The Effect of Online Learning Attitudes of Sports Sciences Students on their Learning Readiness to Learn Online in the Era of the New Coronavirus Pandemic (Covid-19)

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ABSTRACT
The aim of this research is to examine the effect of online learning attitudes on online learning readiness of sports sciences students during the period of coronavirus pandemic (covid-19). The research was designed with the correlational survey model. The population of research consisted of sports sciences students from the faculty in seven state universities in Turkey. The sample consisted of 599 (271 female + 328 male) sports sciences students studying at the Departments of Coaching Training, Physical Education and Sports Teaching, Recreation and Sports Management, selected by the easy sampling method from these faculties and taking courses from the online learning platform. Data in the research was collected by using "Online Learning Attitude Scale", "Online Learning Readiness Scale", and "Personal Information Form". The data was analyzed using descriptive statistics, Pearson's correlation and regression analysis. According to the research findings; There is a moderately significant positive correlation between online learning attitude and online learning readiness ($p < .05$). Also, online learning attitude was found to have a significant effect on online learning readiness ($p < .05$). As a result; In the field of sports sciences, the necessity of establishing a positive online attitude and creating a basis for a successful online learning readiness to provide a good online learning to the learner has been put forward.
Keywords: Sports sciences, Covid-19, Online learning attitude, Online learning readiness.

INTRODUCTION

The fact that technology constantly renews itself and adapts to the conditions of the day has shown itself in the field of education as in many other fields. Education areas try to keep up with the conditions of the day by moving to new learning environments along with technological developments. One of these new learning environments is undoubtedly online learning environments.

Online learning has become a concept that is being examined day by day in the field of education and representing technology in the field of education. Online learning in the literatüre has also been expressed as "blended learning", "e-learning" and "distance learning" (Isaac, Aldholay, Abdullah, and Ramayah, 2019). In this globalized and digitalized century, governments, educational institutions, and companies around the world have increasingly started to encourage online learning, and as a result, the transition from traditional face-to-face classrooms to distance and online learning has increasingly continued (Aldhafeeri and Khan, 2016). In online learning, students needed a presentation method besides being away from teachers, in other words, the traditional classroom environment (Wang, Shannon and Ross, 2013; Wilde and Hsu, 2019). In addition, in this learning, the interaction between students and teachers is mediated by technological opportunities and has a significant impact on learning outcomes (Bower, 2019; Gonzalez et al., 2020; Wang el al., 2013). Online learning has become very popular in the educational environment (Pillay, Irving and Tones, 2007). In online learning that has been studied

over the years, effective online teaching results from careful design and planning (Hodges, Moore, Lockee, Trust and Bond, 2020). Online learning is defined as a form of education carried out through a browser or applications without the need for additional software and learning resources by Horton (2000). In addition, Clark and Mayer (2016) expressed online learning as the use of digital tools to give some instructions to the other person with the internet.

Advanced technology has made learning online easier as a new mode of learning in recent years. Namely, students can access the emerging online learning environment without time and place constraints by using the internet and different online learning platforms. In addition, this learning mode provided more flexibility in learning environments as there is no time and space restriction (Hwang, Wang, & Lai, 2020). s a matter of fact, learners were able to gain experience of learning from their places through computer and the internet (Benson, 2002; Carliner, 2004; Conrad, 2002). Studies have shown that the materials and videos used in online learning make students feel like they are taking lessons in the classroom (Chen and Wu, 2015). In addition, online learning provides the opportunity to repeatedly listen to what is wanted to be learned by watching the lessons over and over again (Brecht and Ogilby, 2008). To achieve versatile online learning (Vandenhouten, Lepak, Reilly, & Berg, 2014), an online learning attitude (Daniels, Tyler, & Christie, 2000) and online learning readiness (Hukle, 2009) are required. Online learning attitude is defined as “the desire and the manner of the individual towards online learning” (Hergüner, Son, Hergüner-Son and Dönmez, 2020). Readiness in online learning is defined as "being mentally and physically prepared for some online learning experiences and actions" (Borotis and Poulymenakou, 2004).

The fact that students, who are one of the most important elements of online learning environments, have a positive or negative attitude towards these learning environments has a great effect on learning (Alomyan & Au, 2004). In studies conducted to examine the effect of attitude on student behaviors, it was concluded that opposing feelings, interests, and thoughts related to a subject affect the behaviors that are or will be exhibited (Pierce, Stacey and Barkatsas, 2007). As a matter of fact, positive attitudes allow students to exhibit positive behaviors towards a lesson and make more effort to learn (Kara, 2010). In addition, a positive attitude towards learning allows students to be diligent towards learning the knowledge and skills that are useful to them in life, and ultimately to be ready in terms of behavioral, emotional, and psychomotor aspects required in the lesson (Tsai and Kuo, 2008; Scheiter and Gerjets, 2007; Yang and Lau, 2003; Merisuo-Storm, 2007; Yudko, Hirakawa and Chi, 2007). In short, students' attitudes should be taken into account in online learning platforms (Daniels et al., 2000).

Another variable that affects the success of online learning environments is readiness towards online learning (So & Swatman, 2006). Readiness, which has an extremely important place in the education process, is one of the important inputs of the learning-teaching system (Bloom, 1995). Readiness is the student's introductory level to the subject, and his / her prior knowledge and attitude (Yenilmez and Kakmacı, 2008). It is extremely important to determine students' level of readiness before starting online learning (So & Swatman, 2006) for student success (Yurdugül and Alsancak-Sırakaya, 2013). Considering the strong relationship between online learning readiness and online learning (Kruger-Ross and Waters, 2013; Kaur and Abas, 2004), it can be said that the progress of online learning is through online readiness (Hukle, 2009). Research has shown that success in online learning environments is directly related to online readiness (Kruger-Rose and Waters, 2013; Galy, Downey and Johnson, 2011; Artino, 2009; Mercado, 2008). Considering the relevant scientific studies, "Online learning readiness can be possibly defined as the state of being physically and mentally motivated for online learning by providing auto-control among individual’s learning time, environment, materials, learning strategies, methods and techniques." Also, it can be said that the individual can achieve online readiness at the rate of the access to technological tools and the internet, the ability to use social networks, technology literacy skills and individual learning responsibility.

In order to be ready, which is expressed as having the information required to experience the online learning experience in the most effective way, the individual must have attitude and motivation (Yurdugül and Demir, 2016). As a matter of fact, Hergüner et al. (2020) stated that a positive online attitude will form the basis for successful online learning readiness. The strong relationship between these two concepts has undoubtedly made online learning environments more successful. In addition to the developing and changing technological conditions, educational institutions have made a rapid transition to online learning due to the epidemic experienced today.

Covid-19 infection, which emerged in Wuhan, China in December 2019, was declared as a pandemic by the World Health Organization (WHO) on March 11, 2020 (Cucinotta & Vanelli, 2020). Most governments around the world have tried to prevent the spread of this contagious disease by imposing closure, social distancing, face-

to-face education avoidance, and restrictions on human mobility (Zheng, Khan and Hussain, 2020). Higher education institutions in the countries have aimed to transition to a safe and healthy learning environment in order to protect students, academic and administrative staff and slow the spread of the virus (Cao et al., 2020; Huang et al., 2020). The Covid-19 pandemic has led to a digital revolution in education with the use of online learning environments, digital books, teleconferences, and virtual classrooms (Kapasia et al., 2020; Sutton and Jorge, 2020). Many universities have transferred their courses to online learning environments (Ali, 2020; Crawford, Butler-Henderson, Rudolph and Glowatz, 2020; Huang et al., 2020). It appears that books and materials from traditional learning environments are changing wherever possible and that various online learning platforms (national television programs or social media) are being created. In addition, some educational institutions have announced holidays to prepare for the distance education environment (Gonzalez et al., 2020). In our country, on March 16, 2020, face-to-face education was suspended in schools and the distance education environment was started. One of the disciplines that interrupt face-to-face education is the field of sports sciences. As in all disciplines, online learning environments have been rapidly adopted in the field of sports sciences. With this research, it is aimed to examine the effect of students' online learning attitudes on online readiness in the field of sports sciences, which is multidisciplinary. It is seen that online learning has increased in today's world due to technological developments and the covid-19 pandemic. This study, which includes some sciences and is multidisciplinary, is considered to be important in terms of being the first in the field of sports sciences and leading future studies. The purpose of this research conducted in this context is to examine the effect of online learning attitudes on the online learning readiness of sports sciences students during the period of renewal and coronavirus pandemic (covid-19).

METHOD

Research Model

The research was patterned with the “correlational survey model” from quantitative methods. Correlational survey model is “research models aiming to determine the existence and / or degree of change between two or more variables” (Karasar, 2018, p. 114).

Research Population and Sample

The universe of study of sports sciences seven state universities in Turkey has created for students in the faculty. The sample consisted of 599 (271 female + 328 male) sports sciences students studying at the Departments of Coaching Training, Physical Education and Sports Teaching, Recreation and Sports Management, selected by the easy sampling method from these faculties and taking courses from the online learning platform. The average age of the research group is 21.72.

Table 1. Descriptive statistics of the research group

Gender	**n**	**%**
Female	271	45,2
Male	328	54,8
Department	**n**	**%**
Coaching Training	127	21,2
Physical Education and Sports Teaching	187	31,2
Recreation	82	13,7
Sports Management	203	33,9
Universities	**n**	**%**
Sakarya University of Applied Sciences	258	43,1
Kırıkkale University	106	17,7
İstanbul University-Cerrahpaşa	84	14,0
Marmara University	56	9,3
Kırşehir Ahi Evran University	34	5,7
Bartın University	33	5,5
Kocaeli University	28	4,7
Total	**599**	**100,0**

Table 1 includes descriptive statistics results of the students participating in the research. According to the analysis result, 45.2% (n = 271) of the participants in the research are females; 54.8% (n = 328) of them are male students. According to the departments attended; Coaching training of 21.2% (n = 127); 31.2% (n = 187) of them were physical education and sports teachers; 13.7% (n = 82) of them are recreation; It is seen that 33.9% (n = 203) consisted of students from sports management department. 43.1% (n = 258) from Sakarya University of Applied Sciences; 17.7% (n = 106) from Kırıkkale University; 14.0% (n = 84) from Istanbul University-

Cerrahpaşa University; 9.3% (n = 56) from Marmara University; 5.7% (n = 34) from Kırşehir Ahi Evran University; 5.5% (n = 33) from Bartın University and 4.7% (n = 28) from Kocaeli University were included.

Data Collection Tools

In the research, the data was collected with the "Personal Information Form" prepared by the researchers, "Online Learning Attitude Scale" developed by Usta, Uysal, and Okur (2016), "Online Learning Readiness Scale" developed by Hung, Chou, Chen, and Own (2010) and adapted to Turkish by Yurdugül, and Alsancak-Sırakaya (2013). Detailed information on measurement tools is given below.

Personal Information Form

Within the scope of the research, the "Personal Information Form" created by the researchers was used to determine some demographic information of sports sciences students. In this form, it is aimed to reach information such as gender, age, university, and department of the students.

Online Learning Attitude Scale

"Online Learning Attitude Scale" developed by Usta, Uysal, and Okur (2016) was used to determine the attitudes of sports sciences students towards online learning. The measuring tool consists of 20 items in 5-point Likert type (1 = Strongly disagree, Strongly agree = 5). It was determined that the measurement tool had 4 factors: "general acceptance (α = .77)", "individual awareness (α = .85)", "usefulness (α = .79)" and "application effectiveness (α = .68)". The overall Cronbach Alpha internal consistency coefficient of the measurement tool was calculated as .90 (Usta, Uysal, & Okur, 2016). As a result of the present research, the Cronbach Alpha internal consistency coefficients of the scale were determined as .67 for general acceptance, .88 for individual awareness, .82 for application effectiveness, .58 for implementation effectiveness, and .91 for the overall scale. In this study, statistical operations were performed over the total score in terms of suitability to the purpose of the research.

Online Learning Readiness Scale

To determine the readiness of sports sciences students for online learning, the "Online Learning Readiness Scale" was used, which was developed by Hung et al., (2020) and adapted to Turkish by Yurdugül and Alsancak-Sırakaya (2013). The measuring tool consists of 18 items in 5-point Likert type (1 = Strongly disagree, Strongly agree = 5). It has been determined that the measurement tool is based on that has 5 factors including "computer and internet self-efficacy (α = .92)", "self-directed learning (α = .84)", "learner control (α = .85)", "motivation for learning (α = .80)" and " "online communication self-efficacy (α = .91)". The overall Cronbach Alpha internal consistency coefficient of the scale was calculated as .87 (Yurdugül and Alsancak-Sırakaya, 2013). As a result of the present research, the Cronbach Alpha internal consistency coefficients of the scale were .87 for computer / internet self-efficacy; .75 for self-directed learning; .74 for learner control; .83 for motivation for learning; 79 for online communication self-efficacy and Cronbach Alpha internal consistency coefficient for the overall scale was determined as .91. In this study, statistical operations were performed over the total score in terms of suitability to the purpose of the research.

Collection of Data

Before the research data were collected, necessary permissions were obtained from the ethics committee of Sakarya University of Applied Sciences (date 08/05/2020, number E.3789). Due to the coronavirus (Covid-19) epidemic, research questions were transferred to the online data collection system with Google form. Questions transferred to the online system between 24.05.2020 and 24.06.2020 were conveyed to the online learning platforms of the students through the deanship, department heads, and faculty members in the relevant faculties, and data were collected from those who voluntarily participated in the study. In addition, general information about the research, and the purpose of the research was given at the beginning of the research form, and approval of the voluntary participation form was added. After the students approved the button on the form, they participated in the research.

Analysis of Data

The raw data obtained from the students through Google forms were transferred to an Excel file, checked and encoded and transferred to the SPSS package program. n order to decide on statistical analysis, normality test was applied to the data. As a result of the statistical process, it was determined that the data showed a distribution in the range -1>,…, <+ 1. It is accepted that these values are suitable for normal distribution (Tabachnick and Fidell, 2013). Descriptive statistics, Pearson's correlation and regression analysis were used while analyzing the data.

FINDINGS

Table 2.The relationship results between the online attitudes of sports sciences students and their online readiness

		Online Learning Readiness
Online Learning Attitude	r	,62
	p	,00**

In Table 2, Pearson correlation analysis results showing the relationship between sports sciences students' online attitudes and online readiness are given. The result of the analysis showed that there was a moderately significant positive correlation between the online attitudes of sports sciences students and their online readiness (r = .62; p <.01).

Table 3.The effect of sports sciences students' online attitudes on their online readiness

Model	B	Std. Error	β	t	p
Stable	32,65	1,64	---	19,87	,00
Online Learning Attitude	,52	,03	,62	19,30	,00

R= ,62 R^2_{adj}= ,38
$F_{(1,597)}$ = 372,41 p= ,00

Dependent variable = Online Readiness Method: Enter

In Table 3, simple linear regression analysis results are given to determine the effect of online attitudes of sports sciences students on their online readiness. As a result of the analysis, it is seen that the regression model is statistically significant. When the t-test results regarding the significance of the regression coefficients were examined, it was determined that the online attitude (β = .62; t = 19.30; p = .00) had a significant effect on online readiness. It can be stated that 38% of the total variance of online readiness is explained by online attitude.

DISCUSSION, CONCLUSION AND SUGGESTIONS

Due to the Covid-19 epidemic, a transition to online learning in higher education institutions has been a very complex process. In this research, it was aimed to examine the effect of online learning attitudes on the online learning readiness of sports sciences students during the period of coronavirus pandemic (covid-19). In this context, 599 sports sciences students took online learning platform courses in Coaching Training, Physical Education and Sports Teaching, Recreation and Sport Management Department from the sports sciences faculty of the seven state universities in Turkey joined the research.

As a result of the research, a moderately significant positive correlation was found between the online learning attitudes of sports sciences students and online learning readiness. Besides, it was determined that online attitude significantly predicts online readiness and online attitude has 38% of the total variance in explaining online readiness. This result revealed that to achieve high readiness in online learning, online attitude should also be high.

Online learning that provides education without the restriction of space and time for students; It is to manage the process effectively by interacting between student-student, student-teacher, student-content, or student-system (Moore and Kearsley, 1996). The online learning process is possible with the use of technology as well as being the innovation brought by technological processes. Therefore, this learning process made possible by technology can form theoretical frameworks from a pedagogical perspective as well as current developments (Beldarrain, 2006). During the period when the teacher is not in the same environment, it has become necessary for the student to feel competent, self-confident, and gain a positive attitude (Çatana-Kuleli, 2018). Also, teaching students their own learning style is a goal for the educator, but it should not be overlooked that not all students have the same learning skills (Tichavsky, Hunt, Driscoll and Jicha, 2015). One of the first ways to increase this learning skill is the attitude towards learning. For this reason, the first variable in the research is about attitude. An important variable that affects attitude is the motivation. If the student is motivated, he/she will be determined to achieve his / her goal by being self-disciplined (Kemp, Palmer and Strelan, 2019). Considering the learning process, the learner's attitude towards learning is of great importance in terms of the process (Chapman and Van Auken, 2001). An individual's attitude towards a behavior allows to evaluate the behavior as positive or negative (GarcíaBotero, Questier, Cincinnato, He and Zhu, 2018; Kemp et al., 2019). Likewise, attitudes in the education process; It has a strong effect on learning processes (Ali, 2020), behaviors (Arbaugh, 2000; Arbaugh,

2010; Bernard et al., 2004) and performance (Duarte, 2007; Bråten and Strømsø, 2006; Özden, 2009). In this context, it shows that attitudes are an important tool in students' self-motivation and performance (Love, Love and Northcraft, 2010). Because a negative performance may be associated with a negative attitude (Sadik and Reisman, 2004). If the displayed attitude is negative and negligible, the student's chance of entering the learning process may decrease (Prior, Mazanov, Meacheam, Heaslip and Hanson, 2016). In previous studies in this area, it has been reported that a positive attitude is important in predicting academic achievement (Karagiannopoulou and Christtodoulides, 2005; Pierce et al., 2007). This information clearly reveals that the online learning attitude should be positive. The fact that the positive attitude is a variable that directly affects the student's positive readiness towards the course has been revealed. As stated by Hergüner et al. (2020) in their research results, "the necessity of positive attitude due to the nature of learning" has been obtained again within the framework of the current research. In the literature and researches, a positive student attitude will increase interest in learning (Dahalan, Hassan and Atan, 2012) and it is believed that learning will be more satisfying (Sun, Tsai, Finger, Chen and Yeh, 2008; Piccoli, Ahmad and Ives, 2001) and it also affects learning interest (Hannafin and Cole, 1983) and keeps his motivation alive (Peng, Tsai and Wu, 2006; Yang and Lin, 2010).

Another important variable that has a significant effect on online learning attitude and revealed as a result of the research is readiness for online learning. As a matter of fact, Thorndike stated that attitudes are related to readiness (Uçar, 2017). Readiness has been frequently mentioned and emphasized in previous research on online learning environments (Adnan and Boz-Yaman, 2017; Horzum and Çakır, 2012; Shraim and Khlaif, 2010; Hung, et al., 2010; Fogerson, 2005; Watkins, Leigh and Triner, 2004; Borotis and Poulymenakou, 2004; Smith, Murphy and Mahonay, 2003). Examining online learning readiness at the beginning of the education process is important for an effective online learning process (So & Swatman, 2006). In order to benefit from online learning environments sufficiently and to use their advantages, the importance of online learning readiness has begun to be emphasized (Watkins and Corry, 2005) and it has become a concept discussed in the process of offering online learning opportunities in different formats (Smith, 2005). So, success in online learning depends on understanding the readiness of stakeholders in this learning environment (Mercado, 2008; Kruger-Ross and Waters, 2013).

Guglielmino and Guglielmino (2003) and Piskurich (2003) reported in their research that forcing individuals who are not ready to learn online would have negative consequences. Machado (2007) emphasized that online readiness for better use of online learning is important and needs to be researched. Indeed, learning can be explained by the strong relationships between cognitive and motivational processes (Pintrich and Schunk, 2002, Stefanou and Salisbury-Glennon, 2002). An individual who uses cognitive processes well can be successful in learning by motivating herself/himself to learning. The motivated individual will be more effective in performing the behaviors (Lee, Bray, Carter-Wells, Glaeser, Ivers and Street, 2004). Behaviors and readiness are related (Demir, 2015). The positive attitude of readiness can only occur with a positive attitude. Because positive attitude towards online learning directly affects the readiness for online learning (Hergüner et al., 2020). Readiness in online learning is positively associated with learning (Stansfield, McLellan and Connolly, 2004). As a matter of fact, there are studies pointing out the positive effect of readiness on learning (Demir-Kaymak & Horzum, 2013; Hukle, 2009; Watkins et al., 2004; So & Swatman, 2006; Artino, 2009; Galy et al., 2011; Kruger-Rose and Waters, 2013).

In the studies conducted in the literature, the existence of studies showing that online learning attitude is positively correlated with online learning readiness and online learning attitude positively explains online learning readiness (Hergüner et al., 2020) supports the research result. Also, the view that positive attitude in the literature lays the groundwork for positive learning (Bråten and Strømsø, 2006; Sanders and Morrison-Shetlar, 2001; Alomyan & Au, 2004) and readiness (Uçar, 2017; Demir, 2015) is consistent with the research results.
The information obtained in the literature and the current research result clearly shows that the way to good online learning is a positive online learning attitude and a good online learning readiness. With this research, the necessity of using online learning environments in both theoretical and practical courses in sports sciences, which is a multidisciplinary field, and the positive attitude and readiness of sports sciences students towards online learning environments have been revealed. In subsequent research; It is recommended that revealing all the sports sciences and online learning conditions of schools in Turkey, the examination of online learning attitudes and online learning readiness, online student engagement of sports sciences students, revealing online socialization situations, besides, similar studies should be carried out on the instructors who are the most important engines and trainers of the education system.

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