ORIGINAL ARTICLE

Examining Addiction Levels of Tablet, Phone, and Computer Gaming According to the Parents' Opinions of Students Participating Summer Sports Schools

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ABSTRACT

Background: The universe of the research is the athletes of summer sports schools held in Elazig in 2021. The sample consists of the mothers of 669 randomly selected athletes from sports schools.

Aim: The aim of the study is to examine the levels of gaming addiction according to the parental opinions of the students participating the 2021 Elazig Summer Sports Schools.

Methods: In order to determine the demographic characteristics of the participants in the study, the personal information form(gender, age, school level, mother work status, child's tablet/phone ownership status), and an 18-item scale developed by Ulusoy (2019) was used. Analysis of the data in the research and the calculation of the results found were created through statistical programs in a computer environment. Frequency (f) and percentage (%) distributions of variables were calculated. The data were checked with skewness and kurtosis tests to determine whether they were normally distributed. As a result of these tests and controls, it was determined that the data of the research was parametric. Therefore, t test and variance analysis (Anova) test were used. The error level was taken as p<0.05 in the study.

Results: It was determined that there was a statistically significant difference in computer game addiction depending on the gender, mother work status and tablet/phone/computer availability of the students participating summer sports schools in Elazig province. There was no statistically significant difference in computer game addiction depending on educational status and age variables.

Conclusion: In line with the study findings, it was observed that the overall average of computer game addiction levels was below average at 45.30 within the framework of the parental opinions of the students participating summer sports schools in Elazig province.

Keywords: Sports, Gaming, Addiction, Technological Device

INTRODUCTION

It is said that the game is the most important activity for children from the past to the present. The game has an impact on children's growth, development and personality traits. Especially on children in primary and secondary education, game often has a positive effect psychologically and physiologically. The game creates a sense of curiosity in the child, affects his decisionmaking, learns to share, the development of muscle groups used in the psychological sense of the game and during the game, and the energy spent during the game is one of the physiological effects of the game. Despite the positive features, the game also has some negative features. Physiologically, as a result of the wrong movements, the child has negative effects such as posture disorder, weight loss, muscle pain, fatigue that the body cannot handle. Psychologically, it has negative effects such as anger uncontrollability, anxiety, inability to distinguish between reality and play1.

Although the game has undergone many changes until today, it has never lost its importance and place. Parks, gardens, and streets that were used as playgrounds in the past have been replaced by digital media such as computers, tablets, and phones today.

Digital environments are more preferred due to the decrease in parks, gardens, and streets and the difficulty of transportation in the globalizing world².

Digital games are an important part of the media world today. Today there are many games produced according to the demographics and preferences of the individual. The types of games preferred by men and women are different. Women generally choose one-man, calm, under-competitive types of games, while men prefer multiplayer, violent, competitive, tactical game types. Men and adolescents prefer violent games, which is dangerous behavior³.

It has opened a new path on sports with the influence of digital games in technology that is open to development. Find the road is also called E-sports (Electronic Sports). E-sports is an organization created by the participants from different countries and cities by remote connection method of a game known anywhere in the world through digital media. Although e-sports is a controversial sport, it can make 400 movements per minute while using the keyboard and mouse as a result of the physical movements. E-sports require high-level hand-eye coordination physically. There are organizations such as World e-Sports Games, World Cyber Games, and governing bodies such as the International e-Sports Federation. In addition, a wide audience of 600 million people was reached worldwide in 2020². As organizations grow, the work and

transactions that need to be done grow, and in parallel with these, the number of people who will do these works also increases⁴.

E-sports, which affects the whole world, attracts more day by day children and adults in our country⁵. In addition to the conveniences that technology brings to our lives, excessive use of platforms such as digital games can have a human-damaging addiction effect. Addiction is when the individual repeats something that will create habits more than once, ignoring the harms it creates and continuing this habit. Gaming addiction, which is considered a type of addiction, also describes its relationship with digital media such as computers, tablets, phones, televisions. The individual must have a certain awareness in order to see this. In order to achieve this awareness, many awareness training has been given in our country as well as in the world⁶.

Computer game addiction also affects family relationships, friendship ties, and school success. The individual needs to communicate healthily with his parents and environment. Since it is thought that various psychological problems and addictive behaviors may occur if this communication is not provided in the individual, our study aims to examine the computer/tablet/phone game addiction levels of children according to parental opinions.

MATERIAL & METHODS

The universe of the research is the athletes of summer sports schools held in Elazig in 2021. The sample consists of the mothers of 669 randomly selected athletes from sports schools.

A personal information form (gender, age, school level, mother work status, child's tablet/phone ownership status) was used to determine the demographic characteristics of the participants participating in the study, and an 18-item scale developed by Ulusoy and Çelik (2019) to determine parents' perceptions of computer game addiction. (7). The likert type of the developed scale is 5 point, single factor structure. According to the 5-type Likert rating scale, it is arranged as "Always (5), Frequent (4), Sometimes (3), Rarely (2) and Never (1)". The scale is between 1 and 5 points and the total score to be collected is between 18 and 90. In the 'Computer Game Addiction Level Determination Scale', the reverse item was used to determine the mothers' understanding of the questions and the consistency between their answers. On the scale, the question 'My students cannot stop playing video games even though they want to stop playing video games' in Article 6 is asked as the opposite article in question 17, 'My students can stop playing video games whenever they want'. Validity and reliability values of the test were found to be 0.92 CFI=0.904, RMSEA=0.053 (90% CI=0.049 and 0.056) for Cronbach alpha and were shown to be available in adolescents.

Analysis of the data in the research and the calculation of the results found were created through statistical programs in a computer environment. Frequency (f) and percentage (%) distributions of variables were calculated. The data were checked with skewness and kurtosis tests to determine whether they

were normally distributed. As a result of these tests and controls, it was determined that the data of the research was parametric. Therefore, t test and variance analysis (Anova) test were used. The error level was taken as p<0.05 in the study.

RESULTS

Findings related to the variables of the study are given in this section. The findings showing the distribution of students participating summer sports schools according to their personal characteristics were examined and interpreted in Elazig province.

Table 1. T-test results according to gender variable of the participants in the study

٠.	in the study									
		Gender	Ζ	Χ	Ss	t	р			
	Total	Male Female	370 299	50,81 38,49	19,16 14,22	9,243	,000*			

When table 1 was examined, it was determined that there was a statistically significant difference between the participants' game addiction levels and the gender variable (p<0.05).

Table 2: T-test results according to the mother working status variable of the subjects who participated in the study

or the subjects this participated in the study									
	Mother Work	N	Χ	Ss	t	р			
	Status					-			
	Working	200	49,70	16,97	4,129	,000			
Tota	Not working	469	43,43	18,37					

When table 2 was examined, a statistical difference was found between the participants' game addiction levels and the mother work status variable (p<0.05).

Table 3. Distribution values of ecorecreational attitude levels of individuals interested in cycling according to licensed sportsmanship status variable

	Education Status	N	Χ	Ss	F	р
	Primary sch.	340	45,76	20,44	2,64	,07
Total	Secondary sch.	269	43,79	12,88	9	1
	High sch.	60	49,50	23,62		
	Total	669	45,30	18.18		

When table 3 was examined, it was determined that there was no statistically significant difference between the participants' game addiction levels and the educational status variable (p>0.05).

Table 4. Anova results according to gender variable of the subjects who participated in the study

who participated in the study								
ſ		Age	N	Χ	Ss	F	р	
ſ		6-9 Years	260	43,38	19,70	2,729	,066	
	Total	10-12 Years	279	46,02	16,68			
		13> Years	130	47,61	17,86			
		Total	669	45,30	18,18			

When table 4 was examined, it was determined that there was no statistically significant difference between the participants' game addiction levels and age variable (p>0.05).

Table 5. T-test results according to tablet/phone/computer availability status of the subjects who participated in the study

status of the subjects who participated in the study								
	Tablet/Phone/C omputer Availability	N	X	Ss	t	р		
Total	Yes No	429 240	50,60 35,83	17,81 14,68	10,935	,000		

When table 5 was examined, it was determined that there was a statistically significant difference between yes and no groups when the participants' game addiction levels and tablet/phone/computer availability variable levels were examined (p<0.05).

DISCUSSION AND CONCLUSION

In our research, the data of the study developed based on the hypothesis that the addiction levels of tablets, phones and computer games differ in terms of various variables according to the parents of the students participating Elazig summer sports schools will be discussed in this section.

When the demographic distribution table of the students is examined, it is seen that the highest participation is between 10-12 years of age with 41.7% (n=279), while the lowest participation is 13 years and older with 19.4% (n=130). When the education status of the children of the participants in the study was examined, the highest participation was at primary school level with 50.8% (n=340), while the second place was the secondary school level with 40.2% (n=269) and the third place was high school level with 9% (n=690). When we looked at the gender of the participants, it was determined that 55.3% (n=370) of the subject group were male and 44.7% (n=299) were female students. When the working status of the participants in the study was examined, working mothers accounted for 29.9% (n= 200) and not-working mothers accounted for 70.1% (n= 469). When the computer, tablet and phone ownership status of the children of the participants in the study was examined, it was seen that 64.1% (n=429) of those who said yes and 35.9% (n=240) said no.

It was determined that there was a statistically significant difference between the game addiction levels of the children of the participants participating in the study and the gender variable. When the gender groups of the participants are examined, it is seen that the average score of the male students is above the average with 50.81 and the score of the female students is lower than the average with 38.49. Şahin and Tuğrul (2012) stated that the addiction levels of male students were higher than female students in their study called "Examination of Computer Game Addiction Levels of Primary School Students"8. Hazar et al. (2017) in their study called Investigation of the Relationship Between Digital Game Addiction and Physical Activity Levels of Secondary School Students stated that male students have higher digital game addiction levels than female students⁹. These studies are in parallel with our study according to gender variable. It has been determined that there is a statistically significant difference between the game addiction of the children of the participants participating in the study and the mother working status variable.

It is seen that the children of working mothers have an average game addiction of 49.70, and the children of not working mothers have a game addiction of 43.43, which is below the average when the mean scores of the working status groups of the participants are examined. Şahin and Tuğrul (2012) found that the level of computer game addiction increased as the education level of the mothers of the students increased in their study called "Examination of the Levels of Computer Game Addiction of Primary School Students". In the studies of Gökcearslan and Durakoğlu (2014) titled "Examining the Computer Game Addiction Levels of Secondary School Students according to Various

Variables", it was found that those whose mother graduated from master's/doctorate had higher gaming addiction scores than those whose mother graduated from primary school, secondary school, high school and university/college¹⁰. Looking at the studies in the literature, it can be said that as the level of mother education and working status increases, the distance of the students from their parents increases their levels of gaming addiction. These studies have shown parallels with our study according to the mother working status variable.

It was determined that there was no statistically significant difference between the game addiction levels of the children of the participants participating in the study and the educational status variable. When the educational status group averages of the students of the participants are examined, it is seen that the game addiction of the students who go to high school is at an average level of 49.50, the game addiction of the students who go to primary school is below the average with 45.76, and the game addiction of the students who go to secondary school is below the average with 43.79. As a result of the statistical analysis carried out in Sahin and Tugrul's (2012) studies titled "Examining the Computer Game Addiction Levels of Elementary Students", it was determined that the difference between the computer game addiction scores of fourth graders and fifth graders was not significant8. Tutar et al.'s (2020) study named "Examination of the Levels of Digital Game Dependency of the Students of the Faculty of Sports" found that there was no statistically significant difference between the game addiction levels of the participants and the class group variable as a result of the statistical analysis. These studies have paralleled our study according to the educational status variable¹¹.

It was determined that there was no statistically significant difference between the game addiction level of the children of the participants participating in the study and the When the average age groups of the age variable. participants are examined, it is seen that the game addiction of students aged 13 and older is below average with 47.61, while the game addiction of 10-12 years is below average with 46.02 and the game addiction of students between the ages of 6-9 is below average with 43.38. Avdoğdu's (2018) study titled "Examining Digital Gaming Addictions of Children Playing Digital Games in Terms of Various Variables", found that the levels of digital gaming addiction of the children included in the study differed significantly by age^{12,14}. Hazar et al. (2017) stated in their study titled "Investigation of the Relationship Between Digital Game Addiction and Physical Activity Levels of Secondary School Students" that 14 years old children are more likely to have game addiction than 13 years old, and a statistically significant relationship was found. It can be said that the studies in the literature are not similar to the results of our study, that the age range in our study is higher, and at the same time that lower age groups have been reached by taking parental opinions9.

When the game addiction level of the children of the participants participating in the research and the level of the Tablet/Phone/Computer availability variable were examined, it was determined that there was a statistically significant difference between the yes and no groups. When the average score of the level of the phone/tablet/computer availability variable of the students of the participants is examined, it is seen that the game addiction of the students who say yes is

above the average with 50.60, and the game addiction of the students who say no is below the average with 35.83. Göldağ's (2018) study titled "Examination of Digital Game Addiction Levels of High School Students According to Demographic Characteristics" determined that digital game addiction is higher than students who have a computer and students who do not have a computer 3. Şahin and Tuğrul's (2012) study called "Examination of Computer Game Addiction Levels of Primary School Students" found that students who have a computer at home have a higher computer game addiction score than students who do not 8. These studies have paralleled our work according to the tablet/phone/computer availability status variable.

As a result; It was determined that there was a statistically significant difference in computer game addiction depending on the gender, mother work status, and tablet/phone/computer availability of the students participating Summer sports schools in Elazig province. There was no statistically significant difference in computer game addiction due to educational status and age variables. In line with the study findings, it was observed that the overall average of computer game addiction levels was below average at 45.30 within the framework of the parental opinions of the students attending summer sports schools in Elazig province.

Playing games via the Internet is one of the rapidly increasing leisure activities today. Children spend most of their time playing games in the time left over from schools and courses. ¹⁶ In our study, when we measured the level of play addiction in the parental opinion of children attending summer sports schools, belowaverage data was found. Compared with other studies in the literature, lower levels of addiction for children going to sports schools may be an option to reduce their gaming addictions to lower levels by directing them to more sports. Reducing children's computer gaming addiction levels with sports can have many benefits, such as children stepping into a healthy life and preventing obesity. Since it is considered very important for parents to warn their children about computer gaming addiction and to keep them away from digital games by directing them to sports, it was deemed necessary to examine the levels of gaming addiction of the students in the study group and as a result of the research available; sports scientists, psychologists and academics working in this regard. In this part of our research, it could not be discussed with many sources as the desired level of work was not found in the literature on the subject. In this aspect of the research, it is thought that it will contribute to the writing of the field.

REFERENCES

- Aydemir, İ., Bayansalduz, M., & Yanar, S. Investigation Of The Relationship Between Physical Activity Levels And Academic Achievements Of High School Students In Different Fields. 2020; 6(2), 57-66.
- Karahuseyinoglu, M.F., Altungul, O., Nacar, E., & Tutar, O.F. Examination of the Levels of Digital Game Dependency of the Students of the Faculty of Sports. Asian Journal of Education and Training, 2020; 6 (1), 18-22.
- Irmak, A. Y., & Erdoğan, S. Digital game addiction in adolescents and young adults: A current view. Turkish Journal of Psychiatry, 2016; 27(2), 128-137.
- Bozkir, A. Spor Organizasyonları, Aydın Pekel, (Ed.), Spor ve Bilim 5, Gece Kitaplığı, Ankara 2021, s.192-205
- Mustafaoğlu, R. E-sports, sports and physical activity. National Journal of Sport Sciences, 2018; 2(2), 84-96.
- Can, H. C., & Demir, G. T. Digital Game Addiction and Awareness Levels of Athletes and E-Sports Players . Gaziantep University Journal of Sports Sciences, 2020; 5(4), 364-384.
- Ulusoy, B., & Çelik, S. Scale Development Study to Determine Parents' Perceptions of Computer Game Addiction. Journal of Youth Studies, 2019; 7(19), 5-26.
- Şahin, C., & Tuğrul, V. M. Examination of Computer Game Addiction Levels of Primary School Students. Zeitschrift für die Welt der Türken/Journal of World of Turks, 2012; 4(3), 115-130.
- Hazar, Z., Demir, G. T., Namlı, S., & Türkeli, A. Investigation of the Relationship Between Digital Game Addiction and Physical Activity Levels of Secondary School Students. Journal of Physical Education and Sports Sciences, 2017;11(3), 320-332.
- Gökçearslan, Ş., & Durakoğlu, A. Examining the Computer Game Addiction Levels of Secondary School Students according to Various Variables. Dicle University Ziya Gökalp Faculty of Education Journal, 2014; (23), 419-435.
- Tutar, Ö. F., Kırtepe, A., & Nacar, E. Examining the Level of Sports Science Faculty Students' Knowledge of Computer Game Dependency. Turkish Studies - Social, 2020; 15(6), 3198-3206.
- Aydoğdu, F. Examining Digital Gaming Addictions of Children Playing Digital Games in Terms of Various Variables. Ulakbilge Journal of Social Sciences, 2018; 6(31), 1-18.
- Göldağ, B. Examination of Digital Game Addiction Levels of High School Students According to Demographic Characteristics. 100th year University Faculty of Education Journal, 2018; 15(1), 1287-1315.
- Ilkım M. Çelik T., Mergan B. Investigation of Sports Management Students' Perceptions and Attitudes towards the COVID-19 Pandemic, Pakistan Journal Of Medical & Health Sciences, Volume15 Issue 2 Page799-803, 2021
- Karaca Y., Ilkım M., Investigation Of The Attitudes Distance Education Of The Faculty Of Sport Science Students In The Covid-19 Period, Turkish Online Journal Of Distance Education Volume22, Issue 4, Page114-129,
- 16. Gümüşdağ, H., Aydoğan, M., Salehian, M.H. E-Spor and Health, Pakistan Journal of Medical Health and Sciences, 2021, 15 (4), 1438-1441.