INVESTIGATING THE RELATIONSHIP BETWEEN THE COMPONENTS OF PROFESSORS PSYCHOLOGICAL EMPOWERMENT WITH THE ICT PROCESS IN THE CORONAVIRUS CONDITIONS (STUDY SAMPLE IN THE FACULTIES OF PHYSICAL EDUCATION AND SPORTS SCIENCES OF ISLAMIC AZAD UNIVERSITY OF IRAN)

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Abstract

Background & aim: Educational organizations of the country need changes in empowerment activities of their human resources in accordance with the growth of information and communication technology. The purpose of this study was to Investigating the relationship between the components of professor' psychological empowerment with the ICT process in the coronavirus conditions in the faculties of physical education and sports sciences of Islamic Azad University of Iran. Methods: This research is applied in terms of purpose and correlational in terms of method and the statistical population is 86 that creates physical education in Islamic Azad University. Standard questionnaires were used. The collected data were analyzed by K-S tests and Pearson Correlation Coefficient, Manova and stepwise using SPSS software were used to analyze the data. Results: The results showed that the correlation between cognitive competence and psychological empowerment was 0.271, functional competence and cognitive empowerment was 0.267, emotional competence and psychological empowerment was 0.063, general skill and psychological empowerment was 0.194 and specialized skill was psychological empowerment. Is 0.201. Statistical results showed that there is a significant relationship between ICT and psychological empowerment in physical education professor (0.001). Conclusion: According to the study findings, information and communication technology can play an important role in sports professor' empowerment and the use of empowerment training classes are essential to rehabilitate educational centers.
Keywords: Functional competence, specialized skills, general skills, empowerment, professors

INTRODUCTION

Creating a quality and desirable educational system that can train people to living in an unsteady world is one of the most important priorities of modern society (Irfan, Wang & Akhtar, 2019). Nowadays educational organizations consider information and communication technology as a tool to increase the performance of their staff and adapt to the changes. But in order for these organizations to make the performance of their employees in terms of the educational and specialized level of the work more efficient, they should encourage their employees to use technology in parallel to the speed of technology changes (Cai, Liu, Huang & Liang, 2019). So, it's not surprising that many governments insist on advancing information and communication technology application in education. Since they intend to bring their nations into the collection of the developed countries of the world. Therefore, information and communication technology has a significant effect on learning which includes changing the role of learners and educators, more participation of students, increasing the use of resources beside the textboxes and the growth and improvement of design and presentation skills (Kalashi et al., 2020). Nowadays, due to rapid technological developments, increasing competitors and environmental risks in any organization, the use of information and communication technology and information systems is raised and benefits and necessities of using computers are debated (Chakravarty, Grewal & Sambamurthy, 2013). The world today is a world with massive transformations and the future imagination seems unlikely without the support of ICT. We have witnessed the information and communication revolution in the last decade, so that the current century has been called ICT due to the transformations.IT is creating a new revolution all over the world that has created new and remarkable capacities in the field of the human's knowledge and has created tools that have changed the nature of work and life and have under gone massive transformation in all the social and economic arenas of humanity (Niazazari, Behnamfar,& Andy, 2012).In recent years, science and knowledge are rapidly changing in the world and the huge successes of information have transformed the world into a global village. That

things were impossible and unthinkable in the past, but those are a part of our everyday life now (Murtaza, Shafqat, & Ud Din, 2011).

What can be observed today shows the ascending and amazing development of transformation through ICT and the increase of human knowledge and awareness. The most important and effective advantage of the ICT use is the reduction of the information poverty in the community, the access to a variety of information and knowledge, and the increase of the level of public awareness in the community (Cohen & Olsen, 2013). ICT plays a vital role in the survival of organizations in the era of environmental accelerator transformations and changes. ICT provides this opportunity for service organizations that be able to fast processing of information and the ability to control and coordination of more complex structures. In addition, it causes that the organization performance and management be accomplished with a coherence state and a quick feedback (Wang, Klein, &Jiang, 2007).The new phenomenon of ICT has affected different aspects of life and has led to the emergence of some fundamental changes in the relationships of human societies (Qudah & Melhem, 2011).This phenomenon has affected the human's demands with a remarkable speed and has created new needs(Ataran & Ayati, 2006). ICT is an instrument in staffs' hands to increase their ability (Abedi Jafari, Asadnezhad Rokni, & Yazdani, 2011).

On the other hand, any organization that ignores this issue will fall due to the rapid growth of ICT and the need of organizations for their survival in today' s era. Nowadays, the attention to this technology is inevitable and necessary to achieve the goals of the organization (Nadifard & Shahtalabi, 2016). The concept of information has had a vital importance in the history of organizations and the slogan of information is power and it has proved its validity throughout history. According to this metaphor and the intellectual information processing theory, there are organizations that can process information that provides more effective decision-making for them (Gougatas, 2012).

The huge and surprising developments in science and technology have revolutionized organizations. This change will continue with an increasing speed. The acceptance of the transformation in the present world is one of the biggest factors in the survival of the organizations, so that the intensity and depth of these changes are so great that it creates the need for new and evolutionary methods for coping, coordination, and adaption with it. (Miker, 2011). Today, the importance of ICT is clearly identified due to the increase of the speed and accuracy of different activities of organizations and the relationship of its different components with each other and their high productivity (Lee, Huang, Barnes, & Kao, 2010). The main part of debates related to systems and methods of work has changed with the development of IT and the software industry (Rodiguez and Lerounteh, 2011). In recent years, countries have invested heavily to equip organizations with IT facilities, including computer hardware, technical and management computer programs, the development of internal networks, and the connection to global networks to improve the productivity process (Paganetto, Becchetti, & Bedoya, 2003). This has led to an increase in the inputs of organizations, so it is expected that the output and productivity will also increase in the organization (Mansell, 2009). On the other hand, productivity is one of the most important factors of development for all countries (Atrostic, Boegh-Nielsen, Motohashi, & Nguyen, 2004). The productivity of human resources is another factor that is used by organizations and it is very important in addition to the capital factors capital and labor force (Ostadzadeh, 2008).Service organizations need ICT due to survive in the market and retain their competitive power (Taleghani, 2014).

Government organizations have invested heavily in the use of ICT due to their capabilities that ICT has in the creation of value for them. One of the most important values that organizations can create in their subsystems using these technologies is the empowerment of their subsets with the use of these tools. successful managers use these technologies to develop their staff's capabilities in order to achieve the goals of the organization due to the potential abilities of ICT to meet the needs of the organization in this field (Kamalian, et al., 2013). Empowerment means that we simply encourage individuals to play a more active role in their work, so that they take responsibility for the improvement of their activities and can make key decisions without referring to a top responsible (Srivastava, et al., 2011). The staff's empowerment has led to specific attitudinal and behavioral outcomes for organizations and enhances their ability to compete in both internal and external environments. The staff's empowerment is an important strategic for the development of different organizations to adapt to external changes and is one of the main issues of organizations. This has led that successful organizations using different tools and mechanisms try to provide empowerment programs for a subset (Mohades Kassai, 2008). Successful managers use

these technologies to develop their staff's capabilities to achieve the goals of the organization due to the potential ability of ICT to meet staff's needs in this field (Dewettinck, et al., 2011).

The creation of a balance between empowerment and ICT, the provision of background for the maintaining, recording, and transmission of a part of staff and managers' valuable experiences to new employees, the prevention of staff's gradual burnout and the gradual burnout of organization, the avoidance of costs due to staff's lack of awareness from the developmental plans of organization, the conflict or challenges of organization and the continuous improvement of the organization, the balance between powerful staff's needs and needs of the organization, and the use of opportunities and the prevention of waste of human capital and resources are the part of a set of reasons that can be considered for the importance of these two variables in this study. Therefore, the purpose of this study was to survey the Investigating the relationship between the components of professor' psychological empowerment with the ICT process in the coronavirus conditions study sample in the faculties of physical education and sports sciences of Islamic Azad University of Iran.

MATERIALS AND METHODS
Methodology

This study was a descriptive correlational research that has been conducted through field method.

Participants

The statistical population was included all professors of physical education faculties in Islamic Azad University Branches in Guilan province who had a master code in the academic semester of 2020-2021 and were teaching for students of physical education and sports sciences in different educational levels. 86 professors were selected through simple random sampling.

Instruments and Tasks

Standard questionnaires were used to collect information for this study. To collect information about your skills and competencies in using information and communication technology, a researcher-made questionnaire has been created, which includes 48 questions if used. This questionnaire was created in a five-point Likert scale in five sections: general skills, specialized skills, competence, performance competence and emotional competence. Distribution benefits related to each of the dimensions skills and competencies in the use of information and communication technology in the questionnaire have been achieved, which is arranged in such a way that the general skills section of questions 1 to 11, specialized skills section 12 to 20, knowledge section 21 To 29, performance section 30 to 40 and emotional competencies section 41 to 48 budget. Cronbach's alpha coefficient of this questionnaire is 0.87.

To evaluate the cognitive empowerment variable of university professors, a valid and standard Spritzer questionnaire of 15 questions was used. This questionnaire is answered based on a 5-point Likert scale. The distribution of questions related to each section of the Psychological Empowerment Questionnaire was as follows: competency section 1 to 3, autonomy section 4 to 6, effectiveness section 7 to 9, significance section 10 to 12 and trust section 13 to 15. Cronbach's alpha coefficient of this questionnaire was 0.81.

Procedure

The purpose of study was explained to subjects. The participants were assured that their data will be kept confidential and those will not be available to anyone. All subjects completed a consent form for the participation in this study and they attended in this study with the complete satisfaction. The researcher distributed questionnaires among subjects. He explained the inventory for the subjects before the questionnaire completion. 86 professors completed a demographic questionnaire and the standard and reliable questionnaire for this research. Then, researchers collected completed questionnaires. The library and field methods have also been used to collect data in this study.

Data Analysis

The collected data were analyzed by K-S tests and Pearson Correlation Coefficient, Manova and stepwise using SPSS software were used to analyze the data.

RESULTS

Table 1. The frequency and percentage distribution of subjects' gender

Gender	N	Percentage
Men	55	63.96
Women	31	36.04

Table 2. The frequency and percentage distribution of subjects' education level

Education Level	N	Percentage
Doctorate and PhD students	51	59.30
Master's degree	35	40.70

The table below shows that there is a significant relationship between the use of ICT and the psychological empowerment of professors. Based on the correlation coefficient, the value of the coefficient is equal to 0.258. If this value indicates a significant relationship, it is between two variables.

The findings in the table below show that there is a significant relationship between the parts of the ICT process and psychological empowerment in the professors of physical education schools. Statistical outputs showed that the subscales of cognitive competence, functional competence, emotional competence, general skills and specialized skills have a significant relationship with the psychological empowerment variable. Therefore, it seems that with the increase of ICT subscales, the empowerment of professors can be increased.

Tables 5 and 6 showed that there is a significant relationship between demographic variables and variables of psychological modernization and ICT.

Table 3. Correlation coefficient between ICT and psychological empowerment of professors

Variables	Psychological empowerment of professor		
	Correlation coefficient	Squared correlation coefficient	P
ICT	0.258	0.068	0.008

Table 4. The amount of correlation between subscales with psychological empowerment

ICT	Psychological empowerment of professor		
	The correlation coefficient	R^2	P
Recognition competence	0.271	0.078	0.006
Functional competence	0.274	0.053	0.017
Emotional competence	0.067	0.031	0.021
General skills	0.198	0.071	0.016
Specialized skills	0.203	0.068	0.026

Table 5. Demographic relationship with psychological empowerment of physical education faculty professor

Variables	Total R	Df	Mean R	F	P
Gender	827.697	2	827.697	2.401	0.389
Master's degree	874.569	2	687.236	2.389	0.453

Table 6. Demographic relationship with ICT of physical education faculty professor

Variables	Total R	Df	Mean R	F	P
Gender	4.234	2	4.234	0.024	0.621
Master's degree	201.385	2	41.871	0.069	0.524

DISCUSSION AND CONCLUSION

The purpose of this study was to Investigating the relationship between the components of professor' psychological empowerment with the ICT process in the coronavirus conditions in the faculties of physical education and sports sciences of Islamic Azad University of Iran.

The findings of this study indicate the relationship between the variables of this study. ICT should be used in such a way that employees' educational skills, creativity, change in the nature of work, and the maximum flexibility are institutionalized in educational organizations due to the importance and special status of ICT and the rapid growth of technology that affects all aspects of organizations in some way. In other words, if professors use more software, their performance will increase too. Professors 'trust or confidence level in using applied software is one of the effective factors for their use of this technology. Professors who do not trust or have little confidence in using computers in their work are trying to avoid it. ICT can support international participations in education and professional development of education. The rapid growth of changes and technological developments has not only been effective on our lifestyle and communication, but it has also been effective on our teaching and learning methods (Panda& Rath,2018).

Today, IT provides this opportunity for us to provide education tailored to the needs, because it eliminates the limitations of the past and provides powers for us and allows learners to meet their educational needs at their right time with learning (Wang& Pan, 2014). The use of ICT and educational equipment requires a lot of effort. Many professors are not willing to become more experienced in their work and many others are unable to understand this issue that their used methods do not have the real effectiveness. However, the efficiency level of their teaching can be increased with a little more effort and a change in the methodology (Mandal, 2019).

The results of this study are consistent with the results of Wang, et al., (2007); Tseng (2008); Chen (2012); Catherine, et al., (2014); Sobhani, et al., (2014); and Mousavivand and Farazyani 's (2016) study. It can be said for the explanation of the consistency of the results of this study with the results of other researches that higher education and knowledge are the focus of all activities in the new approach and human capitals have a particular importance in comparison with natural and financial resources, so that the role of knowledge, information, innovation, creativity, discipline, and management are recognized as the real sources of the creation of economic and social values in this system of thought (Rahnavard, 2019).

It can be said in the explanation of this approach that the greatest effect of technology may has been on human relationships in the 21st century and with the advancement of the technology world and humans anywhere on the planet can communicate with each other with the help of this technology (Miker, 2011). citizens need to manage the effect of information technology on their social, personal, occupational, and civic life due to it is becoming more widespread in the society. Technologies such as computers, mobile phones, the Internet, multi-media, and other popular media have affected the appearance and inner aspects of human life in the current era. These massive information-communications developments have rebuilt the cultural and social context of the society and have had a deep effect on the existential

dimensions of the community (Cohen & Olsen, 2013). According to the results of the results of this study, it is recommended that the staff announce their information needs and shortcomings in the field of ICT to the authorities to enrich their information load. Also, honorable authorities develop and reform infrastructure structures and provide the necessary facilities for the development of computer literacy among students.

The results of Goktas' s (2012) study showed that the lack of access to computers, the low speed of Internet, the lack of access to resources in the area of residence are identified as the most important problems in using ICT. ICT is an approach that can be more effective than any other method in staffs' efficiency and it can also meet the needs of an organization with the consideration of training opportunities and facilities better than any other system. ICT uses all factors that play the important role in the process of productivity and tries to create a desirable organizational conditions in terms of goals and intentions through the precision design of factors (Fallahi, 2010). The correct use of ICT can have a deep positive effect on staffs' engagement and positive attitudes and the facilitation of executive affairs. Therefore, ICT as an effective resource and a way for the quick sharing of information in today's society can be effective to increase empowerment skills in a society (Sobhani, et al., 2014). On the other hand, information technology can also be effective on daily communications and play a role of the facilitator. Also, the emergence of technologies can develop the range of human communications in all fields. The subject of ICT and empowerment has been the subject of debate among researchers of technology field, so that it has affected staffs' knowledge, attitudes, values, and coverings in recent decades (Siddiq, et al., 2016). Today, the ascending and amazing development of the rate of changes is observable due to ICT and an increase of the human's knowledge and awareness. The most important and effective advantage of using ICT is to reduce information poverty in the community and make information and knowledge available and increase public awareness of the community. Therefore, this can play an important role in the reduction of information poverty and the development of the inclusive information in the society and the efficiency and effectiveness of the community (Jafari & Azmoon, 2017). the investment and the application of hardware and software of new technologies and its use for information storage are not the emphasized issue in the information society, especially in the executive section of government organizations, but the most important issue is learners' empowerment to achieve self-leadership skills in the learning. An administrative system for the creation of the place of ICT in its system needs to examine the needs of this technology in the interactions of its infrastructures (Ghafari, 2009).

Generally, the implementation of in-service trainings in accordance with the knowledge of the present era and the work areas can help to staffs' self-efficacy in the professor due to the reinforcement of competence sense and the development of staffs' required skills, abilities, and skills in the professor to prepare them to meet possible work challenges. We can also reinforce the determination of each employee's role in the professor and their activities in achieving the goals of the organizational departments by managers, the strengthening of the control sense over the administrative and operational consequences in staff, and the development of the staffs' capabilities to align the environment with their demands through the implementation of training courses for the organizational upgrading. high level managers of the Faculty of Physical Education can empower their staff through the creation of a climate for staff's more participation of ICT, the sufficient freedom for job responsibilities, the allow for the creativity and innovation, and the attention to low level staff's comments and suggestions.

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CONFLICT OF INTEREST

No potential conflict of interest was reported by the authors.

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