

E-LEARNING IN SPORTS EDUCATION INSTITUTIONS IN TURKEY**Emine ARAS**

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ABSTRACT

This study was aimed to reveal the attitudes of students who receive sports education at higher education level to e-learning and opinions of academicians who work in these institutions to e-learning by adopting a mixed method research. For the students who receive sports education, the scale, "Attitude to E-Learning Scale (AEL)" was implemented. The gathered data was analysed with parametric and non-parametric tests by using SPSS 22.0 package software. For the academicians who work in sports education institutions, face-to-face interviews were conducted. The analysis of the gathered data was conducted by using qualitative content analysis processes and the modeling of the inferred situation was done by using QSR NVIVO-10 software. In the analysis of the attitudes of students who receive sports education to e-learning, in the gender variable of the AEL scale, significant differences were detected between the Inclination to E-Learning (IEL) sub-scale and the gender, marital status and the studied department. In the correlation analysis, it was determined that the strongest relationship was between IEL and AEL scales and it was at a high-level. In the regression analysis, it was determined that the IEL sub-scale explains the 64% of the whole AEL scale.

Keywords: *Academicians; E-Learning; Higher Education; Students; Turkey.*

INTRODUCTION

With the increasing use of information and communication technologies in education, the traditional education has started to be supported by the methods with technological content (Sun, Tsai, Finger, Chen, Yeh, 2008; 2008; Wang, 2003). The rapid changes in the information and technology age are reflected in the field of education directly or indirectly. The technology followed in the daily life also becomes a crucial element of the world of education.

Especially since the late 1960s, a certain movement was observed in the distance education practices. This movement was initiated by the pioneering philosopher, M. Graham Moore. With the developments such as web-based teaching and online learning, Moore's educational technology provided significant contributions to many fields (Horzum, 2013). First of all, to clarify the concept of distance education, the most popular and widespread definition was suggested by Moore and Kearsley (2011), stating that it is a planned and open access education form that learner and the instructor are in different locations and requires special education designs and technologies. Electronic learning (e-learning), which is defined as a new form of distance education is practiced via the internet technologies. E-learning basically provides rather rich and interactive education environments thanks to the use of subject-

related educational methods with technology via computers and internet. Thus, students increase their knowledge and develop their skills through a wide range of technological applications, strategies and tools (Khan, 2001; Yücel, 2006). E-learning, with the support of communication technologies, is proof that 21st century will be a period that is more globalized and based on the information. Consequently, e-learning emerged as a modern sample of education with the development of information and communication technologies.

Today, e-learning is used in two ways in higher education institutions. The first one is the education in internet environment. In this education, the students register to the education portal of the universities, benefit from the available education resources (course books etc.) and information, take exams or complete their homework assignments. Academicians review homework assignments, evaluate and provide feedback. The second one is the case study. In this education, all the resources, materials and homework assignments are presented to the students. Students study and complete their homework assignments individually and deliver them to the instructor on a predetermined date (Begimbetova, 2015).

With the developed technology, today's education and sports education has been undergoing an evolution. Changing education and sports education programs led to the emergence of new approaches and several countries in the world have started to educate students with one of these approaches, the e-learning system (Aypay, 2010; Moore & Kearsley, 2011; Tekinarslan, 2008; Yücel, 2006). During the process of presenting theoretical lesson with e-learning, prior to those type of decisions that would affect the learning experiences of students directly, it is necessary to evaluate the expectancies of the students towards the lessons the students would receive in a different way. It is required to measure the satisfaction regarding this matter, and the necessary adjustments and improvements should be conducted. However, e-learning in sports education together with the practical lessons included in the curriculum of sports education departments and the use of performance tools in these lessons does not seem like a commonly chosen method in these lessons.

Several e-learning practices are conducted in the online environment in Turkey (such as sports certificate and postgraduate programs) but these practices are not sufficiently productive. It is also another fact that most of the prepared web-based e-learning programs do not mean anything further than downloading the lecture notes from the websites. This is believed to be related to the fact that the students do not have sufficient information about e-learning and do not possess the required knowledge to benefit from the upsides of e-learning that emerged with the globalized education system. Preparation of the practices e-learning programs in a way that does not meet a common standard prevents the sharing of the content and the students' records among programs. Acting on this point, this study was conducted with the aim of revealing the attitudes of students, who study in the Faculty of Sports Sciences in a university in Turkey, to e-learning and the opinions of academicians who work in this institution. Within this framework, students' genders, marital status, the departments in which they receive sports education and attitudes to e-learning were investigated. The opinions of the academicians on the practice of e-learning lessons in sports sciences, its benefits to students, disadvantages and the future of e-learning were also presented. Furthermore, with this study, answers were searched for questions such as *"Is distant education important in sports education?"* and *"What are the problems faced in the field of sports education in terms of information technologies?"*.

With the e-learning especially becoming more widespread in higher education, it is believed that this study will provide a significant contribution to sports education institutions in higher education and the field of sports sciences by covering a wide study group from university students who receive sports education and academicians (1198 students who receive sports education and 22 academicians). This study is believed to provide contributions to the design and practice of e-learning environments in a more beneficial way. Finally, it was detected in the literature review conducted in the field of sports education that there were few studies investigating the attitudes of students to e-learning and opinions of academicians to e-learning, and combining the two study groups.

METHODOLOGY

The Model of the Study

In this study, a mixed method design was adopted. In the first study group, the “*quantitative method*” was used while the “*qualitative method*” was used in the second study group. In the quantitative method, the relational screening model was chosen as the research design.

Method on the Quantitative Data

The population of the research conducted with the quantitative method consists of students who receive sports education in the Faculties of Sports Sciences in a university in Turkey. The study group consists of 1198 randomly chosen students.

The “*Attitude to E-Learning Scale (AEL)*”, which was developed by Wilkinson, Roberts, and While (2010) and adapted into Turkish with the conducted validity and reliability studies by Haznedar (2012), was implemented for the students who receive sports education. The reason for choosing this questionnaire form is that it is an up-to-date questionnaire used internationally and is studied in terms of its validity and reliability in Turkey. The information regarding the scale is as the following: the scale consists of 20 matters and 2 sub-scales (Inclination to E-Learning (IEL) and Refraining from E-Learning (REL)). In the analyses conducted by Haznedar (2012) during the adaptation of the scale into Turkish, the Cronbach α coefficient value was determined to be 0.93 for IEL sub-scale and 0.84 for REL sub-scale. The total Cronbach α coefficient value for the whole AEL scale (for 20 matters) was determined to be 0.93. In our study, the Cronbach α coefficient value was determined to be 0.89 for the AEL scale, 0.90 for IEL sub-scale and 0.87 for the REL sub-scale. Additionally, the value range for the AEL scale is as the following: from positive to negative, “*Strongly Agree*”, “*Agree*”, “*Neutral*”, “*Disagree*” and “*Strongly Disagree*”.

In this study, a normality test was first conducted in order to determine whether the data gathered from the AEL scale and its sub-scales demonstrated a normality assumption. As it can be observed in Table 1, it was determined that the coefficients of kurtosis and skewness were determined to be between +1.5 and -1.5. Thus, it was concluded that the normality was actualized. It was also determined that these values provided the assumptions of correlation and regression analyses.

Table 1
Normality test results of the scales (skewness and kurtosis)

	AEL Scale	IEL Sub-Scale	REL Sub-Scale
N	1198	1198	1198
Mean	3.03	3.06	3.01
Standard Deviation	0.67	0.95	0.82
Skewness	[1.137; 0.141]	[-0.355; 0.141]	[0.002; 0.141]
Kurtosis	[-0.075; 0.071]	[-0.127; 0.071]	[-0.020; 0.071]

Afterwards, in order to determine the distribution of the study group according to the personal and occupational variables, “*Independent Sample t-Test*” and “*One Way Variance Analysis (ANOVA)*” tests were conducted to evaluate the rate of differentiation based on the independent variables. However, due to the fact that the quantitative value of the widowed in the marital status variable (N=6) was below 30, the non-parametric test “*Kruskal Wallis Test*” was conducted. The statistically significance level (alpha (α) error level) (was determined to be $p < 0.05$). Furthermore, in order to determine the extent and the way of the relationship between the dependent variables, “*Pearson Correlation Analysis*” was conducted. In order to better explain the quality of the determined relationship, “*Simple Linear Regression Analysis*” was conducted. The correlational relationships between the dependent variables (Table 2) were evaluated according to the following criteria (Kalaycı, 2006):

Table 2

Values regarding the correlational relationships between dependent variables

r	Relationship
0.00-0.25	Very Weak
0.26-0.49	Weak
0.50-0.69	Moderate
0.70-0.89	High
0.90-1.00	Very High

Method on the Qualitative Data

The study group regarding the qualitative data consists of academicians (20 people) who work in the Faculty of Sports Sciences at a university in Turkey. Face-to-face interviews were conducted with the study group. The demographic findings of the study group are as the following: 95% of the academicians were males while 5% were females. In terms of the academic title, 20% of the academicians were professor dr. while 50% were associate professor dr., 15% were instructor dr. and 15% were research assistants.

For the academicians, a semi-structured interview with 3 questions was prepared by the researchers (*Question 1. What do you think are the advantages of practicing the lessons conducted with e-learning in sports sciences as well for the students? Question 2. What do you think are the disadvantages of practicing the lessons conducted with e-learning in sports sciences as well for the students? Question 3. What do you think about the future of e-learning in the field of sports sciences?*). During the preparation of the questions, the opinions of expert academicians on the field were also taken into consideration. In these questions, the opinions of academicians in e-learning were determined (Figure 2, 3, 4).

These face-to-face interviews were conducted in the academicians' own offices and lasted between 5 to 15 minutes. In order to present some of the unique thoughts and opinions, direct quotes were allowed at times. In the analysis of the gathered data, qualitative analysis processes were adopted and descriptive and content analyses were conducted. The opinions of the study group were coded as Academician 1 Male (A1M) and Academician 1 Female (A1F) in order to represent the academicians and were transferred to the computer environment. The data analysis and the modeling of the obtained state were conducted by using QSR NVIVO-10 software.

FINDINGS

In parallel with the aims of the study, the findings regarding the attitudes of students who study in higher education institutions in the field of education to e-learning and academicians who work in these institutions were presented as the following:

Findings Gathered from the Students Who Receive Sports Education

Table 3

Results of the independent samples t-test conducted to determine whether a difference exists in the gender variable of the study group

Scale	Groups	<i>N</i>	\bar{x}	<i>ss</i>	$Sh_{\bar{x}}$	<i>t</i>	<i>t</i> -Test <i>Sd</i>	<i>p</i>
IEL Sub-Scale	Male	882	3.13	0.92	0.03	4.309	1196	0.000*
	Female	316	2.87	0.99	0.05			
REL Sub-Scale	Male	882	3.01	0.82	0.02	0.266	1196	0.791
	Female	316	3.00	0.82	0.04			
AEL Scale	Male	882	3.07	0.68	0.02	3.181	1196	0.002*
	Female	316	2.93	0.64	0.03			

* $p < 0.05$ significance

As it can be seen in Table 3., in the IEL sub-scale, statistically significant differences were determined in IEL sub-scale ($t=4.309$, $p=0.000$, $p < 0.05$) and AEL scale ($t=3.181$; $p=0.002$, $p < 0.05$). The IEL sub-scale ($\bar{x}=3.137$) and AEL scale ($\bar{x}=3.076$) scores of the male students were observed to be high compared to those of females.

Table 4

Results of the Kruskal Wallis-h test conducted to determine whether the study group differs in terms of the marital status variable

Scale	Groups	<i>N</i>	\bar{x}_{sira}	x^2	<i>sd</i>	<i>P</i>	Difference
IEL Sub-Scale	(a) Married	49	499.68	9.524	2	0.009*	a<b a<c b<c
	(b) Single	1143	602.06				
	(c) Widowed	6	926.83				
	Total	1198	-				
REL Sub-Scale	(a) Married	49	618.09	2.659	2	0.265	-
	(b) Single	1143	599.88				
	(c) Widowed	6	375.67				
	Total	1198	-				
AEL Scale	(a) Married	49	539.28	2.408	2	0.300	-
	(b) Single	1143	601.38				
	(c) Widowed	6	732.50				
	Total	1198	-				

* $p < 0.05$ significance

As it can be seen in Table 4, in the REL sub-scale ($x^2=2.659$; $p=0.265$; $p > 0.05$) and AEL scale ($x^2=2.408$; $p=0.300$; $p > 0.05$) no significant difference was observed between the groups (married, single, widowed). In the IEL sub-scale, statistically significant differences were determined among all groups ($p=0.009$; $p < 0.05$).

Table 5
Results of the one-way variance analysis (ANOVA) conducted to determine whether the scores of the study group differed in terms of the department they receive sports education

<i>f</i> , \bar{x} and <i>ss</i> Values					ANOVA Results						
Scales	Groups	<i>N</i>	\bar{x}	<i>sd</i>	Source of Variation	Sum of Squares	<i>Sd</i>	Mean Sum of Squares	<i>F</i>	<i>p</i>	LSD
IEL Sub-Scale	a	184	3.03	0.94							
	b	422	3.18	0.90	Between	9.810	3	3.270			
	c	313	3.01	0.99	Within	1073.021	1194	0.899	3.639	0.012*	c<b d<b
	d	279	2.96	0.95	Total	1082.831	1197				
	Total	1198	3.06	0.95							
REL Sub-Scale	a	184	3.05	0.80							
	b	422	2.98	0.79	Between	0.702	3	0.234			
	c	313	3.01	0.91	Within	806.977	1194	0.676	0.346	0.792	-
	d	279	3.02	0.76	Total	807.679	1197				
	Total	1198	3.01	0.82							
AEL Scale	a	184	3.04	0.68							
	b	422	3.08	0.63	Between	1.554	3	0.518			
	c	313	3.01	0.74	Within	546.128	1194	0.457	1.133	0.335	-
	d	279	2.99	0.65	Total	547.682	1197				
	Total	1198	3.03	0.67							

*a= Physical Education and Sports Teaching, b= Sports Management, c= Coaching Education, Recreation; *p<0.05 significance*

As it can be seen in Table 5, according to the results of the analysis, no statistically significant difference was observed in the REL sub-scale ($F=0.346$; $p=0.792$; $p>0.05$) and the AEL scale ($F=1.133$; $p=0.335$; $p>0.05$). In the IEL sub-scale, statistically significant differences were observed between the students' department of study ($p=0.012$; $p<0.05$). As a result of the LSD analysis of the Post Hoc tests conducted to determine the groups that caused this difference, it was determined that the difference existed between the students who study in the departments of sports management (b) and coaching education (c). Additionally, another significant difference was observed to exist between the students who study in the departments of sports management (b) and recreation (c).

Table 6
Correlation analysis regarding the relationship between the sub-scales of AEL scale

Correlation	<i>N</i>	Pearson (<i>r</i>)	<i>p</i>
IEL Sub-Scale / REL Sub-Scale	1198	0.161**	0.000
IEL Sub-Scale / AEL Scale	1198	0.801**	0.000
REL Sub-Scale / AEL Scale	1198	0.720**	0.000

$p<0.001$ significance

As it can be observed in Table 6, it was determined that there was a significant positive relationship between the AEL scale and its subscales ($p<0.001$). It was also observed that the strongest relationship between the IEL sub-scale and the AEL scale ($r= 0.801$; $p=0.000$) was a high correlation.

The fact that IEL sub-scale and the AEL scale has a high correlation arose the question of linearity problem. Regarding this, Vupa and Alma (2008) emphasized that in a situation where the correlation coefficient is $r > 0.75$, the existence of a multicollinearity problem should be investigated.

In order to better explain the quality of the determined relationship, simple linear regression analysis was conducted. Another presupposition of the simple linear regression analysis is whether there is a linear relationship between the dependent and independent variables. The scatter plot graph for this case was presented in Figure 1. In that case, it can be suggested that the regression model also proves the linearity supposition.

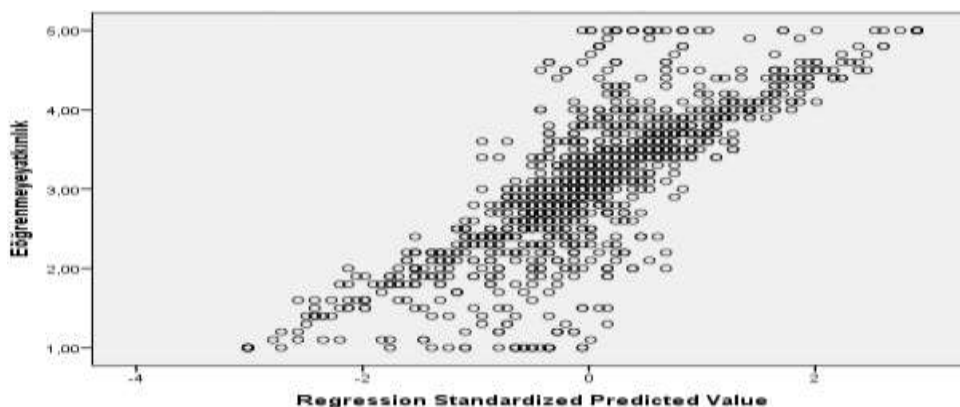


Figure 1. Scatter plot graph

In the regression analysis, error terms (residual) are assumed to be independent of each other. Within this scope, the test of this assumption was conducted with Durbin-Watson coefficient. Additionally, with the t-tests conducted in the regression analysis, it was concluded whether the variables were significant. With the conducted F tests, it was concluded whether the whole model was significant. All of the data regarding these values were presented below (Table 7).

Table 7
Model regarding the IEL sub-scale and the AEL scale

Dependent Variable	Independent Variable	β	t	p	F	Model (p)	R ²
IEL Sub-Scale	Stable	-	-4.662	0.000	2133.792	0.000	0.641
	AEL Scale	0.354	46.193	0.000			

R=0.801; Durbin-Watson= 1.866; $p < 0.000$ significance

As it can be observed in Table 7, examining the model established between the AEL scale and IEL sub-scale as a whole, it was determined that the model was significant ($F=2133.792$; $p < 0.001$). In the analysis of the Durbin-Watson coefficient, the fact that the value was determined to be 1.866 can be considered as a fine value. Thus, it was determined that the IEL sub-scale explains the 64% of the AEL scale ($R^2= 0.641$).

Findings Gathered from the Academicians who Work in the Sports Education Institutions

The opinions of the academicians who participated in the study were gathered from the interviews and analysed. The established connectors were presented and evaluated in the model below.

Within the framework of the study, the question "What do you think are the advantages of practicing the lessons conducted with e-learning in sports sciences as well for the students?" was asked to the academicians. Sub-themes and the number of connectors regarding the theme created for this question were presented below (Figure 2).

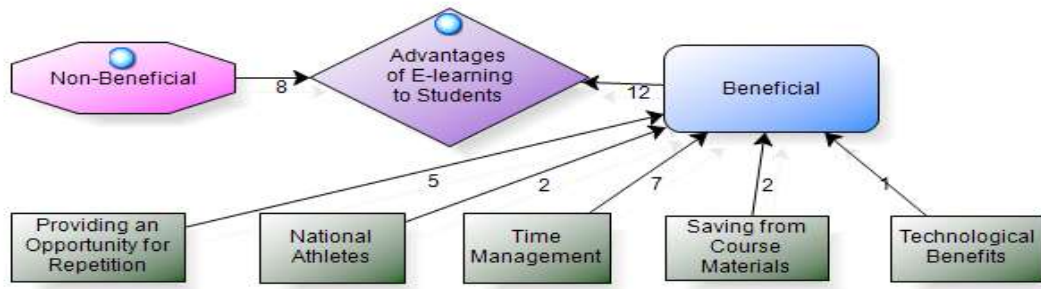


Figure 2. Sub-themes and the number of connectors regarding the theme created for the first question

As it can be seen in Figure 2, the answers of the academicians regarding the advantages of the practicing lessons conducted with e-learning in sports sciences vary. In the examination of the answers of academicians to this question, in advantageous situations, situations such as "providing an opportunity of repetition", "beneficial for national athletes", "time management", "saving from course materials" and "technological benefits" were mentioned. Additionally, 8 academicians expressed the term "non-beneficial". Some of the answers the academicians participated in the study provided for this question are as the following:

A19E: *I believe that providing theoretical lessons and the theoretical parts of practical lessons via e-learning is beneficial for the students in terms of the existence of an always available source of information.*

A14E: *The field of sports sciences has a wide range. I do not think it will be beneficial for the students of sports sciences. Because not all lessons are appropriate for e-learning. However, it might be advantageous in terms of keeping all the lesson activities and usability in future years.*

As it can be observed in Figure 3, in order to determine opinions of the academicians in terms of the disadvantages of practicing lessons conducted with e-learning in sports sciences, the question "What do you think are the disadvantages of practicing the lessons conducted with e-learning in sports sciences as well for the students?" was asked. The sub-themes and the number of connectors regarding the theme created for this question were presented in the model below.

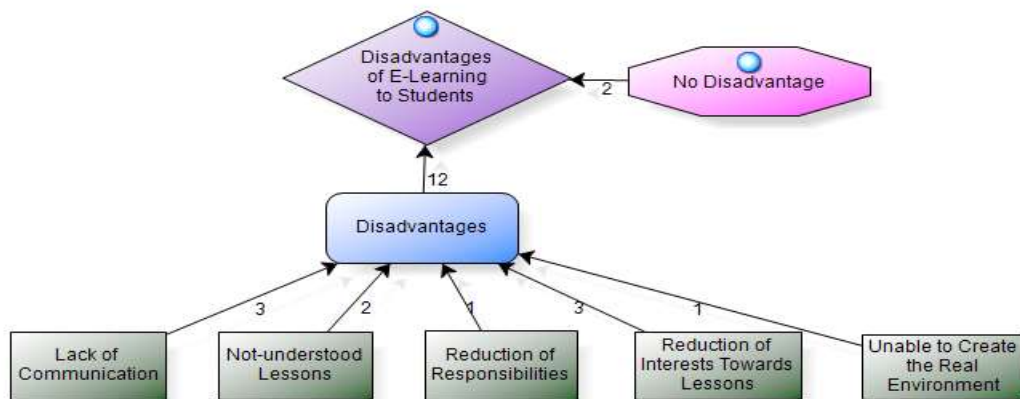


Figure 3. Sub-themes and the number of connectors regarding the theme created for the second question

As observed in Figure 3, the answers of the academicians regarding the disadvantages of the practicing lessons conducted with e-learning in sports sciences vary. In the examination of the answers of the

academicians regarding this question, answers such as "lack of face-to-face communication", "not-understood lessons", "reduction of responsibilities", "reduction of interest towards lessons", "unable to create the real environment" and "lack of communication" were received. Furthermore, 2 academicians stated that "There is no disadvantage". Some of the answers the academicians participated in the study provided for this question are as the following:

A3E: Problems in terms of students' not being able to understand the lesson can be experienced. I believe, for the lessons to be completely understandable, that the existence of face-to-face lessons will be more beneficial. Because I think the fact that lessons are not conducted face-to-face will create a disadvantage.

A7E: E-learning may cause the students to distance themselves from the lessons instead of increasing their interest towards the lessons. In terms of the education process, e-learning will be disadvantageous for the students who receive sports education.

As the last question for the academicians, the question "What do you think about the future of e-learning in the field of sports sciences?" was asked. The sub-themes and the number of connectors regarding the theme created for this question were presented in the model below.

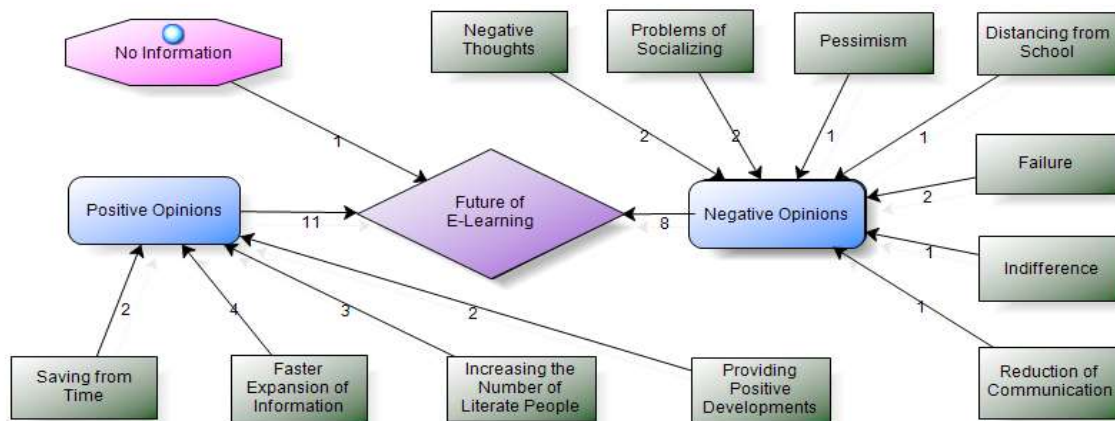


Figure 4. Sub-themes and the number of connectors regarding the theme created for the second question

As it can be observed in Figure 4, the answers of the academicians regarding the future of e-learning vary. In the examination of the answers provided by academicians for this question, the positive answers of the academicians were determined to be "saving time", "faster expansion of information", "increasing the number of literate people" and "providing positive developments". Furthermore, the academicians stated that the e-learning will be non-beneficial by answers such as "reduction of communication", "indifference", "failure", "distancing from school", "pessimism", "problems of socializing" and "negative thoughts". One of the academicians gave the answer "I have no idea". Some of the answers the academicians participated in the study provided for this question are as the following:

A17K: I believe that e-learning in sports education may cause negative effects on socialization process, postpone the necessary experiences to be lived in the school environment and lead to unhealthy generations.

A2E: With the developed technology, due to the fact that individuals use the internet in a very effective way and students can spend the time they would spend in schools or on the ways in different ways and their life, I believe e-learning will provide more contributions.

DISCUSSION

The findings obtained in this study as a result of the conducted analyses were evaluated in two sections:

Discussion regarding the Attitudes of Students who Receive Sports Education to E-Learning

In the AEL scale and IEL sub-scale, statistically significant differences between males and females were observed. The scores of male students in the IEL sub-scale and the AEL scale were determined to be higher compared to those of female students (Table 3). The fact that the attitudes of male students to e-learning was interpreted as male students were inclined to online learning and approached to time management more positively due to the fact that they were more aware of the advantages of e-learning. In the investigation of other studies conducted, it was observed that similar results were found: In the study conducted by Tekinarslan (2008), it was determined that male students had a more positive attitude to internet-based learning compared to female students. In several studies regarding information and communication technologies, it was reported that gender was a distinctive variable and created a significant difference in favour of male students (Taylor, Goede & Steyn, 2011; Aypay, 2010; Birgin, Çoker, & Çatlıoğlu, 2010). It was also observed that results were reported contrary to these studies (Şimşek, İskenderoğlu, & İskenderoğlu, 2010; Şirin, 2015).

In the REL sub-scale and AEL scale, no statistically significant difference was observed in terms of marital status variable. For IEL sub-scale, statistically significant differences were observed between groups (married, single, and widowed) (Table 4). The reason for the fact that significant differences were observed in the inclination to e-learning among married, single and widowed participants was interpreted to be due to the study groups' family lives and opinions of not hindering their university education. In the study conducted by Tekinarslan (2008), investigating the attitudes of students to e-learning, it was reported that students who were married, working and had children had a higher level of positive attitude compared to the students who were single, unemployed and had no child.

In the REL sub-scale and AEL scale, no statistically significant difference was observed in terms of the department of study. In IEL sub-scale, statistically significant differences were observed between the students' departments of study (Table 5). The reason for the fact that differences existed between the attitudes of students who study in the department of sports management and attitudes of those who study in the departments of coaching education and recreation should be regarded natural. This is because it is believed that the reason for the differentiation among the attitudes of students from each department is related to the differences in the curriculum of each department. In the investigation of studies conducted on this subject according to the departments, it was observed that the following results were obtained: in the study conducted with students who study in engineering departments, Adnan and Yaman (2017) reported that students' opportunities to access technology were plenty and they had sufficient technical skills. In the study conducted by Demir (2015), it was reported that the preschool departments of primary education in the faculty of education was not completely ready for e-learning and the department of foreign language education, studying in the same faculty, was partially ready for the e-learning.

Positive significant correlations were observed between the AEL scale and IEL and REL sub-scales. It was also observed that the strongest relationship between the sub-scales of AEL scale was between IEL sub-scale and there was a high-level correlation (Table 6). These results were considered normal. This is because sub-scales that form a scale have a relationship with each other, which should be regarded as natural. This situation also leads to the facts that the constituents of the attitudes of students who receive sports education to e-learning are inseparable and it is believed that using them separately cannot completely predict students' attitudes to e-learning. In Demir's (2015) study conducted with university students, similar findings were discovered. In line with the students' answers, it was reported that all of the sub-scales of readiness to e-learning structure were in statistically significant and positive relationships.

Discussion regarding the Opinions of Academicians who Work in Sports Education Institutions

The academicians stated that the practice of e-learning lessons in sports sciences will be beneficial for students and the best advantage will be in saving time (Figure 2). The academicians also stated that e-learning will have benefits such as cost, equality of opportunities, the inclination to technology and proving usage skills. Regarding this subject, in the study conducted by Uşun (2006), the academicians stated the following opinions regarding e-learning: e-learning provides opportunities for continuous, lifelong, individual and independent learning. In the learning and teaching processes, it provides flexibility and variety in terms of age of learning, the aim of teaching, learning and teaching environment, method, techniques etc. In the study conducted by Ojo and Olakuluhin (2006), it was reported that the attitudes and opinions of university students to open e-learning were generally in positive inclination.

The academicians stated that the practice of the lessons that will be conducted with distance education in sports sciences will have disadvantages for the students and they will not benefit from the practical lessons. It was observed that the academicians were worried that e-learning will not be effective and anti-sociality will increase (Figure 3). In their study, Ali, Ramay, and Shahzad (2011) reported that the role of the interaction occurring between the academicians and the students as a result of the communication had a significant role in the effectiveness and the success of the e-learning method. Berge (2002) and Jin (2005) concluded in their study that the fact that students cannot receive immediate feedback from the academicians in the e-learning environments caused the students to experience some types of problems.

Regarding the future of e-learning, the academicians stated that it will be spread to a wide population in a short time and it will transform into a more frequently used education model (Figure 4). In the study conducted by Kılınc (2015), it was reported, in parallel with the rapid, social, economic and technological developments in the world regarding e-learning, there were individuals who did not have the opportunity to continue their education due to reasons such as lack of physical conditions or time.

CONCLUSIONS

The findings presented above and previously conducted studies pointed out to the fact that information technology will rapidly develop and will continue to be used in the future. Thus, sports education in higher education should have a dynamic structure that can reply to the amount of global information that grows incrementally. In order to build sports education systems with e-learning, students should also be computer literate. As a result of this study, it was thought that the attitudes of the study group to information technologies are at a sufficient level. In future studies conducted on students, the readiness and attitudes of students to e-learning can be supported by qualitative data in order to provide a deeper understating of the reasons and motives and conduct more detailed investigations. Thus, this study will contribute to the improvement of grade point averages of athlete-students who gained positive e-learning experiences in their sports education lives. For this reason, by creating qualified e-learning opportunities that can increase the positive e-learning experiences, the monitoring of the process by sports education researchers will contribute more to the improvement of quality in e-learning research.

Examining the results of the study in general, it was observed that more than half of the academicians had information regarding e-learning. A certain proportion had no idea about the subject. Some of the academicians stated that e-learning will cause problems and will not be beneficial. It was also observed that there were academicians who stated that they do not want to conduct their lessons with e-learning in case e-learning environments are established in their institutions in the future. However, most of the academicians stated that e-learning lessons can be used in theoretical lessons in sports sciences and it will provide benefits. They stated that practicing lesson conducted with e-learning in sports sciences will provide saving time and lead national athletes not to hinder their theoretical lessons. As the disadvantages of e-learning, the academicians stated that there will problems in the interactions of students and problems in understanding the lessons. In conclusion, in order to practice the e-learning

activities effectively in the field of sports sciences, it is required to provide detailed training for the academicians. This is because the education provided for the academicians by their institutions will greatly affect the opinions and attitudes of the students who receive sports education to e-learning and lessons. Additionally, for the academicians who work in sports education institutions, it is necessary to provide in-service training regarding the subjects of technology literacy and computer-assisted education.

The perceptions of academicians and students towards e-learning indicated that there will certainly be inconveniences in terms of required skills and using the system even if the hardware, software and the infrastructure are ready in the sports education institutions. It is necessary for the sports education institutions that wish to initiate e-learning to take these factors into account. However, it is also normal that the students who never had an experience regarding sports education oriented to e-learning have no information on this sports education. In conclusion, it is important that students who receive sports education and academicians who work in these institutions receive educations regarding e-learning. However, the success of teaching activities in the sports education environment regarding e-learning is not at a state that can only be actualized by the individual struggles and positive attitudes of students and academicians. Substantial responsibilities are allocated to sports education institutions for eliminating the negative factors that affect the completion of the adaptation processes and the adaptation processes of academicians. Furthermore, e-learning for sports education should be viewed not as an alternative to formal education but as a supportive element. Thus, in the competitive conditions of today where technology develops rapidly, sports education institutions should effectively use e-learning in order to become faster, more flexible and gain new skills continuously.

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