

Investigating Information Technology Status and Its Effect on The staffs innovation and creativeness in Lorestan-province physical Education headquarters**¹Zahra Heydari, ²Rezvan Dadkhah, ³Yashar Hormati, ⁴MaryamAskarzadeh**¹*Departement of Physical Education, Mobarakeh Branch, IslamicAzadUniversity, Mobarakeh, Iran*²*Young researchclub, khorasganbranch, IslamicAzadUniversity, Isfahan, iran*³*Department of Physical Education, Ardestan Branch, Islamic Azad University, Ardestan, Iran*⁴*Young ReserchersClub, ShoshtarBranch, Islamic Azad University, Shoshtar, Iran*

Zahra Heydari, Rezvan Dadkhah, Yashar Hormati, MaryamAskarzadeh: Investigating Information Technology Status and Its Effect on The staffs innovation and creativeness in Lorestan-province physical Education headquarters

ABSTRACT

The main purpose in this study is investigating the relationship of information technology application and the employees innovation in lorestan province physical Education head quarters-considering applied purpose and data collection method this research is descriptive using correlation method. Statistical population consist of the total group of employees in lorestan province physical Education main office in 2011, based on the office Statistical data department was reported as 133 samples which the research sample was in harmony with Statistical population of which 100 samples(75%)yesponded to the question nairs. In order to collect data ,two types of information technology and rendsip innovation question nairs were used whose estimated reliabilities , were %78 and %80 respectively. Rendsip innovation questionnaire included 50 and information technology questionnaire consisted of 30 multiple choices based on LikertEscale. Data analysis was performed at the level of descriptive statistic by wsing frequency, frequency percentage, standard deviation, mean, graph and tables and in inferential level by wsing one-way t-test, kolomogroph-smiranovetest, Lovintest, multi-variable variance analysis, pearson correlation coefficient and multi regression test. These test was performed at significant level of .05. Research findings revealed that the usage rate of information technology in lorestan province physical education head quarters is below the middle point, and this condition ,in relation to internet indications having a mean of (3/16) includes the highest usage score, in comparison with other indication, in physical education main office(head quarters). In addition, these findings revealed that there is a relationship between computer ability level and innovation which is .19 and in sgnificant level is .4 . There is no significant relationship among other information technology indication and innovation. Also, the results stated that there is a significant relationship between information technology application and the crew innovation in physical education office in lorestan province($r=.20$).

Key words: Information technology, innovation, lorestan province physical education headquarters**Introduction**

In todays world which is called information age, information technology development in office, with the purpose of creating revolution in official system and providing knowledge by the managers and the crews attempt, establishes the base and foundation of this system existence. The most important thing in this revolution is the managers and staffs point of review about the information resources, knowledge and skill of that information resources aswell. Therefore it can be said strongly that from the time human being came to existence, he tried to direct his activities toward providing welfare in his life. Humans motivation toward development, sciences

and technology was pursuing this goal. The main condition in providing welfare is having a healthy and strong body for continuing life and work. While there is a continual action and reaction between human and his environment and this relationship has a continual frequency, It coses an urgent feeling and attention more than before to copmputer in working place and daily activities using information technology in communication reduces expenses such as postal costs and publication expenses , increases the work speed and feedback or output, speeds individuals communications with each other, provides employments and new jobs, rises work force optimization, and augments gross national production. In our society, be coves of cultural, social

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and economic domination conditions and its specific restrictions and also individuals urgent needs to computer as a valuable tool for eliminating these needs, now, it has acquired a more remarkable and main role than the post. As a result, it must be mentioned that computer has a special status and role in the staffs daily lives and leisure time in the head quarters [10]. Considering extensive and various studies about innovation, in addition to researches on information technology in different organization, in the society level having been performed, there has not been any research based on the relationship between innovation and information technology in physical education organizations throughout the country to this time. Because the application of information technology in organizations is accompanied with some shifts and basic changes, these organizations should be careful and considerate about using information technology and try to succeed through cognition, knowledge and objective plans and programs. Since merely having financial ability is not sufficient for successfully implementing information technology project in an organization; However, various factors play a crucial role in its implementing. One of these factors is the rate of managers awareness about organizational variables such as innovation and using information technology in the organizational level. If these factors are being neglected, it can cause project failure and capital loss. Therefore, this crucial subject provided some incentives for the researcher to recognize advantages and plenty of applications which information technology can supply in organizations and institutions as an important role for supporting decision-making systems and determine how the usage extends of this technology in physical education organizations can influence organizational innovation. It is obvious that not paying remarkable attention to these basic variables in organizational level can hinder organizational developments. In other words, information technology development and its increased usage has been augmented significantly, and its growth and development is felt in every aspect of our lives. There is no doubt that innovation has a main share and chief role in information technology development and this technology has some effects on innovation as well. Based on these facts, investigating the relationship between these two issues is main purpose of this paper.

Using the Internet:

The Internet can be considered as a cold war period product which was produced because of the USA defense ministry horror of the nuclear war hazard. In 1969 USA defense ministry launched Arynet which was an experimental network for the first time. Initially, Arynet was only consisted of four computers connecting different

parts to each other. In 1970, by spreading this network, the first connection on the international level was produced, and in 1975 Internet was designed on paper, and in 1986 USA national sciences institute established (USENET) for offering web connection to more research centers and developing international web, and in 1997 by becoming commercialized, the internet services increased dramatically and its access costs reduced [13]. Internet usage could be divided into three basic categories:

- Internet usage as an information source
- Internet usage as a communicative media
- Internet usage as an e-trading system

The scope of internet usage could be considered as daily activities, hobby or recreation, searching data bases, using search engines, sending and examining e-mails.

Computer capability level:

Computer capability level for every individual is related to every person's capability and competence on computer seven fold skills. The internet and its side-activities and anti-virus activities [1].

Software and hardware usage:

Hardware is the main and accessory parts of a computer. These parts are put together based on the computer manufacturer company designs and maps which follow specific purposes. Operating system is used to activate these senseless parts and chips and a special program should be installed on the operating system to be used for that specific purpose. The usage extends application, installation and trigger or operate computer hardware (printer, scanner, and disk-reader) and also the usage scope of the computer-base for evaluation and windows installation and other softwares and using virtual libraries are called softwares and hardware [1].

Usage instruction:

Without having operation system and its softwares, computer is a useless machine and by installing these softwares, it is justifiable to use this machine. These days computer softwares has improved considerably and these are specialized softwares for all sciences and every specialist can use the related software according to his/her major. Therefore, usage instruction of computer is similar to the computer usage extends for performing specialized activities.

Innovation:

Many believe that innovation is a necessary element for accessing excellence and improving scope of the courses of study, however it is an unknown concept whose explanation is very difficult by only using words. Although innovation definition depending on its usage domain and

field (such as painting, writing, commerce) is very different, a new and initiative definition for it can be followed as: creativity novel ideas, without paying much attention to their applications and efficiencies, and it can be said that this definition emphasizes more on inputs than on outputs [4]. Ecayne in his definition expressed the concept of outputs as follow thinking about novel and appropriate ideas. This definition stress on needing individuals who suggest various, excellent wonderful and the some time proper ideas. From psychological point of view, innovation is described as integration of new thoughts through of unknown resources, master of organizational behavior, considers innovation as creating integration of thoughts and groups or individuals approach to in a new method. Georegi emphasizes on concept of innovation. He believes that innovation means looking at something that other people look at but thinking differently. Innovation is looking back again and going out of the closed doors or boundaries [2].

Manafi [6] in a study titled "investigation and comparing innovation obstacles on physical education managers in universities related to science ministry" stated that in physical education managers and science ministry and health ministries innovation, using systematic analysis and once a beautiful harmony have a shortage and deficiency which are the effective factors on innovation obstacles from managers point of view.

Sharif zadeh [15] in a research titled "investigation the relationship between innovation and effectiveness of physical education crew in west Azarbayegan province education offices", acquired these results that there is a positive significant relationship between innovation rate of physical education crew with effectiveness. There is a positive and significant relationship between physical education management crew record service with the crew innovation rate. There is a positive and significant between educational degree of physical education crew with the managers innovation rate. The rate of physical education innovation in education organization is in the middle point.

Karimi in a research work under the title of "investigation the effect of information technology on innovation in Tehran vocational and technical schools" stated this finding that technological training courses didn't have any effect on innovation and the groups who did not participated in training courses had more innovation and incentives.

Salehi and Azadmehre [12] did a research on "The effect of information technology on physical education teachers innovation in Fasahighschool" and obtained the results which revealed that there is a significant difference between the teachers who use the internet and those who do not use it and also there is a significant difference between teachers who use information technology and those who do not use it on innovation and initiation.

Farahani, Zareei in a work titled "information technology and its relationship with educational performance and future occupation of Kerman physical education students" obtained the results showing that the level of awareness in most students about information technology is very low and the majority of students attention and planning about their future occupation and educational performance is in the middle point. In addition there is a significant and positive relationship between the level of awareness of information technology and students educational performance. However, there is no significant relationship between information technology awareness and future occupation.

Sharifiyan and Erfani [14] performed a research titled "physical education organization crew educational and training need-measuring on information technology domain" found that the employees have an average level of knowledge in this domain. It also revealed that most of their knowledge and awareness is related to using internet, software and typing and weakest condition is related to using calculating pages, and applying softwares for offering subjects and issues.

Hematinejad, Esmaeli poor and Mostafae in a research paper under this title suggested that "The relationship of information technology and social structure of physical education head quarters in Iran-Islamic Republic" there are a positive and significant relationship between information technology, social structure and full-time job, concentration and cohesion indication.

Lee research titled "investigation computer usage in university" revealed that there is a significant relationship between age, gender, educational and university degree or rank with computer usage rate. In addition, course of study and university instructors skill level in using applied software programs are very effective.

Richardson and Yan [11] evaluated 428 physical education teachers in a research in eleven city highschool. The results indicated that the teachers who had more work experience with internet, had self-efficiency and they gained more success in education.

Yixi Zhang Han [16] performed a research among 302 internet users (physical education). He observed that there is a significant difference between students self-efficiency who use internet every day and those who use it one day in a week.

Ono and Zanodni [16] in a research on "difference between male and female in using information technology" observed that there are crucial differences between these two gender on applying computer and internet in Japan and USA.

Piper and Austin [9] in a research in Pennsylvania among physical education teachers stated that the teachers who use internet and software have a significant higher innovation in comparison with those who do not use them.

Methodology:

In order to describe and investigating the relationship between information technology application with the employees innovation in lorestan province physical education headquarters, research method descriptive correlation has been used. The statistical population in this research consists of all lorestan province physical education crew-based on the offered statistics in 2011 the whole population was 133. In this study the sample corresponded with the population. In order to collect data, two kinds of questionnaires were used. They were information technology and respondents innovation questionnaires

whose reliabilities were 78% and 80% respectively. Respondents questionnaires consisted of 50 multiple choice and information technology questionnaires included 33 multiple choice based on Likert scale. To data analysis in descriptive statistical level, frequency, percentage of frequency, standard deviation, mean, graph and tables were applied. In inferential statistical level, one-way t-test, Kolmogorov-Smirnov test, low intensity, multi-variable variance analysis, correlation coefficient and multi-regression were used. These tests were done in a meaningful level of 0.05.

Results:**Table 1:** internet items and innovation

Significant meaningful level	Pearson coefficient correlation	Statistical indications variable
0.04/0	14/0	Internet and innovation

Level of significant $P \leq 0.05$

As it is observed in table 1, in significant level ($\alpha \leq 0.01$), there is a significant and meaningful relationship between internet indication and innovation considering the test statistics ($r=0.14$), ($P=0.04$).

Table 2: The result of Pearson correlation between computer competence level items and innovation

Significant meaningful level (P)	Pearson coefficient (r) correlation	Statistical indications Variable
0.48/0	19/0	Computer capability level and innovation

Level of significant $P \leq 0.05$

As it is shown in table 2, there is a positive and significant relationship between innovation and Computer capability level component at the significant level of ($\alpha \leq 0.05$) which is ($P=0.48$), ($r=0.19$). In other words, it can be said the more computer seven-fold skills are, the higher innovation people have.

Table 3- The relationship between technology and innovation

Significant meaningful level (P)	Pearson coefficient (r) correlation	Statistical indications variable
0.42/0	20/0	Information technology with innovation

As it is illustrated in table 3 there is a positive and significant relationship between information technology usage rate and innovation in the level of significant ($\alpha \leq 0.05$) according to the test statistics ($r=0.20$), ($P=0.42$).

Table 4: results of Pearson correlation between using software and hardware component with innovation

Significant meaningful level (P)	Pearson coefficient (r) correlation	Statistical indications variable
0.163/0	14/0	software and hardware usage with innovation

As it is observed in table 4, in significant level ($\alpha \leq 0.05$), there is not a significant and meaningful relationship between software and hardware with innovation considering the test statistics ($r=0.14$), ($P=0.163$).

Table 5: Pearson correlation results between using instructional component with innovation

Significant meaningful level (P)	Pearson coefficient (r) correlation	Statistical indications variable
0.523/0	06/0	Instructional usage with innovation

As it is observed in table 5, in significant level ($\alpha \leq 0.05$), there is not a significant and meaningful relationship between internet indication and

innovation considering the test statistics ($r=0.06$), ($P=0.523$).

Discussion and conclusion:

Based on the research findings, there is a positive and significant relationship between information technology application rate and innovation level. As it is observed, the more the individual employees' innovation level, the higher their information technology application rate would be. It seems that there is a relationship between developing innovation and meeting the curiosity sense in test, providing background for new experiences and even building employees' character personalities. In this way, individual who have higher levels of innovation, according to demographic characteristics, take an action to use this new technology more and more. This part of research findings showing a relationship between innovation and using technology is in harmony with Salehi and Azadmehrs findings. However, it is not in harmony with Krimis research. In addition, the findings indicated that there is a significant relationship between using the internet and computer capability level with the employees' innovation rate in Lorestan province physical education headquarters. It meant that when the internet skill level and computer capability level increase, the employees' innovation rate rises too. In order to explain this result, it can be stated that considering the present age and necessary skills, and using the internet is especially crucial for managers and employees who continuously are encountered with new findings and scientific discoveries. The more the employees become skillful in using the internet, the more innovation they have in comparing to the colleagues who are deprived of it. This part of research findings on having a relationship between the internet and innovation was not in harmony with Salehi and Azadmehr findings. This difference can be due to different organizational structure and difference in the type of statistical population and official services nature type such as various reasons in findings. In addition, the results indicated that there is no significant relationship between instructional usage of computer and software and hardware usages with innovation rate of Lorestan province physical education headquarters employees. According to the obtained results of this study, organizations and physical education office managers and employees should be able to use information technology competencies in the best way, if they want to act effectively and gain up-to-date knowledge in global level. From this point of view, providing an appropriate background and environment for growth and development of information technology and creating and developing information transmission infrastructure would be the first step among physical education office and organization managers and employees in the country in this respect. Furthermore, improving manager and employee total knowledge levels due to information technology and valuing individual innovation discovery toward training and education innovation

minds and also using innovation intellectual and mental capabilities are the time which can help to gain this issue. Equipping physical education office and organizations with computer and easy access to the internet and network services for managers and employees and make an attempt toward propagate information culture among managers and employees is also the basic step in this respect.

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