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Digital empowerment level of physical education and sports students*

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Baybars Recep Eynur

Dumlupınar University School of Physical Education and Sports, Kutahya, Turkey

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Abstract

Background & Study Aim: It is generally accepted that digital empowerment has been rapidly developing with new technologies. The aim of this study is knowledge about digital empowerment level of physical education and sport students.

Material & Methods: In the study, digital empowerment scale developed by Akkoyunlu et al. was used in order to determine digital empowerment of the students. The research sample was the 286 students of Dumlupınar University (DPU) School of Physical Education and Sport (BESYO who were chosen from the population.

Results: It was determined 73% of the students had high motivation level; 64.7% of them had medium and 19.6% of them had low technical access level; 49% of the students had high empowerment level; 50% of the students had high digital empowerment level. It was determined that there was a significant difference ($p<0.05$) in awareness and motivation subgroups of the students between groups according to gender variable; there was also a significant difference ($p<0.05$) in awareness sub-dimension between groups according to department variable. There was not a significant difference in digital empowerment level of DPU BESYO students according to department variable ($p<0.05$).

Conclusions: Digital empowerment issue has a right place in the needs of the individuals to take place in the future education and sports organisations. Digital empowerment should definitely be in the future undergraduate and postgraduate education and it is a skill level considered to be important in career planning for any state and private sector education and sports organisations. Besides, technology seminars should regularly be arranged in undergraduate fields for the current compulsory subjects at universities.

Key words: awareness • digital divide • motivation • technical access

Author's address: Baybars Recep Eynur, Dumlupınar University School of Physical Education and Sports, Germiyan Campus, 43020, Kutahya, Turkey; e-mail: eynurspor@gmail.com

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Digital empowerment – improve people's life skills and knowledge society digital technologies in order to strengthen their capacity in the ability to operate effectively and efficiently.

Digital divide – access to digital technology in the process of distinction between people and benefit from *information and communication technologies* (ICT) facilities.

Physical Education – an educational course related to the physique of the human body. It is taken during primary and secondary education and encourages psychomotor learning in a play or movement exploration setting to promote health.

Sport – Sport (UK) or sports (US) are all forms of usually competitive physical activity or games which, through casual or organised participation, aim to use, maintain or improve physical ability and skills while providing enjoyment to participants, and in some cases, entertainment for spectators.

Mean Rank – is simply the mean rank score for each group; Mann Whitney is a test used when you want to determine whether there is a statistically significant difference in scores for two variables measured at the ordinal

Introduction

It is generally accepted that digital empowerment has been rapidly developing with new technologies. In the face of information explosion, with the necessity of acquiring more digital empowerment for individuals and institutions, being digital empowerment requires to make use of digital technologies [1]. The developments the world of sport today, special works and the fact that World nations put emphasis on the people raised as the most deterrent force in every field after guns have made sports important in the process of competitive world [2].

The fact that the records in the events are expressed with split seconds rather than seconds has meant that the measurements of upper level field, performance and skills are necessary in sport performance and training exercises [3]. In this context, it cannot be denied that it is impossible to get any success in the devoted works of sportsman and coaches without the help of sufficient equipment. In other words, any sports activity deprived of technological support cannot achieve a desired success. In this respect, it is an important necessity for the school of physical education and sports students serving or to serve in the current sport industry to have the necessary technological qualities. The fact that this necessity has been determined is the most important underlying reason of this study.

In a study carried out by Malone [4], it emphasized that the needs in order to provide a good learning environment and a good curriculum that can meet these needs have to be determined and the works have to be evaluated. In this study, it was also stated that in determining the needs of education students needed to have digital empowerment in order to form a cooperative learning environment [4]. According to Anglin [5] technology is an obligation in the developing world and to know and use technology is a necessity in order to be successful and take an active place in life. In a similar study, it was stated that elementary education students should know how to find information on the internet and the information they look for may not be in the form of they want [6]. Digital divide or digital gap concepts which are defined as the condition of having technology or not are among the important agents affecting the quality of education [7]. This situation presenting digital divide has been determined as the basic problem in many studies [8].

In another study, digital divide concept was often used with the statements of development instability or marginalisation in information societies. However, digital gap is also thought as not understanding or perceiving one's roles in information societies. Digital divide could be expressed as the examples with the existence of the internet around or the volume that the online services cover. However, it is qualitatively measured although other researches included such subjects as social and democratic inequality [9]. Seriousness of digital gap depends on an activity more than being able to achieve digital technologies [10].

It is probable to encounter with a number of definition of competence in different fields. In a study, it was stated that the concept competence means being able to take responsibility about what and how they learn [11]. Digital empowerment concept has been included in the important empowerment concepts of European Union. In its definition it was stated that participation and self-development in society are important for learning and employment. The span of the definition of digital empowerment provides with the necessary conditions for learning and living in information societies [12].

The aim of this study is knowledge about digital empowerment level of physical education and sport students.

Material and methods

Survey method was used in the study. Survey models are research approaches which aim to describe a condition existing in the past or now as they were or as they are. The event, individual or object that is the subject of investigation is defined in their own conditions and as they are. They are never tried to change and affect. The things to be known exist and they are there. The important thing is to properly observe and determine them [13].

The population of the research is the students of Dumlupınar University Physical Education Vocational College and Faculty of Education and the sample of the research is 286 students who were chosen from the population (Table 1). The following table shows the distribution of the sample according to departments and gender. In the study, digital empowerment scale developed by Akkoyunlu et al. [14] was used in order to determine digital empowerment of the students. The Table 2 shows the score intervals of low, medium and high for the scale and its sub-dimensions.

Table1. Research sample.

Department		Gender		Total
		male	female	
Teaching	N	**28**	**37**	**65**
	%	9.8	12.9	22.7
Coaching	N	**46**	**42**	**88**
	%	16.1	14.7	30.8
Management	N	7	**26**	**33**
	%	2.4	9.1	11.5
Recreation	N	77	**23**	**100**
	%	26.9	8.0	35.0
Total	N	**158**	**128**	**286**
	%	55.2	44.8	100.0

Table 2. Digital empowerment scale level scores [14].

Level	Scores				
	awareness	motivation	technical access	empowerment	digital empowerment (total scores)
Low	9-27	10-30	10-30	16-47	45-135
Medium	28-46	31-50	31-50	48-80	136-225
High	47-63	51-70	51-70	81-112	226-315

Statistical analysis

During data analysis, gender, department and class independent variables were examined when investigating the digital empowerment level of the students participated in the study and their attitudes towards digital technologies and Mann Whitney U for gender, Kruskal Wallis H test for other variables were used in order to determine whether there was a meaningful difference ($p<0.05$) between groups. To determine for difference between groups, Tukey test was used.

Results

It was determined that 72.2% of the male students had high, 25.3% of them had medium and 2.5% of them had low level of awareness whereas 75.8% of the female students had high, 22.7% of them had medium and 1.6% of them had low level of awareness according to gender variable (Table 3). Most of the male students (66.5%) had high, 30.4% of them had medium and 3.2% of them had low level of motivation whereas 74.2% of the female students had high, 23.4% of them had medium and 2.3% of them had low level of motivation according to gender variable. Only15.2% of the male students had high, 63.3% of them had medium and 21.5% of them had low level of technical access whereas 16.4% of the female students had high, 66.4% of them had medium and 17.2% of them had low level of technical access according to gender variable. It was determined that 45.6% of the male students had high, 47.5% of them had medium and 7% of them had low level of empowerment whereas 53.1% of the female students had high, 43% of them had medium and 3.9% of them had low level of empowerment according to gender variable. Almost half (49.4%) of the male students had high, 48.1% of them had medium and 2.5% of them had low level of digital empowerment whereas 50.8% of the female students had high, 49.2% of them had medium level of digital empowerment according to gender variable (Table 3).

The awareness levels of the participant students ($n = 286$) showed a significant difference ($p<0.05$)

Table 3. According to gender variable crosstab of students' of awareness, motivation, technical access, empowerment and digital empowerment levels (% within gender).

Variable	Gender low		Digital empowerment level			
			medium	high	total (N)	
Awareness	male	N	**4**	**40**	**114**	**158**
		%	2.5	25.3	72.2	
	female	N	**2**	**29**	**97**	**128**
		%	1.6	22.7	75.8	
	total	N	**6**	**69**	**211**	**286**
		%	2.1	24.1	73.8	
Motivation	male	N	**5**	**48**	**105**	**158**
		%	3.2	30.4	66.5	
	female	N	**3**	**30**	**95**	**128**
		%	2.3	23.4	74.2	
	total	N	**8**	**78**	**200**	**286**
		%	2.8	27.3	69.9	
Technical Access	male	N	**34**	**100**	**24**	**158**
		%	21.5	63.3	15.2	
	female	N	**22**	**85**	**21**	**128**
		%	17.2	66.4	16.4	
	total	N	**56**	**185**	**45**	**286**
		%	19.6	64.7	15.7	
Empowerment	male	N	**11**	**75**	**72**	**158**
		%	7.0	47.5	45.6	
	female	N	**5**	**55**	**68**	**128**
		%	3.9	43.0	53.1	
	total	N	**16**	**130**	**140**	**286**
		%	5.6	45.5	49.0	
Digital empowerment	male	N	**4**	**76**	**78**	**158**
		%	2.5	48.1	49.4	
	female	N	**0**	**63**	**65**	**128**
		%	0.0	49.2	50.8	
	total	N	**4**	**139**	**143**	**286**
		%	1.4	48.6	50.0	

according to gender (Table 4). It was determined that the awareness levels of the male pre-service teacher students (Mean Rank = 134.82) were lower than the awareness levels of the female pre-service teacher students (Mean Rank = 154.21). The motivation levels of the participant students showed a significant difference ($p<0.05$) according to gender (Table 5). The motivation levels of the male pre-service teacher students (Mean Rank = 134.26) were lower than the awareness levels of the female pre-service teacher students (Mean Rank = 154.91). The technical access levels (Table 6) and the empowerment levels (Table 7) did not show a significant difference according to gender of the participant students. Also the digital empowerment levels of the participant students did not show a significant difference according to gender (Table 8).

Table 4. Awareness levels Mann Whitney U test results of the students (n = 286) according to gender variable.

Gender	N	Mean Rank	U	p
Male	158	134.82	8740.500	**0.048**
Female	128	154.21		

Table 5. Motivation levels Mann Whitney U test results of the students (n = 286) according to gender variable.

Gender	N	Mean Rank	U	p
Male	158	134.26	8651.500	**0.036**
Female	128	154.91		

Table 6. Technical access levels Mann Whitney U test results of the students (n = 286) according to gender variable.

Gender	N	Mean Rank	U	p
Male	158	138.09	9257.000	**0.218**
Female	128	150.18		

Table 7. Empowerment levels Mann Whitney U test results of the students (n = 286) according to gender variable

Gender	N	Mean Rank	U	p
Male	158	140.42	9625.000	**0.484**
Female	128	147.30		

Table 8. Digital empowerment levels Mann Whitney U test results of the students (n = 286) according to gender variable

Gender	N	Mean Rank	U	p
Male	158	137.27	9128.000	**0.157**
Female	128	151.19		

It was determined that 76.9% of the physical education and sport Teaching Department students had high, 23.1% of them had medium level of **awareness**; 81.8% of the Coaching Department students had high, 14.8% of them had medium and 3.4% of them had low level; 66.7% of the Sport Management Department students had high, 33.3% of them had medium level; 67% of the Recreation Department students had high, 30% of them had medium and 3% of them had low (Table 9). **Motivation**: 78.5% of the Teaching Department students had high; 65.9% of the Coaching Department students had high level; 81.8% of the Sport Management Department students had high level; 64% of the Recreation Department students had high level. **Technical access**: only 10.8% of the Teaching Department students had high, 66.2% of them had medium and 23.1% of them had low level; 20.5% of the Coaching Department students had high, 60.2% of them had medium and 19.3% of them had low level; 24.2% of the Sport Management Department students had high, 66.7% of them had medium 9.1% of them had low level; 12% of the Recreation Department students had high, 67% of them had medium and 21% of them had low level. **Empowerment**: 55.4% of the Teaching Department students had high level; 48.9% of the Coaching Department students had high level; 63.6% of the Sport Management Department students had high level; 40% of the Recreation Department students had high, 53% of them had medium level. **Digital empowerment**: 50.8% Teaching Department students had high level; 52.3% of the Coaching Department students had high; 57.6% of the Sport Management Department students had high level; 45% of the Recreation Department students had high, 55% of them had medium level (Table 9).

The awareness levels of the participant students (n = 286) showed a significant difference ($p<0.05$) according to departments (Table 10). It was determined that the motivation levels of the physical education and sport Teaching Department students (Mean Rank = 161.7) were higher than Coaching Department students (Mean Rank = 152.99), Recreation Department students (Mean Rank = 131.24) and

Table 9. According to department variable crosstab of students' of awareness, motivation, technical access, empowerment and digital empowerment levels (% within department).

Variable	Department low		Cardinality and proportion of level of variable			
			medium	high	total (N)	
Awareness	Teaching	N	**0**	**15**	**50**	**65**
		%	0.0	23.1	76.9	
	Coaching	N	**3**	**13**	**72**	**88**
		%	3.4	14.8	81.8	
	Management	N	**0**	**11**	**22**	**33**
		%	0.0	33.3	66.7	
	Recreation	N	**3**	**30**	**67**	**100**
		%	3.0	30.0	67.0	
	total	N	**6**	**69**	**211**	**286**
		%	2.1	24.1	73.8	
Motivation	Teaching	N	**4**	**10**	**51**	**65**
		%	6.2	15.4	78.5	
	Coaching	N	**0**	**30**	**58**	**88**
		%	0.0	34.1	65.9	
	Management	N	**0**	**6**	**27**	**33**
		%	0.0	18.2	81.8	
	Recreation	N	4	32	64	**100**
		%	4.0	32.0	64.0	
	Total	N	**8**	**78**	**200**	**286**
		%	2.8	27.3	69.9	
Technical access	Teaching	N	**15**	**43**	**7**	**65**
		%	23.1	66.2	10.8	
	Coaching	N	**17**	**53**	**18**	**88**
		%	19.3	60.2	20.5	
	Management	N	**3**	**22**	**8**	**33**
		%	9.1	66.7	24.2	
	Recreation	N	**21**	**67**	**12**	**100**
		%	21.0	67.0	12.0	
	Total	N	**56**	**185**	**45**	**286**
		%	19.6	64.7	15.7	

...Table 9. According to department variable crosstab of students' of awareness, motivation, technical access, empowerment and digital empowerment levels (% within department).

Variable	Department low		Cardinality and proportion of level of variable			
			medium	high	total (N)	
Empowerment	Teaching	N	**5**	**24**	**36**	**65**
		%	7.7	36.9	55.4	
	Coaching	N	**4**	**41**	**43**	**88**
		%	4.5	46.6	48.9	
	Management	N	**0**	**12**	**21**	**33**
		%	0.0	36.4	63.6	
	Recreation	N	**7**	**53**	**40**	**100**
		%	7.0	53.0	40.0	
	Total	N	**16**	**130**	**140**	**286**
		%	5.6	45.5	49.0	
Digital empowerment	Teaching	N	**4**	**28**	**33**	**65**
		%	6.2	43.1	50.8	
	Coaching	N	**0**	**42**	**46**	**88**
		%	0.0	47.7	52.3	
	Management	N	**0**	**14**	**19**	**33**
		%	0.0	42.4	57.6	
	Recreation	N	**0**	**55**	**45**	**100**
		%	0.0	55.0	45.0	
	Total	N	**4**	**139**	**143**	**286**
		%	1.4	48.6	50.0	

Sport Management department students (Mean Rank = 119.52) respectively. Motivation levels (Table 11), technical access (Table 12), empowerment (Table 13) and digital empowerment (Table 14) did not show a significant difference according to their departments.

It was determined that 68.1% of the 1st class students had high, 30.8% of them had medium and 1.1% of them low level of **awareness**; 80.6% of the 2nd class students had high, 15.5% of them had medium and 3.9% of them had low level; 70.2% of the 3rd class students had high, 27.7% of them had medium and 2.1% of them had low level; 73.3% of the 4th class students had high, 26.7% of them had medium level (Table 15). **Motivation**: 59.3% of the 1st class students had high level; 74.8% of the 2nd class students had high level; 72.3% of the 3rd class students had high level; 77.8% of the 4th class students had high level. **Technical access**: only 19.8% of the 1st class students had high, 60.4% of them had medium and 19.8% of them low level; 14.6% of the 2nd class students had high, 68% of them had medium and 17.5% of them had low level; 17% of the 3rd class students had high, 59.6% of them had medium and 23.3% of them had low level; 8.9% of the 4th class students had high, 71.1% of them had medium and 20% of them had low level. **Empowerment**: 46.2% of the 1st class students had high, 50.5% of them had medium and 3.3% of them low level; 48.5% of the 2nd class students had high, 46.6% of them had medium and 4.9% of them had low level; 55.3% of the 3rd class students had high level; 48.9% of the 4th class students had high, 42.2% of them had medium and 8.9% of them had low level. **Digital empowerment**: 45.1% of the 1st class students had high, 54.9% of them had medium level; 55.3% of the 2nd class students had high level; 44.7% of the 3rd class students had high, 53.2% of them had medium and 2.1% of them had low level; 53.3% of the 4th class students had high level (Table 15).

Table 10. Awareness levels Kruskall Wallis H test results of the students (n = 286) according to departments.

Department	N	Mean Rank	X^2	p
Teaching	65	161.70	9.325	**0.025**
Coaching	88	152.99		
Sport Management	33	119.52		
Recreation	100	131.24		

Table 11. Motivation levels Kruskall Wallis H test results of the students (n = 286) according to departments.

Department	N	Mean Rank	X^2	p
Teaching	65	158.22	3.311	**0.346**
Coaching	88	143.23		
Sport Management	33	143.14		
Recreation	100	134.29		

Table 12. Technical access levels Kruskall Wallis H test results of the students (n = 286) according to departments.

Department	N	Mean Rank	X^2	p
Teaching	65	132.69	4.411	**0.220**
Coaching	88	153.64		
Sport Management	33	159.41		
Recreation	100	136.36		

Table 13. Empowerment levels Kruskall Wallis H test results of the students (n = 286) according to departments.

Department	N	Mean Rank	X^2	p
Teaching	65	149.45	4.692	**0.196**
Coaching	88	141.76		
Sport Management	33	167.48		
Recreation	100	133.25		

Table 14. Digital empowerment levels Kruskall Wallis H test results of the students (n = 286) according to departments.

Department	N	Mean Rank	X^2	p
Teaching	65	150.65	5.136	**0.162**
Coaching	88	147.95		
Sport Management	33	160.70		
Recreation	100	129.26		

Table 15. According to class variable crosstab of students' (n = 283) of awareness, motivation, technical access, empowerment and digital empowerment levels (% within class).

Variable	Class		Cardinality and proportion of level of variable			
			low	medium	high	total (N)
Awareness	1st	N	**1**	**28**	**62**	**91**
		%	1.1	30.8	68.1	
	2nd	N	**4**	**16**	**83**	**103**
		%	3.9	15.5	80.6	
	3rd	N	**1**	**13**	**33**	**47**
		%	2.1	27.7	70.2	
	4th	N	**0**	**12**	**33**	**45**
		%	0.0	26.7	73.3	
	total	N	**6**	**69**	**211**	**286**
		%	2.1	24.1	73.8	
Motivation	1st	N	**2**	**35**	**54**	**91**
		%	2.2	38.5	59.3	
	2nd	N	**2**	**24**	**77**	**103**
		%	1.9	23.3	74.8	
	3rd	N	**2**	**11**	**34**	**47**
		%	4.3	23.4	72.3	
	4th	N	**2**	**8**	**35**	**45**
		%	4.4	17.8	77.8	
	total	N	**8**	**78**	**200**	**286**
		%	2.8	27.3	69.9	
Technical access	1st	N	**18**	**55**	**18**	**91**
		%	19.8	60.4	19.8	
	2nd	N	**18**	**70**	**15**	**103**
		%	17.5	68.0	14.6	
	3rd	N	**11**	**28**	**8**	**47**
		%	23.4	59.6	17.0	
	4th	N	**9**	**32**	**4**	**45**
		%	20.0	71.1	8.9	
	total	N	**56**	**185**	**45**	**286**
		%	19.6	64.7	15.7	

...Table 15. According to class variable crosstab of students' (n = 283) of awareness, motivation, technical access, empowerment and digital empowerment levels (% within class).

Variable	Class		Cardinality and proportion of level of variable			
			low	medium	high	total (N)
Empowerment	1st	N	**3**	**46**	**42**	**91**
		%	3.3	50.5	46.2	
	2nd	N	**5**	**48**	**50**	**103**
		%	4.9	46.6	48.5	
	3rd	N	**4**	**17**	**26**	**47**
		%	8.5	36.2	55.3	
	4th	N	**4**	**19**	**22**	**45**
		%	8.9	42.2	48.9	
	total	N	**16**	**130**	**140**	**286**
		%	5.6	45.5	49.0	
Digital empowerment	1st	N	**0**	**50**	**41**	**91**
		%	0.0	54.9	45.1	
	2nd	N	**0**	**46**	**57**	**103**
		%	0.0	44.7	55.3	
	3rd	N	**1**	**25**	**21**	**47**
		%	2.1	53.2	44.7	
	4th	N	**3**	**18**	**24**	**45**
		%	6.7	40.0	53.3	
	total	N	**4**	**139**	**143**	**286**
		%	1.4	48.6	50.0	

Awareness levels (Table 16), motivation levels (Table 17), technical access (Table 18), empowerment levels (Table 19) and digital empowerment levels (Table 20) of the participant students (n = 286) did not show a significant difference according to their departments.

Discussion

The data gathered from this study and our study are also supported by our another study. In a study carried out at Dumlupınar University Class Teaching Department, it was determined that class teaching pre-service teachers had high motivation level and they had medium technical access and empowerment level [15]. In a study devoted to Gazi University Teachers College students it was determined that they had a high level of digital empowerment [16]. In an another study, however, it was discovered that teachers had medium level of digital empowerment [17]. In the study mentioned above, the fact that Computer and Science teachers had high level of awareness, motivation, technical access, empowerment and digital empowerment whereas Social Science, Turkish and Foreign Language teachers had high level of awareness and motivation but medium level of technical access, empowerment and digital empowerment is an issue to take into consideration [17]. In the mentioned study, the attitudes of pre-service teachers towards computer assisted teaching were investigated and it was determined that the branch pre-service teachers belonging to social sciences had lower attitude towards computer assisted teaching and they preferred to use computer during lessons less than other branch pre-service teachers [18].

It was determined that there was a significant difference ($p<0.05$) in awareness and motivation subgroups of the students who participated in the study between groups according to gender variable; there was also a significant difference ($p<0.05$). in awareness sub-dimension

Table 16. Awareness levels Kruskall Wallis H test results of the students (n = 286) according to class

Class	N	Mean Rank	X^2	p
1st	91	133.81	1.896	**0.594**
2nd	103	149.17		
3rd	47	145.76		
4th	45	147.76		

Table 17. Motivation levels Kruskall Wallis H test results of the students (n = 286) according to class

Class	N	Mean Rank	X^2	p
1st	91	135.99	2.930	**0.403**
2nd	103	150.63		
3rd	47	152.94		
4th	45	132.50		

Table 18. Technical access levels Kruskall Wallis H test results of the students (n = 286) according to class

Class	N	Mean rank	X^2	p
1st	91	150.02	3.498	**0.321**
2nd	103	149.55		
3rd	47	131.48		
4th	45	129.02		

Table 19. Empowerment levels Kruskall Wallis H Test results of the students (n = 286) according to class

Class	N	Mean Rank	X^2	p
1st	91	144.19	0.407	**0.939**
2nd	103	139.85		
3rd	47	148.68		
4th	45	145.04		

Table 20. Digital empowerment levels Kruskall Wallis H test results of the students (n = 286) according to class

Class	N	Mean Rank	X^2	p
1st	91	140.34	0.472	**0.925**
2nd	103	147.89		
3rd	47	141.07		
4th	45	142.38		

between groups according to department variable. It was determined in terms of the findings of the study that there was not a significant difference in digital empowerment level of Dumlupınar University Physical Education and Sport Teaching department students according to department variable ($p<0.05$).

Eynur et al. [19] suggested in one of their study that Dumlupınar University School of Physical Education and Sport students did not sufficiently benefit from the technical access service of the University. When the findings gathered from the study were examined, the fact that the student in the study showed intensity in medium levels in their technical access levels (Table 3) had parallels with the findings of other studies. Contemporary education activities have been formed with state and private sector universities. However, reaching their aims in these activities

has got to do with creating adequate physical conditions. [20].

The fact that the active role of gender factor in internet use was revealed in another study shows that females were in passive condition in internet use. However, it was discovered that a situation like that did not exist in school environment [21].

At the end of the study, in the light of data gathered from this and other studies, one of the predicted points is that current education system will at all points be successful in systematic structure, in other words, education should be carried out in systematic structure. Digital empowerment is an issue argued by also other countries and needed to be investigated. A study is trying to prove by referring to projects on digital empowerment in south Asia between the years 2007 and 2008 that certain projects on digital empowerment will increase in the years 2009 and 2010 [22].

Conclusions

The following suggestions could be argued: Digital empowerment issue has a right place in the needs of the individuals to take place in the future education and sports organisations; Digital empowerment should definitely be in the future undergraduate and postgraduate education and it is a skill level considered to be important in career planning for any state and private sector education and sports organisations. Besides, technology seminars should regularly be arranged in undergraduate fields for the current compulsory subjects at universities.

Conflict of interest

The author declares that has no conflict of interest.

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