

Examination of the Educational Internet Use Self-efficacy Beliefs of Students who Study at School of Physical Education and Sports

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Abstract: The purpose of the present research is determining the cognitive self-efficacy levels in internet use of students who study at School of Physical Education and Sports. 150 Teaching of Physical Education and Sports department students, 150 Coaching Education department students, 150 Sports Management department students; and 150 Recreation department students; a total of 600 students selected through random method form the work-group of the research. 480 of the 600 scale forms were evaluated; and 120 scales with empty feedbacks were not evaluated. 279 of the students who participated in the research were male; and 200 of them were female. "Self-efficacy in Educational Internet Use Scale" developed by Sahin (2009); and validity and reliability of which were tested (Cronbach alpha value:0.96) was used in order to obtain the goal of the present research. Kolmogorov-Smirnov test, and one-way anova test were used to analyze and interpret the collected data, and Tukey test was used to determine the differences between groups; and significance level was accepted as $P < 0.05$. SPSS (Statistical Package for Social Sciences) packaged software was used to analyze the data and calculate the values. The findings of the present research are as follows: There are no significant differences between School of Physical Education and Sports students' educational internet use self-efficacy belief levels score averages in terms of gender, branch, age and class variables. In addition, the difference between School of Physical Education and Sports students' educational internet use self-efficacy belief levels score averages in terms age variable is also not statistically significant. Examination of the average scores revealed that, students who study at coaching department have statistically significantly lower educational internet use self-efficacy belief levels than students who study at management and recreation departments.

[Afyon YA. **Examination of the Educational Internet Use Self-efficacy Beliefs of Students who Study at School of Physical Education and Sports.** *Life Sci J* 2014;11(9):1056-1059] (ISSN:1097-8135).
<http://www.lifesciencesite.com>. 156

Keywords: Internet; self-efficacy; belief; physical; education; sports

1. Introduction

Rapid development in the field of information technologies has made it a very important mass medium in our age. This situation forces us; the academicians and the students to use information technology products actively, and to adapt to this development. In this framework, computer skills have become an important competency that individuals should have. Individuals' integrating with the developing technology culture means that those individuals integrate with their societies as well.

Individuals need to have information, skills, and attitudes required to adapt to the social life which develops with technological developments. And this is only possible with individuals' getting the education which provides the competencies projected by technology; especially computer technologies (Ulug, 2002).

In this regard, internet which was put into service of many individuals; from children to adults as the most important innovation of information technologies, has become a mass medium which affects the family and social lives in many aspects (Numanoglu and Bayir, 2012).

In general terms, internet can be defined as an inter-connected computer system that enables a computer exchange data, messages, files etc. with any of the millions of computers that are connected to each other (Numanoglu and Bayir, 2012). According to Odabasi, Kabakci, and Coklar (2007), internet is a system in which millions of people can communicate and exchange information via computers in accordance with their purposes. In other words, internet is a communication network that is formed by computers in various geographical locations of the world by connecting to each other and used by millions of users at the same time and various times (Yalcin, 2003).

In this developing informatics world, the functional use of internet and in which areas this use of it is, is important because some of the individuals use internet in a problematic, addicted way. Because the use of internet for social, information, free time, and emotional functions enables the efficient use of internet. Review of the related literature reveals that, the educational aspect of internet was considered as more of a source of information and as a sub-dimension. Therefore, self-efficacy perception is a

feature that should be studied carefully. Individuals with high self-efficacy perception in any subject make great effort to achieve something; and they cannot be easily discouraged when they face difficulties; and they are insistent and patient (Askar and Umay, 2001). Albert Bandura (1977), defined self-efficacy belief as "individuals' beliefs related to how well they can perform actions required to handle the possible situations". He also emphasized that self-efficacy belief affects the individuals' performing right or wrong acts, and indicates how much effort they will pay and how insistent they will be to solve the problem when they face difficulties. Zimmerman (1995) who made a similar definition emphasized that self-efficacy involves "individuals' judgements related to their skills of achieving something" (Akkoyunlu and Orhan, 2003).

Bandura (1977), focuses on that increase of individuals' beliefs in themselves in achieving something as a result of an experience may increase their self-efficacy beliefs in other fields accordingly.

Self-efficacy belief is defined as individuals' beliefs in their capacities related to showing success in a certain activity (Sahin, 2009). Self-efficacy belief is related to the individuals' performance competencies (Sahin, 2009). The basic question related to this belief can be expressed as "Can I achieve this?". In other words, self-efficacy belief is related to individuals' individual competencies in achieving a job. High self-efficacy belief is a factor that increases interest in an activity or a career (Sahin, 2009).

In accordance with this information, the purpose of the present research is examining the Educational Internet Use Self-efficacy Beliefs of students who study at different departments of Schools of Physical Education and Sports.

2. Material and Methods

The purpose of the present research is examining the cognitive self-efficacy levels in internet use of students who study at Mugla Sitki Kocman University, School of Physical Education and Sports. 150 Teaching of Physical Education and Sports department students, 150 Coaching Education department students, 150 Sports Management department students; and 150 Recreation department students; a total of 600 students selected through random method form the sample of the research.

480 of the 600 scale forms were evaluated; and 120 scales with empty feedbacks were not evaluated. 279 of the students who participated in the research were male; and 200 of them were female.

"Self-efficacy in Educational Internet Use Scale" developed by Sahin (2009); and validity and reliability of which were tested (Cronbach alpha value:0.96) was used in the present research. Considering that the anticipated reliability level of the

measurement tools to be used in researches should be 0.70 (Anastasi 1982; Tezbasaran, 1997), the reliability level of this scale is pretty high. The scale consists of 28 items on a 5-level Likert type scale.

Kolmogorov-Smirnov test, and one-way anova test were used to analyze and interpret the collected data, and Tukey test was used to determine the differences between groups; and significance level was accepted as $P < 0.05$. SPSS (Statistical Package for Social Sciences) packaged software was used to analyze the data and calculate the values.

3. Results

Table 1 presents that the difference between school of physical education and sports students' educational internet use self-efficacy belief levels average scores across genders is not statistically significant [t value = 0,869 $P = 0,385 > 0.05$].

Table 1. T Test Table for the Educational Internet Use Self-efficacy Beliefs of students in terms of Gender Variable

gender	N	Mean	Std. Dev.	t	p
Male	279	103.498	20.860	0.869	0.385
Female	200	101.840	20.412		

Table 2 shows that the difference between school of physical education and sports students' educational internet use self-efficacy belief levels average scores in terms of age variable is not statistically significant [F value = 1.360 $P = 0.258 > 0.05$].

Table 2. Anova Test Table for the Educational Internet Use Self-efficacy Beliefs of Students in terms of Age Variable

Age	Sum of Squ	Df	M. Squ	F	P
Bet. Gr.	1160.456	2	580.228	1.360	.258
With.Gr.	203058.488	476	426.593		
Total	204218.944	478			

Table 3 reveals that the difference between school of physical education and sports students' educational internet use self-efficacy belief levels average scores in terms of department variable is statistically significant [F value=4.638 $P = 0.003 < 0.05$].

Table 3. Anova Test Table for the Educational Internet Use Self-efficacy Beliefs of Students in terms of Department Variable

Department	Sm of Squ.	Df	M.Squ.	F	P
Bet. Gr.	5811.578	3	1937.193	4.638	.003
With.Gr.	198407.366	475	417.700		
Total	204218.944	478			
				Tukey	2-3 2-4

1=Teaching, 2=Coaching, 3=Management, 4=Recreation

By examining the average scores, it can be observed that students who study at coaching department have statistically significantly lower educational internet use self-efficacy belief levels than students who study at management and recreation departments.

Table 4. T Test Table for the Educational Internet Use Self-efficacy Beliefs of Students in terms of Branch Variable

Branch	N	Mean	Std. Deviation	T	P
Team	258	103.5155	19.41984	0.813	0.416
individual	220	101.9545	22.10287		

Table 4. presents that the difference between school of physical education and sports students' educational internet use self-efficacy belief levels average scores in terms of branch variable is not statistically significant [t value = 0.813 P=0.416>0.05].

Table 5. Anova Test Table for the Educational Internet Use Self-efficacy Beliefs of School of Physical Education and Sports Students in terms of Class Variable

Class	Sum of Squares	df	Mean Square	F	P
Bet. Gr.	1991.102	3	663.701	1.559	.199
With.Gr.	202227.842	475	425.743		
Total	204218.944	478			

Table 5 shows that the difference between school of physical education and sports students' educational internet use self-efficacy belief levels average scores in terms of class variable is not statistically significant [F value = 1.559 P=0.199>0.05].

4. Discussions

Tables 1, 2, 4, 5 reveal that the differences between school of physical education and sports students' educational internet use self-efficacy belief levels average scores in terms of gender, branch, age, and class variables are not statistically significant.

Researchers who have studied the computer self-efficacy belief on various samples examined the individuals' computer use experiences according to their genders, ages, classes and area of interests in terms of factors such as access conditions, and usage frequencies. For instance, previous researches have reached at various findings about the correlations between individuals' genders and their computer self-efficacy beliefs.

Miura (1987) who conducted a research on undergraduate students found that male students have significantly higher computer self-efficacy beliefs

than female students. Murphy, Coover, and Owen (1989) didn't find any significant differences between males and females' self-efficacy beliefs in terms of beginner level computer skills; but in advanced level and mainframe computer skills, they found a significant difference between males and females; that is in favor of males. On the other hand, Torkzadeh and Koufteros (1994), didn't find any significant differences between males and females in terms of basic computer skills and advanced level computer skills, but they found a significant difference in favor of males in terms of software development and software languages. In general, previous researches didn't find any significant differences between males and females in terms of beginner level computer skills self-efficacy beliefs; while they found significant differences in favor of males in terms of more complicated computer skills.

In their research on Turkish sample, Akkoyunlu and Orhan (2003) didn't find any statistically significant differences across genders which complies with the findings of our research.

Akkoyunlu and Orhan (2003) reported in their research conducted on computer and instructional technologies department students that there is a statistically significant difference in self-efficacy levels in terms of class variable; and self-efficacy levels of senior students are significantly higher than other students. This finding contrasts with the findings of the present research. It is thought that, the reason for this difference is that students who study at schools of physical education and sports take less courses on computer and technology use.

Table 3 shows that the difference between school of physical education and sports students' educational internet use self-efficacy belief levels average scores in terms of department variable is statistically significant [F value = 4.638 P=0.003<0.05].

By examining the average scores, it can be observed that students who study at coaching department have statistically significantly lower educational internet use self-efficacy belief levels than students who study at management and recreation departments.

Considering that, self-efficacy belief is an important factor in determining the computer use frequencies and success of individuals (Cassidy and Eachus (2002), obtained findings comply with the findings of the researches conducted by Akkoyunlu and Orhan (2003); Cassidy and Eachus (2002); and Wu and Tsai (2006).

This finding can be interpreted as that recreation and management departments students make more effort than coaching students during education process and so they gain more experience.

As stated above, comparing the findings of the present research with the findings of other researches in the literature; it can be observed that different findings were obtained on different samples about the educational internet use self-efficacy. No domestic or foreign researches conducted on educational internet use self-efficacy were found in the literature of sports sciences. The findings were presented in conclusion part within the findings obtained in parallel phenomena.

In parallel with the findings obtained in general, considering the education got by students who study at different departments at the schools of physical education and sports, it is thought that the similarities in terms of gender, age, class and branch variables were caused by the fact that computer and technology education got by these students are equal. The only difference was detected in terms of department variable which is thought to be caused by that recreation and management department students use computers more frequently. Considering the importance of learning motive for individuals, self-efficacy of the individuals is also of utmost importance for learning performances; as emphasized by Chang et. al.(2013). As suggested by Artino (2007), individuals' self-efficacy beliefs can be developed through field-specific computer courses or similar activities.

It is thought that, the literature on the subject can be expanded with different approaches on the sample of schools of physical education and sports.

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References

1. Akkoyunlu, B., Orhan, F. Bilgisayar ve Ogretim Teknolojileri Egitimi (Bote) Bolumu Ogrencilerinin Bilgisayar Kullanma Oz Yeterlik Inanci Ile Demografik Ozellikleri Arasindaki Iliski. Tojet Issn: 1303-6521. 2003. Volume 2 Issue 3.
2. Artino, A. R. Online military training: Using a social cognitive view of motivation and self-regulation to understand students' satisfaction, perceived learning, and choice. Quarterly Review of Distance Education, 2007. 8, 191–202.
3. Askar P., Umay A. Ilkogretim Matematik Ogretmenligi Ogretmen Adaylarinin Bilgisayarla Ilgili Oz Yeterlik inanclari. Hacettepe Universitesi Egitim Fakultesi Dergisi, 2001. 21,1-8.
4. Bandura, A. Self-efficacy: Toward a unifying theory of behaviour change. Psychol Rev, 1977. 84,191-215.
5. Cassidy, S., & Eachus, P. Developing the computer user self-efficacy (CUSE) scale: Investigating the relationship between computer self-efficacy, gender and experience with computers. J Educ Comput Res, 2002. 26(2), 133-153.
6. Chiung-Sui Changa, Eric Zhi-Feng Liub, Hung-Yen Sungc, Chun-Hung Linb, Nian-Shing Chend & Shan-Shan Cheng Effects of online college student's Internet self-efficacy on learning motivation and performance. Innov Educ Teach Int, 2013. 51:4, 366-377.
7. Miura, T. The relationship of computer self-efficacy expectations to computer interest and course enrolment in college, Sex Roles, 1987 Vol.16 (5/6).
8. Murpy, C., Coover, D., Owen, S. Development and validation of the computer self-efficacy scale. Education and Psychological Measurement, 1989 Vol. 49, pp. 893-899.
9. Numanoglu G., and Bayir S. Ilkogretim Ikinci Kademe Ogrencilerinin Sinif Duzeylerine Gore Internet Kullanimlari. Turk Egitim Bilimleri Dergisi, 2012. 10 (2), 295–323.
10. Sahin I. Egitsel Internet Kullanim Oz-Yeterlilik Inanclari Olceginin Gecerlilik ve Guvenirliligi Calismasi, Selcuk Universitesi Sosyal Bilimleri Dergisi 21. Konya. 2009.
11. Torzadeh, G., Koufteros, X. Factorial validity of a computer self-efficacy scale and the impact of computer training, Education and Psychological Measurement, 1994 Vol. 54(3)pp. 813-821.
12. Ulug F. Ilkogretimde Teknoloji Egitimi, Milli Egitim Dergisi, 2002 sayi:140, Ankara.
13. Yalcin C. Sosyolojik Bir Bakis Acisiyla Internet. Cumhuriyet Universitesi Sosyal Bilimler Dergisi, 2003 27 (1), 77–89.
14. Y.-T. Wu, C.-C. Tsai University students' Internet attitudes and Internet self-efficacy: A study at three universities in Taiwan. Cyberpsychol Behav, 9 (4) 2006, pp. 441–450.
15. Zimmerman, B. J. Self-efficacy and educational development. In A. Bandura (Ed.). Self-efficacy in changing societies. New York: Cambridge University Press 1995. (pp. 202-231).

9/2/2014