ORIGINAL ARTICLE

Investigation of Readiness and Expectations of Students of Sports Science Faculties Regarding the E-Learning Process and Their Self-Efficacy Perceptions

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ABSTRACT

Aim: The aim of this study is to examine the relationship between the readiness and expectations of the students of sports science faculties regarding the e-Learning process as well as their self-efficacy perceptions.

Methods: The research group consists of 146 men and 64 women studying at the faculties of sports sciences, a total of 210 university students. "Personal Information Form", "Readiness and Expectation Scale for e-Learning Process" and "General Self-efficacy Scale (GSE)" were applied to the participants. In the analysis of the data, the appropriateness of the parametric tests was reviewed and the independent sample t-test, ANOVA, Pearson correlation and simple linear regression analysis were used.

Results: In the study, it is seen that there is no significant difference in self-efficacy perceptions and its subdimensions according to gender and habit of playing sports actively, but there is a statistical difference between the groups when compared according to grade level. It is found that there is a significant difference in the readiness and expectations of e-Learning in favor of women in terms of only the dimension of factors that affect success according to gender. It is observed that according to habit of playing sports actively, the scores of those who play sports are high in total score averages and in all other dimensions except for the dimension of factors affecting success, and there is a statistically significant difference between the groups in terms of access to technology and technical skills when compared according to the grade. It is seen that there is a positive linear relationship between self-efficacy perception and readiness and expectation for e-Learning, and that self-efficacy perception explains 6% of the variance in readiness and expectations for e-Learning.

Conclusion: In the research, it is concluded that the self-efficacy perceptions and readiness for e-Learning of those who play sports actively are higher, and that self-efficacy perception is an important predictor of their readiness and expectations regarding e-Learning.

Keywords: E-Learning, Self-Efficacy Perception, Sports Sciences, Distance Education

INTRODUCTION

Human is an entity that needs education by its nature in order to maintain its life in harmony in¹. In the course of time, changes have occurred in the understanding of education in accordance with the needs of society. Distance education which has a more flexible structure, and in which expressions such as learning anywhere, timespace restriction will be expressed more has emerged².

Distance education process is a system established to meet the educational needs of people who cannot benefit from formal education for any reason. In this process, e-learning and management systems constitute one of the most important elements of the distance education system³. E-Learning means the use of information technologies with the aim of transforming educational processes with student-centered approaches⁴. E-readiness is the information obtained by measuring how ready, willing and equipped a person, an institution or a country is in terms of the e-Learning process, i.e. the use of information and communication technologies and the benefit from technology⁵.

Since current technologies change quite rapidly⁶, it is important for instructors and managers⁷ to know the readiness levels of individuals who will be trained in electronic environments, also referred to as virtual environments⁸. In the literature, the online readiness of students has been evaluated from different perspectives. Shraim and Khlaif (2010) grouped online learning

readiness into four dimensions: perceived benefit (usefulness), self-efficacy, willingness and difficulties. In this context, self-efficacy is considered a concept that affects e-learning readiness⁹.

The concept of self-efficacy was defined as an important determinant of human behavior by Bandura (Bandura and Adams 1977) within the scope of Social-Cognitive Theory, and later many theoretical and experimental studies which addressed this concept have been carried out¹⁰. The efficacy concept is defined to be the existence of abilities, skills and knowledge capacities that an individual is required to have in order to successfully fulfill a responsibility or task11. As for selfefficacy, it is described as an individual's faith in their own ability that they can perform successfully by planning and organizing the activities necessary to exhibit a certain performance¹². Self-efficacy does not correspond to being capable, but to trusting one's own resources¹³. Alison and Keller (2004) found that prolonged physical activity indirectly increases the feeling of self-confidence¹⁴. In studies examining the relationship between self-efficacy and sports, results have also been found that sport has a positive effect on self-efficacy development¹⁵. Sport is an important activity that develops a person physically, socially and psychologically. Thanks to sports, individuals' ability to communicate, express themselves, have a place in society develops. Moreover, it is of great importance in terms of controlling one's emotions and movements, increasing

decision-making ability and courage¹⁶.

Therefore, it is seen that the distance education process, which has taken an important place in the lives of students with the restrictions imposed by the pandemic period, affects them in various ways. In particular, it is observed that sports science students who are usually subjected to face-to-face and hands-on courses due to the department they are studying in encounter many different applications in this process. In this respect, it is very important to compare the general self-efficacy of sports science students with their Readiness and Expectations for the e-Learning Process in terms of various variables and to examine the effect of their general self-efficacy on the Readiness and Expectations for the e-Learning Process.

MATERIAL AND METHODS

Research Model: The relational survey model, a quantitative research method aiming to determine the degree of change between two or more variables, has been used in the research^{17,18}.

Research Group: The research group of the study consists of 210 (146 male and 64 female) students who are studying in the field of sports sciences at universities and voluntarily participated in the research using a simple random method.

Table 1: The Demographic Characteristics of the Participants

Variable	Group	Frequency (n)	Percentage (%)		
Gender	Male	146	69.5		
Gender	Female	64	30.5		
Play Sports	Yes	129	61.4		
Actively	No	81	38.6		
Grade	Year 1	58	27.6		
	Year 2	52	24.8		
Grade	Year 3	55	26.2		
	Year 4	45	21.4		
		MinMax.	X ±Ss		
	Male	17-37	21.23±3.22		
Age	Female	18-28	20.32±1.83		
	General	17-37	21.09±2.87		

A simple random sampling method is a sampling method in which participants or subjects are equally likely to enter the sample and are randomly selected from the universe^{19,20}, as well as their representation power is described to be higher²¹ than other methods. The demographic characteristics of the research group are

displayed in Table 1.

Data Collection Tools: In the research, "Personal Information Form", "Readiness and Expectation Scale for the e-Learning Process" and "General Self-Efficacy Scale-GSE" created by the researchers have been used to identify the demographic characteristics of the study group.

Readiness and Expectation Scale for the e-Learning Process: It is a 5-point Likert-type scale developed by Gülbahar (2012) to identify students' readiness and expectations for the e-Learning process, consisting of 26 items 5 sub-dimensions (Technical Skills, Factors Affecting Success, Access to Technology, Motivation and Attitude, Personal Characteristics)⁸. It has been specified that the scale's croncbach alpha reliability coefficient, which was calculated based on dimensions, is between .77 and .80, and .93 for the entirety. And in this study, it has been specified that the croncbach alpha reliability coefficient, which was also calculated based on dimensions, is between .65 and .86, and .91 for the entirety.

General Self-Efficacy Scale: It is a 5-point Likert-type scale consisting of 17 items and 3 sub-dimensions (Starting, Not Giving Up, Continuing Effort-Persistence) developed by Sherer et al. (1982) and adapted into Turkish by Yıldırım and İlhan (2010)^{22,13}. It is observed that the Cronbach alpha coefficient calculated for the scale in the Turkish adaptation study was not evaluated based on dimensions, but an item-based evaluation was made and these values ranged between .78 and .81, but the Cronbach alpha reliability coefficient calculated for the whole scale was calculated as .80. In their study, Sherer et al. (1982) stated that it would be more appropriate to evaluate a one-factor structure of the scale rather than its dimensions²². In this study, the cronbach alpha reliability coefficient for the entire scale has been calculated as .88.

Analysis of the Data: Before proceeding to the statistical analyses, assumptions such as normality, homogeneity, stationarity, linearity, if any, related to these analyses should be audited and statistical information should be given about which assumptions are provided. The researcher, in the light of this information, should justify which analysis techniques they prefer and which they do not^{23} .

Table 2: Mean, Standard Deviation, Minimum, Maximum, Skewness and Kurtosis Values of the Scale Scores

Factor		n	MinMax.	X±Ss	Skewness	Kurtosis
ral	Starting	210	9.00-45.00	35.80±7.06	-1.068	1.045
	Not Giving Up	210	7.00-25.00	20.63±3.54	771	.206
a - 1- ale ale	Continuing	210	4.00-15.00	11.95±2.19	541	.176
Gener Self- Efficad Scale	General	210	30.00-85.00	68.40±10.82	735	065
of ; and n for ning	Personal Characteristics	210	4.00-20.00	13.93±3.65	329	236
	Access to Technology	210	4.00-20.00	12.25±4.98	.038	-1.207
ar tic s	Motivation and Attitude	210	7.00-20.00	14.87±3.48	118	915
Sca adine ectal ectal E-Le	Technical Skills	210	12.00-40.00	30.87±6.79	361	730
	Factors Affecting Success	210	9.00-30.00	24.71±4.40	663	133
4 8 X 8 7	General	210	51.00-130.00	96.65±18.39	118	547

In the research, descriptive analyses have been made to describe the demographic characteristics of the participants. Then, after specifying the distribution characteristics and reviewing the appropriateness of the parametric tests, independent sample t-test has been used in comparisons of two independent groups, ANOVA and Tukey test, which is one of the Post Hoc multiple comparisons, are used in comparisons of more than two groups, and Pearson correlation analysis and simple linear regression analysis have been used to specify the relationship between the variables. The results regarding their distribution within the scales are shown in Table 2.

Tabaschnick and Fidell (2013) state that if the skewness and kurtosis coefficients on the scales are between -1.5 and +1.5, the data have a normal distribution. When the

table is examined, it is seen that the specified values are within the appropriate ranges and parametric tests can be used in the analysis of the data²⁴.

Limitations of the Research: Only the students of the Sports Sciences Faculty at Erzincan Binali Yildirim University have participated in the research.

RESULTS

Table 3: Comparison of Participants' General Self-efficacy and Readiness and Expectations for the e-Learning Process according to Gender

	Factor	Gender	n	\overline{X}	Ss	t	р
<u>ئ</u>	Starting	Male	146	35.52	7,378	874	.38
Ğ	Starting	Female	64	36.45	6,284	074	.50
l	Not Giving Up	Male	146	20.61	3,574	133	.89
<u>_</u>	Not Giving Op	Female	64	20.68	3,513	133	.09
Š	Starting Not Giving Up Continuing General	Male	146	11.77	2,288	-1.788	.07
<u> </u>	Continuing	Female	64	12.35	1,922	-1.700	.07
ale	General	Male	146	67.91	11,037	975	.33
ပိုင်	9 0 Serierai	Female	64	69.50	10,331	975	.55
	Personal Characteristics	Male	146	13.67	3,850	-1.573	.11
ness and e-Learning		Female	64	14.53	3,126	-1.373	.11
and	Access to Technology	Male	146	12.02	5,065	-1.008	.31
SS	Access to Technology	Female	64	12.78	4,805	-1.006	.31
e-I	Motivation and Attitude	Male	146	14.89	3,614	.119	.90
eadine the e-	Wollvation and Attitude	Female	64	14.82	3,204	.119	.90
Re.	Technical Skills	Male	146	30.76	6,630	351	.72
of F	recrifical Skills	Female	64	31.12	7,194	331	.12
tio le	Public Scales Services Male	146	24.28	4,530	-2.162	.03*	
sca ctar		Female	64	25.70	3,966	-2.102	.03
be(General	Male	146	95.64	19,399	-1.207	.22
The Exp Proc	General	Female	64	98.96	15,777	-1.207	.22

*p<.05

When the table is examined, it is observed that, according to gender, there is no statistically significant difference in the participants' general self-efficacy and its sub-dimensions (p>.05). In the case of readiness and expectations related to the e-Learning process, it has been found that the averages of females are statistically significantly higher than that of males in the dimension of

factors affecting success (t=-2.162, p<.05). However, it is observed that there is no statistically significant difference in the overall average and other sub-dimensions of readiness and expectations related to the e-Learning process (p>.05).

Table 4: Comparison of Participants' General Self-Efficacy and Readiness and Expectations for the e-Learning Process According to their

Habit of Playing Sports Actively

	Factor	Active in Sports	n	X	Ss	t	р
5	Starting	Yes	129	36.45	7.069	1.685	.09
Ö	Starting	No	81	34.77	6.965	1.000	.09
Self-Efficacy	₩ Not Giving Up	Yes	129	20.93	3.418	1.551	.12
<u> </u>	Not Giving op	No	81	20.16	3.716	1.551	.14
Š	Continuing	Yes	129	12.00	2.184	.460	.64
<u>ढ</u>	Continuing	No	81	11.86	2.223	.400	.04
General 8 Scale	General	Yes	129	69.40	10.602	1.702	.09
Sc	General	No	81	66.80	11.053	3 1.702	.09
	Personal Characteristics	Yes	129	14.37	3.659	2.213	.02*
ng u	Personal Characteristics	No	81	13.23	3.571	2.213	
eadiness and the e-Learning	Access to Technology	Yes	129	12.98	4.963	2.707	.00*
SS	Access to Technology	No	81	11.09	4.833	2.707	
e-l	Motivation and Attitude	Yes	129	15.25	3.321	2.031	.04*
eadine the e-	Wollvation and Attitude	No	81	14.25	3.673	2.031	.04
P. P.	Technical Skills	Yes	129	31.92	6.633	2.865	.00*
ا آو کا	Technical Skiiis	No	81	29.20	6.746	2.003	
The Scale of Re Expectation for t Process	Factors Affecting Success	Yes	129	25.00	4.307	1.200	.23*
Sca cta	raciois Affecting Success	No	81	24.25	4.546	1.200	.20
be S	General	Yes	129	99.54	18.299	2.919	.00*
L T X Y	General	No	81	92.06	17.711	2.319	.00

*p<.05

When the table is examined, it is seen that, according to their habit of playing sports actively, there is no statistically significant difference in the participants' general self-efficacy and its sub-dimensions (p>.05).

It has been discovered that the general average and all sub-dimensions of the readiness and expectations regarding the e-Learning process are statistically higher

than the averages of those who do sports actively than those who do not (p<.05).

Table 5: Comparison of Participants' General Self-Efficacy and Readiness and Expectations for the e-Learning Process according to Grade Level

Factor	Variance Source	Sum of Squares	Sd	Mean of Squares	F	р	Significant Difference
Starting	Cross-groups	1261.424	3	420.475			4 (V:20 60) 2 (V:20 00)
	In-groups	9158.957	206	44.461	9.457	.45	1 (X:38.62)>3 (X:32.20)
	Total	10420.381	209				
	Cross-groups	209.645	3	69.882			1 (X:22.22)>2 (X:20.19)
Not Giving up	In-groups	2420.850	206	11.752	5.947	.00*	1 (X:22.22)>3 (X:19.72)
- '	Total	2630.495	209				1 (X:22.22)>4 (X:20.22)
	Cross-groups	27.773	3	9.258			
Continuing	In-groups	979.751	206	4.756	1.946	.12	-
	Total	1007.524	209				
	Cross-groups	2777.248	3	925.749			1 (X:73.20)>2 (X:67.11)
General	In-groups	21723.152	206	105.452	8.779	.00*	1 (X:73.20)>3 (X:63.56)
	Total	24500.400	209				3 (X:63.56<4 (69.60)
	Cross-groups	38.716	3	12.905			
Personal Characteristics	In-groups	2760.351	206	13.400	.963	.41	-
	Total	2799.067	209				
	Cross-groups	214.869	3	71.623			
Access to Technology	In-groups	4985.245	206	24.200	2.960	0 .03*	1 (X:11.03)<4 (X:13.84)
	Total	5200.114	209				
	Cross-groups	39.599	3	13.200			
Motivation and Attitude	In-groups	2501.930	206	12.145	1.087	.35	-
	Total	2541.529	209				
	Cross-groups	404.539	3	134.846			
Technical Skills	In-groups	9236.242	206	44.836	3.008	.03*	1 (X:29.12)<4 (X:33.02)
	Total	9640.781	209				
	Cross-groups	100.971	3	33.657			
Factors Affecting Success	In-groups	3955.453	206	19.201	1.753	.15	
	Total	4056.424	209				
	Cross-groups	1723.947	3	574.649			
General	In-groups	69021.368	206	335.055	1.715	.16	
	Total	70745.314	209				

p<.05* (1: Year 1, 2: Year 2, 3: Year 3, 4: Year 4)

According to Table 5, in the comparison of the general self-efficacy of the participants according to grade level, it is seen that the scores of the 1st year students in the Starting sub-dimension are statistically higher than the 3rd year students, of the 1st year students in the Not Giving Up sub-dimension than the 2nd, 3rd and 4th year students, of the 1st year students in the general average than the 2nd the 3rd year students, and the 3rd year students in the general average than the 4th year students (p<.05).

In the Access to Technology and Technical Skills subdimensions of the participants' readiness and expectations regarding the e-Learning process according to grade level, it is observed that the 4th year students have statistically higher averages than the 1st year students (p<.05).

Table 6: The Relationship between General Self-efficacy and Readiness and Expectation for the e-Learning Process

Factor	n	r	р
General Self-efficacy			
Readiness and Expectation for the e-Learning Process	210	.251	.00*

As a result of the pearson correlation analysis made to find the relationship between the participants' general self-efficacy and readiness and expectation for the e-learning process, it has been discovered that there is a low level of positive linear relationship among the variables (r=.251, p<.05).

Table 7: Regression Analysis

Table 1. Regression Analysis								
Factor	В	Standard Error	β	t	р			
(Constant)	67.503	7.898		8.547	.00			
General Self-efficacy	.426	.114	.251	3.737	.00			
R= .25 R ² =.06 F=13.965 p<.05 Durbin Watson: 2.187								

According to the results of the regression analysis, when the significance level corresponding to the F value is considered, it is seen that the model established is statistically significant (F=13.965; p<.05). Considering the beta coefficient value, t value and significance level of the independent variable, it is seen that there is a statistically significant effect of general self-efficacy on the level of readiness and expectation for the e-Learning process (t= 3.737, p<.05). According to this result, it has been found that the general level of self-efficacy explains 6% of the readiness and expectation for the e-learning process. In addition, it has been discovered that a one-unit increase in the general self-efficacy level will cause an increase of .251 in the readiness and expectation for the e-learning process (β =.251).

DISCUSSION

In the research, it has been found that there is no statistically significant difference in the average scores of the students' general self-efficacy and readiness and

expectations regarding the e-Learning process according to the gender variable. When the literature is examined, it is stated that the gender variable does not have a statistical effect on self-efficacy scores and readiness and expectations regarding the e-Learning process^{25,26,27,28,29}.

In the comparison with respect to the habit of doing sports actively, it has been found that the averages of the readiness and expectations regarding the e-Learning process of those who do sports actively are statistically higher in the general average and in all its sub-dimensions than of those who do not. In the research conducted by Türker (2020), it is seen that the attitudes of individuals who exercise towards e-Learning are higher than those who do not exercise³⁰. It has been found that students studying in the field of sports use e-Learning tools at a high rate and have proposed increasing their opportunities³¹. In another study conducted by Mutlu Bozkurt (2021), it has been found that the attitude scores towards e-Learning in sports are high in favor of those who play sports actively³². In addition, there are studies showing that individuals who do sports have high average scores in lifelong learning, which also includes the e-learning process³³. Looking at the results of the grade variable, statistical differences have been found in the scores of general self-efficacy and e-Learning readiness and expectations. In the studies conducted, it has been observed that online learning readiness differs according to the grades of undergraduate students³⁴. In their study, Warshawski et al. (2019) have found that self-efficacy-proficiency scores according to the grade variable³⁵.

It has been specified that there is a low level positive linear relationship between the general self-efficacy of the participants and their readiness and expectations for the e-Learning process. Yordam, Bülbül (2018) have found in their study on pre-service teachers that there is a positive relationship between teachers' self-efficacy perceptions and their readiness for online learning³⁶. Karaduman (2015) found that there is a significant positive and linear relationship between the lifelong learning tendencies of university students and their self-efficacy perceptions³⁷.

CONCLUSION

As a result, it has been concluded that, in the distance education process brought by the pandemic, the self-efficacy perceptions and readiness for e-Learning of students who do sports actively are higher among the students studying in the field of sports sciences, and the general self-efficacy perception of the students is an important predictor of their readiness and expectations regarding e-Learning.

Since sports positively affect the abilities, skills and knowledge capacities of people, it is claimed that sports education institutions can ensure that sports are delivered to a wider audience by making the e-Learning process more comprehensive, accessible and continuous.

REFERENCES

- Demirel F. Relationship of Human Nature with Education According to The Ideas of John Dewey and İsmail Hakkı Tonguç. Ankara University Journal of Faculty of Educational Sciences (JFES) 2019; 52(3): 967-987.
- 2. Delen A. Trends In Studies on E-Learning

- Environments in Turkey: Examination Of Theses Between 2004-2020. (Master's thesis). 2021; Necmettin Erbakan University Institute of Education Sciences.
- Altıparmák M, Kurt İD, Kapıdere M. E-Learning and Open Source Code Management Systems in Education. XI. Academic Informatics Conference. 2011.
- 4. Aoki K. The Use of ICT and E-Learning in Higher Education in Japan. World Academy of Science, Engineering and Technology 2010; 66(6): 868-872.
- Dada D. E-Readiness for Developing Countries: Moving the Focus from the environment to the users. The Electronic Journal of Information Systems in Developing Countries 2006; 27(1): 1-14.
- Bülbül A. Examination of Lifelong Learning Trends of Physical Education and Sports Teachers on Different Variables. Journal of Education and Learning 2020; 9 (6): 94-101.
- Altınışık Ü, Turhal SN, Çelik A, Yetim AA. Employability Perceptions of Sports Manager Candidates. Ambient Science, 2020; 07(Sp1): 275-279.
- Gülbahar Y.. Scale Development Study to Measure The Readiness and Satisfaction Levels of Participants in E-Learning Environments. Journal of the Faculty of Educational Sciences, 2012; 45(2): 119-137.
- Shraim K, Khlai, Z. An e-Learning Approach to Secondary Education in Palestine: Opportunities and Challenges. Information Technology for Development 2010; 16(3): 159-173.
- Bandura A, Adams NE. Analysis of Self-Efficacy Theory of Behavioral Change. Cognitive Therapy and Research 1977; 1(4): 287-310.
- Derman A. Self-Efficacy Perceptions of Chemistry Teacher Candidates and Their Attitudes Towards The Teaching Profession. (Unpublished Doctoral Thesis) 2007. Selçuk University, Konya.
- Bandura A.. Human Agency in Social Cognitive Theory. American Psychologist 1989; 44(9): 1175.
- Yıldırım F, İlhan İÖ. The Validity and Reliability of the General Self-Efficacy Scale-Turkish Form. Turkish Journal of Psychiatry, 2010; 21(4): 301-308.
- Allison MJ, Keller C. Self-efficacy intervention effect on physical activity in older adults. Western journal of nursing research 2004; 26(1): 31-46.
- Eyüboğlu E.. The Analysis of Self-Efficacy Levels of 12-14 Year-Old Adolescent Sports Players and Non-Players (Master's thesis. 2012; Social Sciences Institute.
- 16. Sevim Y.. Training Information. 1. Oppression, Ankara: Gazi Bureau Publishing House 1997: 127-128.
- 17. Fraenkel JR, Wallen NE. How to Design and Evaluate Research in Education (Eight Ed.) 2012. McGraw-Hill.
- Karasar N. Scientific Research Method. Nobel Publishing 2020.
- 19. Frerichs RR. Simple Random Sampling, Chapter Three, in Rapid Surveys (unpublished) 2008; pp 1-44.
- Tuna F. Statistics for The Social Sciences Ankara. Pegem Academy Publishing 2016.
- Büyüköztürk Ş, Kılıç Çakmak E, Akgün ÖE, Karadeniz Ş, Demirel F. Scientific Research Methods in Education. Pegem Academy Publishing 2019.
- Sherer M, Maddux JE., Mercandante B, Prentic Dunn S., Jacobs B, Rogers R. The Self-Efficacy Scale: Construction and Validation. Psychological Reports 1982; 51(51): 663-671
- Tozoğlu E, Dursun M. Scientific Research Process in Sports Sciences, Editor; Gökmen, Ö. Sports & Science, Efe Academy Publishing House 2020. İstanbul; 7-23.
- Tabaschnick BG, Fidell LS. Using multivariate statistics (6th Edit.) 2013. Boston: Pearson.
- İkiz FE, Yörük C. The Investigation of Self-Efficacy Levels and Family Functions of Teacher Trainees. Uşak University

- Journal of Social Sciences, 2013; 6(1): 225-252.
- Erol M, Temizer Avci D. A Catalyst that Put into Action "Perception of Self-Efficacy": A Study on University Students. Hacettepe University Journal of Education 2016; 31(4): 711-723.
- Steele-Dadzie TE. (). Relationships Among Teacher Self-Efficacy, Student Self Efficacy, and Student Performance.
 2004 Rutgers The State University of New Jersey New Brunswick.
- Soydal I, Alır G, Ünal Y. Are Turkish Universities Ready For E-Learning: A case of Hacettepe University Faculty of Letters. Information Services & Use 2011; 31(3-4): 281-291.
- Yakın İ, Tınmaz H. An important dimension in distance education: e-readiness of teacher candidates. 16. Academic Informatics Conference 2013. Ankara: Middle East Technical University.
- Türker É. The Effect of the Coronavirus (Covid-19)
 Pandemic on The Anxiety Level and e-Learning Attitudes of
 Higher Education Students. Doctoral Thesis. 2020. Ondokuz
 Mayıs University, Health Sciences Institute, Samsun.
- Rigamonti L, Dolci A, Galetta F, Stefanelli C. Social media and elearning use among European exercise science students. Health Promotion International 2019; 35(3): 1-8.
- Bozkurt Mutlu T. Investigation of attitudes towards e-learning in sports, academic procrastination behaviors and emotional

- intelligence of students studying at the faculty of sports sciences. Doctoral Thesis. 2021; Gazi University Institute of Education Sciences, Ankara.
- Tatlisu B. Examination of Lifelong Learning Competencies of Teacher Candidates Who Do and Do Not Do Sports In Terms of Different Variables. Master Thesis. 2016; Atatürk University, Erzurum.
- Saritaş É, Barutçu S. Digital Transformation in Education and Students' Readiness to Learn Online: A Research on Pamukkale University Students in The Period of Pandemic. Journal of Internet Applications and Management 2020; 11(1): 5-22.
- Warshawski S, Bar-Lev O, Barnoy S. (2019). Role of Academic Self-efficacy and Social Support on Nursing Students' Test Anxiety. Nurse educator 2019; 44(1): 6-10.
- Yordam MF, Bülbül T. The Relationship Between Teachers Self-Efficacy Sense And Their Level Of Readiness For Online Learning. Trakya University Journal of Social Science 2018; 20(1).
- Karaduman A. The Relationship between the Lifelong Learning Tendencies of Undergraduate Students and their Self-Efficacy Perceptions. Master's thesis, 2015; Bartın University, Institute of Education Sciences, Bartın.