EXAMINING THE LEVELS OF USING DIGITAL EDUCATIONAL GAMES OF SPORTS HIGH SCHOOL STUDENTS

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ABSTRACT

In this study, it was aimed to examine the level of use of Digital Educational Games by Sports High School Students. The research group consists of a total of 210 volunteer students, 102 female (% 48.6) and 108 male (% 51.4) studying at Şehit Zafer KILIÇ Sports High School in Siirt province. A descriptive scanning model was used in the research and "Personal Information Form" and "Digital Educational Games Usage Scale" were used as data collection tools. Data analysis was carried out using the SPSS 22 statistical package. The Digital Educational Games Usage Scale, used as a data collection tool, consists of 21 items of 5-point Likert type. Using Digital Educational Games Scale consists of four sub-dimensions: Affective Component, Perceived Usefulness, Perceived Control and Behavioral Component. For data analysis, firstly, skewness and kurtosis values were examined and it was determined that the data was normally distributed. For this reason, parametric tests were preferred. Descriptive statistics such as frequency (f), percentage (%), mean (X̄) and standard deviation (Ss) were used to determine the demographic characteristics of the research group. The Cronbach Alpha (internal consistency) value of the Digital Educational Games Usage Scale was calculated as 0.92; In this study, the Cronbach Alpha (internal consistency) value calculated as 0.74 was found to be moderately reliable. According to the results of the research, while there was no significant relationship between the students using digital educational games among the students at the Sports High School and the variables of gender, regular sports activity and sports year; A significant relationship was detected between grade level, perceived economic status, digital game playing status and daily digital game playing time variable. These findings can be concluded that digital educational games are not yet preferred by sports branches and athletes for educational purposes.

Keywords: Sports, Sports high school students, Educational games, Digital Educational Games.

INTRODUCTION

Sports is an activity in which physical activities are performed within certain rules, competition and entertainment are combined, and improves physical abilities and strengthens mental skills.1 Sportive activities can also be expressed as all the activities carried out to develop sportive skills together with the feeling of winning or losing as a team or individually. In addition, sports activities performed as fun games can contribute to the development of physical and mental skills by providing people with the opportunity to both have fun and learn. A game is an activity that is generally carried out for entertainment, competition, sociality or learning purposes, with certain rules and usually for a certain purpose (Pala et al., 2011). With the development of technology, games have become more common on digital platforms. Digital games have offered a new perspective in education and have been accepted as an effective tool by supporting users' knowledge acquisition processes through learning games with their interactive and entertaining structure (Yaşar et al., 2019).

With technological developments, the impact of technology in today's learning world can be felt in every aspect of life (Gülbahar, 2005). Technology plays an important role in the field of education by supporting digital educational games (Efe Kendüzler, 2023). Digital educational games are closely related to major developments in the field of computers. These games have been developed by taking advantage of the features of computers such as increased processing speed, ease of use, high memory capacity and internet access. At the same time, integrating visual and audio elements, along with advances in the software industry, has allowed educational games to provide an interactive and richer experience. In this way, the learning process can be made more effective and attractive by gamifying educational materials (Sancak, 2003). It can be said that the ability to think differentiates and develops within this framework and increases the speed and capacity of learning. Learning in the period before technological developments; While it was limited to stereotyped and monotonous learning with traditional strategies, today's mindset and learning strategies have gained flexibility and taken their place in the educational learning environment with various formats. Thus, educational areas have taken their place on digital platforms and started to use different learning methods to ensure the permanence of learning (Delen, 2021; Metin et. Al. 2023). It is thought that, as a result of the presentation of teaching methods in game formats that are more entertaining, collaboration-oriented and aimed at using the sense organs more, and the integration of this approach with the digital learning environment, digital educational games will further affect the learning environments around the world and enrich the learning methods.

The effects of sports and digital educational games on human health are complementary to each other (Güler et al., 2019). While both positively affect people's physical and mental health, they contribute in different ways. While sports activities improve physical health, digital educational games not only increase mental abilities but also support the learning process (Karacelil, 2010). Especially today, many technological devices make exercise more fun by combining sports and gaming experiences (Hazar, 2016). Such technologies allow users to engage with educational games on the go while also encouraging exercise. In addition, by increasing the richness of the

learning environment in digital educational games, the athlete has the chance to experience the digital learning environment of the sports branch.

In line with this information, it can be said that doing sports, experiencing the athlete's own branch in the digital environment and gaining movement through digital educational games play an important role in protecting and improving physical and mental health, considering its effects on human health and mental aspects. Implementing both activities together and in a balanced way can improve individuals' overall quality of life and be part of a healthy lifestyle. However, since it is thought that the combination of sports and digital educational games will be an important method to make the learning process more effective and diverse, in this study; It was aimed to examine the level of use of digital educational games by sports high school students.

METHOD

Research Model

Descriptive scanning model was used in the research. Descriptive screening model refers to screening arrangements made to make a general evaluation on the entire universe or a group, sample or sample to be selected from this universe, in case there are many elements in a universe. It can be explained as (Karasar, 2015).

Working Group

The group of the research consists of student athletes studying in Siirt in the 2023-2024 academic year. The sports high school students who make up the study group consist of a total of 210 volunteer student athletes, 102 of whom are female (% 48.6) and 108 of whom are male (% 51.4).

Data Collection Tools

The "Personal Information Form" prepared by the researcher and the "Digital Educational Games Usage Scale" developed by Bonanno and Kommers (2008) and adapted into Turkish by Sarıgöz, Bolat and Alkan (2018) were used as data collection tools.

Personal Information Form

Personal information form prepared by the researcher; It consists of variables such as gender, class level, perceived economic status, regular sports activity, digital game playing status, daily digital game playing time and sports year.

Digital Educational Games Usage Scale

This scale, developed by Bonanno and Kommers (2008) and adapted by Sarıgöz, Bolat and Alkan (2018), is a 5-point Likert type and consists of 21 items and 4 subscales. These sub-dimensions consist of affective

component, perceived usefulness, perceived control and behavioral component sub-dimensions. The items in the scale are determined as "0-Totally Disagree", "1-Disagree", "2-Undecided", "3-Agree", "4-Totally Agree" as a scoring scale. The total score range is between 0 and 105, and there are no reverse items in the scale. The Cronbach alpha (internal consistency) value of the Digital Educational Games Usage Scale was calculated as 0.92; In this study, the Cronbach alpha (internal consistency) value calculated as 0.74 was found to be moderately reliable.

Table 1. Chronbach Alpha Values

scales	Chronbach's Alpha (α)	Number of items
Affective component subdimension	,46	6
Perceived usefulness sub-dimension	,36	5
Perceived control subdimension	,55	6
Behavioral component subdimension	,39	4
Total scale for using digital educational games	,74	21

According to the reliability evaluations determined by Özdamar in the literature, α (Cronbach Alpha) values are classified as follows: 0.00 < α< 0.40 "not reliable," 0.41 < α < 0.60 "low reliability," 0.61 < α < 0.80 "medium reliable," and 0.81 < α < 1.00 is considered "highly reliable" (Özdamar, 1999). When Table 1 was examined, it was determined that Chronbach alpha (α) values had a medium level of reliability.

Analysis of Data

Within the scope of the research, data analysis was carried out using the SPSS 22 statistical package. Before starting the research analyses, the researcher evaluated the suitability of assumptions such as normality, homogeneity, linearity and stationarity, and provided statistical information about which statistical analyzes were preferred. Skewness and kurtosis values were examined to select the tests to be used in the analysis of the data. Since the skewness and kurtosis values in Table 2 are between -1 and +1, which are the limits determined by George and Mallery (2010), it was assumed that the data set had a normal distribution and therefore parametric tests were used. First of all, descriptive statistics were applied to determine demographic characteristics. Demographic information of the research group and the answers given to the scale of using digital educational games, percentage (%), frequency (f), arithmetic mean ($\overline{x}$) and standard deviation (SsIt was summarized with the help of descriptive statistics such as).

After it was determined that the data exhibited normal distribution, Independent Samples T-test was applied to compare two groups and One-Way Variance (ANOVA) test was applied to compare three or more groups. "Tukey HSD" multiple comparison test was applied to determine the source of the difference. The significance level was determined as p<0.05.

Table 2. Skewness and Kurtosis Values

Variables	n	Min.	Max.	x̄	Ss	Median	Skewness	Kurtosis
Affective component subdimension	210	1,33	4,17	2,61	,554	2,66	,086	-,428
Perceived usefulness sub-dimension	210	1,40	4,80	2,87	,675	3,00	,041	-,335
Perceived control subdimension	210	1,33	4,33	2,79	,553	2,83	-,178	-,327
Behavioral component subdimension	210	1,00	4,25	2,55	,653	2,50	,218	-,188
Total scale for using digital educational games	210	1,52	3,86	2,71	,403	2,71	-,283	,183

When the averages obtained from the sub-dimensions of the digital educational games usage scale are examined, the highest average value is in the "perceived usefulness" sub-dimension (X̄=2.87±.675) and the lowest average value is in the "behavioral component" sub-dimension (X̄=2.55±.653). It appears to be.

FINDINGS

Table 3. Analysis of Demographic Information

Variables		Frequency	Percentage (%)
Gender	Woman	102	48,6
	Male	108	51,4
Grade level	9th grade	71	33,8
	10th Grade	59	28,1
	11th grade	37	17,6
	12th grade	43	20,5
Perceived economic situation	Bad	32	15,2
	Medium	153	72,9
	Good	25	11,9
Regular exercise status	Yes	161	76,7
	No	49	23,3
Do you play digital games?	Yes	121	57,6
	No	89	42,4
Your daily digital game playing time	0-2 seconds	142	67,6
	3 hours or more	68	32,4
Your sports year	1-3 years	99	47,1
	4-6 years	80	38,1
	7 years and above	31	14,8

When Table 3 is examined, % 48.6 of the research group is female and % 51.4 is male; % 33.8 were in the 9th grade, % 28.1 were in the 10th grade, % 17.6 were in the 11th grade, and % 20.5 were in the 12th grade; % 15.2 have a poor economic situation, % 72.9 have a moderate economic situation, % 11.9 have a good economic situation, % 76.7 do sports regularly, % 23.3 do not do sports regularly, % 57.6 of them play digital

games, % 42.4 do not play digital games, % 67.6 play digital games for 0-2 hours a day, % 32.4 play digital games for 3 hours or more daily, % 47.1 It was determined that 100,000 people have been doing sports for 1-3 years, % 38.1 for 4-6 years, and % 14.8 for 7 years or more.

Table 4. T-Test Analysis Regarding The Gender Variable

Subdimensions	Gender	$\bar{x}$	Ss	t	p
Affective component sub-dimension	Woman	2,66	,555	1,252	0,21
	Male	2,57	,551		
Perceived usefulness sub-dimension	Woman	2,86	,680	-,240	0,81
	Male	2,88	,673		
Perceived control sub-dimension	Woman	2,71	,563	-1,872	0,06
	Male	2,85	,537		
Behavioral component sub-dimension	Woman	2,53	,700	-,385	0,70
	Male	2,57	,608		
Using digital educational games scale total	Woman	2,70	,431	-,453	0,65
	Male	2,72	,376		

p<0.05

When Table 4 was examined, it was determined that there was no statistically significant difference between the gender variable and the total score of the digital educational games usage scale and the average score of the affective component, perceived usefulness, perceived control and behavioral component subscales (p>0.05).

Table 5. ANOVA Analysis On Grade Level Variable

Subdimensions	Grade Level	$\bar{x}$	Ss	F	p	Tukey
Affective component sub-dimension	9th grade	2,57	,562	2,525	0,05	
	10th grade	2,61	,499			
	11th grade	2,82	,504			
	12th grade	2,50	,620			
Perceived usefulness sub-dimension	9th grade	3,02	,676	6,038	0,00*	**12<9**
	10th grade	2,73	,524			**10<11**
	11th grade	3,10	,756			
	12th grade	2,60	,674			
Perceived control sub-dimension	9th grade	2,67	,527	3,507	0,01*	**9<11**
	10th grade	2,79	,565			
	11th grade	3,03	,522			
	12th grade	2,76	,557			
Behavioral component sub-dimension	9th grade	2,42	,612	1,867	0,13	
	10th grade	2,67	,636			
	11th grade	2,65	,722			
	12th grade	2,52	,661			
Using digital educational games scale total	9th grade	2,68	,380	4,502	0,00*	**9<11**
	10th grade	2,70	,365			**12<11**
	11th grade	2,91	,370			
	12th grade	2,60	,466			

*p<0.05

When Table 5 is examined, it was determined that there was a statistically significant difference between the grade level variable and the digital educational games usage scale total score, perceived usefulness and perceived control sub-dimensions average score ($p<0.05$), while there was no significant difference between the affective component and behavioral component sub-dimensions average score was detected ($p>0.05$). As a result of the Tukey analysis conducted to determine which group the difference originates from, the significant difference in the perceived usefulness sub-dimension and grade level variable is due to the fact that the mean scores of 9th grade students are higher than the mean scores of 12th grade students and that the mean scores of 11th grade students are higher than the mean scores of 10th grade students. It has been determined that . It was determined that the significant difference in the perceived control sub-dimension was due to the perceived usefulness sub-dimension, where the mean score of 11th grade students was higher than the mean score of 9th grade students.

Table 6. Variance Analysis on the Perceived Economic Situation Variable

Subdimensions	Perceived Economic Situation	x̄	Ss	F	p	Tukey
Affective component sub-dimension	Bad	2,41	,564	2,568	0,07	
	Medium	2,65	,547			
	Good	2,62	,549			
Perceived usefulness sub-dimension	Bad	2,75	,705	2,699	0,07	
	Medium	2,93	,669			
	Good	2,64	,629			
Perceived control sub-dimension	Bad	2,61	,532	1,990	0,13	
	Medium	2,83	,547			
	Good	2,76	,595			
Behavioral component sub-dimension	Bad	2,53	,729	1,386	0,25	
	Medium	2,59	,642			
	Good	2,36	,608			
Using digital educational games scale total	Bad	2,57	,487	3,707	0,02	**2>1**
	Medium	2,76	,373			
	Good	2,61	,427			

*$p<0.05$

When Table 6 is examined, it is determined that there is a significant difference between the perceived economic status variable and the total score average of the Digital educational games usage scale ($p<0.05$); It was determined that there was no significant difference between the affective component, perceived usefulness, perceived control and behavioral component subscale mean scores ($p>0.05$). As a result of the Tukey analysis conducted to determine which group caused the difference, it was determined that there was a significant difference between the total score average of the digital educational games usage scale and the perceived economic situation, and that the average score of students with a moderate economic situation was higher than that of those with a poor economic situation. In addition, it was determined that the total score averages of the digital educational games usage scale of students with a moderate perceived economic status were higher than other students.

Table 7. T-Test Analysis Regarding The Variable of Doing Regular Sports

Subdimensions	Do you exercise regularly?	x̄	Ss	t	p
Affective component sub-dimension	Yes	2,63	,580	,761	0,44
	No	2,56	,458		
Perceived usefulness sub-dimension	Yes	2,88	,689	,492	0,62
	No	2,83	,632		
Perceived control sub-dimension	Yes	2,80	,547	,706	0,48
	No	2,74	,576		
Behavioral component sub-dimension	Yes	2,56	,661	,511	0,61
	No	2,51	,632		
Using digital educational games scale total	Yes	2,73	,407	,930	0,35
	No	2,66	,392		

p<0.05

When Table 7 is examined, it has been determined that there is no statistically significant difference between the variable of doing regular sports and the total score of the scale of using digital educational games and the average score of the affective component, perceived usefulness, perceived control and behavioral component sub-dimensions (p>0.05). In addition, it was determined that the students who do sports do not participate in sports. It was observed that the mean scores in the total and all sub-dimensions of the digital educational games usage scale were higher than the students who did not use digital educational games.

Table 8. T-Test Analysis Regarding The Digital Game Playing Variable

Subdimensions	Do you play digital games?	x̄	Ss	t	p
Affective component sub-dimension	Yes	2,62	,577	,366	0,71
	No	2,60	,523		
Perceived usefulness sub-dimension	Yes	2,99	,641	3,125	**0,00***
	No	2,70	,688		
Perceived control sub-dimension	Yes	2,82	,557	1,183	0,23
	No	2,73	,546		
Behavioral component sub-dimension	Yes	2,49	,670	-1,644	0,10
	No	2,64	,623		
Using digital educational games scale total	Yes	2,74	,391	1,324	0,18
	No	2,67	,417		

*p<0.05

When Table 8 is examined, it is determined that there is a statistically significant difference between the digital game playing variable and the perceived usefulness sub-dimension (p <0.05). It was determined that there was no statistically significant difference between the total score of the digital educational games usage scale and the average score of the affective component, perceived control and behavioral component sub-dimensions (p>0.05). The total score average of the digital educational games usage scale of the students playing digital games was determined as the affective component, perceived It was determined that the mean scores of the usefulness and perceived control subscales were higher than those of students who did not play digital games.

Table 9. T-Test Analysis Regarding The Daily Digital Game Time Variable

Subdimensions	How long do you spend playing digital games?	x̄	Ss	t	p
Affective component sub-dimension	0-2 seconds	2,60	,542	-,623	0,53
	3 hours or more	2,65	,580		
Perceived usefulness sub-dimension	0-2 seconds	2,80	,649	-2,101	0,03*
	3 hours or more	3,01	,711		
Perceived control sub-dimension	0-2 seconds	2,76	,547	-,998	0,31
	3 hours or more	2,84	,565		
Behavioral component sub-dimension	0-2 seconds	2,57	,655	,594	0,55
	3 hours or more	2,51	,652		
Using digital educational games scale total	0-2 seconds	2,69	,401	-1,285	0,20
	3 hours or more	2,76	,406		

*p<0.05

When Table 9 is examined, it is determined that there is a statistically significant difference between the daily digital game playing time and the perceived usefulness sub-dimension (p<0.05), while there is no statistically significant difference between the total score of the digital educational games usage scale and the average score of the affective component, perceived control and behavioral component sub-dimensions. It was determined that there was no significant difference (p>0.05). It was determined that the total score average, affective component, perceived usefulness and perceived control sub-dimensions of the digital educational games usage scale of the students whose digital game playing time was 3 hours or more were higher than the students whose digital game playing time was 0-2 hours.

Table 10. ANOVA Analysis on The Sport Year Variable

Subdimensions	Year of Sports	x̄	Ss	F	p	Tukey
Affective component sub-dimension	1-3 years	2,62	,521	,212	0,80	
	4-6 years	2,59	,599			
	7 years and above	2,66	,547			
Perceived usefulness sub-dimension	1-3 years	2,84	,700	,413	0,66	
	4-6 years	2,86	,669			
	7 years and above	2,97	,619			
Perceived control sub-dimension	1-3 years	2,69	,570	3,026	0,05	
	4-6 years	2,87	,431			
	7 years and above	2,87	,722			
Behavioral component sub-dimension	1-3 years	2,53	,619	,469	0,62	
	4-6 years	2,54	,639			
	7 years and above	2,66	,797			
Using digital educational games scale total	1-3 years	2,67	,380	1,119	0,32	
	4-6 years	2,73	,398			
	7 years and above	2,79	,481			

p<0.05*

When Table 10 is examined, it was determined that there is no significant difference between the variable of years of doing sports and the total score average of the Digital educational games usage scale, affective

component, perceived usefulness, perceived control and behavioral component subscale average score (p>0.05). In addition, it was determined that the average score of students who have been doing sports for 7 years or more was higher than other students.

CONCLUSION AND DISCUSSION

This study was conducted to examine the level of use of digital educational games by students studying at a sports high school. The group of the research consists of student athletes studying in Siirt in the 2023-2024 academic year. The study group consists of a total of 210 volunteer sports high school students, 102 of whom are female (% 48.6) and 108 of whom are male (% 51.4).

As a result of the analyzes made on the gender variable, which is the first finding of the research, no significant difference was detected between the gender variable and the total score and sub-dimensions of the digital educational games usage scale. In this context, it is thought that individual differences, not gender, are more important in learning in games involving movement, digital games and virtual environments, because it can be said that characteristic features rather than gender are effective. As a result of the literature study; Gedik's (2012) study examined the effect of educational games on success and permanence of learned information and did not reach a significant result in terms of gender variable. Bulut's (2015) study investigated the effect of educational games on creativity and reached results that support the research findings. Studies that reach different results than the research findings are; Çavuş et al., (2016) examined students' digital game addiction levels and found a significant difference in favor of male students in terms of gender variable. When the studies on the subject are examined, in some studies there is a significant difference between male students compared to female students (Arslan et al., 2015; Erboy and Vural, 2010; Horzum, 2011; Karacaoğlu, 2019; Kınay, 2019; Köseliören, 2017; Smohai et al., 2017). ; Vollmer et al., 2014), some studies have found that female students have higher levels of computer addiction than male students (Öncel and Tekin, 2015; Topşar, 2015).

The second finding of the research was that there was a statistically significant difference between the grade level variable and the total score of the digital educational games usage scale, perceived usefulness and perceived control sub-dimensions, while there was no significant difference between the affective component and behavioral component sub-dimensions. As a result of the analysis conducted to determine which group the difference originates from, the significant difference in the perceived usefulness sub-dimension and grade level variable is due to the fact that the mean scores of 9th grade students are higher than the mean scores of 12th grade students and that the mean scores of 11th grade students are higher than the mean scores of 10th grade students. has been detected. It was determined that the significant difference in the perceived control sub-dimension was due to the perceived usefulness sub-dimension, where the mean score of 11th grade students was higher than the mean score of 9th grade students. In this context, the fact that 9th grade sports high school students were found to be high in the perceived usefulness dimension of digital educational games may have caused their course intensity to be less than the upper grades and to spend more time learning through digital educational games. However, the fact that the average score of 11th graders is higher than that of 10th

grades can be thought to be due to the fact that they use educational digital games for learning-focused purposes and preparation for the university exam. As a result of the literature review; Sadera et al. (2014) stated that the effective use of digital games increases students' motivation and class participation in the classroom environment. In his study, Ramazanoğlu (2019) found that there was no significant difference between the ability to use digital educational games and grade level, reaching a different result than this research.

While it was determined that there was a significant difference between the third variable of the research, the perceived economic situation variable, and the total score average of the Digital educational games usage scale; It was determined that there was no significant difference between the affective component, perceived usefulness, perceived control and behavioral component subscale mean scores. As a result of the analysis conducted to determine which group caused the difference, it was determined that there was a significant difference between the total score average of the digital educational games usage scale and the perceived economic situation, and that the average score of students with medium economic status was higher than that of those with poor economic status. In addition, it was determined that the total score averages of the digital educational games usage scale of students whose perceived economic status was at a medium level were higher than other students.In this context, the fact that students do not have their own income and live on their family's income can be expressed as they perceive their economic situation. For this reason, it is thought that the moderate economic situation perceived by students has a positive impact on school life, which is socially accepted as a close environment. In addition, it is thought that it provides positive academic success and the opportunity to spend time on digital educational games. As a result of the literature review, Güler et al., (2017) examined the use of digital devices according to income levels in their study and found that there was a significant difference in terms of individuals at middle income level. In another study, it was stated that the economic situation limited the use of digital educational games (Arslan, 2019).

As a result of the analyzes made on the variable of regular exercise, which is the fourth finding of the research; It was determined that there was no statistically significant difference between the variable of doing regular sports and the scale total score and sub-dimension mean score of using digital educational games. However, it has been observed that the students who do sports have higher average scores of the digital educational games usage scale total and sub-dimensions than the students who do not do sports. In this context, although the fact that the sample group is sports high school students and all of them do sports regularly has prevented the difference between the groups, the difference between the groups has been increased. It is thought that sociability and spending time together, rather than regular sports, are important in choosing to learn through the sharing of the social environment and peer groups and cooperative games. As a result of the literature review, it is seen that there are studies that support the research findings. When Bozkurt and Olcay (2022) examined the variable of doing regular sports in their study; No significant difference was detected in terms of the variable of students doing regular sports and the sub-dimensions of the Attitude to Playing Digital Games

scale. Unlike the research findings, Erdoğan and Yıldırım (2023) concluded in their study that there is a significant difference between doing sports and digital educational games.

While it was determined that there was a statistically significant difference between the digital game playing variable and the perceived usefulness sub-dimension, which is the fifth finding of the research; It was determined that there was no statistically significant difference between the total score of the digital educational games usage scale and the mean score of the affective component, perceived control and behavioral component subscales. It was determined that the total score average, affective component, perceived usefulness and perceived control subscales of the students who play digital games were higher than the students who did not play digital games. In addition, it was determined that there was a statistically significant difference between the daily digital game playing time and the perceived usefulness sub-dimension, which is the sixth finding of the study; It was determined that there was no statistically significant difference between the total score of the digital educational games usage scale and the mean score of the affective component, perceived control and behavioral component subscales. It was determined that the total score average, affective component, perceived usefulness and perceived control sub-dimensions of the digital educational games usage scale of the students whose digital game playing time was 3 hours or more were higher than the students whose digital game playing time was 0-2 hours. In this context, it can be interpreted that students who play digital games and spend the most time with digital games also prefer digital educational games. As a result of the literature review, Aksoy (2014) states that as the time students play games increases, games with lesson content make the lesson easier, more enjoyable and entertaining. In the study conducted by Laakso et al., (2021), it was determined that individuals who spent more time playing digital games used digital educational games more effectively and were competent in designing them.

It was determined that there was no significant difference between the last finding of the research, the variable of years of doing sports, and the total score average of the Using Digital Educational Games scale, affective component, perceived usefulness, perceived control and behavioral component sub-dimension average. However, it was determined that the average score of students who have been doing sports for 7 years or more was higher than other students. In this context, it can be stated that digital educational games are not yet preferred by sports branches and athletes for educational and instructive purposes. As a result of the literature review; In the study conducted by İbiş and Aktuğ (2018), it was stated that in the educational game variable of the students who do and do not do sports, those who do sports are in the class with a higher success level than the students who do not do sports, while the students whose success level is low play fewer educational games.

In conclusion; It is thought that software that combines digital games and education, applications that integrate educational content, that students can use as support material for their courses, or that can be used directly as course teaching material, are not included sufficiently. In a study, the relationship between students' educational-based games and digital game learning method and their scientific process skills was examined; It was observed that the results of the research improved students' scientific process skills (Yıldırım, 2018).

Educational digital games, unlike other games, aim to teach educational and instructional concepts to the user within the game. For this reason, in order for educational digital games to be successful, it can be suggested that providing educational opportunities to branches, remote places and environments that are difficult for the student to reach, by adding diversity to the course content, should be included among the goals of education.

SUGGESTIONS

- Integrating digital educational games into Sports High School curricula can provide support in developing students' sports theory and practical skills.
- Educational games can be included in the education process by adapting them to course content.
- Raising teachers' awareness about the pedagogical advantages of digital educational games and training them on how to use these games effectively can benefit students.

ETHICAL TEXT

This research was created in accordance with journal writing principles, publishing principles, research and publication ethics rules, and journal ethical standards. In case of any violation that may occur in the article, the responsibility will belong to the author. It was deemed appropriate by the decision of Bitlis Eren University Ethical Principles and Ethics Committee numbered 25.01.2024/01-10 and E.4972.

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