of Medical Surgical Nursing, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran.

E-mail: feizollahzadehh@tbzmed.ac.ir

1. Introduction

Nowadays, medical emergencies and pre-hospital care are considered community-based health management system that plays a key role in the treatment of emergency patients and the transfer of patients to medical centers [1]. The main goal and focus of pre-hospital emergency activities is to prevent and reduce mortality and morbidity [2]. In general, the activities of this system include providing care by trained people at the scene of the accident, continuing to provide care in vehicles such as ambulances and helicopters, and transferring the person to medical centers designated by the emergency command center [3, 4]. In emergency cases, the pre-hospital emergency personnel play a leading role and provide pre-hospital treatment measures and services based on sound and independent clinical judgment, as well as skills in decision-making and prioritization through training [5]. Therefore, based on these activities and the scope of operations, the pre-hospital emergency provides quality care for patients through diagnosis, response, and timely and prompt action to emergencies and the ground for further treatment by providing for other sections. The pre-hospital emergency acts as a gateway for emergency measures in the emergency care spectrum [6]. Therefore, due to the importance of this part of patient care and treatment in reducing mortality and morbidity of diseases, many developed and developing countries have coherent and systematic plans to improve the provision of advanced services in hospitals. In addition, in Iran, the pre-hospital emergency system is more important due to the high incidence of traffic accidents [7].

Manpower is considered the main and most valuable asset of an organization, which provides the basis for the development, progress, and excellence of an organization. Thus, today, the human factor and its role as a strategic resource, designer, and implementer of organizational systems and processes, has a much higher status than in the past, and in organizations with high human performance, human resources are considered the most important asset [8]. Therefore, organizations strive to grow, prosper and provide the best services through healthy and capable human resources to achieve continuous improvement, efficiency, profitability, flexibility, and a privileged position in their field of activity. Regardless of manpower, service organizations such as pre-hospital emergencies are impossible to achieve maximum efficiency and provide the best quality of care [9, 10]. Paying attention to the physical and mental health of employees and their problems is as much a characteristic of a healthy organization as production and productivity

[11]. One of the problems that pre-hospital staff faces due to the nature of their work is job burnout which directly reduces the quality of treatment services. Job burnout is a common problem in pre-hospital emergency staff that has significantly affected the performance of these staff [12].

Although job burnout is not a mental disorder, it is the end result of unmanaged job stress which progresses slowly over time [13, 14]. Job burnout is one of the important and growing issues in the health profession that has been considered a job risk in recent years [15]. The concept of job burnout was used by Freudenberg in clinical psychology research in the mid-1970s to describe the opposite and unpleasant reaction to work, as well as to explain fatigue syndrome [16, 17]. Job burnout is associated with psychological stress. Stress arises from an imbalance between environmental demands and desires with the individual's ability to respond to them. As the demands of the environment increase and the individual's ability to respond to them decreases, psychological stress is created, which leads to a negative experience in the individual and job burnout [18, 19]. Burnout is a mental and physical syndrome and an emotional response to the constant stress in the employees of an organization that reduces the quality of services provided [20]. These reactions are more common in social and medical services professionals such as education and medicine, especially nurses and hospital staff [21-23]. Job burnout has external and internal causes. External causes include administrative activities, feelings of helplessness with heavy workloads, problematic clients, incurable patients, and repetitive tasks. Internal causes of job burnout also include unrealistic expectations and employee boredom about their job and work environment [24]. Studies show that nurses and health workers suffer from burnout more than other professions. In a study in the United States, the rate is four times higher than other professions [23, 25]. In the meantime, emergency medical personnel are faced with stressful environments such as places full of injuries, critically ill patients, etc. where it is very difficult to work [26, 27].

Job burnout in healthcare personnel has a set of emotional, attitudinal, behavioral, psychosomatic, and organizational symptoms that lead to a gradual decrease in internal energy along with emotional fatigue, depersonalization, and personal incompetence [28, 29]. These factors can be accompanied by symptoms including feeling unable to do things, decreased attention, apathy, decreased feelings of inadequacy, decreased interest, lack of attachment, reluctance to start work, inability to maintain work balance as well as anorexia, headache, nausea and sleepless [28, 30,

31]. Also, psychological fatigue caused by burnout can lead to irritability, low mood symptoms, increased intolerance, negative attitude and behavior, and feelings of hopelessness in people [16]. In addition, the role of organizational factors in preventing or causing burnout is significant. One of these factors that play a significant role is organizational justice. A positive attitude towards the work, management, unit, or the whole organization in which the employees work leads to better performance and as a result to better achieve the predetermined goals of an organization [32]. The attitude of individuals is influenced by the perceptions of employees in an organization towards the degree of justice in the organization [33].

Organizational justice refers to people's perceptions of fair treatment in the workplace, which can be considered part of social justice. Employees' perception of injustice has a devastating effect on the spirit of collective work because it overshadows the diligence and motivation of employees [34]. The processes of justice and how to deal with people in the organization may also affect the beliefs, feelings, and attitudes of people [35]. Fair treatment of employees by the organization, generally leads to their higher commitment to the organization and their greater job satisfaction. On the other hand, people who feel unfair are more likely to leave the organization or exhibit low levels of organizational commitment. They may even start behaving abnormally, such as seeking revenge, or become ambiguous and conflict roles. Also, refusal of effort, underemployment, and poor behaviors in the workplace in their acute form, resignation from work can be among the consequences of injustice in organizations [36-38].

Since the employees of the health care system are considered the main capital to achieve the organizational goals and the basis of providing health services to the community, any change in their mental and motivational state will directly affect their work efficiency. Therefore, the issue of organizational justice in the health system of the country can be more important. Therefore, the study of organizational justice and its relationship with concepts such as job burnout has a direct impact on the treatment and care of patients in the emergency department.

Considering that various studies have confirmed that the existence of organizational justice is an important principle in the efficiency of employees and considering that the relationship between organizational justice and job burnout among pre-hospital emergency personnel has not been done, this study was conducted to investigate the relationship between organizational justice and job burnout in pre-hospital emergency personnel in Tabriz in 2019.

2. Materials and Methods

Study design and participants

The present study is a descriptive cross-sectional correlational study that was performed on 140 hospital emergency nurses in pre-hospital emergency bases in Tabriz in 2019. Eligible samples were selected using a census sampling method. The sample size was equal to the total size of the target population ($n=161$), and 21 people were excluded from the study due to a lack of cooperation in completing the questionnaires. Finally, data on 140 personnel were analyzed.

The inclusion criteria were work experience of at least six months, having no acute family problems such as the death of a spouse or loved one, and divorce leading to impaired job performance. Lack of mental disorders such as depression, anxiety, and stress were the symptoms of trauma and staff satisfaction to participate in the study. Exclusion criteria included the incompleteness of the questionnaires.

Study instruments

A three-part questionnaire of nurses' personal and social characteristics form, organizational justice, and job burnout questionnaires were used to collect data.

A) Form of personal and social characteristics of nurses: This form includes gender, age, marital status, academic level, type of shift, work experience, and type of employment.

B) Organizational justice questionnaire: In this study, organizational justice was measured using the organizational justice questionnaire. This questionnaire was developed by Niehoff and Moorman in 1993 [39] and was prepared by Naami and Shokrkan (2004) in Iran to assess the status of justice in organizations [40]. The organizational justice questionnaire consists of 20 questions that are in the form of three subscales of distributive justice (5 items), procedural justice (6 items), and interactive justice (9 items). The items of this questionnaire are graded based on the 5-point Likert scale (strongly disagree=1 to strongly agree=5). The minimum and maximum score of this questionnaire is between 20 and 100. A higher score indicates more organizational justice. Golparvar et al. (2007) examined the face and content validity of this questionnaire and it was confirmed [41]. Noami and Shokrkan (2004) also confirmed the construct validity of the organizational justice questionnaire. They also obtained the reliability of this questionnaire

using Cronbach's α coefficient ($\alpha=0.85$) [40]. In the study of Rohollahi and colleagues (2016), the reliability of this questionnaire was confirmed and Cronbach's α was 0.85 [42]. In the present study, the reliability of this questionnaire was recalculated using Cronbach's α coefficient ($\alpha=0.89$).

C) Job burnout questionnaire: In this study, the rate of job burnout was measured using Maslach burnout inventory (MBI). This questionnaire was developed by Maslach et al. in 1986 as a new estimate of the phenomenon of stress [43]. The job burnout questionnaire includes 22 items and three subscales of emotional exhaustion (9 items), depersonalization (5 items), and personal accomplishment (8 items). This questionnaire is graded based on a 5-point Likert scale from zero to five (very low=1 to very high=5). Scores range from 22 to 110. A higher score indicates more job burnout. The validity of the job burnout questionnaire has been confirmed by Momeni et al. [44]. Also, Ghaniyoun et al. (2016) have confirmed the face and content validity of this questionnaire [45]. To evaluate the validity of the questionnaires in the present study, both questionnaires were distributed to 10 faculties in [Tabriz University of Medical Sciences](#) and they were finally approved. In the study by Rohollahi et al. (2016), the reliability coefficient of the job burnout questionnaire was 0.83 [42]. In the present study, the

reliability of this questionnaire was recalculated using Cronbach's α coefficient ($\alpha=0.92$).

Data analysis

The SPSS software, version 22 was used for data analysis. Data were analyzed using two sections: Descriptive statistics and inferential statistics. In the descriptive statistics section, frequency, percentage, Mean \pm SD were used to describe the data. In the inferential statistics section, to check the relationship between the variables, after checking the normality of the data, the Pearson correlation coefficient, independent t-test, and ANOVA were used. A $P<0.05$ was considered statistically significant.

3. Results

The results of the study showed that all participants were male (100%) and most of them were married (65.7%) and had a bachelor's degree (65%). Their mean age was 35.36 ± 8.01 and their mean work experience was 10.15 ± 6.52 (Table 1).

Also, the results showed that the mean total score of organizational justice of pre-hospital emergency personnel is in the average range and the mean total score of their job burnout is in the medium to high range (Tables 2 and 3).

Table 1. Demographic characteristics of participants in the study

Variables		No. (%) / Mean \pm SD
Gender	Male	140(100)
	Female	-
Marital status	Married	92(65.7)
	Single	48(34.3)
Academic level	Associate degree	38(27.1)
	Bachelor	96(65)
	Master degree	6(4.3)
Location	Native	97(69.3)
	Non-native	43(30.7)
Employment status	Official	72(51.4)
	Contractual	68(48.6)
Age (y)		35.36 \pm 8.01
Work history (y)		10.15 \pm 6.52

Table 2. Organizational justice and its dimensions in pre-hospital emergency personnel

Organizational Justice Dimensions	Mean±SD	Scores Range
Distributive justice	18.86±4.5	5-25
Procedural justice	21.30±5.7	6-30
Interactional justice	31.86±8.69	9-45
Total score	72.03±17.03	20-100

Health in Emergencies and Disasters Quarterly

Pearson correlation test also showed that there is a significant and inverse correlation between job burnout and organizational justice ($P<0.05$). Therefore, the more employees perceive organizational justice, the less job burnout they have (Table 4).

4. Discussion

The findings of our study showed that the average score of organizational justice of personnel was moderate (72.03 ± 17.03). In this regard, the results of the study of Gholampour et al. (2018) showed that the level of organizational justice from the perspective of nurses was moderate [46], which is consistent with the results of our study. However, the results of the study by Hassani et al. (2012) in Iran showed that the average score of organizational justice of hospital staff was low and was lower than the present study [47], which is not consistent with the results of our study. The reason for this can be due to differences in the research environment and the research community. Also, in a study conducted by Janati et al.

(2017) in the hospitals of Tabriz, the level of organizational justice of nursing, laboratory, and radiology staff was examined and their organizational justice score was moderate [48], which is consistent with the results of our study.

The results of the present study showed that the staff job burnout score was moderate to high. In this regard, the results of the study by Ren et al. (2021) in China showed that the rate of job burnout among nurses is moderate to low [49], which is not consistent with the results of our study. Also, in a study conducted by Gökçen et al. (2013) in Turkey on emergency medical personnel, the rate of job burnout in all its dimensions was lower than the present study [50]. In addition, in another study conducted by Tarcan et al. (2017) in Turkey, the rate of job burnout and its dimensions were much lower than the present study [51]. Two studies conducted in Turkey show that the rate of job burnout in this country is low and in a better situation than the present study. This may be due to the provision of better facilities in this country, as

Table 3. Job burnout and its dimensions in pre-hospital emergency personnel

Job Burnout Dimensions	Mean±SD	Scores Range
Emotional exhaustion	29.54±6.70	9-45
Depersonalization	18.33±3.84	5-25
Personal accomplishment	27.89±3.62	8-40
Total score	75.77±11.09	22-110

Health in Emergencies and Disasters Quarterly

Table 4. Correlation between organizational justice and job burnout in pre-hospital emergency personnel

Variables	Job Burnout (75.77±11.09)	P
Organizational justice (72.03±17.03)	$r=-0.197$	$P=0.02^*$

*Statistical significance ($P<0.05$).

Health in Emergencies and Disasters Quarterly

well as differences in the demographic characteristics of the samples, which has led to job satisfaction. However, in another study conducted by Popa et al. (2010) in Romania, the rate of job burnout was reported high among emergency medical personnel [52], which is consistent with the results of the present study. The reason for high burnout in emergency personnel can be due to stress and high job stress.

Another finding of this study showed that there is a significant and inverse correlation between organizational justice and burnout. In other words, with the increasing perception of organizational justice in nurses, their burnout decreases. In this regard, the results of the study by Bakri et al. (2015) in Pakistan showed that organizational justice is inversely related to burnout in nurses and plays a mediating role in this regard [53]. The results of the study by Ren et al. (2021) in China also showed that organizational justice is inversely related to the rate of burnout in nurses [49], which is consistent with the results of our study. Alimoradnori et al. (2017) in Iran also concluded that more justice and fairness by bosses and senior managers will improve job burnout among employees and consequently their performance [54]. In addition, the results of the present study are in line with the findings of Rohollahi et al. (2016) [42], Li et al. (2013), Yener et al. (2014), Yadegar et al. (2018), and Moshiri et al. (2014) [55-58]. Therefore, the finding that establishing organizational justice and improving its status can reduce employee job burnout applies to employees of different organizations. Fair treatment of employees by the organization leads to higher commitment and, as a result, greater job satisfaction. On the other hand, if people feel injustice by the organization, they may leave the service [36-38]. Therefore, if organizational justice is observed, it can be expected that it will lead to a reduction in job burnout [59].

Study limitations

One of the most important limitations of this study was the epidemic of COVID-19 and the limitations regarding the distribution and collection of questionnaires, which was largely solved by designing software for completing questionnaires via social networks. Also, the dispersion of emergency bases and the mental state of the staff when completing the questionnaires could have an impact on how they answered, which was beyond the control of the researcher.

5. Conclusion

The results of this study showed that the perception of organizational justice from the perspective of pre-hospital emergency personnel has an inverse and significant relationship with their job burnout. Findings indicate that the greater perception of organizational justice from a personnel perspective, the less job burnout they will have. The findings of the present study also showed that organizational justice is not very desirable from the perspective of pre-hospital emergency personnel and their sense of job burnout can be largely related to this situation. Therefore, according to the results of this study, it is suggested that managers and officials of pre-hospital medical centers and emergencies can take positive steps to improve organizational justice and reduce burnout by adopting new administrative policies and creating a favorable organizational climate based on human dignity.

Ethical Considerations

Compliance with ethical guidelines

This research was approved by the Ethics Committee of the [Tabriz University of Medical Sciences](#) (Code: IR.TBZMED.REC.1399.516). Informed consent was also obtained from all participants to participate in the study and they were assured that the information was confidential.

Funding

This study was supported by a Research Deputy of the [Tabriz University of Medical Sciences](#).

Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgments

We wish to express our appreciation to the [Tabriz University of Medical Sciences](#) authorities and trainers for their cooperation.

References

- [1] Sabouri E, Naderi Moghadam M, Saburie O, Mohammadi Y, Tavakkoli F. [The evaluation of prehospital emergency performance indicators in Birjand , 2015 (Persian)]. *Iranian Journal of Emergency Care*. 2017; 1(1):61-8. [\[Link\]](#)
- [2] Mlcak RP, Buffalo MC, Jimenez CJ. Prehospital management, transportation, and emergency care. In: Herndon DN, editor. *Total Burn Care*. Amsterdam: Elsevier; 2018. [\[DOI:10.1016/B978-0-323-47661-4.00007-1\]](#)
- [3] Galvagno Jr SM, Thomas S, Stephens C, Haut ER, Hirshon JM, Floccare D, et al. Helicopter emergency medical services for adults with major trauma. *Cochrane Database of Systematic Reviews*. 2013; 3:1-44. [\[DOI:10.1002/14651858.CD009228.pub2\]](#)
- [4] Carlson JN, Karns C, Mann NC, E Jacobson K, Dai M, Collesan C, et al. Procedures performed by emergency medical services in the United States. *Prehospital Emergency Care*. 2016; 20(1):15-21. [\[DOI:10.3109/10903127.2015.1051682\]](#) [\[PMID\]](#)
- [5] Haghani F, Sadeghi N. [Training in pre-hospital emergency: Needs and truths. *Iranian Journal of Medical Education (Persian)*]. 2011; 10(5):1273-80. [\[Link\]](#)
- [6] Moghaddasi H, Rabiei R, Mastaneh Z. [Pre-hospital emergency information system in America and England: A review (Persian)]. *Payesh Journal*. 2014; 13(4):383-91. [\[Link\]](#)
- [7] Pourshaikhian M, Jahangiri K, Kazemnejad E, Vatankhah S. [Pre-hospital emergency medical services: The analysis of EMS ambulances equipment in Rasht city (Persian)]. *Journal of Rescue and Relief*. 2014; 6(1):55-65. [\[Link\]](#)
- [8] World Health Organization. *Global strategy on human resources for health: Workforce 2030*. Geneva: World Health Organization; 2016. [\[Link\]](#)
- [9] Buchan J, Kluge H, Perfilieva G, World Health Organization, Regional Office for Europe. *Future human resources for health: today's priority. Investment in the health workforce can yield returns in improved population health, wealth and well-being*. *Public Health Panorama*. 2017; 3(03):366-8. [\[Link\]](#)
- [10] Goswami A. Human resource management and its importance for today's organizations. *Journal of Advances and Scholarly Researches in Allied Education*. 2018; 15(3):128-35. [\[DOI:10.29070/15/57308\]](#)
- [11] Imran R, Majeed M, Ayub A. Impact of organizational justice, job security and job satisfaction on organizational productivity. *Journal of Economics, Business and Management*. 2015; 3(9):840-5. [\[DOI:10.7763/JOEBM.2015.V3.295\]](#)
- [12] Eslami AliAbadi H, Rajabi R, Asadi F. [Burnout among emergency medical services (EMS) staff (Persian)]. *Quarterly Journal of Nursing Management*. 2017; 5(3):62-70. [\[DOI:10.29252/ijnv.5.3.4.62\]](#)
- [13] Vaezfar S, Azadi M, Akbari Balotabegan A, Rahimi M. [The predictive role of self-efficacy and social support in nurses' burnout (Persian)]. *Iran Journal of Nursing*. 2014; 27(90-91):140-9. [\[DOI:10.29252/ijn.27.90.91.140\]](#)
- [14] Shahnazdoust M, Maghsoudi S, Tabari R, Kazem Nejad Leili E. [Level of burnout in nurses and its related factors in medical educational hospitals in Rasht in 2010 (Persian)]. *Journal of Holistic Nursing and Midwifery*. 2011; 21(2):20-7. [\[Link\]](#)
- [15] Lasebikan VO, Oyetunde MO. Burnout among nurses in a Nigerian General Hospital: Prevalence and associated factors. *ISRN Nursing*. 2012; 2012:402157. [\[DOI:10.5402/2012/402157\]](#) [\[PMID\]](#) [\[PMCID\]](#)
- [16] Mahmoodi GR, Alhani F, Anousheh M, Rouhi G. [Burnout levels and some related factors in nurses of Golestan Province (Persian)]. *Preventive Care in Nursing & Midwifery Journal*. 2011; 1(1):43-54. [\[Link\]](#)
- [17] Bayrami M, Movahedi M, Movahedi Y, Azizi A, Mohamadzadigan R. [The role of perceived social support in the prediction of burnout among nurses (Persian)]. *Quarterly Journal of Nursing Management*. 2014; 3(1):27-34. [\[Link\]](#)
- [18] Liu C, Liu S, Yang S, Wu H. Association between transformational leadership and occupational burnout and the mediating effects of psychological empowerment in this relationship among CDC employees: A cross-sectional study. *Psychology Research and Behavior Management*. 2019; 12:437. [\[DOI:10.2147/PRBM.S206636\]](#) [\[PMID\]](#) [\[PMCID\]](#)
- [19] Fedai L, Tarhini A, Altinay Z, Dağlı G, Altinay F. Occupational burnout and job satisfaction: Evidence from secondary schools in Northern Cyprus. *International Journal of Economic Perspectives*. 2017; 11(1):782-94. [\[Link\]](#)
- [20] Lin TC, Lin HS, Cheng SF, Wu LM, Ou-Yang MC. Work stress, occupational burnout and depression levels: A clinical study of paediatric intensive care unit nurses in Taiwan. *Journal of Clinical Nursing*. 2016; 25(7-8):1120-30. [\[DOI:10.1111/jocn.13119\]](#) [\[PMID\]](#)
- [21] Demirel Y, Güler N, Toktamis An, Özdemir DL. Burnout among high school teachers in Turkey. *Middle East Journal of Family Medicine*. 2005; 3(3):33-6. [\[Link\]](#)
- [22] Ayala E, Carnero AM. Determinants of burnout in acute and critical care military nursing personnel: A cross-sectional study from Peru. *PLoS One*. 2013; 8(1):e54408. [\[DOI:10.1371/journal.pone.0054408\]](#) [\[PMID\]](#) [\[PMCID\]](#)
- [23] Khazaei T, Khazaei T, SharifZadeh G. [Nurses' professional burnout and some predisposing factors (Persian)]. *Journal of Birjand University of Medical Sciences*. 2006; 13(1):9-15. [\[Link\]](#)
- [24] Martínez JP, Méndez I, Ruiz-Esteban C, Fernández-Sogorb A, García-Fernández JM. Profiles of burnout, coping strategies and depressive symptomatology. *Frontiers in Psychology*. 2020; 11:591. [\[DOI:10.3389/fpsyg.2020.00591\]](#) [\[PMID\]](#) [\[PMCID\]](#)
- [25] Hosseini M, Sedghi Goyaghaj N, Alamadarloo A, Farzadmehr M, Mousavi A. [The relationship between job burnout and job performance of clinical nurses in Shiraz Shahid Rajaei hospital (thruma) in 2016 (Persian)]. *Journal of Clinical Nursing and Midwifery*. 2017; 6(2):59-68. [\[Link\]](#)
- [26] Negahdari A, Jadid-Milani M, Alemohammad SN, Pishgooei SAH. [The relationship between job stress and quality of work life among prehospital emergency personnel in Shiraz, 2017 (Persian)]. *Iranian Journal of Nursing Research*. 2019; 13(6):48-53. [\[Link\]](#)
- [27] Maguire BJ, O'Meara P, O'Neill BJ, Brightwell R. Violence against emergency medical services personnel: A systematic review of the literature. *American Journal of Industrial Medicine*. 2018; 61(2):167-80. [\[DOI:10.1002/ajim.22797\]](#) [\[PMID\]](#)

- [28] Pourghane P, Farahbod F, Yousefpour Gelsefidi H. [Evaluation of socio-demographic factors affecting burnout in Nurses (Persian)]. *Scientific Journal of Social Psychology*. 2017; 4(42):43-52. [Link]
- [29] Davoudi-kiakalayeh A, Farahbod F, Goudarzvand Chegini M, Rimaz S, Kouchakinejad-Eramsadati L, Akbari M. [Evaluation of burnout among nurses working in a first level trauma center (Persian)]. *Journal of Guilan University of Medical Sciences*. 2015; 23(92):24-30. [Link]
- [30] Vahey DC, Aiken LH, Sloane DM, Clarke SP, Vargas D. Nurse burnout and patient satisfaction. *Medical Care*. 2004; 42(2 Suppl):II57-66. [DOI:10.1097/01.mlr.0000109126.50398.5a] [PMID] [PMCID]
- [31] Amini F, Farah bakhsh K, Nikoozadeh kordmirza E. [Comparative analysis of life satisfaction, resilience and burnout among intensive and other units nurses (Persian)]. *Quarterly Journal of Nursing Management*. 2013; 1(4):9-17. [Link]
- [32] Khan K, Abbas M, Gul A, Raja U. Organizational justice and job outcomes: Moderating role of Islamic work ethic. *Journal of Business Ethics*. 2015; 126(2):235-46. [DOI:10.1007/s10551-013-1937-2]
- [33] Haghighi M, Ahmadi I, Ramin Mehr H. [The effect of organizational justice on employee's performance (Persian)]. *Organizational Culture Management*. 2010; 7(20):79-101. [Link]
- [34] Chan SHJ, Lai HYI. Understanding the link between communication satisfaction, perceived justice and organizational citizenship behavior. *Journal of Business Research*. 2017; 70:214-23. [DOI:10.1016/j.jbusres.2016.08.017]
- [35] Bish AJ, Bradley LM, Sargent LD. Career development for going beyond the call of duty: Is it perceived as fair? *Career Development International*. 2004; 9(4):391-405. [DOI:10.1108/13620430410544346]
- [36] Musringudin M, Akbar M, Karnati N. The effect of organizational justice, job satisfaction, and organizational commitment on organizational citizenship behavior (OCB) of the principles. *Indonesian Journal of Educational Review*. 2017; 4(2):155-65. [DOI:10.21009/IJER.04.02.17]
- [37] Chen SY, Wu WC, Chang CS, Lin CT, Kung JY, Weng HC, et al. Organizational justice, trust, and identification and their effects on organizational commitment in hospital nursing staff. *BMC Health Services Research*. 2015; 15(1):1-17. [DOI:10.1186/s12913-015-1016-8] [PMID] [PMCID]
- [38] Ouyang Z, Sang J, Li P, Peng J. Organizational justice and job insecurity as mediators of the effect of emotional intelligence on job satisfaction: A study from China. *Personality and Individual Differences*. 2015; 76:147-52. [DOI:10.1016/j.paid.2014.12.004]
- [39] Moorman RH, Niehoff BP, Organ DW. Treating employees fairly and organizational citizenship behavior: Sorting the effects of job satisfaction, organizational commitment, and procedural justice. *Employee Responsibilities and Rights Journal*. 1993; 6(3):209-25. [DOI:10.1007/BF01419445]
- [40] Naami A, Shokrkon H. [The simple and multiple relationships of the organizational justice with the job satisfaction of the personnel of an industrial organizations (Persian)]. *Psychological Achievements*. 2020; 11(1):57-70. [DOI:10.22055/PSY.2020.16364]
- [41] Golparvar M, Nasry M, Malekpour M. [The roles of participation to decision making, job involvement, job alternatives and job satisfaction on perceived organizational justice in teachers of special schools in Esfahan (Persian)]. *Curriculum Planning Knowledge & Research in Educational Sciences*. 2007; 4(15):25-46. [Link]
- [42] Rohollahi AA, Moftakhari Tabrizi AM, Asadi E. Investigating the relationships between organizational justice, organizational commitment and job burnout. *Journal of Military Medicine*. 2016; 17(4):273-81. [Link]
- [43] Maslach C, Jackson SE, Leiter MP. *Maslach burnout inventory manual*. Palo Alto: Consulting Psychologists Press; 1997. [Link]
- [44] Momeni H, Salehi A, Seraji A. [The comparison of burnout in nurses working in clinical and educational sections of Arak University of Medical Sciences in 2008 (Persian)]. *Arak Medical University Journal*. 2010; 12(4):113-23. [Link]
- [45] Ghaniyoun A, Soloukdar A. Burnout, dimensions and its related factors in the operational staff of Tehran Medical Emergency Center. *Journal of Health Promotion Management*. 2016; 5(3):37-44. [Link]
- [46] Gholampour M, Pourshafei H. [The role of organizational justice in job satisfaction with nursing burnout mediation (Persian)]. *Journal of Health & Care*. 2018; 20(1):7-17. [DOI:10.29252/jhc.20.1.7]
- [47] Hassani M, JodatKordlar L. [The study of relationship between perception of organizational justice with turnover intention, job satisfaction and organizational citizenship behavior of medical staff of Urmia Imam Reza Hospital (Persian)]. *Nursing and Midwifery Journal*. 2012; 10(3):340-52. [Link]
- [48] Janati A, Chegini Z, Gholizadeh M, Naseri N, Ahmadi Z. [The relationship between organizational justice perception and self-efficacy in staff of a selected educational hospital: A case study (Persian)]. *Journal of Health-Based Research*. 2017; 3(2):127-39. [Link]
- [49] Ren Z, Zhang X, Li X, He M, Shi H, Zhao H, et al. Relationships of organisational justice, psychological capital and professional identity with job burnout among Chinese nurses: A cross-sectional study. *Journal of Clinical Nursing*. 2021; 30(19-20):2912-23. [DOI:10.1111/jocn.15797] [PMID]
- [50] Gökçen C, Zengin S, Oktay MM, Alpak G, Al B, Yildirim C. Burnout, job satisfaction and depression in the healthcare personnel who work in the emergency department. *Alpha Psychiatry*. 2013; 14(2):122-28. [DOI:10.5455/apd.36379]
- [51] Tarcan GY, Tarcan M, Top M. An analysis of relationship between burnout and job satisfaction among emergency health professionals. *Total Quality Management & Business Excellence*. 2017; 28(11-12):1339-56. [DOI:10.1080/14783363.2016.1141659]
- [52] Popa F, Raed A, Purcarea VL, Lală A, Bobirnac G. Occupational burnout levels in emergency medicine—a nationwide study and analysis. *Journal of Medicine and Life*. 2010; 3(3):207-15. [PMID] [PMCID]
- [53] Bakri N, Ali N. Relationship between organizational justice, psychological capital and job burnout: Empirical evidence from health care sector. *Asian Social Science*. 2015; 11(25):84-9. [DOI:10.5539/ass.v11n25p84]

- [54] Alimoradnori M, Zargar Balaye Jame S. [Investigating the relationship between organizational justice and its dimensions with job burnout and its dimensions in selected military clinics in Tehran in 2017 (Persian)]. *Paramedical Sciences and Military Health*. 2018; 12(4):16-25. [\[Link\]](#)
- [55] Li Y. Modeling the relationship between organizational justice, job burnout and organizational commitment among university teachers [PhD dissertation]. Madrid: Universidad Complutense de Madrid; 2013. [\[Link\]](#)
- [56] Yener D, Oskaybaş K, Dursun T. The effects of burnout on organizational commitment in logistics sector. *Journal of Business Research-Türk*. 2014; 6(2):15-25. [\[DOI:10.20491/isader.2014215951\]](#)
- [57] Yadegar M, Sief M. [Prediction of the burnout based on organizational justice and commitment with an emphasis on role mediating of role conflict and ambiguity among the staff of the Islamic Azad University of Shiraz (Persian)]. *Knowledge & Research in Applied Psychology*. 2018; 19(2):22-34. [\[DOI:10.30486/JSRP.2018.543220\]](#)
- [58] Moshiri K, Aghaei N, Pour Soltani Zarandi H, Ghorbani M. [The relationship between perceived organizational justice & job burnout and intent to leave the profession of the staff in Tehran Province directorate of youth and sports (Persian)]. *Research in Sport Management and Motor Behavior*. 2014; 4(7):65-76. [\[Link\]](#)
- [59] Andekazalaky M, Barzegar M. [Relationship dimension-organizational justice and role conflict and ambiguity role and burnout employee (Persian)]. *Journal of Social Psychology (New Findings in Psychology)*. 2013; 1(28):93-106. [\[Link\]](#)

This Page Intentionally Left Blank