



Investigate the situation using information technology in elementary physical education teachers

Investigar la situación utilizando tecnología de la información en profesores de educación física de primaria

Investigar a situação usando tecnologia da informação em professores de educação física do ensino fundamental

Mohammadbagher Forghani OZRUDI¹ , Aliakbar Raeispour² , Reza Raeispour³ 

¹ Young Researchers and Elite Club, Babol Branch, Islamic Azad University, Babol, Iran.

² Department of Primary Education, Babol Education Office, Babol, Iran.

³ Shahid Rajaei Campus University, Babol, Iran.

Corresponding author:

Aliakbar Raeispour

E-mail: raeispour56@gmail.com

How to cite: Forghani OZRUDI, M. B., Raeispour, A., & Raeispour, R. (2021). Investigate the situation using information technology in elementary physical education teachers. *Journal of Research and Knowledge Spreading*, 2(1), e12506. <http://dx.doi.org/10.20952/jrks2112506>

ABSTRACT

Now day's education is very important & more changes cause more attention to the training. These days training is the one of human body's unavoidable needs. Training & increasing skills is a good way to encounter with the problems of today's complex & changeable world. Education & especially training that train the new generation is the former need of a civilized society. The purpose of this research was Investigate the situation using information technology in elementary PE teachers of Babol city. The research type was descriptive, applicative and natural dispositional that was done by the field way. Statistical society included all the male & female employed elementary school's PE teachers of Babol city. Statistical sample included 85 teachers that answered the questionnaire. The measuring tools were the Kalateahani (2009) ($\alpha=0.79$). The used statistical way included the t-test & Pierson correlation coefficient. The research's founding's showed the teacher's attitude about the IT was positive & there is a meaning relation among the skill, quantity of useag of them. About the use of IT & also there is not a meaningful difference among teacher's attitudes about the use of IT in research & education task & quantity of need to education of them in difference sexuality & there is a meaningful difference among the skill & quantity of use of IT in research & education tasks in different education degrees.

Keywords: Information Technology. PE Teacher. Elementary School.

RESUMO

Hoje, a educação do dia é muito importante e mais mudanças causam mais atenção ao treinamento. Hoje em dia, o treinamento é uma das necessidades inevitáveis do corpo humano. Treinar e aumentar as habilidades é uma boa maneira de enfrentar os problemas do mundo complexo e mutável de hoje. A educação e, especialmente, o treinamento que treina a nova geração é a primeira necessidade de uma sociedade civilizada. O objetivo desta pesquisa foi investigar a situação do uso da tecnologia da informação em professores do ensino fundamental de EF da cidade de Babol. O tipo de pesquisa foi descritivo, aplicativo e disposicional natural que foi feito por meio de campo. A sociedade estatística incluiu todos os professores de EF do ensino fundamental da cidade de Babol, homens e mulheres. A amostra estatística incluiu 85 professores que responderam ao questionário. As ferramentas de medição foram o Kalatehahani (2009) ($\alpha = 0,79$). A forma estatística utilizada incluiu o teste t e coeficiente de correlação de Pierson. Os fundamentos da pesquisa mostraram que a atitude do professor em relação à TI foi positiva e há uma relação de significado entre a habilidade, quantidade de uso delas. Sobre o uso de TI e também não há uma diferença significativa entre as atitudes do professor sobre o uso de TI em tarefas de pesquisa e educação e quantidade de necessidade de educação deles na sexualidade diferente e há uma diferença significativa entre a habilidade e quantidade de uso de TI em tarefas de pesquisa e educação em diferentes graus de ensino..

Palavras-chave: Tecnologia da Informação. Professor de Educação Física. Ensino Fundamental.

RESUMEN

La educación actual es muy importante y más cambios atraen más atención a la capacitación. El entrenamiento de estos días es una de las necesidades ineludibles del cuerpo humano. La formación y el aumento de habilidades es una buena forma de enfrentarse a los problemas del mundo complejo y cambiante de hoy. La educación y especialmente la formación que capacita a la nueva generación es la antigua necesidad de una sociedad civilizada. El propósito de esta investigación fue Investigar la situación utilizando tecnologías de la información en profesores de educación física de primaria de la ciudad de Babol. El tipo de investigación fue descriptiva, aplicada y disposicional natural que se realizó por vía de campo. La sociedad estadística incluía a todos los profesores de educación física de la escuela primaria empleados, hombres y mujeres, de la ciudad de Babol. La muestra estadística incluyó a 85 profesores que respondieron el cuestionario. Las herramientas de medición fueron el Kalatehahani (2009) ($\alpha = 0,79$). La forma estadística utilizada incluyó la prueba t y el coeficiente de correlación de Pierson. Los fundamentos de la investigación mostraron que la actitud del profesor sobre las tecnologías de la información era positiva y que existe una relación significativa entre la habilidad y la cantidad de uso de las mismas. Sobre el uso de TI y tampoco hay una diferencia significativa entre las actitudes de los maestros sobre el uso de TI en la tarea de investigación y educación y la cantidad de necesidad de educarlos en la sexualidad diferente y hay una diferencia significativa entre la habilidad y la cantidad de uso de TI en tareas de investigación y educación en diferentes grados educativos.

Palabras clave: Tecnologia da Informação. Professor de Educação Física. Ensino Fundamental.

INTRODUCTION

Nowadays education is very important & increasing changes cause more attention to education. These days education is one of the people's necessary needs. Education & increasing skills become a basic method to encounter with the problem of today's complex world.

Education & especially training that train new generations, is the first need of a modern society (Moayeri, 2000).

Today, IT technologies as one of the human, its not only changes have been profound changes, but rapidly influencing patterns of life, methods of research, education, transport management, security and other fields of human life (Hamedi et al, 2014). Extent of IT & its application had a deep effect on different aspects of human's life, for example education. The effect of information & IT can be studied from the aspect of making new opportunity & from the aspect of organization challenges (Yadegarzadeh et al, 2007).

Physical education stakeholders in education on the one hand with training a large number of students with different needs physical and mental and proper use of talents and abilities, and the other with directional changes and rapid progress in the face of physical education (Alizadeh et al, 2014). Teachers need to an approach that help them to risk & use technologies & help them to learn permanently & for all of their life. In the past a good teacher was a person who have enough information about the objects that he was teaching, be experienced in making activities attractive in class, have a necessary ability in transfer textbook's objects & have the carrier efficacy with unchangeable way. But nowadays this thinking is not acceptable. New technologies will changed the teacher's rule from expressing things that is in textbooks. Using of information technology in schools force teachers to learn the IT knowledge & increase the motive of students for learning text objects. IT is a new technology & its rapid & gradual presence in social life & its effect on education systems & training & using the best methods in text programs can help students to understand & use of the way of having a good life. The technology used in text program can be an opportunity to improve education & increase the student's learning in lessons (Popastergiou, 2010).

It seems that these days the situation & the amount of the teacher's using from IT don't happen organized & this cause a challenge for education system. Because they are programed to progress in education & student's learning in their lessons by using IT, also the schools use IT to add a new aspect in learning process. IT has a lot usages that one of them is this technology in education structure is flexible, such as being flexible in teaching, collecting information presenting scientist information & communicating ways between student & teacher (Thornburg & Hill, 2010).

According to this that a few evidences & experience & theory information's there are in this object, it seems that we need to do research about the amount & situation of use of IT among teachers. What's more, in this age according to the change of life pattern in the most aspects, research is presented as one of the attention need parts in human life & according to its social, national & international effects different societies & their government's pay attention to it. In our country, also extent of IT as the base of training & guarantee of safe human force is a part of national extent programs (Razavi, 2009). Roland & Carry (2010) found in a research that teachers enjoy from working with computers & it seems that using technology in the school programs increase the student's motivation to work. They also show positive attitude to the using technology in physical educating classes. This study showed that teachers will earn positive results when they use suitable technology & educating ways & useable concepts in school programs (Thornburg & Hill, 2010).

(2010) found that information technology provide situations for improve the education Mandic qualite before. In this article it is encounter with WEB & basic soft-ware for design perception of realistic & measuring the result of student's work in physical education. This period of IT & communication was very important for educated teachers, so they can understand the advantages of using of inside IT technologies (Razavi, 2006). The result of a research in elementary schools in Turkey (2009) showed that how much the level of the knowledge about the ICT skills be more, the level of it's usage in education is more too & also the teacher's attitudes to the both internet & computer is in the average level. What if their attitude level to computers is lower than internet (2011) do a research about the computer

assessments & usage of internet as (Kamalipor, 2009). Frank & Mary the complementary educating to improve the training's quality. The result shows that attentionable precents of teachers have more than 92% computer knowledge & 78% of students know the basic knowledge about computers (Frank et al, 2011).

The result of Hosseini's (2007) research show that the usage of educated teachers from ICT skills in Rafsanjan city is low, their knowledge & skills to use of ICT is in average quality & the teacher's attitudes to the use of ICT is negative. Also is a considered sample between the age, the teaching ages for teachers, teacher's majors, the teacher's participating in ICT classes, the hours of teacher's participating in these classes, the hours of teacher's usage from computers & avail ability to computers in home, and the use of ICT there is a correlation. But there is not a meaningful relationship between the teacher's sexes to their usage of ICT. Bakhtiari (2007) found that these educations for high school teachers in 3 basic aspects is used is less than average level « improve electronic government learning, improve use of internet & improve knowing about computer », but influence (amount of usage) in these 3 aspects was not in a same level. Also founding's show that these educations in these 3 aspects was more effective for male teachers more than females & for more educated teachers was more than less educated teachers.

The result of shahbaz's (2009) research show that the school managers use computers for doing official works instead of a vehicle to make learning easier. What's more, for the reason of lacking all-time & enough educated computer operator in schools. The available advantages can't be used, although the manager's attitudes to IT evaluated positive.

Razavi (2009) in a research with the subject of " ICT in training company in south America" found that when the managers of national training company in Chili performed new education system in this country in 1992, they found that using technology is necessary for progress the training's quality. More than 90% of Chili's students have computer labs connected to internet in their schools & the members of scientific groups of more than 20 universities in Chili try to train 70,000 teachers for (2010) in a research on body training using technology to improve the education. Marina students found that this period improve the student's self believe level about internet & computer & their positive attitude about computer & decrease their anciousity about computer. The student's idea about this period was good & they feel that they learned important ICT skills (Popastergiou, 2010) also in another research found that students & teachers think that Antonio & Rodriguez IT will not be necessary for them in the future & their attitude to the use of IT is negative. Their problem in research was the students not enough perceptions about some of the questionnair's concepts (Gema Sáez & Antonio, 2011).

METHODOLOGY

This research was a descriptive, present and practical research that was done as an open research. The statistical society includes all of male and female employed elementary school teachers (more than 1054 people) of Babol city. The statistical sample was 85 teachers that answered to the question near. The measuring tool is the Kalateahani question near of the age of 2009 ($\alpha=0.79$). This question near had 104 question that include 7 parts of personals questions, amount of usage of IT, the attitude about the use of IT, the teacher's educating need & skill to use of IT, available facilities of teachers related to the IT, barriers of use of the IT, and the ways of increasing usage of this technology. We used the description & perception statistic to analyze the data's. We used Kolmogorov-Smirnov test to determine the variable's natural distribution & Levine test to determine the variance's homogeneity. If the data's distribution & variance's homogeneity between the groups is natural, the independent t test to compare between 2 groups and by the aid of SPSS22 software.

RESULTS

According to the results of the research 30% of men and women daily, 40% weekly, 11% monthly, and 11% once in a term use their personal computer in home. 71% of male and female teachers had a positive attitude to the use of technology. There is a meaningful relation between the teacher's attitude about use (table 1) of IT and amount of their usage from this technology.

Table 1. The relation between the teacher's attitude about the use of IT and amount of their use of technology

varieties	N	Mean	SD	R	p-value
Time of use of different parts of IT	85	47.35	10.25	0.785	0.007
Attitude about the use of IT	85	40.11	6.39		

According to the founding's of the research 11% of male and female body training teachers had very low skills and 21% were low and 44% were average. That the results showed that there is a meaningful. Relation between the teacher's attitude about use of IT and their skills in use of this technology ($p \leq 0.05$).

Table 2. The relation between the teacher's attitude about the use of IT and their skills in use of this technology

varieties	N	Mean	SD	R	p-value
Their skills in use of different parts of IT	85	61.35	12.02	0.692	0.008
Attitude about the use of IT	85	40.11	6.39		

More than 11% of teachers had sense of need of education about the use of IT. Table 3 performed the result of Pierson correlation coefficient and shows that there is a meaningful but in the opposite side between the attitude of teachers about the use of IT and amount of need to their education in the use of this technology ($p \leq 0/05$) (table 3). It means that how much the amount of attitude to use of IT become more, amount of need to education decrease.

Table 3. The relation between attitude of teachers about use of IT and amount of need to their education in the use of this technology

varieties	N	Mean	SD	R	p-value
Amount of need of the education	85	28.11	8.07	-0.534	0.016
Attitude about the use of IT	85	40.11	6.39		

DISCUSSION

According to the research's founding, 11% of male and female elementary school students had a very low, 21% low and 44% average skill. And it can be found that elementary school teachers have low skill and more in average level in IT and in use of computer are amateur that it shows that our teachers are weak in the use of technology parts and they didn't think about it's use in their class. According to the research's founding's there is a meaningful relationship between the skill of using IT by teachers and the amount of their use of this technology, it means that when they don't know how to use IT, surely their use will be low and

also there is a meaningful relation in the opposite side between the skill of use of IT by teachers and the amount of their need be education of this technology. That it means that how much the amount of the skill of use of IT increase, the amount of need to education decreases. The founding's show that the male and female elementary school teachers want to educate more in IT and feel that they need to use this technology and with the progress of science and technology will found that using this technology will help them to reach to their research and educational purposes. And another reason for their feel of need to education is that they are up to date and they are informed about the speed of the science's progress. According to the result it determined that there is a meaningful difference between the average of D.A level and M.A level in teacher's education need, it means that how much the educating level increase, the feeling of the need to education in correct use of technology increase that it is like the results of Hamedi et al (2014), Marina (2010), Lorkian (2004), Bakhtiari (2007). The research's founding shows that more than 10% of male and female teachers have a possitive attitude to IT and there is a relation between the teacher's attitude about the use of IT and the amount of their need to education in the use of technology that is like the results of Katy (2009), Marina (2010) and Roland & Carry (2010) that show a positive attitude to the use of technology in their own physical education classes. About the use of it's barriers the result of research show that one of the reasons that people don't interested in ICT in education is the social-mental reasons and they mentioned to the things like having not enough time, emotion and interest and in fact they think that the effective use of IT in education is more related to user's social-mental aspects instead of the facilities related to the technology itself. So, it is suggested that the training company's worker have to remove the barriers with determine enough budget and also doing related researches with this subject and providing possibilities in IT and performing facilities and provide the conditions to extent and use of this new technology in research and educational affaires. This research's founding's show that use of IT in Babol city was in the average totally and the elementary school teachers in Babol city have the lowest possible use of IT in their educational classes and it's reasons are the low facilities in this case, unavailability of internet in schools and their offices and also because the teachers are not familiar with useable software's in teaching hours, so it is suggested that the training company's coworkers and elementary education groups try to help to inform elementary school teachers more about the facilities of this education system by presenting seminars and education workshops about electronica education. Totally the use of IT among elementary school teachers in Babol city is low but the founding's show that this amount is changing to progress and teachers noticed that they are interested in using of IT to improve their teaching and are wanted to educate and learn any type related software with their work. We hope that with considering the condition of today's science and technology of world, necessary facilities to teachers that are trying to reach to real purposes and finding the suitable position is provided and these teachers make progress in science and technology object because the Babol city give a good opportunity to progress in any type of science and use of different facilities in IT and using various educational software's in teaching hour's.

CONCLUSION

At the end according to the existing opportunities and momenta IT progress and with the perception and importance of use of IT's advantages in all educational aspects, these suggestions is performed to the training company's workers and programmers: increasing the educational group's budget in elementary education to use the best in ICT facilities, extent the computer educating classes qualitionally and quantitionally (hard ware, software, net internet and etc) to teachers, make the good condition in school's educational and official personnel to know the IT's founding's and making and emotion and interest to come to the new

environment, provide facilities and perform economical helps to buy computers to school according to the need and preference.

ACKNOWLEDGMENTS: The authors thanks all those who helped him in this research.

AUTHOR CONTRIBUTIONS: Paste the contributions of each author. Each author must have made at least one of the following contributions to the completion of the manuscript: conception and design, acquisition of data, analysis and interpretation of data, drafting the article, critical review of important intellectual content. In addition, all authors must have made the following contribution: final approval of the version to be published (at the end of this topic, keep the following:

All authors have read and approved the final version of the manuscript").

Mohammadbagher Forghani Ozrudi: conception and design, acquisition of data, analysis and interpretation of data, drafting the article. Aliakbar Raeispour: analysis and interpretation of data, drafting the article, critical review of important intellectual content. Reza Raeispour: conception and design. All authors have read and approved the final version of the manuscript.

CONFLICTS OF INTEREST: The authors declare that there are no conflicts of interest.

REFERENCES

- Alizadeh, S.M., Forghni Ozrudi, M.B., Tabaeian, A. (2014). Relationship of organizational culture and creativity of physical education manager & teacher's aspect in Mazandaran province education. *Sport Management Review*, 6(24), 75-88.
- Bakhtiari, M. (2007). The effectiveness of in-service training information and communication technology (ICT) in secondary school teachers of science and research in Education, Journal of Islamic Azad University, Khorasgan, master's thesis.
- Frank, W.K., Mary, N., Beloved, M. (2011). The Use of Computers and Internet as Supplementary Source of Educational Material: A Case Study of the Senior High Schools in the Tema Metropolis in Ghana, University of Education, Ghana - *Contemporary Educational Technology*, 2(2), 151-162.
- Gema Sáez, R., Antonio, J. (2011). The use of ICT tools in physical sciences education. *International Journal of the Physical Sciences*, 6(4), 944-947.
- Hamedi, S., Tondnevis, F., Forghani Ozrudi, M. (2014). The skill & use rang by physical education teachers of information technology. *Sport Management Studies*, 6(23), 193-204.
- Hosseini, S. (2007). Evaluation skills of teachers trained in the use of ICT in Rafsanjan, Faculty of Human Sciences Department of Education and Psychology martyr Bahonar University, a Master's thesis.
- Katy, N. (2009). Teachers on the use of Information and Communication Technology (ICT) in Education: the Turkish example Ardvgan Tzsy , World Conference on Science Test. Office of Educational Sciences. Faculty of Education by University, Bahksyr, Turkey.
- Lockyer, L., Patterson, J. (2007). Technology Use, Technology Views: Anticipating ICT Use for Beginning Physical and Health Education Teachers. University of Wollongong, Australia.
- Lorkian, M. (2004). Development project evaluation capabilities in the use of information and communication technology (ICT) for the ICT course participants during the academic year 2003- 2004 in Tehran, master's thesis, Faculty of Psychology and Educational Sciences.
- Mandic, D., Martinovic, D., Stamatovic, M. (2010). Informatics and didactic Faculty of Teacher Training University of Belgrade SERBIA. "Creating WEB based didactical resources for teachers in physical education".
- Moayeri, M.T. (2000). Education issues, Tehran, Amir Kabir Publications.
- Popastergiou, M. (2010). Enhancing physical education and sport science student, self efficacy and attitudes regarding information and communication technologies through a computer literacy course.

Razavi, A. (2006). ICT in Education in South America, *Journal of Educational Technology*, 2, 18-19.

Roland, T., Kory, H. (2010). Descriptive Study of Information Technology Application Status among Physical Education and sport teachers, karyes, 42100 tricala. Greece, University of Thessaly, Department of physical *Education and sport science*, 54, 298-308.

Shahbaz, S. (2009). The application of existing laws and the attitudes of high school principals in Isfahan on ICT (information and communication technology), Educational Planning Master's thesis, University of Isfahan.

Thornburg, R., Hill, K. (2010). Descriptive Study of Information Technology Application Status Among Physical Education and sport teachers, karyes, 42100 tricala, Greece. University of Thessaly, department of physical Education and sport science. *Computers & Education*, 54, 298-30.

Yadegarzadeh, G., Parand, K., Bahrami, A. (2007). The presence of Iran in the information society. *Tadbir Journal*, 181, 44-48.

Received: 9 June 2021 | **Accepted:** 22 September 2021 | **Published:** 11 October 2021



This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.