RELATIONSHIP BETWEEN THE COMPONENTS OF INFORMATION AND COMMUNICATION TECHNOLOGY WITH ORGANIZATIONAL AGILITY FROM VIEW POINT OF PHYSICAL EDUCATION PROFESSORS

RELAÇÃO ENTRE OS COMPONENTES DA TECNOLOGIA DE INFORMAÇÃO E COMUNICAÇÃO COM A AGILIDADE ORGANIZACIONAL DO PONTO DE VISTA DE PROFESSORES DE EDUCAÇÃO FÍSICA

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Abstract. Nowadays, the use of information and communication technology helps a lot to increase the knowledge of physical education professors and to enrich the content of their jobs. And the paradigm called organizational agility can play a significant role in facing challenges and achieving success. From this point of view, the present research was conducted with the aim of the relationship between the components of information technology and communication with organizational agility from the point of view of physical education professors. The research is applied in terms of purpose and descriptive-survey in terms of execution method. The method of data collection is library studies and field research with questionnaire tools in physical education faculties and they were random samples. Confirmatory factor analysis was used to examine the dimensions of the examined variables and construct validity, and PLS method was used to test the research hypotheses. The findings of the research showed that the structural model of the research has a strong fit and information and communication technology plays a significant role in improving the organizational agility of physical education professors. In this research, it shows that there is a significant relationship between information and communication technology and organizational agility of physical education professors that by using information and communication technology on organizational agility, in providing better services and doing more optimal work and quick environmental response in professors. Physical education is effective.

Keywords: technology, agility, competence, flexibility

Resumo. Atualmente, o uso da tecnologia da informação e comunicação ajuda muito a aumentar o conhecimento dos professores de educação física e enriquecer o conteúdo de seus trabalhos. E o paradigma chamado agilidade organizacional pode desempenhar um papel significativo no enfrentamento de desafios e na conquista do sucesso. Sob esse ponto de vista, a presente pesquisa foi realizada com o objetivo de relacionar os componentes da tecnologia da informação e comunicação com a agilidade organizacional na visão de professores de educação física. A pesquisa é aplicada quanto à finalidade e o levantamento-descritivo quanto ao método de execução. O método de coleta de dados é estudos de biblioteca e pesquisa de campo com instrumentos de questionário em faculdades de educação física e foram amostras aleatórias. A análise fatorial confirmatória foi usada para examinar as dimensões das variáveis examinadas e a validade de construto, e o método PLS foi usado para testar as hipóteses de pesquisa. Os resultados da pesquisa mostraram que o modelo estrutural da pesquisa tem um forte ajuste e a tecnologia da informação e comunicação desempenha um papel significativo na melhoria da agilidade organizacional dos professores de educação física. Nesta pesquisa, mostra que existe uma relação significativa entre a tecnologia da informação e comunicação e a agilidade organizacional dos professores de educação física que, ao usar a tecnologia da informação e comunicação na agilidade organizacional, na prestação

de melhores serviços e na otimização do trabalho e resposta rápida do ambiente nos professores. A educação física é eficaz.

Palavras-chave: tecnologia, agilidade, competência, flexibilidade

INTRODUCTION

Information and communication technology is one of the most important development pillars worldwide and most countries in the world have made ICT development as one of the most important infrastructures of their development (Cepeda & Arias-Pérez, 2019). Nowadays, using ICT in the organizations has been converted to a necessary, inevitable task, such that, higher education is no exception and is one of the effective factors to meet economic, social and cultural policies and higher education system with its outputs and consequences plays an important role in development of the countries (Mandal, 2019). Information and communication technology has been implemented in all aspects of our lives and is considered one of the most important axes of development in the world. Most of the world has made the development of information and communication technology one of the most important infrastructures for their development, in the way that technology is used and with the functionality of information and communication in organizations, it becomes a necessary thing (Panda & Rath, 2016).

At the beginning of the third millennium AD, universities in developed countries have acquired characteristics differing from what is traditionally understood from the university (Cepeda & Arias-Pérez, 2019). Being informational and digitalization, internalization, being interdisciplinary and multidisciplinary, and providing continuous educations are among these characteristics (Karimi-Alaghehband & Rivard, 2019). Daily changes in the software and hardware technology, internalization, competitive pressure, organizations need for having expert staffs familiar to technology techniques, no need to physical presence of individuals in educational classes, organizations need to raise the efficiency and effectiveness of their staffs, expanding the scope of information circulation and its effective contribution in decision makings and planning's and excessive hierarchy of most big public organizations, made technology the main focus of human attention. So, computer science, storage, recovery, information volume and human knowledge mixed together and information technology was shaped (Irfan, Wang & Akhtar, 2019). Educational organization now consider ICT as a tool through which raises the performance of its staff and adapt it with changes. But in order for these organizations to make the performance of their employees more effective and efficient in respect of training and professional level, they should encourage their employees to use technology alongside the pace of technology change (Cai et al., 2019). Creation of an quality and desirable education system with ability to train individuals to live in a variable world is among the major priorities of modern world (Bakhshalipour, 2020). So, it is not surprising that many countries insist on progressing the plans for using ICT in education. Since, they are trying to include their nation in the advance countries of the world. So, ICT has a significant effect on learning which is including the role played by learners and educators, more participation of students, increased usage of resources outside the curriculum and growth and improvement in designing skills and material presentation (Marhraoui & Manouar, 2018).

The standard of ICT competency for educators of the next generation in terms of national policy, curriculum planning, evaluation, education, management, professional development of professors and the skills relating to ICT is that: professors should know the basic skills of software and hardware performance as well as applications, web, communication soft wares, demonstrative soft wares and managerial applications (Mandal, 2019). All the governments all over the world try to manage ICT properly to gain their goals in educational processes and to invest on ICT so that they can improve the standard of living for professors in the society.

They based their aim on this basis that use information and communication technologies to bring the government closer to the people, improve the quality of government relations with neighboring countries, strengthen the foundations of the social economy and create coordination and integration between different government departments (Irfan & et al, 2019; Alam, 2020). ICT as a novel approach is the complement of education not its alternative. The purpose of its development is to improve and make more efficient educational resource particularly human resourced. Expansion of ICT and using novel tools and concepts, provides easy and low cost information develop mend and on line access for learning's including students and scholars and enables rapid exchange of information and cultural interactions (Panda & Rath, 2016).

One of the capabilities of agility is increasing the accountability speed through using developed information technologies (Cepeda & Arias-Pérez, 2019; Mandal, 2019). Investment in information technology decreases the risk and costs of integrity and using information technology it is possible to reconstruct technical- human systems according to the changes, so that, Professors can form virtual teams inside and outside the organization to respond to environmental changes (Mao, Liu & Zhang, 2015). Information and communication technology provides the possibility of better and wider access to information, and by saving time and money and leading the human force to useful activities, it causes the development of the human force. Among the other applications of information and communication technology, obtaining and analyzing information, reducing costs in supervision and management, increasing the speed of operations, increasing user satisfaction, integrating simple and fast programs, achieving appropriate and stable returns by spending money. and less material resources and rapid dissemination of information (Irfan & et al, 2019; Alam, 2020).

ICT is an instrument to develop the knowledge of employees to realize the agility (Panda & Rath, 2018). As well, it can provide an infrastructure on which depends all other business processes and leads to better sensing and responding to the changes. But rapid growth, both for human resource management and for information and communication technology, has led to the fact that today most educational organizations have turned to the use of information technology in the human resources sector (Hassan et al., 2015).

In the technological organizations, communication and information systems are used to improve communication, rapid rotation and access to information, ease of process and analysis on the information security and finally relationship with outside world and to provide a reasonable solution for management so that along with decreasing the costs and time, it is tried to control and monitor all the affairs from a central point (Marhraoui & Manouar, 2018). Information technology supports updated programs and establishing informational communications and decreasing the costs in organization. In addition to positive influence on the organizations function, information technology effects on company's functional potential and provides a mechanism to save access and divide the information function. Application of information technology in organization leads the organization to take advantage of the value change of the organization as a result of agility and ultimately increase the competitive advantage of the organization (Hassan et al., 2015).

Continuous change is one of the basic and functional concepts of organizations that operate in the current century; Organizations that operate in a very active and dynamic environment are always faced with threats that, if they are not responded to quickly, they will undoubtedly remain out of the circle of activity and survival. The issue of how the organization faces the unpredictable, dynamic and constantly changing environment has become a dominant issue in the industrial, scientific and educational sectors; In this regard, various ways have been proposed, among the ways proposed to face the uncertain and

unpredictable environment, agile organization is more dominant and famous than other methods (Mandal, 2019).

Based on the available information, in the developed countries whether in public or in the private part, there are many failures in this regard (Panda & Rath, 2018). Evidence indicates that in international level using this technology especially in developing countries has led to the growth of higher education (Marhraoui & Manouar, 2018; Hassan, Arshad, Mustapha, Jaafar, 2013). Capabilities of information technology support organizations agility and play a fundamental role in understanding and reacting to the environment (Wang, Pan, Ouyang, Chou, 2014). Educational organizations context has changed for educational environment in recent years, and not only it is not possible anymore to make decisions based on the pre-determined plans for all the organizational environments but also the lack of a rapid response to turbulent environments will deprive the ability to compete (Butgereit, 2019). Organizational agility is one of the very key strategies in order to quickly receive customers' needs and provide appropriate answers to them in the shortest possible time. The more agile an organization is, the more effectively it responds to sudden and unexpected changes (Karimi-Alaghehband & Rivard, 2019).

Applying information technology in the educational organizations lead them to take advantage of organizations value change flexibility as a result of agility and eventually increase the competitive advantage of organizations. In other word organizations agility is a function of information technology integrity in that organization (Mao et al., 2015). Using ICT in agility will be followed by improved business operations, empowerment and more facilitation and the basis of agile organizations is integration of information system, technology, individuals, business processes and equipment's in integrated organizations for rapid responding to the environmental events and changes. Organization agility enables organizations by integrating technology and employees with a communication infrastructure to accelerate in responding the changing needs of individuals in an environment that is subject to constant, unanticipated changes (Panda & Rath, 2018).

One of the major capabilities of agility is increased speed of response through use of developed information technologies. ICT as one of the most efficient suggested technologies is considered as the most important levers to provide agility capacities for organizations without which organizations agility will not be realized (Karimi-Alaghehband & Rivard, 2019). Nowadays, ICT helps us to break down the walls separating the tasks, geographical location and managerial level and lets us to create a new network of relationship between organization members. What will be shown form the research evidence in the future management of educational organizations will be based on virtual management in which developed technology of networks, information and management of their use play a key role and its based on ergonomics (the structure of human –computer relationship). In this structure, reporting management is not vertical and communications is of multiple, comprehensive and universal structure and dimensions where organizational agility plays an important role in this process (Marhraoui & Manouar, 2018; Bakhshalipour et al., 2017; Mao et al., 2015).

LITERATURE REVIEW

In fact, applying ICT in the educational organizations leads the organizations to take advantage of the flexibility of the organizations value chain as a result of the organizations agility (Hassan et al., 2015). In addressing the research evidence, some research relating to the present study variables can be mentioned. Cai., et al (2019) studied the organizational agility in the product innovation through information technology. Results of their findings indicated that there is a significant positive relationship between the components ICT and agility. Irfan et al., (2019) in their study titled ICT capabilities on the supply chain process and

organizational agility concluded that there is a significant relationship between variables. Mandal (2019) in the study in of status of ICT capabilities on the organizational agility and flexibility rate concluded that information technology may be useful in strengthening organizational agility and educational institutions are subjected to constant changes and necessity to use updated communication tools is among the necessary requirements of educational centers (Mandal, 2019). Ridwando et al., (2019) studied the relationship between ICT and organizational agility. Their data output indicated that information technology plays the basic role in the agility of work processes and affects on the efficiency and quality of the results and there is a significant relationship between the two variables. Marhravi & Abdollah(2018) in their research titled information technology innovation in the sustainable function of company with the mediation role of organizational agility indicated that the components influential on organizational agility system can be effective through applying new rules and regulations, individuals perception rate about knowledge production and using suitable technologies and optimum, effective use of resources to gain organizational agility.

Supporting the use of information and communication technology in higher education including the planning, content and text compilation, teaching- learning methods, especially I educational environments is one of the most important requirements for improving the level of education and creating quality learning. Given the rapid change and evolution in the context of information, human knowledge and acceleration of knowledge production flow, it is required to move more than ever towards how to learn for life time and in this course, physical education departments Professors in the units of Islamic Azad university are confronting the education of a great of university students with different bodily and mental needs and proper, purposeful use of their talents and capabilities in one hand and rapid changes and development in sport science field on the other hand. Coordinating with these changes requires the creation of new, applied knowledge's and establishing a knowledge-based environment and the coordination intended for these changes needs creating innovative ideas and providing an environment based on knowledge. Given the above mentioned cases as well as the great importance of universities in the country, particularly the physical education departments playing an important role in dynamicity and creating motivation, cheerfulness, lively and knowledge searching spirit, present study tries to recognize the relation between these variables through defining the relationship between the components of ICT and organizational agility from the viewpoint of physical education Professors.

METHODS

The present study is a descriptive- correlation research based on Structural Equation Modelling (SEM). It is also practical in terms of purpose and field data collection method.

Participants

Research community gjc mvgis consisted of all the physical education Professors in Guilan university units including 550 persons. 255 Professors were selected based on the convenient sampling technique to select research samples and finally after gathering the questionnaires, 210 healthy questionnaires were received. Thus statistic sample was considered as 210 male and female Professors (30 females and 180 males).

Instruments and Tasks

Face validity was used to assure the questionnaires validity. Opinions of Professors and experts were used to measure face validity, so it's structural problems were defined and the required corrections were applied to satisfy face validity. Sharifi and zhang agility questionnaire (2004) Schroeder and Philine ICT questionnaire (2001), personal information questionnaire

was used to measure research variables. Agility questionnaire measures 4 aspects including flexibility, speed responsiveness and competence. Questionnaire is including 42 items measuring internal and external factors. Data collection was performed through library and field technique. Questionnaires were distributed between professors after the requires coordination with university directors. Questionnaires face and content validities were evaluated and affirmed by 15 skilled Professors in the sport management field. Reliability was 0.964 through Cronbach's alpha and combined reliability (CR) was 0.967. Descriptive statistic (frequency and frequency percentage) was used to evaluate demographic characteristics of respondents.

Data Analysis

In the next step, the results of confirmatory factor analysis were reported as measurement models to fit the research construct and variables structure and finally while testing research hypotheses, structural model of research variables was provided. Structural equations model using was PLS software used to examine the relationship between statistic hypotheses.

RESULTS

According to the descriptive findings, maximum frequency is observed in 36-40 age range. Among 210 subjects participated in this research, 30 were female (14%) and 180 (86%) were male. Maximum frequency with 49.5% is related to Ph.D. and a maximum frequency of 22.4% is related to 6 to 10 years' service background. In order to answer the research questions in the first part, structural equations have been used, whose Fit indices related to the measurement model can be seen in Tables 1and 2.

Output results of the model are displayed for AVE index. As is observed, results indicate the suitability of convergent validity criterion (AVE More than 0.5).

The results show that the average variance for each structure is more than the shared variance between that structure and other structures, so this criterion is at a suitable level.

After measuring the reliability and validity of measurement model, structural model was evaluated through the relationships between hidden variables. Meanwhile, in present study, most widely used criteria were used for structural model fitness. They are including significant coefficient (t- values), determination coefficient (R2) and Communalities rate.

Table 1. Index coefficients of convergent validity (AVE) for each variable.

Factor	AVE	Variable	AVE	Variable	AVE
Information technology	0.943	Internal factors	0.717	Hardware technology	0.613
				Human- machine interface technology	0.601
				Knowledge management	0.681
				Technology application	0.585
				Telecommunication technology	0.676
		external factors	0.692	Customers	0.728
				Management	0.616
				Software technology	0.637

				Network technology	0.500
				regulations	0.615
Organizational agility	0.720	Organizational speed	0.519		
		Organizational competence	0.518		
		Accountability power	0.540		
		Flexibility	0.508		

Table 2. Furnel and Locker matrix for divergent validity

	Organizational flexibility	**speed**	**competence**	**Hardware technology**	**network technology**	**Tele communication technology**	**Software technology**	**Human Machine interface technology**	**Accountability power**	**regulations**	**Management**	**customers**	**Knowledge management**	**Technology application**
Organizational flexibility	0.813													
Speed	0.662	0.721												
Competence	0.715	0.713	0.719											
Hardware technology	0.755	0.503	0.658	0.783										
Network technology	0.748	0.557	0.666	0.658	0.703									
Telecommunication technology	0.683	0.563	0.647	0.600	0.598	0.822								
Software technology	0.628	0.458	0.599	0.579	0.644	0.586	0.798							
Human-machine interface technology	0.685	0.514	0.701	0.660	0.618	0.633	0.661	0.775						
Accountability power	0.598	0.437	0.569	0.607	0.552	0.399	0.484	0.487	0.735					
Regulations	0.661	0.529	0.606	0.635	0.612	0.592	0.399	0.518	0.399	0.784				
Management	0.712	0.549	0.696	0.620	0.677	0.719	0.707	0.646	0.403	0.584	0.785			
Customers	0.694	0.539	0.648	0.550	0.564	0.814	0.547	0.591	0.337	0.626	0.766	0.853		
Knowledge engineering	0.627	0.535	0.634	0.547	0.569	0.690	0.594	0.638	0.373	0.491	0.678	0.690	0.825	
Technology application	0.670	0.542	0.640	0.563	0.575	0.760	0.570	0.610	0.420	0.541	0.711	0.736	0.768	0.765

Table (3) shows the results related to the relationships between the main factors and sub-factors.

Table 3. Significance coefficient (T-values) of the relationship of each major factor with each other and with subfactors

Relationship of each factor with Subfactors		T Statistics (/O/STDEV/)	P Values
Internal factors of information Technology	Hardware Technology	37.918	0.001
	Human-machine interface Technology	38.499	0.001
	Knowledge Technology	61.853	0.001
	Technology application	53.908	0.001
	Telecommunication application	62.865	0.001
External factors of Information Technology	Customers	54.212	0.001
	Management	53.456	0.001
	Software technology	36.020	0.001
	Network technology	49.880	0.001
	Regulations	30.178	0.001
Information Technology	Internal factors of information technology	288.045	0.001
	External factors of information technology	289.076	0.001
	Organizational Speed	35.334	0.001
Organizational agility	Organizational agility	110.723	0.001
	Responsiveness	26.419	0.001
	Flexibility	162.207	0.001
Information Technology	Organizational agility	61.342	0.001

Given the fact that all the paths of relationships between the factors, sub factors and all the relations between the factors themselves are greater than 1.96 and are significant, this significance indicates the correct prediction of the relations of the research model. The relationships between these factors can be seen in figure (1).

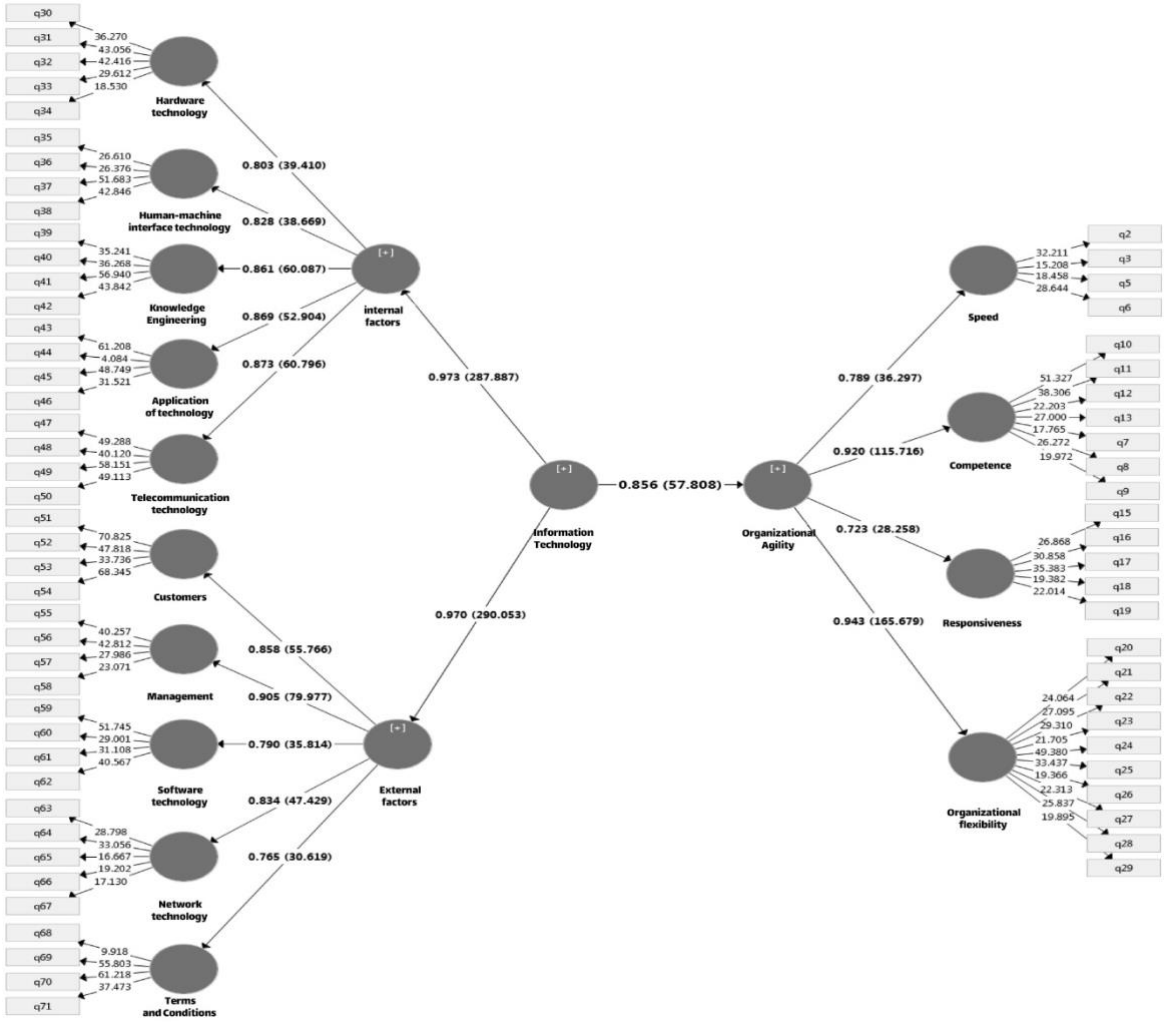

Figure 1. Impact coefficient rate and significance statistics (T value) of information technology on organizational agility of physical education Professors.

In the partial least squares (PLS) approach, the quality and fit of the model is measured using several. The value of these indicators for each variable can be seen in table (4).

Table 4. Communication and RT rates to calculate goodness of fitness index (GOF)

Variables	Communalities rate	R2 rate
Organizational flexibility	0.508	0.889
Speed	0.519	0.623
Competence	0.518	0.846
External factors	Second time	0.941
Internal factors	Second time	0.947
Information Technology	Third time	
Hardware technology	0.613	0.645
Network technology	0.500	0.695

Telecommunication technology	0.676	0.761
Software technology	0.637	0.624
Human – machine technology	0.601	0.686
Responsiveness	0.540	0.523
Regulations	0.615	0.585
Management	0.616	0.818
Customers	0.728	0.737
Knowledge engineering	0.681	0.741
Organizational agility	Second time	0.732
Technology application	0.585	0.756
Mean	0.595	0.738

$$\text{Strong goodness of fitness} = \sqrt{0.595 \times 0.738} = 661$$

Table (4) indicates that R2 rate almost in all the research variables is very larger than 0.33 and in 0.67 range or larger. This means that research structural model has strong fitness. The value of GOF shows the high quality of the estimated model.

After implementing the measurement model and structural model and checking the fit indices of each part, in this stage, the main purpose of the research will be investigated.

Table 5. Results of hypotheses of information technology on organizational agility of physical education teacher

According to the results of table (5) and confirming the relationships between the hypotheses, it can be said that there is a relationship between the components of information and communication technology with organizational agility from the point of view of physical education professors.

DISCUSSION

Present study aims to examine the relationship between the components of information and communication technology and organizational agility from viewpoint of physical education Professors. Results of this indicated that there is a significant relationship between ICT and organizational agility. Nowadays, ICT as a novel infrastructure has attracted much attention to its impact on sports schools. So that, today the context of ICT in sports consists of information systems, technological environment, technology infrastructure, etc all of which are important and influential on the educational system in the field of physical education (Baloch & Meng Bari, 2018). The results show that if information technology is accepted and the necessary training is provided, there are tools available to the workforce, there is a strategy, and the alignment of the information technology structure with the organizational structure, organizational agility is achieved (Karimi-Alaghehband & Rivard, 2019).

Physical education schools need infrastructure and structure to have a desirable executive process, all of which will take place in a safe environment that will be established in the field of sports by physical education professors (Sether, 2016). From viewpoint of experts, ICT has a positive effect on the organizational agility and recent researchers indicate that educational organizations in response to competitive pressures have shifted to the agility paradigm and use a variety of strategies to achieve organizational agility (Melián-Alzola et al., 2020). In present study it was noted that all 5 components (knowledge engineering, technology application, telecommunication technology, hardware technology, human- machine interface technology) play a significant role in internal factors of ICT. So that the components of customer management (0.858), network technology (0.834), software technology (0.790) and regulations (0.765) played the most role in explaining the external factors of ICT of physical education Professors, respectively. Findings of test on this hypothesis, were consistent to the findings of Cai et al., (2019), Panda & Roth (2018). In explaining the consistency, this can be inferred that using ICT in an education organization minimizes human error in the information processing system of organization and increase the speed to provide services for students and more importantly increase the satisfaction (Melián-Alzola et al., 2020). In sports organizations, due to the nature of these organizations, more agility is needed for management to be dynamic and dominant, and the introduction of technology platforms can create an important and effective transformation; Also, producing knowledge and using appropriate technologies regarding the effective use of resources seems important to achieve organizational agility (Mandal, 2019).

Applying ICT increases the knowledge and ability of employees of the organization to communication more easier, accurate and less expensive and human mistake in the processing system will be decreased (Marhraoui & Manouar, 2017). Nowadays, education organizations transfer commands and messages all over the world without conventional structure using computer and through automizing a part of the tasks. These way employees achieve more information and their knowledge and awareness will increase and they conclude faster in their tasks. So applying ICT will increase knowledge and awareness, thus enabling the Professors and provides organizational agility (Marhraoui & Manouar, 2017). In those education al organization where there is a culture of using information and communication technology, the effects of satisfaction with the efficiency of employees and improving the performance of human resources can be seen well, and organizational agility due to its powerful effect on the behavior and performance of educational organizations members play an important role in applying ICT (Keller, Ollig, Fridgen, 2019).

ICT supports updated programs, establishing informational communication and decreasing the costs in the organization. In addition to positive influence in the organizations function, it will affect on the student and Professors functions potential and offer a mechanism to save, access and divide information efficiently (Omrani & Zarei, 2018; Lee, Sambamurthy, Lim, Wei, 2015). It can be said certainly that in the recent century, no factor has been able to affect on the design and manpower as much as technology (Ravichandran, 2018). Nowadays, desire and most importantly the need to use ICT accelerate the organizational activities and coordination with environment has caused that in occurred to organizations and managers to use it in organizations (Tallon, Queiroz, Coltman, Sharma, 2019). But the important issue in this regard is great costs of establishing, operating, maintaining and developing these technologies in organization which has hampered its wide spread use in developing countries (Bandian, 2016).

Today, sports organizations need agility enablers to achieve the goal of agility, most of which are directly related to information technology structures such as new hardware equipment, and on the other hand, modern sports organizations are in a complex competitive environment. have been placed due to environmental, organizational and technological

changes, in fact, in this competitive environment and the virtualization of organizations, managers in sports organizations need to make various adjustments in organizations, and perhaps most of them need a general review and redesign of the structure be their own organizations. The use of information technology enables people to perform their job duties away from the physical environment of the organization (Panda & Rath, 2016).

On the other hand, employees of organizations such as physical education Professors also are among the very important and vital resources which it is necessary to pay attention to their capabilities and also try to enable them to reach organizational goals (Jairak, Praneetpolgrang, Subsermsri, 2015), it is worth mentioning that these are organizational employees that should use new technologies to bring the organization to its destination (Ghazi Noori, Anvari, Khorasani, 2013). Results confirmed that all four components (speed, competence, responsiveness and organizational flexibility) play an important role in organizational competence so that , component of organizational flexibility, competence, speed and responsiveness play greatest role in explaining organizational agility of physical education Professors, respectively. Findings of research on this hypothesis are consistent to the results of Ridwando, et al., (2019), Marharvy and Abdollah (2018), Baloch et al., (2018). In explaining the significant relationship of organizational agility and its aspects it can be said that prerequisite for a leading, agile organization is a desire for change among members and a common goal, to strive for high performance with their unity and agreement and of course, applying modern science and knowledge and to provide the conditions for the growth, development and agility of the organization (Hassan et al., 2015; Darvish Molla, 2016). The ability to create, infer and articulate the purpose of an educational organization and awareness of the mission of organization and the sense of common goal in a way that each of them forcely understands the success of the organization will increase agility in the organization (Torkian et al., 2014).

Also, results suggested that both aspects (internal and external factors) play an important role in explaining information technology factor, so that internal factors and them external factors play the greatest role in explaining information and communication technology in physical education Professors, respectively. Findings of this hypothesis are consistent to the findings of Robert et al., (2019), Mandal (2019), Sepda and Perez (2019) and Omary and Zary (2018). In fact one of the reason of this consistently is that applying ICT in the organization will increase the organizations ability for sensing, perception and anticipation of changes in the work environments and successful identification of competition fundamentals, resource coherence and appropriate measures for rapid change, tp provide products and services in the request of each person (Qosasi et al., 2019; Aghaei & Aghaei, 2014).

A based on the course analysis it was defined that information technology directly has a positive significant relationship with organizational agility, so that this variable explains 85% of change in organizational agility variable. This finding is consistent to the findings of Mandal (2019), clare et al., (2019), Mao et al., (2015), Bandiam (2016), Hassan et al., (2015). applying ICT will increase the decision- making responsibility of organization, since obtaining the information needed to make decision, control and more monitoring on the organization and process and ability to analyze the conditions are among the significant effects of the presence of ICT in the organization (Khodabakhshi, Tulayi, Abolhassani, 2016). Also, to avoid repetitive daily tasks, reducing the response and decision-making time, delegating authority to lower organizational levels gives the opportunity and focus more on design and entrepreneurship roles, which leads to organizational agility (Mirinejad & Keivani, 2014). Managers of physical education schools can use the achievements of technology in line interests of the organization (khosravipour & amirnezhad, 2015) and instead of limiting and using the conventional facilities for physical education Professors, managers should prepare

the ground for nurturing their talents and provide the creative and up to date financial and moral support for creative staff to attain disable results in organizational agility (khosravipour & amirnezhad, 2015; Chakravarty, Grewal, Sambamurthy, 2013). Thus, in organizations such as universities which deals with education and research and creative services and more importantly, training human resources, policymakers, planners and resourceful, capable mangers should create, promote and encourage the field of creativity and innovation in the organization and the whole subset (vahdati & Naemi, 2020).

In general, it can be said that the necessity of technology to achieve the goals of any organization in the age of communication is undeniable, and different organizations based on their nature and goals should take help from this tool in order to achieve their goals faster. In addition, the speed of change and developments has made the use of this tool necessary for the continued survival of the organization. Today's changing world demands that sports organizations look for new tools to achieve success and survival. One of the tools that helps organizations in achieving these goals is the use of information technology. Information technology improves various characteristics of the organization's performance. Information technology as a new tool has drawn a lot of attention to its effect in sports organizations and today in most sports organizations, there is an Internet connection and organizational websites are maintained with different purposes, the use of information technology is one of the most important the needs of sports organizations are considered.

CONCLUSION

Results of present study indicates that applying and spreading creative behaviors and attempts and optimal use of ICT in the organization can provide the most optimal work environment in the situation of organizational structure and agility of the physical education schools. According to the results and the analysis performed for optimal usage of this study, it is suggested that in order to stream line the universities and colleges of physical education, the use of ICT should be one of the primary priorities of decision makes and according to the changes in the organizational structure of educational environments and the tendency to network structure, it is suggested that applying ICT being placed in the basic, key plans of decision makers of physical education schools managers.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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