Studying the relation of quality of work life with socio-economic status and general health among the employees working in Students Welfare Fund of Ministry of Health and Medical Education in 2016

Saeed Reza Azami (1)
Nasrin Shaarbafchizadeh (2)
Soheil Mokhtari (3)
Ali Maher (4)

(1) Ph.D candidate in Health Services Management, Department of Health Services Management ,Azad University -North Tehran Branch.Tehran,Iran
(2) Assistant Professor in Health Services Management, Health Management and Economics Research Center, Isfahan University of Medical Sciences, Isfahan
(3) B.Sc. Student, Health Management and Economics Research Center, Iran University of Medical Sciences, Tehran, Iran.
(4) Ph.D.Assistant Professor, Department of Health Services Management, Tehran North Branch, Islamic Azad University, Tehran, Iran

Correspondence
Ali Maher, Ph.D.Assistant Professor,
Department of Health Services Management,
Tehran North Branch,
Islamic Azad University,
Tehran, Iran

Abstract

Introduction: The importance of socio-economic variables such as level of literacy, income, and occupational status and their impact on the physical and psychological well-being of the people is clear for experts and policymakers. In much research, the root of increase in life expectancy and improvement in other indexes of health is considered to not only progress medicine, but also improve socio-economic indexes. Thus, the present study aims to determine the relation between socio-economic status and general health and the consequences of disease on the quality of work life of the employees working in Students Welfare Fund of Ministry of Health and Medical Education.

Methodology: The present cross-sectional research is of descriptive-analytical type, that has been conducted in Students Welfare Fund of Ministry of Health and Medical Education in 2016, and the population under study included all the 130 employees working in the Students Welfare Fund. The required data was collected by consensus method and Quality of Work life (QWL) questionnaire. This questionnaire was based on Walton components and Socio-economic Status (SES) questionnaire, and was designed in order to evaluate socio-economic status, and had 4 components. The data on general health was collected by Goldberg and Hillier 28-Item General Health Questionnaire (GHQ-28) (1979). Then, the collected data was recorded by SPSS version 18 software and was analyzed by common methods of descriptive-analytical statistics.

Results: The results demonstrated that the frequency of socio-economic status of the employees under study were 73 persons (57.9 percent) for low level, 45 persons (35.7 percent) for moderate level, and 8 persons (6.3 percent) for high level, and the frequency of the quality of work life of the employees under study were 7 persons (5.6 percent) for low level, 40 persons (32.3 percent) for moderate level, and 77 persons (62.1 percent) for high level.

Conclusion: Considering the importance of quality of work life in socio-economic status, it is proposed that the following measures be taken into account: appropriateness of salary to the economic factors like inflation; demand and supply in fair and adequate payment; paying more attention to the physical conditions of workplace, e.g. light, cooling and heating facilities to prepare a secure and healthy workplace; preparing some possibilities for the employees so that they can further develop their personal talents and have opportunities for making progress in their specialized field by encouraging creativity and innovation that leads to the promotion of the organization; and providing continuous security and growth opportunities for the employees, allowing them to do of their own free will, and providing any information or skill that they need in the workplace to develop their human capabilities. In the present study, there is a significant relationship between the quality of work life and general health and also socio-economic status and general health, however, there was no significant relationship between quality of work life and socio-economic status.

Key words: Quality of Work life (QWL), socio-economic status, general health, employees working in Students Welfare Fund.

Introduction

Nowadays organizations are considered as living creatures with an identity that is independent of their members (1), and by this new identity, they can affect the behavior of their employees. This personality and identity can be organizationally healthy or ill (2). Miles introduced the notion of "organizational health" in 1969. In his view, organizational health refers to the durability and persistence of an organization in its environment and adaptability to it, and also developing its own ability to be more adaptable to it (3). Wrong choice, misuse of skills, and lack of proper atmosphere to allow creativity to flourish can endanger health and promotion of the organization. When a position or office is proposed for employees that is not commensurate with their dignity, it can lead to disobedience, absence from work, delays, and resignation. In an organization, if communication at all levels is not multilaterally and openly established, and full confidence does not exist between different parts, misunderstanding and disharmony will be created. When goals are not clear, they become vague, and as a result, the employees do not make a concerted effort to achieve the goals (4).

Recently the human factor has been considered as the most important and sensitive organizational element, and most of the new theories of organization and management have referred to this sensitive factor (5). One of the most important parameters affecting the performance of human resources is the role of individual health in improving the economy of a country. Therefore, any kind of planning or investment in human resources that leads to protect and promote the health of employees, can eventually lead to increased efficiency and Return on Investment (ROI) (6). Nowadays the notion of quality of work life has turned into a major social issue all around the world, while in the past the emphasis was only on personal life. From the 1970s onward, improving the employees' quality of work life has been considered as one of the most important issues in many organizations, including health care organizations (7). Due to the inevitability of some of the stress factors in health care organizations and the need to prevent psychological stress effects, one of the duties of managers in these organizations is taking some measures and actions to improve the quality of work life, and teaching coping techniques (8). Although there is no formal definition of quality of work life, however, Walton's theory has offered the most comprehensive components of quality of work life plan (9). He has offered the main components of quality of work life in four dimensions that are as follows: meaningfulness of work; organizational and social fit of work; provocativeness, richness, and fruitfulness of work; and security, developing skills, and continuous learning in work (10).

Quality of work life programs deal with various objective and subjective areas of employees' issues. Quality of work life is a process by which the organization's members can participate in making decisions that generally affect their job and particularly their work environment; in doing so, they can use open and appropriate communication ways that have been designed for this purpose. As a result, their work-related stress will diminish and employees' satisfaction will increase. An organization that pays attention to its employees' quality of work life will benefit from having competent workforce, the signs of which are willingness to cooperate with the management and improvement in the performance of the workforce (11).
General health is a subset of the health system and is defined as a set of important social activities and measures that are based primarily on prevention strategies (12). One of the characteristics of a healthy organization is that the physical and psychological health of the employees are as important and interesting as production and productivity for its managers (13). In recent decades various studies have been conducted on the relationship between work and stress and its consequences for health care workers. In these studies, some topics such as productivity, occupational accidents, absenteeism, and increase in physical and mental damage in various occupational groups have been scrutinized (14). The profession of the people is one of the main causes of stress in their life. There is more stress in professions in which human contact is important (15).

Socio-economic determinants of health such as level of income, education, job, nutrition, and social class are far more important in catching diseases than the biological factors, and they play an important role in human's health (16). In the social hierarchy, people take different positions based on their occupational status and level of education and income, and the position of the people in this system is defined by their socio-economic status. Although occupation and level of income and education all determine the position of an individual in the social hierarchy, these factors are generally not separate from each other, but they should be individually studied in order to realize their role in health. Level of education makes differences in terms of having access to information and level of expertise to take advantage of knowledge, while occupation entails differences in having access to scarce material goods. Occupational status includes both of these aspects, and also includes benefits of working in certain occupations such as dignity, privilege, and technical and social skills and power (17).

The present age organizations have a strategic approach to human resources and consider it as a smart and valuable asset, and desire to further improve the quality of life and job satisfaction of their employees (18). Workplace health and psychological health are created by improving quality of life indexes, and it is necessary to pay attention to this issue in all organizations in order to prevent job burnout and low efficiency. Measuring the understanding and sense of people about their own health in order to assess the status quo, investigating the efficacy of health interventions and health care, and implementing appropriate health services are of crucial importance (19). Socio-economic status is an important factor that affects the possibility of taking advantage of medical services, while the wealthy social groups, which in every respect are better equipped than the disadvantaged groups, can sooner and better convert their need to demand, and hence, take more advantage (20). A survey of 17,000 employees in England showed that occupation rank itself plays a more important role in health than some risk factors combined, such as smoking and high blood pressure and cholesterol. Since healthy human is the axis of sustainable development, and also modern societies call for providing a proper environment for production and having the required speed to achieve comprehensive development, it is clearly the responsibility of health practitioners and researchers to investigate and explain all the social factors influencing health, and then giving feedback to the policy-makers in the form of scientific and practical information. In this way, they can help a great deal toward sustainable development (21).

The importance of socio-economic variables such as level of education, income, and occupational status, and their impact on physical and psychological health of the people, is clear for health experts and policy-makers. It has been suggested in many studies that increase in life expectancy and improvement in the other health indexes are not merely because of medical progress, but in many cases are due to the improvement in the socio-economic indexes (22).

Global data shows that environment, socio-economic status, housing, job security, access to health facilities, and human behavior are all crucial factors in securing or weakening health (23). Research in many countries shows extensive inequalities and differences in health conditions of various socio-economic, racial, ethnic, and geographical groups in society. This is indicative of the crucial impact of various factors on health that include reducing social exclusion, alleviating educational shortcomings, reducing insecurity and unemployment, and improving housing standards (24). Studies on the relationship between health and socio-economic status of a population originally started in England. Gradually this type of research was of interest to researchers in other countries and useful data was collected in this field, all of which shows that individuals and families who are in lower social groups, in comparison to higher and richer social groups, experience more and premature death, and diseases and defects are more common in this group; this inequality can be seen in all European countries, and is an undeniable fact that needs more attention (23). To this aim, this research has been conducted to determine the relationship between socio-economic status and general health, and show the consequences of disease that affects the quality of work life of Students Welfare Fund employees.

Methodology

This study is of descriptive-analytical type that has been conducted by cross-sectional method in Students Welfare Fund in 2016, and the population under study included all the 130 employees working in Students Welfare Fund. The inclusion criterion for the study was being an employee in Students Welfare Fund, i.e. all the employees working in the Fund and the employees working in Khazarabad Complex in Sari. Quality of Work life (QWL) questionnaire was used to collect the required data. This questionnaire was based on Walton's components, including fair and adequate payment (questions 1 to 5), safe and healthy working environment (questions 6 to 8), providing growth opportunities and continuous security (questions 9 to 11), having respect for the laws in the organization (questions 12 to 17), social dependence of work life (questions 18 to 20), the overall atmosphere of life (questions 21 to 25), social integrity and solidarity (questions 26 to 29), and developing human capabilities (questions 30 to 32). This questionnaire has been conducted by many researchers and contains 32 items, and is based on a Likert scale from very low (1 point) to very high (5 points).

Walton showed the reliability coefficient of the questionnaire to be 0.88 (25). Also in 2006 Rahimi reported the reliability coefficient of the test to be 0.85 (1). Furthermore, in this study, the Socio-economic Status (SES) questionnaire is implemented, which takes four components of income, economic class, education, and housing into account, and generally consists of 6 demographic questions and 5 key questions. The criterion scaling of questions in this questionnaire has 5 options and responses are graded on a continuum, from very low (1) to very high (5). Eslami et al. (26), by asking 12 sports experts, has confirmed the face

and content validity of this questionnaire. Also by applying Cronbach's alpha test, the reliability of the questionnaire was calculated as 0.83. General health data were collected by Goldberg and Hillier 28-Item General Health Questionnaire (GHQ-28) (1979). It has 4 subscales and each subscale contains 7 questions. These subscales include somatic symptoms, anxiety and insomnia, social dysfunction and severe depression. Of the 28 items of the questionnaire, questions 1 to 7 are about somatic symptoms, questions 8 to 14 ask about anxiety and insomnia, questions 15 to 21 assess social dysfunction, and finally, questions 22 to 28 are related to severe depression.

In standardization of GHQ-28 questionnaire in Iran, Houman (1997) implemented Cronbach's alpha coefficient for the subscales to assess the internal consistency of it, and reported them to be 0.85, 0.87, 0.79, and 0.91, respectively. For the overall score, that demonstrates general health, he reported 0.85. Goldberg and Blackwell (1972), by using a clinical interview checklist for 200 surgery patients in England, and concluded that more than 90% of the sample was correctly classified by the questionnaire as sick or healthy. Moreover, they reported the correlation coefficient between the scores of GHQ-28 questionnaire and the result of clinical evaluation of the results to be 0.80. Also they reported sensitivity and specificity as 0.84 and 0.82, respectively.

In order to assess the socio-economic status, the Socio-economic Status (SES) Questionnaire (Ghodratnama, 2013) was generally implemented. This questionnaire contains 4 components, namely income, economic class, education, and housing, and in total contains six demographic questions and 5 key questions. Criterion scaling in this questionnaire consisted of five responses, and the scoring method for each response was from very low (1) to very high (5). Eslami et al. (26), by asking 12 sports experts, has confirmed the face and content validity of this questionnaire. Also by applying Cronbach's alpha test, the reliability of the questionnaire was calculated as 0.83 (28).

Thus, the collected data were recorded by SPSS version 18 software and then underwent statistical analysis. By using common methods in descriptive-analytical statistics, the results were demonstrated in the forms of tables, diagrams, etc.

Results

The results demonstrated that the frequency of socio-economic status of the studied employees were 68 for low status (52.3%), 41 for medium status (31.5%), and 21 for high status (16.2%).

Table 1: Socio-economic Status

Socio-economic status	Frequency	Percentage
low	68	52.3
medium	41	31.5
high	21	16.2
total	130	100

The results demonstrated that the frequency of quality of work life of studied employees were 7 for low status (5.6%), 40 for medium status (32.3%), and 77 for high status (62.1%).

Table 2: Frequency and percentage of Quality of Work Life (QWL) status

QWL	Frequency	Percentage
low	7	5.6
medium	40	32.3
high	77	62.1
total	124	100

The results demonstrated that the mean and standard deviation of dimensions of quality of work life were 16.97 and 3.68 for fair and adequate payment, 8.25 and 2.84 for safe and healthy working environment, 9.32 and 3.14 for providing growth opportunities and continuous security, 18.93 and 5.31 for having respect for the laws in the organization, 8.57 and 2.72 for social dependence of work life, 15.21 and 5.48 for the overall atmosphere of life, 12.47 and 3.50 for social integrity and solidarity, and 8.85 and 3.04 for developing human capabilities.

Table 3: Status of QWL's dimensions

Dimensions of QWL	Mean	Standard Deviation
Fair and adequate payment	16.97	3.68
Safe and healthy working environment	8.25	2.84
Providing growth opportunities and continuous security	9.32	3.14
Having respect for the laws in the organization	18.93	5.31
Social dependence of work life	8.57	2.72
Overall atmosphere of life	15.21	5.48
Social integrity and solidarity	12.47	3.50
Developing human capabilities	8.85	3.04

The results demonstrated that in the somatic dimension of employee's general health, 50 persons were at very low level (39.1%), 53 persons were at slight level (41.1%), 18 persons were at medium level (14.1%), and 7 persons were at severe level (5.5%). In anxiety dimension, 41 persons were at very low level (32.8%), 49 persons were at slight level (39.2%), 30 persons at medium level (24%), and 5 persons at severe level (4%). In social dimension, 33 persons were at very low level (25.8%), 77 persons at slight level (60.2%), 16 persons at medium level (12.5%), and 2 persons at severe level (1.6%). In depression dimension, 104 persons were at very low level (81.3%), 19 persons at slight level (14.8%), 4 persons at medium level (3.1%), and 1 person at severe level (0.8%):

Table 4: Status of total general health and its dimensions

Dimensions of General health	Status				
	very low	slight	medium	severe	total
Somatic	50 (39.1%)	53 (41.1%)	18 (14.1%)	7 (5.5%)	128 (100%)
Anxiety	41 (32.8%)	49 (39.2%)	30 (24.0%)	5 (4.0%)	125 (100%)
Social	33 (25.8%)	77 (60.2%)	16 (12.5%)	2 (1.6%)	128 (100%)
Depression	104 (81.3%)	19 (14.8%)	4 (3.1%)	1 (0.8%)	128 (100%)

The results of the test demonstrate that among the employees that in terms of socio-economic status were at a low level, 3 persons (4.3%) had low quality of life. Of those employees that had a medium socio-economic status, 2 persons (4.7%) had low quality of life. Also, 1 person (12.5%) among the employees with high socio-economic status, had medium quality of work life. The results of Chi-squared test show that there is no significant relationship between socio-economic status and quality of work life (p=0.086).

Table 5: Quality of work life status in terms of socio-economic status

socio-economic status	quality of work life				probability
	low	medium	high	total	
low	3 (4.3%)	21 (30.4%)	45 (65.2%)	69 (100%)	0.086
medium	2 (4.7%)	18 (41.9%)	23 (53.5%)	43 (100%)	
high	2 (25.0%)	1 (12.5%)	5 (62.5%)	8 (100%)	

The results of the test show that among the employees with a very low level of general health, 20 persons (60.6%) had high quality of work life, while among the employees with slight general health, 32 persons (58.2%) had high quality of work life. Also among the employees with a medium general health, 21 persons (80.8%) had high quality of work life, and among the employees with severe general health, 4 persons (40.0%) had high quality of life. The results of Fisher test show that there is a significant relationship between general health and quality of work life (p=0.029).

Table 6: General health in terms of quality of work life

General health	Quality of work life				probability
	low	medium	high	total	0.029
very low	0 (0.0%)	13 (39.4%)	20 (60.6%)	33 (100%)	
slight	3 (5.5%)	20 (36.4%)	32 (58.2%)	55 (100%)	
medium	2 (7.7%)	3 (11.5%)	21 (80.8%)	26 (100%)	
severe	2 (20.0%)	4 (40.0%)	4 (40.0%)	10 (100%)	

The results of the test show that among the employees with a very low level of general health, 23 persons (67.6%) had a low socio-economic status, and among the employees with a slight level of general health, 29 persons (50.9%) had a low socio-economic status. Also among the employees with a medium level of general health, 14 persons (51.9%) had a low socio-economic status, and among the employees with a severe general health, 2 persons (16.7%) had a low socio-economic status. The results of Fisher test show that there is a significant relationship between general health and socio-economic status (p=0.002).

Table 7: General health in terms of socio-economic status

General health	Socio-economic status				probability
	low	medium	high	total	0.002
very low	23 (67.6%)	8 (23.5%)	3 (8.8%)	34 (100%)	
slight	29 (50.9%)	22 (38.6%)	6 (10.5%)	57 (100%)	
medium	14 (51.9%)	9 (33.3%)	4 (14.8%)	27 (100%)	
severe	2 (16.7%)	2 (16.7%)	8 (66.7%)	12 (100%)	

Discussion and Conclusion

The purpose of this study was to investigate the relationship of quality work life with socio-economic status and general health among the employees working in Students Welfare Fund of Ministry of Health and Medical Education. According to the descriptive results of the present study, most of the employees (almost 52%) had a low level of socio-economic status.

The results of the study show that the frequency of socio-economic status of the employees under study were 179 (53.3%) for low level, 109 (35.5%) for medium level, and 199 (6.2%) for high level. Also the frequency of employees' quality of work life were 10 (3.3%) for low level, 108 (35.6 %) for medium level, and 185 (61.1%) for high level, while most of them (almost 62%) had a high quality of work life. As mentioned before, in order to study the quality of work life of the employees, these components were taken into account: fair and adequate payment, safe and healthy working environment, providing growth opportunities and continuous security, having respect for the laws in the organization, social dependence of work life, overall atmosphere of life, social integrity and solidarity, and developing human capabilities. Among these factors, having respect for the laws in the organization and fair and adequate payment respectively had the highest average in the quality of work life of the employees. General health, was the other objective of this study; most of the employees working in the Students Welfare Fund (almost 38.4%) were at slight level. Of the studied dimensions of general health, most of the employees reported their status to be at slight level in somatic, anxiety, and social dimensions, and only a few of them reported to be at severe level in these dimensions. However, in depression dimension, most of the studied employees (81.3%) reported to be at a very low level, and only a few of them (almost 1 percent) reported severe depression. The results of this study are in line with the study of Dargahi et al., in which the general health status of the executive managers was investigated, and the highest and the lowest average scores and frequency percentages related to social and depression dimensions, respectively. Furthermore, the managers in this study were at an appropriate status in other dimensions of general health (somatic and psychological), and this is in line with the results of the present study. The other issue relates to the analytical findings. The results of the test shows that the employees in terms of general health were at a very low level; 23 persons (67.6%) had a low socio-economic level, and among the employees who were at a slight level of general health, 29 persons (50.9%) had a low socio-economic level. Among the employees who were at a medium level of general health, 14 persons (51.9%) had low socio-economic level, and of the employees who were at a severe level of general health, 2 persons (16.7%) had low socio-economic status. The results of the Fisher test show that there is a significant relationship between general health and socio-economic status (p=0.002).

In addition to studying the relationship between each of the variables of general health and socio-economic status with the quality of work life of employees in this study, there is a significant relationship between quality of work life and general health, and also between socio-economic status and general health, but there is no significant relationship between quality of work life and socio-economic status. Hence, the relation between each one of the dimensions of general health with socio-economic status was investigated, and the results of the Fisher test showed that there is no significant relationship between dimensions of general health (somatic, anxiety, social, dimension) and socio-economic status. Considering the findings of this study, and in order to promote the socio-economic status of the employees working in the Students Welfare Fund of Ministry of Health and Medical Education, it is suggested that the authorities pay especial attention to these suggestions: fair and adequate payment, providing growth opportunities and continuous security, having respect for the laws in the organization, and developing human capabilities. Furthermore, implementing some policies in order to reduce depression and anxiety and increase social function of the employees can enhance their quality of work life.

References

1. Seyed javadian R.The principle of organization and Management. Tehran: Negah Danesh; 2005. [Persian].
2. Saatchi M. Work psychology: Application of psychology at work, organization and management. Tehran: Virayesh; 2004. [Persian].
3. Jahed H. organizational health. Tadbir training scientific monthly 2005; (159): 10-16. [Persian].
4. Daft R. Organization Theory & design. (Translate by: Parsayan A, A'arabi M). 6Th ed. Tehran: cultural Research Bureau; 2004. [Persian].
5. Botshekan, Mohammad Hashem. Promoting management capacity and motivation for employees working in institutions and organizations. Management and Planning Organization of Iran. 1995.
6. Spinaci S, Korat L, Keravel V. Tough choices investment in health for development.
7. Khaghanizadr M, Ebadi A, Siratinayer M, Rahmani M. [The Study of Relationship between job stress and quality of work life of nursesin military hospital]. Mil Med 2008; 10 (3); 175-84.Persian.
8. McVicar A. Workplace stress in nursing: a literature review. J Adv Nurs.2003; 44(6):633-42.
9. Organization WH. TheWorld health report: 2001: Mental health: new understanding, new hope.2001.
10. Conklin MH, Desselle SP. Snapshot of pharmacy faculty quality of work life and productivity. Journal of Pharmacy Teaching.2007:14(1):53-77.
11. Ballou B, Norman H, Goodwin NH. Quality of work life. Strategic Finance.2007:89(4):40-51.
12. Davari SA. Health and its determinants. Tehran, contemporary works, 2007: 25.
13. Saatchi M. Applied Psychology for Managers in homes, schools and organizations. 1nd ed. Tehran:editing, 1995: 5- 51.
14. Stellman JM, McCann M, Warshaw L, et al. Encyclopaedia of occupational health and safety. 4th ed. Geneva: International Labour Office. 34.2-34.28. 1998.
15. Bahribinabaj N, Moghimian M, Attarbashi M, Gharche M. Inverstigating the relationship between job burnout and mental health in nursing and midwifery professions. Ofogh-e Danesh. Journal of Gonabad University of Medical Sciences. 2003, Vol. 9, Spring and Summer. 1: 99-104.
16. Motlaq M, Oliaee Manesh A, Beheshtian M. Health and its social determinants. 2nd ed.Tehran: Moafaq Press; 2007. 42 [In Persian].
17. Lahelma E, Kivela K, Roos E, Tuominen T, Dahl E, Diderichsen F,et al. Analysing changes of health inequalities in the Nordic welfare states. Social Science of Medicine 2002; 55: 609-25.
18. Bazaz Jazayeri SA, Pardakhtchi MH. [Developing a model for the assessment of quality of work life in organizations]. Iranian Journal of Management Sciences 2007; 2(5):123-51.
19. Nejat S, Montazeri A, Holakoie K,Mohamad K,Majdzadeh SR. Quality of Life of Tehran's population by Whoqol-Bref questionnaire in 2005.Hakim 2007; 10(3): 1-8.
20. Spinaci S, Korat L, Keravel V. Tough choices investment in health for development. Ttranslated by: Poorreza A. 1st ed. Tehran: University Of Medical Science Prees; 2008. 38-9 [InPersian].
21. Marmot M, Wilkinson R. Social determinants of health. Translated by: Montazeri A. 1st ed. Publication of Jahad; 2008. 1-30.
22. http://www.unicef.org/sowc08/profiles/child_survival.php. Last accessed at 2011-03-14.
23. Alemi, Ali Akbar. Poverty and its influences on health, experinces and Mistakes of the West. Tahghighat and Amoozesh Company Publications. Fall 2001.
24. Davoudi, Saeed. Health and its Determinants. Ministry of Health and Medical Education, Health Department. 2007.
25. Virme, G. (2001). "Human behaviour ; improving performance at work". New York : Perntice-Hell, inc.
26. Eslami,Ayoub. Mahmoudi,Ahmad. Khabiri, Mohammad. Najafian Razavi, Seyed Mehdi. (2013). The role of Socio-economic status in motivating the people to participate in public and recreational sports. Journal of Applied research in sport management, 2 (3), 89-104
27. Fahti Ashtiani, Ali. Psychological tests - personality and mental health evaluation. Besat Publications. 2009.
28. Sa'atchi, Mahmoud. Kamkari, Kambiz. Askarian, Mahnaz. Psychological tests. Virayesh Publications. 2010.