INVESTIGATION OF DIGITAL GAME ADDICTION OF CHILDREN BETWEEN 9-11 AGE GROUPS: KIRŞEHİR SAMPLE

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ABSTRACT

The aim of this study is to investigate the digital game addiction in children between the ages of 9-11. This research, which is a descriptive study, has been conducted with the screening model. A total of 1100 students, which consist of 552 girls and 548 boys, from the 6 state schools (Mehmet Hüsnü Özyeğin, Erol Güngör, Süleyman Türkmani ve Sırrı Kardeş Primary Schools, and Cacabey and 23 Nisan Secondary Schools) affiliated to the Ministry of National Education in the province of Kırşehir participated in the research with the method of purposeful sampling. A 14-item digital game addiction scale developed by researchers was used in the study. Percentage, frequency, factor analysis and Chi-square test were used in the analysis of the data. As a result of the conducted analyzes, it is seen that digital game addiction scores change according to gender and age. According to gender, there is a significant difference between girls' low addiction levels and boys' low addiction levels. It can be concluded that addiction level of boys is higher than the level of girls. According to the age, it is seen that the average and high level game addiction decreases while the low level game addiction increases as the age increases. In brief, the level of game addiction decreases as the age increases and this result is not accidental but significant. One of the most effective ways to cope with digital game addiction is to direct children to physical activities. However, parents, teachers and students should be informed about digital game addiction.

Keywords: Digital Games, Addiction, 9-11 Age Group

INTRODUCTION

The rapid development of digital games has not only provided entertainment for the consumers but also increased the motivation for playing games. Although Internet and digital gaming addictions are thought to be more common among adolescents, it is possible to see individuals of all ages suffering from these problems. According to international literature, the prevalence of internet and digital gaming addiction in adolescents has increased in many countries. According to Ögel (2012), as technology develops, the use of computers occupies more space in human life. Individuals are trying to express themselves through computers, games and other platforms. Yengin (2010) stated that the rapid development of information technology accelerates the increase of users seriously, and that this interaction occurs in different forms on young people. In the 2000s, computer games have begun to increase their influence in social life and have become one of the most popular entertainment tools. In the early of the 20th century the leisure time of people has gradually increased, and it has led to competition in many products and environments for recreational activities. This competition, which started with cinema, theater and concerts, infiltrated into people's houses and even into their pockets and continued with radio, television, video, computer, internet and mobile phone. As the devices such as computer and mobile phone are interactive, it has paved the way for them to be used not only as a device for running business but also as a means of entertainment tool (Binark, Bayraktutan-Sütçü and Fidaner, 2009).

One of the innovations brought by the computer industry, which affects people of all ages, to the life of children is the concept of ''digital game''. Digital game, in which the interaction is provided through the interfaces such as monitor, mouse, keyboard or joystick, is an alliance of systems which has rules and purposes (Kaya, 2011). Digital game can be described as a game played with electronic devices such as desktop and laptop computers, game consoles, mobile phones (Whitton cited by Erboy and Akar-Vural, 2010). Digital games are also emerging as a big market where millions of people are included all over the world (Erboy and Akar-Vural, 2010). The digital gaming industry is growing faster than other entertainment industries and has become an entertainment tool appealing to many people, from teenagers to adults. (Wallenius and Punamäki, 2008).

In the past, games played in outdoor places (playgrounds, streets, etc.) in interaction with friends, whereas today, the games are started to be played with people in virtual and indoor environment along with the development of technology, particularly the development of computer and internet (Horzum, Ayas and Çakır-Balta, 2008). Postman stated that children's games that we used to see on the streets are now extinguished, and that even the term of children's games are wiped from minds of people (Kıran, 2011) and Kaya (2013) stated that almost any game played in parks, on the streets and even in coffee shops is played in houses, offices, internet cafes and playstation halls.

According to Smith (2004), people have concerns on whether the video games (digital games) are good or bad for their children and in particular, parents and educators are concerned that computer games can be harmful to children. Kars (2010) argues that computer games can be both good and bad, depending on the content of the game and the time spent for playing the game. Parents, psychologists, sociologists, educators,

communicators, educational technologists and academicians constitute the parties of the debate. While one party of the debate defends their negative effects on children, the other party emphasizes the benefits (İşçibaşı, 2011). According to Şahin and Tuğrul (2012), some studies have revealed the benefits of computer games as an entertainment tool for developing the learning process, its psychomotor, physiological, cognitive, social and emotional effects, intelligence development and motivation, whereas many studies have stated that it has negative effects. According to Arslan et al. (2014), there are criticisms such as the fact that the virtual world that is provided with these technologies is far from reflecting the truth, they are pulling the children from the facts into an isolated life, they are reducing children's awareness and creativity. According to Aydoğdu-Karaaslan (2015), children playing violent games are getting used to the violence in real life and can tend to these behaviors. Thus, children can exhibit violent behaviors as the occasion arises. As the computer addiction that started at a young age continues in the advanced stages of education, the act of playing a digital game can be transformed into the field of enjoyment and relaxation for the child.

According to the study of Akçayır (2013), computer games especially affect 11-14 age group players more than adults and male players are more affected than female players. Psychological problems such as aggressive behaviors, personality disorders, mechanization in individuals, decreased emotions, anti-social behavior, breakdown in interpersonal relations have been observed in researches on the effects of excessive game play. Staying still for a long time and being tense causes neck pain and neck stiffness. As a result of looking at a fixed point for a longer time, the feeling of fatigue, burning and itching can be occurred in the eyes. Postural disturbances caused by sitting at the computer also cause lumber and back pain.

Game addiction is being engaged in gaming constantly in the mind and playing games for a long time by neglecting everyday life tasks and responsibilities. Tarhan and Nurmedov (2001) described addiction as a chronic, relapsing, chronic brain disorder characterized by impulsive search for and use of substance or virtual agent, despite harmful consequences. Digital game addiction is defined by Lemmens, Valkenburg and Peter (2009) as "the continuing use of computer or video games in an extreme and compulsive manner, while causing social and/or emotional problems". Game addiction is an addiction that adversely affects one's daily life and social life. Thus, in order to be able to say that one is addicted to a game, the changes in the relevant person's daily behavior and the effects of social life should be observed. The fact that an individual plays games for a long time does not mean that the individual is addicted. For example, someone who neglects her/his responsibilities for many days and plays games for long hours is not addicted to games, as long as the person continues her/his daily life and maintains positive social relations (Akçayır, 2013).

Lieberman et al. (2009) argue that digital games can have negative consequences such as causing violence and fear, exhibiting insensitive and aggressive behavior, spending a large part of the time with digital games rather than exploratory games, and being away from physical and social activities. According to Griffiths and Meredith (2009), digital game addiction has many psychological and physiological effects on the individual. The psychological effects can be listed as the feeling of happiness and energy during the game, not being able to finish the game, ignoring family and friends, feeling of depression and loneliness when the individual cannot

play the game, telling lies about gaming behavior to the relatives and causing problems in individual's school and business life, and physiological effects can be listed as carpal tunnel syndrome, ocular instability, headache and back pain, irregular nutrition, skipping self-care and cleanliness, and sleeping disorders. Horzum (2011), on the one hand, expresses that games have a significant contribution to children's social, spiritual, physical and cognitive development areas, while on the other hand, games played in the past as physical activities in playgrounds are replaced by games played virtually at home and this leads to some physical, psychological, social and mental problems. Irmak (2016) expresses that virtual games are a tool for recreational activities, reducing daily stress and fatigue, and being used as an entertainment component but excessive and unconscious game playing behavior has led to virtual game addiction, which, after a while, is regarded as impulse control disorder, becoming a controversial subject. If a person cannot control her/his desire to play games and causes problems in terms of emotions, thoughts and social life, this should be considered as a problem. It has been pointed out in the conducted studies that playing virtual games excessively will lead to some kind of behavioral dependence. Along with the rapid development in the digital gaming industry, game addiction has increased, and this has caused children to spend a significant part of their day in a virtual world (Erboy and Akar-Vural, 2010).

Most of the parents and teachers are complaining about the unwillingness of the children to study and their desire to spend their time with computer games. This reveals that computer games are quite powerful in attracting and motivating children, which in turn leads to the desire to play over and over again. When it is regarded in this respect, the addict becomes integrated with the game and begins to live the game in every division of life. The most important indicator is that children excessively relate themselves to the characters in the game. This association also leads to death cases. For this reason, it is very important to investigate computer games and their dependency. The aim of this study is to investigate the digital game addiction in children aged 9-11 years studying in Kırşehir.

METHOD

Research Model

In this study, screening model was used because an existing situation was tried to be addressed and described as it exits without making any changes. Screening model is a research approach which aims to describe a situation in the past or present as it exists (Karasar, 2014). The universe of the study consists of the children between the ages of 9-11 and the sample of the study is composed of a total of 1100 students, which consist of 552 girls and 548 boys, studying at the 6 state schools (Mehmet Hüsnü Özyeğin, Erol Güngör, Süleyman Türkmani ve Sırrı Kardeş Primary Schools, and Cacabey and 23 Nisan Secondary Schools) affiliated to the Ministry of National Education in the province of Kırşehir in the 2016-2017 academic year. Purposive/Purposeful Sampling: It is a method that enables deep researching by selecting situations rich in information depending on the aim of the study. It is preferred to be used in one or more particular cases that meet certain criteria or have certain characteristics (Büyüköztürk, et al., 2012).

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         (1740-1757).

Table 1. Demographic Information of the Study Group

Age	Frequency	Percentage (%)	Gender	Frequency	Percentage (%)
9	410	37,3	Female	552	50,2
10	338	30,7	Male	548	49,8
11	352	32,0			
Total	1100	100,0	Total	1100	100,0

Data Collection Tool

The literature on addiction and the sub-dimensions of addiction was reviewed before the items of data collection tool were created and items were tried to be prepared by considering the theoretical structure of addiction and the characteristics of this structure. A 5-item semi-structured interview form was prepared with the support of experts in the creation of the data collection tool and interviews were conducted through a semi-structured interview technique with 20 children aged between 9-11 who are playing games for 30-60 minutes and over per day. There are no pre-set expressions and question answers (Sharan B. Merriam, 2015). The data obtained from the interviews were subjected to a content analysis and utilized in the creation of the item repository. Furthermore, literature review was conducted and a form consisting of 14 items was created by using the other scales and sources in the literature. The items were evaluated by a total of three experts, which consists of a field expert, an assessment and evaluation expert and a linguist, and a pilot form was prepared by deciding that the scale should be composed of 14 items. The final corrections were made after the pilot form was applied to 60 children. Cronbach's Alpha value of the survey questions is 69.6. This gives the result that the survey questions are reliable. If the Alpha value is 60% and higher, the study will be considered as reliable particularly in the social sciences (Büyüköztürk, 2014).

Analysis of Data

Percentage, frequency, factor analysis and Chi-square test were used in the analysis of the data. In order to evaluate the opinions of the students on the effects of computer games, three evaluation ranges and criteria were determined over the mean value (Table 2). Factor analysis was carried out in order to ensure the structural validity of the developed addiction scale and to obtain a functional dimension of the items in the scale. Factor analysis enables the variables to be presented in a more meaningful and concise manner by examining the mutual relations between the variables (Bayram, 2015). The Chi-Square test is used as a test of independence as well as being used in cases where the significant difference between the variables are investigated.

Table 2. Digital Game Addiction Evaluation Criteria

Evaluation Range	Evaluation Criteria	Frequency	Percentage (%)
0-4	No Score or Low Level Addiction	504	45,8
5-9	Average Level Addiction	533	48,5
10-14	High Level Addiction	63	5,7
	Total	1100	100,0

FINDINGS (RESULTS)

Table 3. Percentage and Frequency Distribution of the Digital Game Addiction Scale Items

	DIGITAL GAME ADDICTION SURVEY FOR CHILDREN AT 9-11 AGE GROUPS	YES N	YES %	NO N	NO %
1	Do you think about playing games even when you do not play games?	462	42,0	638	58,0
2	Do you look forward to the next time that you will play a game?	637	57,9	463	42,1
3	Do you feel happy when you play a game?	1001	91,0	99	9,0
4	Do you feel excited when you play a game?	739	67,2	361	32,8
5	*Is it enough for you to play games for the same duration of time?*	*370*	*33,6*	*730*	*66,4*
6	Do you want to play the game for a longer time when you play a game?	437	39,7	663	60,3
7	Do you feel unhappy when you do not play a game?	290	26,4	810	73,6
8	Do you feel angry when you do not play a game?	146	13,3	954	86,7
9	Do you argue with the person who restrain you from playing games?	243	22,1	857	77,9
10	*Do you give misleading information about the duration of the games you have played to your social circle (mother, father, teacher, friend, etc.)?*	*86*	*7,8*	*1014*	*92,2*
11	When necessary, can you give up playing the game?	192	17,5	908	82,5
12	Do you want to play games when you see any of the digital gaming devices such as computers, tablets or mobile phones?	540	49,1	560	50,9
13	Do you postpone any of your needs like eating, sleeping and using restroom to play games?	193	17,5	907	82,5
14	Do you postpone your responsibilities such as doing homework, tidying up your room, doing personal cleaning to play games?	178	16,2	922	83,8

The scale items in the table given above are evaluated as Yes: 1, No: 0. Only the items 5 and 10 are scored exactly the opposite.

Table 4. Digital Game Addiction Evaluation Results According to Gender

Group	Gender (%) Female	Male	Total	X^2	Sd	P
0-4 No Score or Low Level Addiction	52,5	39,1	45,8			
5-9 Average Level Addiction	44,2	52,7	48,5	26,817[a]	2	,000
10-14 High Level Addiction	3,3	8,2	5,7			
Total	100,0	100,0	100,0			

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 31,39.

As seen in the table above, there is a significant difference between low level addiction of girls (52.5%) and low level addiction of boys (39.1%).

Table 5. Digital Game Addiction Evaluation Results According to Age

	Age(%)						
Group	**9**	**10**	**11**	**Total**	**X²**	**Sd**	**P**
0-4 No Score or Low Level Addiction	34,1	42,6	62,5	45,8			
5-9 Average Level Addiction	59,8	49,7	34,1	48,5	65,916[a]	4	,000
10-14 High Level Addiction	6,1	7,7	3,4	5,7			
Total	100,0	100,0	100,0	100,0			

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 19,36.

As seen in the table given above, the low level game addiction increases and the average and high level game addiction decreases as the age increases. It was tested whether these increases and decreases were significant (65, 916; p <0.05). It provided the result that the value is significant within the reliability level of 95%. In brief, the low level game addiction increases and the average and high level game addiction decreases as the age increases

Table 6. Factor Analysis Results

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,884	20,600	20,600	2,884	20,600	20,600	2,130	15,213	15,213
2	1,333	9,521	30,121	1,333	9,521	30,121	1,668	11,916	27,129
3	1,074	7,674	37,796	1,074	7,674	37,796	1,294	9,246	36,375
4	1,027	7,336	45,132	1,027	7,336	45,132	1,226	8,757	45,132
5	,946	6,759	51,891						
6	,910	6,499	58,390						
7	,904	6,455	64,844						
8	,852	6,088	70,932						
9	,813	5,804	76,736						
10	,718	5,130	81,867						
11	,707	5,052	86,918						
12	,652	4,657	91,575						
13	,605	4,324	95,900						
14	,574	4,100	100,000						

Extraction Method: Principal Component Analysis.

When study data were subjected to factor analysis, game addiction of children was grouped according to four main factors as seen in the table above:

The questions that make up dimension 1 are the questions 1, 2, 5, 6, 12 respectively. These items cover the extreme focus on playing digital games and excessive desire to play games.

The questions that make up dimension 2 are 9th, 10th, 11th, 13th, 14th questions. These items indicate that there is a desire to postpone any business for playing games.

The questions that make up dimension 3 are 7th and 8th questions. These items can be called as the dimension of unhappiness and insufficiency.

The questions that make up dimension 4 are 3rd and 4th questions. These items can be called as the dimension of happiness and excitement.

CONCLUSION and DISCUSSION

The level of digital game addiction of children aged between 9-11 was researched in this research. As a result of analysis, it is seen that scores of digital game addiction vary by age and gender. According to gender, significant differences are seen between low level addiction of girls and boys. We can say that level of boys' addiction is higher in comparison to girls'. According to age, the low level game addiction increases and the average and high level game addiction decreases as the age increases. In short, the low level game addiction increases and the average and high level game addiction decreases as the age increases

The results of the researches related to addiction of digital game conducted in abroad are as follows:

According to Anderson's study (2001); it was concluded that video games including violence affect behavior of aggression positively in young adults. In the study of Weber, Ritterfeld and Mathiak (2006) addressing the subject ''Do video games including violence prompt aggression? An experimental functional magnetic resonance imaging''. Brain activities of the participants were measured when they played games including violence. As a result of measurements carried out, it was seen that behavior of aggression displayed in the game triggered defence mechanism taking part in the left lobe of the brain and similar reactions the brain gives in case of any violence that could happen in real life. As a result of measurements carried out by Bartholov, Bushman and Sestir (2006), levels of aggression and desensitization to violence are substantially higher than gamers playing nonviolent games. According to results of research of Wallenius and Punamaki (2008), it is seen that schoolboys play violent video games more in comparison to schoolgirls and the scores boys get directly on scale of aggression come up more than the scores that girls get. It was seen that levels of playing violent games of older students and levels of direct aggression are higher than younger students. According to results of the study of Kneer, Glock, Beskes and Bente (2012), it was found out that aggressiveness and emotional instability were accelerated in negative content games, while responses to social interaction and achievement dimensions were higher in positive content games. According to results of research of Blinka and Mikuska (2014), it was found that there was a high positive correlation among online game addiction, social motivation and duration

of playing game, whereas there was a negative relationship among online game addiction and self-efficacy, age and in-game friendship relationship. According to results of research of Müller et al. (2014) titled as ''Regular game behavior and internet game disorder in young people in Europe'', 84% of boys, 42.8% of girls play online games regularly and this result is on behalf of male gamers in astatistically significant level. The results in comparison among countries related to levels of addiction according to age factor differ on behalf of Germany and too little from Poland and Spain. In other words, there is a direct relation between level of addiction and age factor. In the study ofKneer, Rieger, Ivory (2014) titled as ''Awareness of risk factors related to addiction of digital game'', the participants indicated factors such as ''low self- respect'', ''friendlessness'', ''bad family past'', ''not having another hobby'' as negative risk factors, whereas they described factors taking part in the games such as ''social interaction'',''success'', ''engrossment- drift'', ''high self-respect'' are positive risk factors that cause individuals to be addicted to games. In the result of the research Pallesen, Lorvik, Bu and Molde (2015) titled as ''Research on effects of treatment guide for addiction of video addiction'', it was seen that level of video game addiction of 12 participants decreased but it was reported that this result was not statistically significant. In the research of Donati, Chesi, Ammannato and Primi (2015) titled as ''Variety and addiction in games: video game variety and relation of addiction in male adolescents'', it was seen that there was a strongly positive relation among level of video game addiction and game variety and duration of playing game. In the research of Irles and Gomis (2015) titled as ''Impulsivity and video game addiction'', the time that male participants spend on the computer and level of frequency and level of video addiction concluded relatively higher in comparison to female participants. In research of Fest, Scharkow and Quandt (2016), ''Problematic computer game playing (digital game) in adolescents, young people and adults''; there is an inversely proportional relation between video game and level of addiction and it was found out that the young play video game much more. It was seen that there was a meaningful and strong relation between duration of daily playing game and level of video game addiction. It was found out that level of video game addiction of boys is substantially higher than the girl's levels. Park vd. (2016), in the research themed ''Effects of virtual reality games for online game addiction'', it was observed that there were no statistically significant differences between groups whereas, scores of addiction between both cognitive – behavioural thearapy group (control) and virtual-reality therapy group (experiment) significantly decrease in the result of four-week application. In the study of Fröolichet al. (2016) titled as ''Addiction of computer games in adolescents-sample of clinical study',' it was concluded that 14,5% of women are highly addicted, and this difference is statistically relatively significant, whereas 44,7% of men are highly addicted to computer games (digital game).

The results of some studies carried out related to addiction of digital game in our country is as as follows:

In the research of Pala and Erdem (2011) titled as ''A study on relations between digital game preference and gender due to game preference, class level and style of learning'', it was found out that there was a significant relation between gender and game preference. Girls preferred real time games to whole time games whereas boys preferred real and whole-time games at nearly same rates. According to the result of the research conducted by Günay (2011) titled as ''Effects of violent online computer games on aggression reactions of

primary school students'', it was found out that playing violent online computer game (digital game) had no significant effect on physical and verbal aggression reactions. According to the result of the research conducted by Demir (2011) titled as ''Research on relation between computer games and psychopathology of children and teenagers'', rate of playing computer games 4 times and more in a week are 33,4% in girls 72.1% in boys. A statistically significant difference was found in favor of male in comparison of genders in terms of the frequency of playing computer games per week. According to the result of the research of Horzum (2011), titled as ''Examination on computer game addiction level of primary school students according to various factors'', it was observed that male students were found to have a higher level of game addiction compared to female students in terms of the gender variable, and when the socio-economic level (SEL) is regarded, the students in the upper SEL were found to have higher game addiction level than the students in the middle and lower SEL, and in terms of grade level, the students in the 4th grade were found to have higher game addiction level compared to the 3rd and 5th grade. In the result of the research conducted by Solak (2012) titled as ''An examination of the relationship between computer game attitudes and aggression and loneliness tendencies of secondary school students'', it is concluded that secondary school students have a meaningful positive relationship between computer game (digital game) attitudes and aggression tendencies, however, there is no significant relationship between computer game attitudes and loneliness tendencies In the analysis performed according to the gender variable, computer game attitude and negative personality attitude variables were found to be significantly different in favor of men. Şahin and Tuğrul (2012) found out in their study "Examination on computer game addiction levels of primary school students'' that male students have higher levels of computer game (digital game) addiction than female students, the students who have a computer at their home have higher levels of computer game addiction than the others and the students whose mothers have higher educational background have higher levels of computer game (digital game) addiction than those whose mothers have lower educational background. According to the result of research conducted by Akçay and Özcebe (2012) titled as ''Evaluation of habits of playing computer games of children who get preschool education and their families'' it was indicated that the level of playing computer games of children whose mothers or father play computer games (digital games)were higher in comparison to the ones whose mother or father do not play. It was found out that level of playing computer game of boys was higher than girls. Another result of research is that the frequency of playing games of children who are older was more in comparison to children who are younger. According to the result of the research by Burak (2013) titled as ''Examination of effects of computer games on aggression levels of primary school first stage students'', a difference in significant level was determined according to their gender and it was stated that level of aggression of schoolboys was higher than schoolgirls. According to study conducted by Köse (2013) titled as' 'Investigating playing computer game habits and socialization of 13-14 age group adolescents'' (Kütahya Sample)'', it was found out that 76% of participants prefer individual game and computer games make adolescents an individual. Nearly half of adolescents (48,5%) emphasized that computer games intervened relations with their families. Çelik (2013) found out in the research titled as ''Determination of the effect of computer and computer games on selected psychomotor development profiles of primary school second grade

students'' that there was a significant relation between frequency of using computer according to father's occupation of primary school students and it was seen that frequency of using computer of the students whose fathers are civil servant are higher than the students whose fathers are described as workers, freelance and the others. According to study of Ergin et al. (2013) titled as ''Frequency of internet addiction in medical faculty students and factors affecting them'', it was seen that the difference was not significant whereas, level of being risky to be addicted in men are higher in comparison to women. One of interesting results of the research, possibility of level of being risky-addicted for people who do sport regularly came up to be relatively higher than the ones who do not sport. In the research conducted by Gökçearslan and Durakoğlu (2014) titled as ''Examination on level of computer game addiction of secondary school students according to various factors'', level of game addiction of schoolboys came up to be higher than schoolgirls. Another significant result that drew attention is the students whose mothers and fathers have graduate/doctorate degrees were found out that have higher game addiction scores in comparison to the students whose mothers and fathers have primary, secondary, high school degrees and bachelor/associate degree. According to results of research Yeşilyurt (2014) titled as ''Experiences of adolescents in online games and research of their attitudes related to the games'', boys prefer sport, car racing, action and strategy role playing games, girls prefer desktop games more. The highest level of online playing game motivation is escape dimension and the lowest level of online playing game motivation is social relations dimension. It was seen that there was a positive relation between self-respect and playing simulation games, there was a negative relation between social media games. According to results of analysis of interviews, participants consider that playing online games contribute to socializing in both virtual platform and real life. Adolescents do not agree the idea that online games cause violence to themselves. According to result of another research,76,7% of boys, 50,0% of girls indicated that they spend money for online games. According to the research conducted by Demirtaş Madran and Ferligül Çakılcı (2014) titled as ''Video game addiction and aggression in individuals who play multiplayer online video games''. It was reached to the conclusion that there was a relatively significant relation between aggression scores of participants and scores of online video game addiction. It was seen that physical aggression scores of boys are relatively higher in comparison to girls' scores. It was put forward that there were adversely significant relations between age and level of addiction and aggression. According to the research conducted by Zorbaz et al. (2014) titled as ''The relation between video game addiction of primary school students and family communication'', researchers indicated that preventive family behaviors cause children to spend more time on the computer and therefore; level of video game addiction of children came up to be higher.

In the research carried out by Burak and Ahmetoğlu (2015) with the aim of ''Examining the effect of computer games on aggression level of children'', they stated that 37,8% of the students play violent computer games and 62,2% of them do not play violent games. Another result of the research that draws attention is that the score of the children who play violent games came up to be higher than the children who do not play violent games. According to the research conducted by Torun, Akçay and Çoklar (2015) related to ''Examination on the effects of computer games on academic behavior and social life of secondary school students'', it was observed that the mostly-preferred games by students were action, sport, intelligence and adventure games. A

remarkable result of the research is that playing computer game (digital game) does not substantially affect social life of children. Another remarkable result is the finding that playing computer game does not affect level of academic success. In the research conducted by Aydoğdu Karaaaslan (2015) titled as ''Digital games and digital violence awareness: a comparative analysis carried out on parents and children'', it was observed that 88% of the participants spend 2-5 hours of their free times on the net and computer. 71% of these children use that time to play game. It was concluded that boys prefer violent games more than girls and they assimilate themselves with game characters more. In the study of Ağaoğlu and Metin (2015) carried out with the aim of examining the level of playing violent computer games of 4-8thgrade students who participate in Bilim ve Sanat Merkezi (BİLSEM) and who do not participate, it was determined that the participants who go to BİLSEM plays more computer games(digital game) and they mostly prefer adventure and intelligence-logic games when compared to the participants who don't go to BİLSEM. They also came up with the conclusion that only those students who are getting formal education play violent games more often than the others ([1]Science and Art Centre in Turkey).

SUGGESTIONS

One of the most effective ways to deal with digital gaming addiction is to direct children to physical activities. However, parents, teachers and students should be informed about digital gaming addiction.

9-11 YAŞ GRUBU ÇOCUKLARDA DİJİTAL OYUN BAĞIMLILIĞININ ARAŞTIRILMASI: KIRŞEHİR İLİ ÖRNEĞİ

GİRİŞ

Birçok aile ve öğretmen çocukların ders çalışmadaki isteksizliği ve bilgisayar oyunlarıyla geçirilen vakitteki istekliliğine dair şikâyette bulunmaktadır. Bu durum bilgisayar oyunlarının çocukların ilgilerini çekme ve onları motive etme açısından oldukça güçlü olduğunu ortaya çıkarmakta, bu da tekrar tekrar oyun oynama isteğini beraberinde getirmektedir. Bu yönüyle düşünüldüğünde bağımlı, oyunla bütünleşir ve tüm hayatında onu yaşamaya başlar. En önemli göstergesi çocukların oyunlardaki karakterlerle kendilerini aşırı ilişkilendirmeleridir. Bu ilişkilendirme de ölüme giden olayları ortaya çıkarmaktadır. Bu nedenle bilgisayar oyunlarının ve bağımlılığının araştırılması oldukça önemlidir. Bu çalışmanın amacı Kırşehir ilinde öğrenim gören 9-11 yaş grubu çocuklarda dijital oyun bağımlılığının araştırmaktır.

YÖNTEM

Bu araştırmada, var olan bir durum hiçbir değişiklik yapılmadan var olduğu şekliyle ele alınıp betimlenmeye çalışıldığı için tarama modeli kullanılmıştır. Çalışmanın evrenini 9-11 yaş grubu çocuklar, örneklemini ise amaçlı örneklem yöntemi ile seçilen 2016-2017 eğitim-öğretim döneminde Kırşehir ilinde bulunan Milli Eğitim Bakanlığına bağlı 6 (Mehmet Hüsnü Özyeğin, Erol Güngör, Süleyman Türkmani ve Sırrı Kardeş İlkokulu; Cacabey, 23 Nisan Ortaokulu) devlet okulunda öğrenim gören 552'si kız 548'i erkek toplam 1100 öğrenci oluşturmaktadır.

Veri toplama aracının oluşturulmasında uzmanlar eşliğinde hazırlanan 5 maddelik bir yarı yapılandırılmış görüşme formu hazırlanmış, günlük ortalama 30-60 dk ve üzeri oyun oynayan ve yaşları 9-11 arasında değişen 20 çocukla yarı yapılandırılmış görüşme tekniğine göre görüşmeler yapılmıştır. Önceden belirlenmiş ifade ve soru yanıtları yoktur. Görüşmelerden elde edilen veriler içerik analizine tabi tutularak madde havuzunun oluşturulmasında yararlanılmıştır. Bununla birlikte literatür taraması yapılmış ve literatürde yer alan diğer ölçek ve kaynaklardan yararlanılarak toplam 14 maddelik bir form oluşturulmuştur. Oluşturulan maddeler biri alan uzmanı, bir ölçme-değerlendirme ve bir dil uzmanı olmak üzere toplam üç uzman tarafından değerlendirilmiş ve ölçeğin 14 maddeden oluşturulmasına karar verilerek deneme formu oluşturulmuştur. 60 çocuğa pilot uygulamadan sonra son düzeltmeler yapılmıştır.Anket sorularının Cronbach's Alpha değeri 69,6'dır. Bu da anket sorularının güvenilir olduğu sonucunu vermektedir.

Verilerin analizinde yüzde, frekans, faktör analizi ve Ki-kare testi kullanılmıştır. Öğrencilerin bilgisayar oyunlarının etkilerine yönelik görüşlerini değerlendirebilmek için ortalama değer üzerinden üç değerlendirme aralığı ve kriteri belirlenmiştir. Geliştirilen bağımlılık ölçeğinin yapı geçerliliğini sağlamak ve ölçekte yer alan

maddelerin işlevsel bir boyutlandırmasının elde edilebilmesi amacıyla faktör analizi yapılmıştır. Faktör analizi, değişkenler arasındaki karşılıklı ilişkileri inceleyerek, değişkenlerin daha anlamlı ve özet bir şekilde sunulmasını sağlar. Ki-Kare testi bağımsızlık testi olarak kullanıldığı gibi değişenler arasında anlamlı fark olup olmadığının araştırıldığı durumlarda da kullanılan bir testtir.

BULGULAR

Araştırma bulgularına göre, kızların düşük bağımlılık seviyeleri ile (% 52,5) erkeklerin düşük bağımlılık seviyeleri (% 39,1) arasında anlamlı farklılık görülmektedir. Yaş ilerledikçe düşük seviye oyun bağımlılığının arttığı orta düzey ve yüksek oyun bağımlılığının azaldığı görülmektedir. Bu artma ve azalmaların anlamlı olup olmadığı test edilmiştir(65, 916; p<0,05). Bu da değerin % 95 güvenlik seviyesi içerisinde anlamlı olduğunu sonucunu vermektedir. Kısacası yaş ilerledikçe oyun bağımlılığı seviyesi düşmektedir ve bu sonuç tesadüfi değil anlamlıdır.

Bu araştırmada çocukların oyun bağımlılıkları 4 ana faktör üzerinden gruplandırılmıştır:

1. Boyutun meydana geldiği grup soruları sırasıyla 1, 2, 5, 6, 12. sorulardır. Dijital oyun oynamaya yönelik aşırı odaklanma ve aşırı oyun oynama arzusu içinde olan maddelerdir.
2. Boyutu meydana getiren sorular 9, 10, 11, 13, 14. sorulardır. Bu maddeler herhangi bir işi erteleme arzusunda olduğunu belirtmektedir.
3. Boyutu meydana getiren sorular 7 ve 8. sorulardır. Bu maddeler mutsuzluk ve eksiklik boyutu olarak adlandırılabilir.
4. Boyutu meydana getiren sorular 3 ve 4. sorulardır. Bu maddeler de mutluluk, heyecan boyutu olarak adlandırılabilir.

TARTIŞMA VE SONUÇ

Bu araştırmada, 9-11 yaş grubu çocuklarda dijital oyun bağımlılık düzeyleri araştırılmıştır. Yapılan analizler sonucunda dijital oyun bağımlılığı puanları cinsiyet ve yaşa göre değiştiği görülmektedir. Cinsiyete göre; kızların düşük bağımlılık seviyeleri ile erkeklerin düşük bağımlılık seviyeleri arasında anlamlı farklılık görülmektedir. Erkeklerin bağımlılık düzeyi kızlara göre daha yüksek denilebilir. Yaşa göre ise, yaş ilerledikçe düşük seviye oyun bağımlılığının arttığı orta düzey ve yüksek oyun bağımlılığının azaldığı görülmektedir. Kısacası yaş ilerledikçe oyun bağımlılığı seviyesi düşmektedir ve bu sonuç tesadüfi değil anlamlıdır. Kısacası yaş ilerledikçe oyun bağımlılığı seviyesi düşmektedir ve bu sonuç tesadüfi değil anlamlıdır. Dijital oyun bağımlılığı ile baş etmede en etkili yöntemlerden birisi çocukları fiziksel aktivitelere yönlendirmektir. Bununla birlikte dijital oyun bağımlılığı konusunda veliler, öğretmenler ve öğrenciler bilgilendirilmelidir.

Anahtar Kelimeler: Dijital oyun, bağımlılık, 9-11 yaş grubu

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