

Effect of Participation in Relay Sports on the Quality of Work Life and Job Performance of Relief Workers with the Mediating Role of Professional Ethics: A Case Study of Hogam Competitions in Mazandaran Province, Iran

Meghdad Kamrani Amiri¹ , Vahid Shojaei² , Mohammad Hami² , Jamshid Hemmati Moradabadi³ 

Date of submission: 29 Nov.2020 Date of acceptance: 16 Sep. 2021

Original Article

Abstract

INTRODUCTION: Today, the importance of paying attention to human resources for the growth and development of relief organizations, such as the Red Crescent, emergency services, and fire stations, has been considered a key priority at the decisions and activities of the managers of these organizations. Therefore, the present study was conducted to investigate the effect of participation in relay sports on the quality of work life and job performance of relief forces with the mediating role of professional ethics in Mazandaran Province, Iran.

METHODS: The present applied study was conducted based on a descriptive-survey approach. The statistical population of the study consisted of all relief forces, including firefighters, Red Crescent rescuers, and emergency service staff, (with unknown sample size) who participated in the Hogam relay sport. The research sample included 168 members of the above-mentioned forces who participated in an event related to the Hogam sport in Mazandaran Province, 2018. The samples were selected using the non-random convenience sampling method; regarding this, all participants in the mentioned event were entered into the research. The required data were collected using questionnaires, namely the Walton Quality of Work Life Questionnaire, Paterson Job Performance Questionnaire, Sports Questionnaire (developed by Taji et al., 2010), and Standard Professional Ethics Questionnaire (designed by Kadozir, 2002).

FINDINGS: The results showed that participation in Hogam sport had a significant effect on job performance and quality of work life of relief workers with the mediating role of professional ethics. Therefore, it can be said that addressing this sport, which has its specific nature compared to other sports, can have a significant impact on the quality of work life and job performance of employees, which will be doubled by the observance of professional ethics.

CONCLUSION: It can be concluded that the managers of these organizations can take steps to implicitly and explicitly institutionalize professional ethics by addressing ethical complaints of employees and implementing programs of strengthening ethics in employees to improve the quality of employees' work life.

Keywords: Hogam Relay Sports Participation; Job Performance; Professional Ethics; Quality of Work Life.

How to cite this article: Shojaei V, Kamrani M, Hami M. Effect of Participation in Relay Sports on the Quality of work Life and Job Performance of Relief Workers with the Mediating Role of Professional Ethics: A Case Study of Hogam Competitions in Mazandaran Province, Iran. *Sci J Rescue Relief* 2021; 13(4): 246-54.

Introduction

Today, the importance of paying attention to human resources for the growth and development of relief organizations,

such as the Red Crescent, emergency services, and fire stations, has been considered a key priority at the decisions and activities of the

1- PhD Candidate, Department of Sport Management, Sari Branch, Islamic Azad University, Sari, Iran

2- Assistant Professor, Department of Sport Management, Sari Branch, Islamic Azad University, Sari, Iran

3- Assistant Professor, Department of Sport Management, Behbahan Branch, Islamic Azad University, Behbahan, Iran

Corresponding author: Vahid Shojaei, Email: shojaei.vahid@yahoo.com

managers of these organizations. The reason for this is attributed to the fact that these organizations often face highly difficult missions, and overcoming these challenges requires the use of specialized, skillful, and committed personnel. One of the basic steps to promote these organizations is to identify such causes and factors as quality of work life (1).

The quality of work life in numerous cases, from the change of payment system to the enactment of the Employees' Rights Act, guarantees freedom of thought, freedom of expression, the process of meeting needs, and fair and equal treatment (2). Quality of work life reflects a kind of organizational culture or management practices according to which employees feel autonomous ownership, responsible, and self-esteem. In this process, all members of the organization, through open and appropriate communication channels created specifically for this purpose, are involved in decisions that affect their job and profession in particular and their work environment in general, and as a result, their participation in and satisfaction from work increase and work-imposed stress decreases (3).

The quality of working life is reflected in the employees' reaction to their job satisfaction and mental health. Attitude towards the quality of work life and its individualistic reflections, work experience, and how to improve work in order to meet the needs of the individuals have a special priority. Therefore, it can be said that "quality of work life" means the possibility of meeting more personal needs of employees and the existence of security for people so that they can live comfortably with others, feel useful, be accepted by others, and finally, have the opportunity to increase their skills and knowledge (4).

Performance is the accomplishment of the tasks assigned to the workforce by the organization. Traditional practices and human relations lead to something that is common to contingent practices. The factor of ability or skill in the performance equation is essentially the measurement of the individual. One of the external factors is the motivation of environmental and social conditions that create a job or profession. Contingency thinking forms the theoretical basis for our performance equation (Gungor, 2011, 1510). Job performance is affected by various factors, of which professional

ethics can be one of the most important since professional ethics affect people's attitudes toward the job/profession.

Ethics flow through ethical principles in the organization. These principles are as guiding patterns on which decision-making in the organization is based. Organizations, based on their values and principles and considering external factors and internal requirements of their organization, make their decisions, especially strategic ones (5). Ethics is one of the supreme Islamic teachings that has played a huge role in the creation and development of Islamic civilization. Professional ethics is one of the factors of the organization's success in such a way that the organization moves toward achieving specified goals by following the ethics that is specific to that profession, and in this path, the performance of employees with professional ethics and the goals of the organization are integrated and provide the means to improve performance (6).

Sari et al. (2019) have reported that quality of work life has had a positive and significant effect on employees' job performance (7). They concluded that managers can improve staff performance by improving the quality of work life, job satisfaction, and work motivation in order to maintain quality human resources, sustain the organization's actions, and increase customer satisfaction. Based on the results of a study carried out by Shafighi et al. (2015), professional ethics has an effect on job performance with the mediating role of religiosity in work (8). Therefore, they state that senior managers should consider the design and formulation of a practical vision in their agenda through the adoption of ethical and cultural programs and the formation of committees of ethical and cultural experts.

The observance of the principles and techniques of professional ethics in order to increase the level of organizational intelligence, health, and growth through training programs can be an appropriate way to improve organizational performance (9). If interventionist policies in organizations are reduced and the standards of professional ethics are considered more, the employees will work harder and be less likely to leave their jobs, which in turn will increase their job performance (10). When employees oblige themselves to comply with the components of professional ethics, their level of job performance

will improve, and as a result, among more ethical people, professional stress will be reduced, good relationships in the organization will be improved greatly, and the productivity of the organization will be increased noticeably. Committed employees to professional ethics try to provide any kind of useful service for their organization, and consequently, their job performance level would improve and can contribute to the success of their organization (11).

Koonmee et al. (2017), in their study entitled "institutional ethics, quality of work life, and employee job-related outcomes" found that there was a positive and significant relationship among these three variables (11). They reported that institutionalizing an ethical culture had a strong impact on the quality of work life and job performance. Ansari et al. (2018) stated that quality of work life had a positive and significant relationship with the ethical work climate of coaches and that ethical work climate could predict the quality of life of coaches (12). Therefore, they concluded that managers should improve the ethical model in work and convey the organization's expectations to employees because this measure would form the infallible norms of the organization and increase the quality of their work life.

One of the factors that seems to be able to affect the employees' job performance and quality of work life is participation in sports-related events, such as sports activities, events, and competitions. Exercise is an institutionalized activity that requires the employment of intense physical force using sophisticated physical skills by participants that are stimulated by internal and external factors. This definition is related to organized sports activities (13). One of the types of sports is Hogam (Stragos), which is a new relay sport and a subset of public sports although many of its activities can be implemented in the form of competitions and events. The nature of this sport is to cross mainly natural obstacles, such as rivers, trees, and mountains. Hogam is significantly held as a team, in which the members of a team, in coordination, concentrate their energy and, through proper planning, work in a double synergy towards the common goals of the team.

Beigmohammadi (2017) in a study entitled "The relationship between physical activity and quality of work life of Ilam sport and youth officers" found that there was a positive and significant relationship between physical activity

and quality of work life; consequently, improving the level of physical activity by increasing sports activity at work, promoting sports activities outside the organization, creating sports conditions and facilities, and filling employees' leisure time with sports, is a useful and effective way to improve the quality of work life. It is staff (14).

Rutanen et al. (2014) concluded that doing exercise increases people's self-confidence and reduces the effect of physical and psychological stress at work (15). As a result, exercise and physical activity can be effective in increasing morale and motivating people in work activities, and therefore, increase job performance. In addition, individuals, especially those who need physical and mental fitness due to their job or profession, should not only pay attention to their mental health but also strengthen their physical strength and engage in sports and physical movements. This aim will be realized in case that ethics is also expanded and deepened in sports (16). On the other hand, ethics in sports is one of the topics of applied ethics that is used to measure practical ethical decisions and deal with ethical issues, behaviors, and policies in professions, technology, and other fields.

The observance of ethical principles in sports requires effort, a strong and stable personality, awareness and knowledge, correct understanding of situations and opportunities, knowledge of rules and regulations, and faith and heartfelt belief in honest deeds. Non-professional sports may not have as much focus on ethics as professional sports. However, in the meantime, the concern of sports ethics thinkers is to resort to ethical standards that are common to all cultures and identities. Nevertheless, some believe that this hope should be diminished since cultural differences will also affect the differences in the standards of professional ethics in sports (13). Walters et al. (2016) found that the ethical behavior of coaches had a significant effect on the performance of the athletic students and improved their performance to a large extent (16).

The results of a study showed that valuable moral actions are superior to material values in a way that every human being submits to and respects them, even though he has not been able to act on them; therefore, it should be said that everything that exists in public ethics and is appropriate and implementable in sports fields, need to be practiced (17). Organizations'

disregard for work ethic and weakness in observing ethical principles in dealing with the organization's human resources and external stakeholders can create problems for the organization and question the legitimacy of the organization and its actions.

Poor professional ethics affects people's attitudes toward the job, organization, and managers, and can influence individual, group, and organizational performance. The dominance of professional ethics in the organization is able to significantly help the organization to reduce tensions, create success in achieving the goals effectively, and make the organization accountable (18). Numerous pieces of research have been performed in this domain and the role and importance of sports and ethics have been highlighted. Moreover, quality of work life and job performance, as a chain of trust, participation, and cohesion, have important roles in leading organizations to achieve valuable goals. One of the main responsibilities of organizations, especially relief organizations, is to maintain and develop fair service behaviors and a sense of justice in society and help and assist those requiring special service activities.

Considering these reasons, the present study was conducted to investigate the effect of participation in Hogam relay sport on quality of work life and job performance of relief forces with the mediating role of professional ethics in Mazandaran Province, Iran. This study sought to answer the question of whether engaging in Hogam sports and participating in related events had an impact on the quality of work life and job performance of its staff through the mediating role of professional ethics. The proposed research model is also presented below.

Methods

This applied study was carried out based on a descriptive-survey approach. The statistical population of the study consisted of all relief forces, including firefighters, Red Crescent rescuers, and emergency service staff, (with

unknown sample size) who participated in the Hogam relay sport. The research sample included 168 members of the above-mentioned forces who participated in an event related to the Hogam sport in Mazandaran Province, 2018. The samples were selected using the non-random convenience sampling method; regarding this, all participants in the mentioned event were entered into the research. The required data were collected using questionnaires, namely the Walton Quality of Work Life Questionnaire, Paterson Job Performance Questionnaire, Sports Questionnaire, and Professional Ethics Questionnaire.

In this study, the validity of the questionnaires was reconfirmed through a survey of experts and professors in sports management, and its reliability was approved by calculating Cronbach's alpha coefficient. Data analysis was performed through descriptive statistics and inferential statistics. In the descriptive section, indicators such as median, mean, and percentages, etc. were used to examine the demographic characteristics of the subjects. The research hypotheses were tested in Smart PLS software version 3 using structural equation modeling.

Findings

The age of the participants was obtained at the range of 25-50 years, and 73% of the subjects were between 30 and 40 years old. In this study, more than 80% and about 20% of the samples were men and women, respectively. The highest level of education was found to be the bachelor's degree with a frequency rate of 53%. The Kolmogorov-Smirnov test was used to evaluate the normality of the variables. Table 1 summarizes the status of the main research variables, including mean and standard deviation.

Based on these findings, the quality of work life of the participants was estimated at 2.90 ± 0.782 . This variable included subscales of adequate payment, safe conditions, growth opportunity, legalism, social relations, general living atmosphere, social cohesion, and capability development (Table 2). Moreover, according to

Table 1. Correlation matrix of the main research variables

Variable	Quality of work life	Job performance	Participation in Hogam sport	Professional ethics
Quality of work life	1			
Job performance	0.43	1		
Participation in Hogam sport	0.66	0.46	1	
Professional ethics	0.69	0.53	0.68	1
Standard deviation	0.782	0.749	0.618	0.839
Mean	2.90	3.22	3.45	3.29

Table 2. Correlation matrix of research sub-scales

Variable	Adequate payment	Safe conditions	Growth opportunity	Legalism	Social relations	General living atmosphere	Social cohesion	Capability development	Job performance	Participation in Hogam sport	Responsibility	Honesty	Justice	Loyalty	Norm observance	Empathy	Respect	Superiority
Adequate payment	1																	
Safe conditions	0.68	1																
Growth opportunity	0.54	0.54	1															
Legalism	0.43	0.39	0.45	1														
Social relations	0.61	0.46	0.46	0.64	1													
General living atmosphere	0.62	0.48	0.62	0.57	0.35	1												
Social cohesion	0.48	0.37	0.72	0.52	0.42	0.67	1											
Capability development	0.53	0.61	0.59	0.61	0.38	0.61	0.53	1										
Job performance	0.45	0.38	0.47	0.38	0.29	0.37	0.41	0.32	1									
Participation in Hogam sport	0.38	0.39	0.41	0.58	0.39	0.37	0.41	0.56	0.46	1								
Responsibility	0.42	0.45	0.46	0.36	0.41	0.62	0.62	0.52	0.55	0.42	1							
Honesty	0.36	0.46	0.42	0.38	0.39	0.36	0.65	0.51	0.26	0.46	0.45	1						

Table 2. Continued

Justice	0.64	0.28	0.41	0.42	0.37	0.42	0.45	0.46	0.33	0.38	0.46	0.23	1					
Loyalty	0.62	0.62	0.48	0.26	0.19	0.46	0.36	0.48	0.42	0.62	0.33	0.45	0.36	1				
Norm observance	0.58	0.37	0.38	0.18	0.28	0.48	0.38	0.38	0.41	0.26	0.52	0.62	0.34	0.45	1			
Empathy	0.31	0.38	0.36	0.46	0.21	0.41	0.52	0.39	0.44	0.35	0.47	0.45	0.42	0.35	0.45	1		
Respect	0.29	0.37	0.32	0.35	0.37	0.39	0.26	0.35	0.62	0.42	0.49	0.35	0.52	0.46	0.42	0.42	1	
Superiority	0.27	0.42	0.28	0.39	0.65	0.52	0.26	0.37	0.53	0.55	0.33	0.42	0.52	0.42	0.62	0.33	0.35	1
Mean	2.83	2.87	2.99	2.93	2.88	2.92	2.94	2.85	3.22	3.45	3.36	3.03	3.11	2.97	3.68	3.42	3.25	3.47
Standard deviation	0.738	0.457	0.712	0.784	0.624	0.905	0.728	0.492	0.749	0.618	0.456	0.572	0.791	0.629	0.734	0.846	0.629	0.437

Table 2, the mean scores of participants' job performance and their participation rate in Hogam sport were calculated at 3.22 ± 0.749 and 3.45 ± 0.618 , respectively. Furthermore, the mean professional ethics of the sample members was obtained at 3.29 ± 0.839 . This variable consisted of sub-scales, namely responsibility, honesty, justice, loyalty, norm observance, empathy, respect, and superiority (Table 2).

Table 2 presents the status of the subscales of the two main variables, namely quality of work life and professional ethics. It also tabulates the correlation coefficient between the subscales and the other two main variables, including job

performance and participation in Hogam sports.

According to the above results, by the presence of the mediating variable of professional ethics, the causal relationship of participation in Hogam sport with job performance, on the one hand, and quality of work life, on the other hand, was still established, which was significant.

This model (Figures 1 and 2) is based on the findings of previous research and specifically focuses on the role of participation in Hogam sports in the quality of work life and job performance of participants in this relief sport; explaining that the professional ethics of them is considered as a mediating variable.

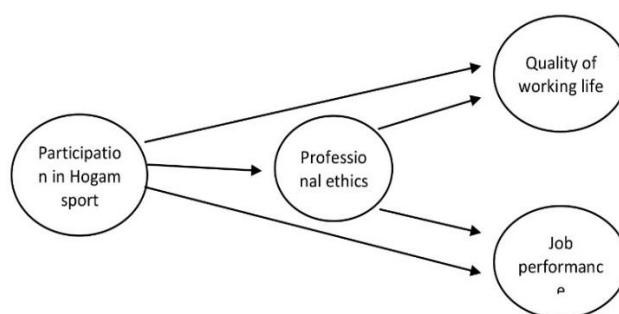


Figure 1. Proposed model of the research

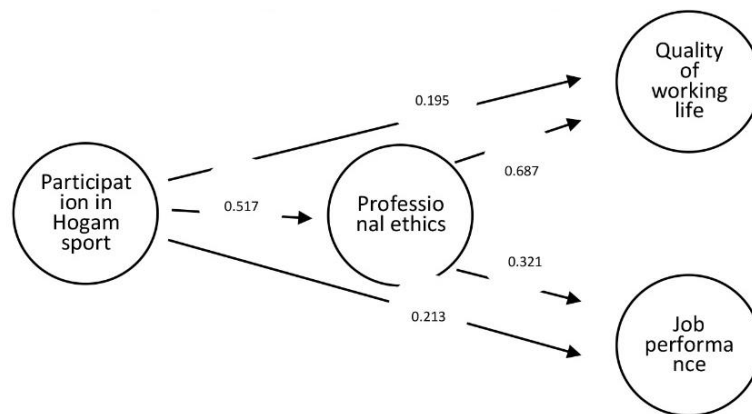


Figure 2. Tested model of research in standard mode

Discussion and Conclusion

The results of the present study showed that participation in the events related to Hogam relay sports had a significant effect on the quality of work life and job performance of the staff work in relief organizations, such as emergency services, fire stations, and the Red Crescent, and professional ethics played a mediating role in this regard. These results were in line with those of studies conducted by Sari et al. (2019), Al-Morsad (2019), Shafiqi et al. (2019), Banisi (2019), Walters et al. (2016), Drannan et al. (2016), Andam et al. (2015), Ghasemzadeh et al. (2018), Koonmee et al. (2017), Amiratash et al. (1397), Azmat (2017), Klimova (2013) (5, 7-11, 16-20).

Based on the findings of a study, observing the principles and techniques of professional ethics in order to increase the level of organizational intelligence, health, and growth through training programs can be a proper way to improve organizational performance, which is in agreement with the results of the present research (9). In another study, it was revealed that if interventionist policies in organizations are reduced and professional ethics standards are considered more, employees will work harder and be less likely to leave their jobs, which in turn will increase their job performance (10).

Individuals should not only pay attention to their mental health but also strengthen their physical strength, which will be realized in case that ethics is also expanded and deepened in sports (16). To achieve a quality work life, it is required to regularly make efforts on the part of the organization, which gives employees more opportunities to influence their work and

contribute to the effectiveness of the whole organization. In this regard, any organization with desirable and effective productivity and efficiency is seeking ways to make employees acquire that level of ability that enables them to use their intelligence. This aim is fulfilled through the appropriate quality of work life, which is allowing employees to participate more in the process of decision-making (7).

According to the findings of another study, the quality of work life reflects a kind of organizational culture or management practices based on which employees feel autonomous ownership, responsible, and self-esteem. Quality of work life program is a process by which all members of the organization through open and appropriate communication channels created specifically for this purpose, are involved in decisions that affect their job and profession in particular and their work environment in general, and as a result, their participation in and satisfaction from work increase and work-imposed stress decreases (3).

The results of various pieces of research have indicated that exercise significantly improves employees' job performance. Individuals who perform exercises and physical activities, experience an increase in job performance and increase their job performance through mental health and good mood. In this respect, in order to improve the job performance of the relief forces, it is necessary to not only improve sports programs, such as Hogam, but also pay attention to increasing their quality (19).

Job performance is influenced by different factors, among which professional ethics can be one of the most important factors since it affects

the attitude of individuals to work. Ethics flow through ethical principles in the organization. These principles are as guiding patterns on which decision-making in the organization is based. Organizations, based on their values and principles and considering external factors and internal requirements of their organization, make their decisions, especially strategic ones (5). Therefore, in explaining the findings of the present study, it can be stated that practicing Hogam sports could have a tremendous impact on the quality of work life and job performance of relief workers.

It was also revealed that it was possible to have healthier and more committed rescuers in the organization by building a culture among them for the development of Hogam relay sport, who can acquire more abilities both in the work and organizational environment and in dealing with external problems, through which they can develop their capabilities and contribute to the growth and excellence of the organization. Additionally, the observance of professional ethics principles is considered not only knowledge and skill but also a communication activity and social value; therefore, it is necessary to analyze all aspects of spiritual leadership and professional ethics and effective factors on it in order to achieve better organizational performance and higher quality of work life in employees. In this respect, it should be noted that to increase the level of job performance among their employees, organizations need to pay serious attention to the ethical aspects of their employees and try to raise their ethical level. In addition, based on these findings, it can be acknowledged that employees with high self-confidence are more concerned about ethical and epistemological issues, consider hard work a value, and strongly emphasize their duties, avoid wasting time at work, and have higher job performance than their colleagues.

Employees with high professional ethics are individuals who value their time and plan for their work. Such people focus on what they want to do, avoid unnecessary and time-consuming tasks (e.g., talking to colleagues and having phone calls), and fulfill their duties while work. As a result, they are able to complete their tasks at a more appropriate shorter time with more accuracy and perform better. Consequently, when a person has specific goals in his work and personal life, he makes every effort if the aim is to build a

successful organizational life; this hard work leads to improving and increasing one's performance. Probably a person who believes in morals and ethical values always considers them in life and work and believes that his efforts are accompanied by spiritual values. As a result, he uses his principles and beliefs in life and work and voluntarily performs responsibilities and duties in the organization beyond his role. Such a person has more ethics toward performing the right things and achieving organizational goals, which leads to the individual's higher performance.

Acknowledgments

None.

Conflict of Interests

Authors have no conflict of interests.

References

1. Srivastava S, Kanpur R. A study on quality of work life: key elements & its Implications. *IOSR J Bus Manag.* 2014; 16(3):25-35.
2. Wyatt TA, Wah CY. Perceptions of QWL: A study of Singaporean employees' development. *Res Pract Hum Res Manag.* 2001; 9(2):59-76.
3. Sahni J. Role of quality of work life in determining employee engagement and organizational commitment in telecom industry. *Int J Qual Res.* 2018; 13(2):285-300.
4. Almarshad S, Toukabri M, Yillah MS. Quality of work life as a determinant of social responsibility in the public sector: the case of the governmental sector of the northern borders region in Saudi Arabia. *Eur J Sustain.* 2019; 8(1):82-98.
5. Azmat R. QWL Programs Facilitate Change. *Personnel J.* 2017; 69:50-67.
6. Baret P. High school students' academic buoyancy: Longitudinal changes in motivation, cognitive engagement, and affect in English and math. Dissertation submitted in partial fulfillment of the requirements for the degree of doctor for Philosophy in the graduate school of Fordham university. 2016.
7. Sari NP, Bendesa IK, Antara M. The influence of quality of work life on employees' performance with job satisfaction and work motivation as intervening variables in star-rated hotels in Ubud tourism area of Bali. *J Tour Hosp Manag.* 2019; 7(1):74-83.
8. Shafiqi F, Kalantari M, Zolfaghari Saffron R. Each person has a sense of entitlement; In *Educational Systems*, 2018; Special Issues, 988-1008. (Persian)
9. Banisi P. Relationship between work ethics &

- mental health with organizational growth. *Int J Ethics Soc.* 2019; 2(1): 1-9.
10. Ghasemzadeh A, Esmaeili E. Professional ethics and workplace safety behaviors. Journal homepage: www.ijethics.com. 2018; 1(1):1-8. (Persian)
 11. Koonmee K, Virakul B. Ethics, quality of work life, and employee job-related outcomes: a survey of HR and marketing managers in Thai businesses. The ISQOLS Conference (From QOL Concepts to QOL Performance Measures) San Diego Marriott Mission Valley, San Diego, California, USA. By *Int Soc Qual Life Stud.* 2017; 63(1):20-6.
 12. Ansari F, Nourbakhsh P, Sepasi H. The relationship between quality of work life and work environment. *J Ethics Sci Technol.* 2018; 13(1):74-81. (Persian)
 13. Moradi Pour M, Babaei A. ethics in sport and ethics of the Muslim athlete, Second National Conference on Sport Science and Physical Education of Iran, Tehran, Association for the Development and Promotion of Fundamental Sciences and Technologies, 2016. (Persian)
 14. Beigmohammadi T. The relationship between physical activity and quality of work life of Ilam sport and youth officers. First International Conference on Modern Research in Sport Science and Physical Education, Hamedan, 2017. (Persian)
 15. Rutanen R, Luoto R, Raitanen J, Mansikkamäki K, Tomás E, Nygård CH. Short-and long-term effects of a physical exercise intervention on work ability and work strain in symptomatic menopausal women. *Saf Health Work.* 2014; 5(4):186-90.
 16. Walters SR, Schluter PJ, Oldham AR, Thomson RW, Payne D. The sideline behaviours of coaches at children's team sports games. *Psychol Sport Exerc.* 2012; 13(2):208-17.
 17. Amiratash AM, Hosseinpour H. Providing model of service quality, satisfaction and job performance of teachers participating in postgraduate education programs. *J Soc Res in Islamic Azad University of Shoushtar Branch,* 2018; 1(1): 125-42. (Persian)
 18. Andam R, Montazeri A, Abbasvani A. The relationship between work ethics, job commitment, and job performance of Khorasan Razavi sport and youth offices personnel. *Contemp Res Sport Manag.* 2015; 5(10):61-72. (Persian)
 19. Drannan DG, Ariyabuddhiphongs V. The relationship between physical exercise and job performance: the mediating effects of subjective health and good mood. A Thesis Presented to The Graduate School of Bangkok University, 2016.
 20. Klimova BF, Semradova I. Innovation in tertiary education and professional codes of ethics. *Procedia Soc Behav Sci.* 2013; 83:161-4.
 21. Wyatt, Thomas A; Yue Wah, Chay. (2015). Perceptions of QWL: A Study Singaporean Employees Development. Research and Practice in Human Resource Management. Singapore. URL: <http://www.hhs.com>