ISSN: 0975-8585

Research Journal of Pharmaceutical, Biological and Chemical Sciences

An Evaluation Of The Factors Associated With The Usage Of Information Technology In Sport Organizations.

Sardar mohammadi*.

Assistant Professor in Sport Management, University of Kurdistan, Sanandaj, Iran.

ABSTRACT

The purpose of this study was to evaluate the factors associated with the usage of Information Technology in Iranian sport organizations. The number 176 managers were selected randomly and answered to a researcher-made questionnaire. We confirmed that the refined factors we developed were valid and that they reliably measured Iranian IT usage scale. The results revealed that age, Job experiences, skills related internet and computer, Technical and English skills, environmental and economic factors affect the usage of IT significantly. The results of MONOVA did not demonstrate any significant difference between the mentioned subscales in sport organizations. The results of regression analysis demonstrated that all the considered subscales in the research are significant predictors for the usage of IT. According to results IT is considered as one of the most important indices of progress in Iranian sport organizations; therefore, making all suitable previsions for the usage of IT should be one of the chief priorities of the organization.

Keywords: information technology, technical factors, internet, computer, sport organizations.

Corresponding author

ISSN: 0975-8585

INTRODUCTION

Today, IT is considered as one of the main criteria of development in terms of economic and industrial factors (1). Researchers believe that, IT revolution has brought about changes in the lives of the people as the invention of steam machine and the occurrence of industrial revolution have caused great mutations in the individual lives of the people. They also believe that the science of management is basically known to be born out of that period (2).

Despite the comparatively short age of IT, there are different definitions and implications for it (3). The word IT was first used by Loit and Waizler (1958) in order to imply the role of computer in supporting decision making and informational processes in organizations (4). Today the meaning of the expression IT has got vaster and it is known as a set of techniques and tools dealing with studying, designing, developing, establishing and supporting or managing informational systems based on computer and specially software and hardware (1). IT, in its modern form, has been under close consideration since 1980. At this time, many countries came to the conclusion that the development of IT is considered as one of the main factors in the development of economics (5). This technology has prevailed in all scopes of human activities as a means of increasing exploitation, effectiveness, competition and growth by increasing the process of exchanging information and decreasing the cost of transaction (6). It has also influenced all scopes of the peoples' lives in a way that few subjects can be found unrelated with it. Paying attention to IT in different countries demonstrates that this subject has a great potential to be elaborated and many advantages have been mentioned for it until now. Some of the researchers have claimed that IT services being digital and figurative, prompt a reduction in the side expenses (7). Some others argue that IT exempts information exchange from the variability of location and information transmission will happen sooner, leading to an increase in the human exploitation (5). From other benefits of IT we can mention actions controlled remotely, reduction in the expenses, facilitation of acquiring information and the cheaper and sooner transition of the goods and services(4). According to the benefits mentioned for IT, most of the organizations have realized that using IT in all economic and social aspects is an inevitable necessity (5).

Physical education and sport are not exceptions. One of the fields of using this technology is sport. Using IT in sport institutions increases effectiveness and efficiency (8). Giving service and information to others happens easier, sooner and cheaper in these organizations by using IT (9).

Collecting and processing sport data is difficult due to the extension of sport operations, variety of activities and rapid changes in these organizations (6). However, we should try our best to make an optimal use of this technology in Iranian sport organizations. We should step in this field with adequate knowledge of making the best use of IT. We should deal with the factors affecting this technology before going to the next step. Some studies have been implemented on the usage of IT and factors related to it such as: Hyesung (2004) realized that the usage of IT is directly affected by the mental understanding of IT usefulness and individual factors. The attitude of the coaches towards IT was significantly related to their use of it. Facility of using IT and the feeling of being useful were also significantly related to the usage of IT. Skill of working with IT and environmental conditions were effective in using IT by the coaches (10). The findings of other researchers demonstrated that the attitudes of the teachers to internet and their understanding of internet, its' usefulness, Observability, testability and complexity affect the acceptance and usage of internet in educational activities. In this study, the job history of the teachers was considered as an effective factor. The findings of another research demonstrated that the respondents had a positive attitude towards internet and there was a significant and positive relationship between the extent of using internet and characteristics such as skill in English language, age, job history, and scientific works (11). Another research mentioned gender, educational level, job, income, source of income, awareness, knowledge and the attitude towards the usage of IT as effective factors in using IT (12).

Rezaii (1983) referred to the items: the extent of familiarity, the skill in providing and producing ICT and job history as the main factors in this field (14). However another research considered individual factors, organizational traits and system characteristics as effective factors in using IT (7). The results of another research demonstrated that there is a positive and significant relationship between the extent of familiarity and skill in English language, familiarity and skill in working with internet, the extent of monthly income from sources other than teaching, the aim of using internet and environmental factors with the extent of using IT by

teachers (15). Rasooli azar et al. (2006) specified 54.3 percent of the dependent variable variance through the variables: the history of access to internet, the weekly average of using computer, internet and educational level. They also determined 95.3 percent of the variance of the mentioned variable through the extent of familiarity with IT, the hours of using computer, the history of using computer and educational level (16).

In the end, according to the research literature, theoretical framework and the studies implemented regarding the factors associated with IT, we can say that the individual traits, the skill in working with IT, skill in English language, environmental factors, technical factors, economic factors and attitudinal factors have close relationship with the usage of IT. These factors are arranged in a theoretical framework in figure 1.

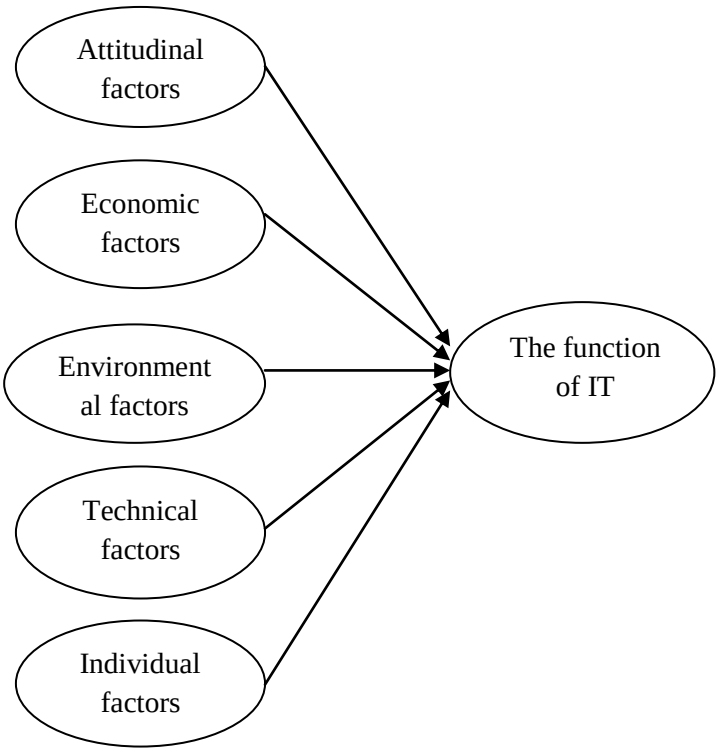

Fig 1: The Theoretical Framework of the Factors Associated with the Function of IT

MATERIALS AND METHODS

This research was correlative. The subjects consisted of 233 of the staff mangers of the ministry of sport and youth, the managers of sport federations and the managers of the principle office of physical education in schools from which 176 managers were selected through random sampling and the table of Kerjsai and Morgan. They were selected because they were active in decision making and diplomacy in their organizations. The measurement instruments were: 1- The researcher made questionnaire of individual traits. 2- The researcher made questionnaire of the factors related with the function of IT. The opinions of the scope of experts were used in order to determine content and face validity. Confirmative and explorative factor analyses were used in order to determine construct validity. The results of explorative factor analysis for the factors related to IT (KMO=0.923, KB=2.532, df=76, P≤ 0.001) and those of confirmative factor analysis (AGFI=0.954, df=63, P≤ 0.001) were taken. Chronbach Alpha method was used in order to determine reliability whose results were obtained for the questionnaire of the factors related to the function of IT (α = 0.90). According to the results extracted from chronbach Alpha, we can claim that the obtained α coefficients are acceptable and the instruments have a good internal congruence. Descriptive statistics was used in order to organize, summarize and categorize the raw grades. Explorative and confirmative factor analyses, multiple correlations, multivariable regression, ANOVA and MONOVA were used as inferential statistics. The data were analyzed through the software « LISREL » version 8.52 and « SPSS » version 18. Correlation was also used in order to analyze the data.

ISSN: 0975-8585

RESULTS AND DISCUSSION

The statistics related to individual traits demonstrated that the average of the age and job history of the managers in the ministry of sport and youth were 39.66 and 10.6 by order. The average of the age and job history of the managers in sport federations were 37.17 and 9.5 by order and it was 41.2 and 14.5 for the principle office of physical education in schools as well (table 1).

Table 1: The Descriptive Statistics of Individual Traits of the Respondents in the Ministry of Sport and Youth, Sport Federations and the Principle Office of Physical Education in Schools

organizations	Gender			Age (M± SD)	Job history (M ± SD)
	sex	number	percentage		
The ministry of sport and youth	Female	10	25.4	5.4 ± 39.66	4.9± 10.6
	Male	34	74.6		
Sport federations	Female	25	30.48	4.3±36.17	4.2±9.5
	Male	75	69.52		
The principle office of physical education in school	Female	3	27.27	6.6±241.2	6.3±14.5
	Male	8	72.73		

The findings in table 2 demonstrated that the respondents used typing more than other actions and they also used a lesser amount of formula. The skill of the respondents in finding internet sites was more than the other skills and their skill in Photoshop was less than the other ones.

Table 2: Distributions of the respondents in terms of the extent of using IT and skill in it

Statement	The extent of using IT	The extent of skill in using IT
	M± SD	M± SD
Working with folder	4.9±0.89	4.2±0.82
Searching for folder	4.1±0.95	4.1±0.95
Introducing new client	4±0.95	4±0.95
Print management	3.9±1.04	3.9±1.94
Using formula	3.2±0.97	4.1±0.97
Watching drive space	3.5±1.01	4.1±1.01
Edition and formatting	3.6±1.08	3.9±0.65
Drawing table	3.8±1.2	3.8±1.2
Making database	3.7±1.10	3.9±1.10
Typing texts	5±1.19	3.9±1.19
Drawing chart and diagram	4.1±0.86	4.1±0.86
Analyzing the data	4.1±0.74	4.1±0.74
Making slide and working with it	4.1±0.91	4.1±0.91
Adding pictures and effects	4.4±0.74	4±0.74
Internet sites	4.5±0.61	4.5±0.61
Searching for scientific articles	4.1±0.62	4.2±0.62
Electronic mail	4.2±0.79	4.2±0.72
Yahoo group	4.1±1.83	4.1±0.83
Photoshop	4.2±0.83	3.7±0.83

ISSN: 0975-8585

The information related to English skill in table 3 demonstrates that the managers of sport organizations are more skilled in reading English texts and less skilled in speaking English. The statistics in table 4 demonstrates that approximately all the factors are greatly important in the usage of IT by sport managers. The most important factors are the direct line of internet in work environments, no limitation of time in using IT in work environments and appropriate circumstances in terms of light and temperature, silence in environment and the speed of internet. The respondents are also in agreement with usefulness of IT and its' wrathfulness in terms of physical education more than other factors.

Table 3: The distribution of the respondents in terms of skill in English

SD±M	Very little		little		mediocre		very		Very much		SD±M
	%	f	%	f	%	f	%	f	%	f	
Writing	14.4	17	10.9	15	19.7	27	29.2	40	22.4	30	1.28±3.3
Reading	10.9	15	15.3	21	24.1	33	32.1	44	34.4	32	2.4±1.29
Speaking	9.5	13	33.3	32	26.3	36	25.5	35	15.3	21	1.21±3.3
listening	9.5	13	12.4	17	34.3	47	20.4	28	23.4	32	1.23±3.1

Table 4: The distribution of the respondents in terms of the effect of environmental, technical, economic and attitudinal factors on the use of IT

Statement	M ± SD
Easy access to IT in work environment	4.1±0.84
The existence of a direct line for internet	1.06±4.3
Good environmental circumstances in working with IT	4.2±0.92
The low expense of the money-demanding sites related to sport	4.1±0.99
The provision of accessories	3.6±0.99
Suitability of the speed of internet in work environment	3.6±0.99
The permanent connection of internet in work environment	4.1±8.1
Low technical problems in the work environment	3.8±2.1
Appropriateness of IT for organization	4.2±0.9
Access to the information through internet in the shortest time	4.1±0.86
The lowness of the expense of the access to the information through internet	4.1±0.91
The value of the information and internet sources in the field of sport	4.3±0.74
Attractiveness of IT	4.2±0.61
Rationality of information structure	4±0.8
Feeling comfortable while working with IT	4.1±0.83
Success in receiving information through IT	4.1±0.78
Improvement of the performance through IT	4.2±0.8
Increasing the quality of the research through IT	4.4±0.6
Increasing the interest in research field through IT	4±0/8
Appropriateness of internet in order to transfer information and job tasks	4±0.85
Better access of the employees inside and outside of the organization to each other by internet	4.1±0.8

Correlation coefficient was use in order to study the relationship between the extent of using IT (dependent variable) and the independent variables under investigation. The results extracted from table 5 demonstrates that the skill of working with computer, the skill of using internet, skill in English language, environmental factors, economic factors, technical and attitudinal factors have a positive and significant relationship with the extent of using internet. The results extracted from multi-variable regression through simultaneous entrance in order to predict the extent of using IT according to the variables such as skill in English, Skill in internet, skill in computer, environmental factors, economic factors, technical and attitudinal factors demonstrated that these factors can be significant predictors for the extent of using IT ($F_{2.27}$ =12.977, P

≤ 0001,r^2 = 0.299). The prediction power of the dependent variable (the extent of using IT) is presented in table 6 in terms of each of the mentioned variables. The results of MONOVA in terms of the extent of skill in computer, internet, English and the technical, environmental and attitudinal factors in the three organizations demonstrates significant differences (F4,686=10.791, P ≤ 0.001, Wilks lambda= 0.885, Eta= 0.87). The results of the hoc test for multivariable variance analysis (one way variance analysis) demonstrated significant differences between the variables in the Ministry of sport and youth, sport federations and the principle office of physical education in schools. Scheffe hoc test was used in order to investigate the differences in one way variance analysis deeply. The results are as follows:

1- No significant difference was observed between the subscales of skill in computer (p=0.069), skill in internet (p=0.091), skill in English (p=3.23), economic factors (p=2.13), technical factors (p=1.43), attitudinal factors (p=2.8) and environmental factors(p=1.40) between the ministry of sport and youth and the principle office of physical education in schools.
2- The variables of skill in computer (p=0.009), skill in internet (p=0.001), Skill in English (p=0.03), economic factors (p=0.03), technical factors (p=0.03), attitudinal factors (p=0.08) and environmental factors (p=0.02) demonstrated a significant difference between the ministry of sport and youth and sport federations.
3- The subscales of skill in computer (p=0.001), skill in internet (p=0.002), skill in English (p=0.03), economic factors (p=0.006), technical factors (p=0.008), attitudinal factors (p=0.012) and environmental factors demonstrated a significant difference between the principle office of physical education in schools and sport federations.

Table 5: The relationship between the extent of using IT and the independent variables

The factors related to the use IT	M ± SD	The use of IT (M ± SD)	r	P
Age	28.90 ± 5.89	69.03 ± 3.22	0.421	*0.021
Job history	30.86 ± 4.11		0.291	*0.023
Skill in using computer	51.02 ± 4.05		0.562	*0.001
Skill in using internet	45.58 ± 2.80		0.532	*0.018
Skill in English	47.02 ± 3.42		0.512	*0.005
Environmental factors	41.91 ± 6.07		0.301	*0.038
Economic factors	50.23 ± 2.92		0.316	*0.034
Technical factors	39.67 ± 1.77		0.274	*0.008
Attitudinal factors	41.43 ± 4.31		0.520	*0.021

Table 6: The regression coefficients related to the prediction of the use of IT in terms of the predictive variables

	Predictive variable	B	Beta coefficient	t	P
Sport organizations	The skill in using computer	0.254	0/142	2/108	*0.056
	The skill in using internet	0.233	0.212	3.146	*0.042
	The skill in English	0.412	0.187	2.536	*0.025
	Environmental factors	0.185	0.236	2.013	*0.018
	Economic factors	0.091	0.598	4.238	*0.015
	Technical factors	0.394	0.599	3.734	*0.011
	Attitudinal factors	0.194	0.299	2.735	*0.008

ISSN: 0975-8585

Table 7: The result of the hoc tests for MONOVA in terms of the factors related to the function of IT in sport organizations.

Variables	Location of giving service	M ± SD	$F_{2.344}$	P	The square of parabola Eta (the amount of effect)
Skill in using computer	The ministry of sport and youth	25.49±2.70	5.430	0.005	0.31
	Sport federations	24±2.22			
	The principle office of physical education in schools	25.17±1.74			
Skill in using internet	The ministry of sport and youth	26.06±1.91	4.480	0.008	0.28
	Sport federations	27.96±0.38			
	The principle office of physical education in schools	25.80±1.75			
Skill in English	The ministry of sport and youth	19.90±3.03	1.445	0.07	0.027
	Sport federations	17.81±2.90			
	The principle office of physical education in schools	19.07±2.08			
Economic factors	The ministry of sport and youth	21.91±2.40	3.741	0.012	0.16
	Sport federations	20.88±2.43			
	The principle office of physical education in schools	22.17±2.52			
Technical factors	The ministry of sport and youth	16.68±1.93	13.451	0.001	0.38
	Sport federations	15.64±1.96			
	The principle office of physical education in schools	16.73±1.57			
Attitudinal factors	The ministry of sport and youth	38.86±3.11	21.638	0.001	0.39
	Sport federations	37.02±3.42			
	The principle office of physical education in schools	38.67±3.77			
Environmental factors	The ministry of sport and youth	16.68±1.93	12.351	0.001	0.35
	Sport federations	15.64±1.55			
	The principle office of physical education in schools	16.73±1.57			

DISCUSSION AND CONCLUSION

Nowadays, almost all organizations invest a great part of their expenses in buying and maintaining the systems and devices related to IT whose aim is to improve effectiveness, function and efficiency of the organizations. Sport organizations, like other organizations, use IT in order to do their tasks. The investment sources of the organizations will go off if IT in organizations is not used in a correct way. Therefore, the factors related to IT should be specified. As a result, the concentration of this article is on the factors related to the usage of IT in sport organizations. The findings demonstrated that there is a significant and positive relationship between the variables age, job history, skill in English, technical factors, environmental, economic and attitudinal factors and IT in sport organizations. In the studies implemented by Haysung (2004), Movahed Mohammadi (2002) and Asadi (2007) there was a positive and significant relationship between the extent of using IT and environmental factors (10, 13,17). In the studies implemented by Al- Amarri (2004) and Yaghoobi (2004) and Movahed Mohammadi (2002) there is a positive relationship between computer skills and the extent of using IT(18 ،11 ،17). Moreover, there is a reference to the significant and positive relationship between IT and familiarity with English which is consistent with the findings of the present research (11, 16, and 19).

As English has a great influence on the usage of IT, it is suggested to facilitate the use of IT by taking part in English classes and reinforcing English skill. The results of the researches implemented by Izian (2008), Vanektash (2000) and Atashak (2010) demonstrated that economic factors affected using IT. It can be said that

there is a direct relationship between economic development and presenting modern technologies in organizations and the extent of using IT. The more the access of the employees to IT, the more the desire of the employees to use it (5,20,21). It should be said that the results presented by most of the researchers are consistent with the present research in terms of the attitude. For example, Karani (2008) claimed in his research that the attitude of the people is an effective factor in using IT and also Lieberman (2006) in his research emphasized on the importance of the employees mental implication of the use of IT (8). O' Brien (1996) mentioned the attitude of the managers and teachers towards IT as an effective factor in the acceptance and usage of IT (8). The finding of Shojaii (2006) also demonstrated that all the independent variables (mental implication of the usefulness of IT, the attitude towards the easiness of using IT and decision making on the use of IT) affected the dependent variable (the factors influencing the usage of IT) by 99 percent of confidence (24). Therefore, it can be said that the attitude is one of the most effective factors in the usage of IT and those who have positive attitude towards IT, use it more in the organization and spread it in a better way. The positive attitude of the managers and technicians enables them to use it eagerly.

The result of multivariable regression analysis through simultaneous analysis in order to predict the extent of using IT in terms of skill in computer, skill in internet, skill in English, environmental factors, technical factors, economic factors and attitudinal factors demonstrated that these factors can be significant predictors for the extent of the use of IT. Asadi (2007) mentioned in his research that the variables of familiarity with computer and skill in English define 63 percent of the variance of dependent variable (the extent of using IT) (17). In a study by Movahed Mohammadi (2002), familiarly and skill in English predict 71 percent of the changes related to the use of IT (13). By the way, the result of the research implemented by Falaki (2006) demonstrated that the three variables of familiarity with computer, familiarity with internet and the extent of using of computer per week in order to do the tasks related to jobs define 75.2 percent of the extent of using IT (26). The results of MONOVA demonstrated significant difference in terms of skill in computer, skill in internet, skill in English, technical factors, economic factors, environmental and attitudinal factors between the three organizations mentioned. According to the results of regression analysis, it is suggested to get more acquainted with IT through different methods such as holding under-service periods and providing and distributing broachers on this subject. It is also recommended to provide enough access to necessary hardwares in job environment. Also, according to the results of regression analysis and entering the variable "familiarity with English" , it is suggested to consider familiarity with English as a criterion in order to employ the human force for sport organizations and augment their familiarly with English and their eligibility through holding educational classes.

According to the importance of environmental and technical factors and having realized their relationship with IT, it is suggested to consider proper environmental circumstances such as providing suitable temperature, light, retired job environment, unlimited time and place in working with computer and internet and other hardware's and the existence of experts in order to eliminate problems. It is also suggested to adopt different policies in order to improve technical factors such as net speed and intermittent connection and disconnection of the net in order for the employees to utilize IT in a suitable way and far from stress and equipped with required facilities. The scheffe hoc test demonstrated a significant difference between the subscales of skill in computer, skill in internet, skill in English, economic factors, technical factors, attitudinal factors and environmental factors between the ministry of sport and youth and the principle office of physical education in schools. However, there is a significant difference between the mentioned subscales in a comparison between the ministry of sport and youth and sport federations and also between sport federations and the principle office of physical education in schools. The results of this study are consistent with those mentioned in the literature of the study. The results of the study implemented by Salmani (1390) regarding IT and the coaches of body building demonstrated that there is a great gap between the federation of body building and the international standards of IT (27). As there was a significant difference between sport federations and the other two organizations in terms of the subscales mentioned in this research, we can say that this study is consistent with the other studies. The results of the study implemented by Mohammadi et al (2010) demonstrated a significant difference regarding familiarity with computer in sport organizations. According to the results of this research, the principle office of physical education in schools is in a much better condition than the other two (30). Nasiri Ali Abadi et al. (2010) came to the conclusion that the awareness of the staff employees of the ministry of education from informational nets, electronic government and computer tools was in an acceptable level. It is consistent with this research (28). Also, Haghforush (2002) stated in his research that the managers of the ministry of education put a lot into IT and discussion over it (29). One of the reasons why the principle office of physical education is superior to the other two

organizations is the positive attitude of the managers towards IT, holding educational classes and making the path smooth in order for the employees to get more familiar with it. However, the results seem logical. According to the formal information obtained from the site of the department of IT and communications, the formal site of telecommunication and the ministry of education stating that the two organizations of communications and ministry of education were the superior organizations in terms of IT and communications in the years from 2007 to 2008 in Iran and according to the superiority of the ministry of education, the principle office of physical education in schools, which is one of the chief offices of the ministry of education, is expected to be superior and to have a better condition than the other two. The findings of the present research emphasized on this subject once more. But the important point to be mentioned is that the ministry of sport and youth was in a parallel track with the principle office of physical education in schools in terms of working with computer.

REFERENCES

[1] Sarafi Zadeh Z, it is in organizations (theories and practices), Amir Publications, 2007.

[2] A., Shahi Beik, L., Hashemi, "reengineering of human sources through it", tadbir magazine, no. 163, pp. 125-134, 2005.

[3] G.C., Matthews, I., Benbasat"Development of an instrument to measure the perceptions of adopting an information technology", Information Systems Research, Vol. 2, no. 3, pp. 192-222, 2002.

[4] M., Lorin, B., Erik "information technology and internet firm organization: an exploratory analysis", journal of management information system, voll. 4, no. 2, pp. 81-84, 1997.

[5] Z., Ezziane "information technology literacy: implications' on teaching and learning", Educational technology and society, vo.10, no.3,pp. 175-191, 2008.

[6] G., Knezek, R., Christanson" impact of new information technologies on teachers and student education", Education and information technologies, vo. 7, no. 4, pp. 369-376, 2002.

[7] F., Davis, R., Bagozzi, P., Warshaw" User acceptance of computer technology: a comparison of two theoretical models", Management Science, vo. 35, no. 8, pp. 982-1003, 1998.

[8] D.G., Liebermann, L., Katz, R.M., Sorrentino" Experienced Coaches Attitudes Towards Science and Technology", International Journal of Computer Science in Sport, vol. 4, no. 1, pp. 21-28, 2006.

[9] M., Hughes, I.M., Franks, (Eds.)" Notational Analysis of Sport London", New York: Capital press, 2004.

[10] P., Hyesung" factors that affect information technology adoption by teachers" Vhttp: // digitalcommons. Unl. Edu. / Dissertation/ AA 13126960/, 2004.

[11] N., Yaghobi, R., Shakeri" The comparison of the analysis of the models of it acceptance by emphasis on the acceptance of internet banking", the seasonal of Iranian management sciences, vol. 3, no. 11, pp.21-24, 2008.

[12] R., Maningas" ultization of it based services and communication technology media by end- user of agricultural research and extension network in the Philippines", AFITA/WCCA joint congress on IT, 2002.

[13] H., Mohammadi Movahed" the model of using internet by the students of agricultural faculty in Iran" the magazine of Iranian agricultural Faculty", vol. 33, no. 4, p p.717-727, 2002.

[14] R., Rezaii" an investigation of the factors effective on the use of informational and communicative technologies by the experts of agricultural faculty in Iran", M.a thesis, Tehran university, 2002.

[15] M., Mashhadi, A., Rezvanfar, J., Yaghoobi" The factors effective on the use of it by the scientific, party of the agricultural faculty of Tehran university", the seasonal of survey and research in higher education, vol. 30, no. 2, pp. 151-171, 2007.

[16] M., Holecombe" Factors influencing teacher acceptance of the internet as a teaching tools: a study of texas schools receaving a TIF or TIF grant", the university of Baylor, USA, 2000.

[17] A., Asadi, A., Karimi" the recovery of the factors educative on the usage of it by the teachers of educational centers", the Iranian magazine of agricultural sciences, vol. 2, no. 38, pp.277-289, 2007.

[18] G., Al-Amarri, G., Victor "Benefits and barriers implementation computer usage Qatari elementary schools as perceived by female teacher, an explorarety study", available on: www.ohaiolink.edu, 2003.

[19] Z., Karani, H., Fami, A., Rezvanfar, J., Ghasemi "an investigation of the attitude of the students of agricultural faculty of Tehran university towards the use of it in agriculture", the magazine of economic and development researches of agriculture, no. 3, pp. 167-177, 2010.

[20] V., Venkatesh, D., Davis" A theoretical extension of the technology acceptance model: four longitudinal field studies", Management Science, vol. 46, no. 2, pp. 186- 204, 2000.

[21] M., Atashak, P., Mahzadeh" recognizing and sorting the obstacles effective on the disuse of the informational and communicative technologies by the teachers", educational scientific publications, vol. 5, no. 8, pp. 115-122, 2010.
[22] G. J., O'Brien, W. D., Wilde "Australian managers' perceptions, attitudes and use of information technology", Information and Software Technology, vol. 38, no. 5, pp. 783-789, 1996.
[23] S., Rasouli azar, H., sadeghi "Technical expert's perception toward information technology", Iranian journal of agricultural science, vol. 37, no. 2, pp. 168-173, 2006.
[24] F., Shikh Shojaii, A., Tahereh "an investigation of the factors effective on the acceptance of it by the librarians of technical faculty libraries of Tehran university", vol. 10no. 3, pp. 9-34, 2007.
[25] S., Mohammadi "Investigate the attitude of elite coaches of the team and individual sports towards the role and importance of information technology in sport", Sport Management International Journal, vol. 7, no. 2, pp. 19 – 26, 2011.
[26] M., Falaki, H., Shaabai Alifami, H., Irvani, H., Movahed Mohammadi "analsis of the factors effective on the use of it by the experts of agricultural system in Iran", the Iranian magazine of agricultural sciences, vol. 2, no. 2, pp. 185-197, 2006.
[27] Salmani, B., Motab, A., "it and the coaches of body building, international festival of body building and aerobic Iran", the International congress of body building and aerobics, Iran, Tehran, pp 121- 122, 2010.
[28] A., Nasiri, R., Abadi, Z., Taghpoor "an investigation of the obstacles facing the use of information and communication technology in the ministry of education and submitting an optimal model in this field", the seasonal of educational Enovation's, no. 31, pp. 54- 62, 2010.
[29] A., Hajforush, A., Ourangi" an investigation of the results of the usage of information and communication technology in the employees of Tehran high schools", the seasonal of educational Enovation, vol. 3, no. 9, pp. 11-31, , 2002.
[30] Mohammadi, S., Esmaili, N., "an investigation of the extent of familiarity with computer and importance of computer in Iranian sport organizations", the International festival of body building and aerobics, Iran, Tehran, pp. 142-143, 2010.