



The Relationship between Digital Game Addiction and Being Neglected by Parents in Adolescence

 Utku BEYAZIT¹
 Aynur BÜTÜN AYHAN²

Ergenlerde Dijital Oyun Bağımlılığı ile Ebeveynleri Tarafından İhmal Edilme Düzeyleri Arasındaki İlişki

Abstract

Objective: Digital game addiction is defined as an impulse control disorder involving characteristics such as “feelings of restlessness and/or irritability when unable to play”, “isolation from others in order to spend more time gaming”, and “the inability to control the time spent on game-playing”. It is thought that the children who are neglected by their parents may experience feelings of loneliness, isolation and depression, may lean on to digital games as a means of socialization and coping with feelings of loneliness. Within this concept, in this study, it is aimed to examine the relationship between digital game addiction and being neglected by parents in adolescence. **Method:** The study was consisted of 303 adolescents, attending to two separate secondary schools in the city center of Antalya, Turkey in 2018-2019 spring semester and their 303 parents. As the data gathering instruments, a Socio-Demographic Information Form and Digital Game Addiction Scale were administered to adolescents. To the parents, Socio-Demographic Information Form and Multidimensional Neglectful Behavior Scale-Parents Form were administered. **Results and Conclusion:** As a result it was found that adolescents’ level of digital game addiction increase as their parents’ level of neglectful behaviors increase. The results were discussed in terms of the relevant literature and suggestions were made in regards with the subject.

Key Words: Digital game addiction, neglect, parents, adolescence

Özet

Amaç: Dijital oyun bağımlılığı, “dijital oyun oynamadığında huzursuzluk ve/veya sinirlilik”, “oyun oynamak için ayrılan zamanın fazla olması nedeniyle sosyal izolasyon”, “oyun oynamaya ayrılan zamanın kontrol edilememesi” gibi özelliklerle karakterize bir dürtü kontrol bozukluğu olarak tanımlanmaktadır. Ebeveynleri tarafından ihmal edilen ergenlerin yalnızlık, izolasyon ve depresyon deneyimleyebilecekleri; sosyalleşebilmek ve yalnızlık duygusu ile baş edebilmek için dijital oyunlara ilgi gösterebilecekleri düşünülmektedir. Bu bağlamda bu çalışmada, ergenlerde dijital oyun bağımlılığı ile ebeveynleri tarafından ihmal edilme düzeyleri arasındaki ilişkinin incelenmesi amaçlanmıştır. **Yöntem:** Araştırmanın çalışma grubunu 2018-2019 öğretim yılı bahar döneminde Antalya il merkezindeki iki farklı ortaokula devam eden 303 ergen ve ebeveynleri oluşturmuştur. Çalışmada yer alan ergenlerden ve ebeveynlerinden sosyo-demografik bilgiler elde edilmesi amacıyla, araştırmacılar tarafından hazırlanan Kişisel Bilgi Formu, öğrencilerin dijital oyun bağımlılığını değerlendirmek amacıyla Dijital Oyun Bağımlılığı Ölçeği kullanılmıştır. Ebeveynlerin çocuklarını ihmal düzeylerinin belirlenmesi amacıyla ise Çok Boyutlu İhmalkar Davranış Ölçeği-Ebeveyn Formu uygulanmıştır. **Bulgular:** Çalışma sonucunda, ebeveynlerin ihmalkar davranış düzeyleri ile ergenlerin dijital oyun bağımlılığı düzeyleri arasında istatistiksel açıdan anlamlı ve pozitif yönde bir ilişki tespit edilmiştir. **Sonuç:** Elde edilen sonuçlar literatürdeki bulgular doğrultusunda tartışılmış; anne babalara, konu ile ilgili uzmanlara önerilerde bulunulmuştur.

Anahtar Kelimeler: Dijital oyun bağımlılığı, ihmal, ebeveyn, ergen

Alındığı tarih/Received Date:
21.10.2019

Kabul tarihi/Accepted Date:
15.11.2019

Sorumlu yazar:

Utku BEYAZIT

e-mail: proz2proz@yahoo.com

¹ Akdeniz University, Kumluca Health Sciences Faculty, Child Development Department, Antalya, Turkey

² Ankara University, Faculty of Health Sciences, Child Development Department, Ankara, Turkey

This study is presented as a poster in the 9th World Congress of Behavioural & Cognitive Therapies in July 2019 in Berlin, Germany.

INTRODUCTION

In parallel to the technological developments, digital games are those that enable interaction with computer software, have objectives and rules and offers users with rich visuals (Hazar, 2018). In recent years, these games turned out to be increasingly popular among adolescents and became virtual activities realized in front of computers for adolescents at home and game arcades, brought out digital game addiction through their extreme and uncontrolled playing (Kuss & Griffiths, 2012; Yalçın Irmak & Erdoğan, 2015). The Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5) published by the American Psychological Association (APA, 2014) classifies digital game addiction as disorders of playing games on the Internet. Digital game addiction is defined as a type of behavioral addiction and show similarities with other types of addictions like alcohol, gambling, Internet. It arises with symptoms such as 'not being able to control the game-playing time', 'losing interest in other activities', and 'feeling psychological withdrawal at times of not playing games' (Grüsser, Thalemann & Griffiths, 2007; Schoenmaker et al., 2010). People with digital games addiction, also, exhibit various psychological challenges like the sudden desire to play games and restlessness, social isolation, skepticism, tendency toward violence, keeping mind constantly busy with games and neglecting duties and responsibilities in daily life to continue playing for long hours (Orr, Ross & Orr, 2012; Lopez-Fernandez et al., 2014).

Digital game addiction may cause physiological problems like eye, head and back aches, posture problems (Gentile, 2009; Lui, Szeto, & Jones, 2011), obesity (Ivezaj et al., 2017) and sleep disorders (Smith, 2007); and lead to psychological and social problems such as depression and loneliness (Wei et al., 2012; Lee & Jeong, 2017), anxiety (Snodgrass et al., 2014), aggression (Ko et al., 2009; Lemmens, Valkenberg & Peter, 2011), tendency to commit crimes (Holtz & Appel, 2011); and breakdowns in interpersonal relations (Jeong & Kim 2011). Digital game addiction appears more commonly in adolescents than adults and causes developmental challenges (Griffiths, 2008; Festl, Scharnow & Quandt, 2013). Lynn and Johnson (2018) underlined that digital addictions isolate adolescents from the outside world and the school which becomes increasingly less interesting for them; in turn, causing problems in adolescents'

social, emotional and cognitive structures that are needed to overcome problems in social and scientific areas. During this process, executive functions and generic associations of the brain emerge as primary losses; adolescents feel as aimless and estranged after leaving the computer; the breakdown processes which starts within the family extends to all social environments and continues with real world (Brian & Wiemer-Hastings, 2005; Sublette & Mullan, 2012).

The addiction toward digital games is highlighted to be an important predictor of inadequate familial relations (Young, 2009; Pawlowska, Potembska & Szymańska, 2018). A number of studies showed that problems regarding digital technology use such as the Internet and digital game addiction are seen more often in conflicting families; on the other hand, such problems are seen less in families with strong parent-child relations (Günüç & Kayrı, 2010; Aarsand, 2011; Kwon, Chung & Lee, 2011). In this regard, parent-child relation emerges as a significant factor in the occurrence of digital game playing in adolescents at addiction levels. Family's role is crucial in a child's healthy development. A child needs to be thoroughly taken care of by fostering all developments aspects and meeting needs in guidance of the fields of interest (Tuğrul, 2014; Maguire-Jack & Wang, 2016). The case of a child's caretaker not meeting the child's basic needs such as nutrition, protection, caregiving, education and health is defined as child neglect (Straus, 2006; Polat, 2017). Attitudes and behaviors of parents like the following, are among the examples of neglectful behaviors: not expressing love and care toward the child; not providing the child with limits; not caring about the child's wrongful behaviors; not caring about who the child befriends, where the child is and what the child is doing; the home setting being without rules and adrift; not preventing others from harming the child and the child from harming the others; not protecting the child from harmful behaviors toward and from others; not taking necessary precautions so that the child cannot watch inappropriate content on TV and the Internet; allowing the child to have unlimited access to the Internet without supervision; and allowing the child to play digital games (Coohy, 2003; Dubowitz et al., 2005; Ruiz-Casares, Trocmé & Fallond, 2015; Snyder & Merritt, 2015).

The adolescents who are neglected by their parents may be inclined to use digital games

played at home, cafes and arcades as socialization tools, seek the attention they need in these settings, thus, be more exposed to the danger of digital game addiction. It can be argued that parents' inadequacy in meeting their children's basic needs of love and affection and neglecting children, especially in supervisory aspects can be crucial factors in the emergence of digital game addiction. There are no studies available in the literature that deal with digital game addiction and neglect together. The evaluation of these concepts together is significant for the investigation of negative outcomes of child neglect, taking necessary protective and preventive measures, and offering guidance to educators and parents. Taking this as the starting point, this study aimed to investigate the relation between digital game addiction in adolescents and their parents' neglect.

METHOD

Participants

The study group of the study consisted of 303 adolescents, attending to two separate secondary schools in the city center of Antalya, Turkey in 2018-2019 spring semester and their 303 parents. In the process of selection of the schools in that the study is planned to be administered, the Ministry of National Education was consulted initially and information related to the socio-demographic profiles of the schools and the number of students in each of these schools is provided. Upon the information obtained, the two of the schools were chosen as they represented the socio-economic characteristics of the general population. The socio-demographic characteristics of the adolescents and parents participated in study are shown in the Table 1.

Table 1. The Socio-Demographic Characteristics of the Adolescents and Parents Participated In the Study

		n	%
Adolescents	Gender		
	Female	168	55.4
	Male	135	44.6
	Age Group		
	12	129	42.6
	13	66	21.8
	14	48	15.8
	15	60	19.8
Parents	Gender		
	Female	187	61.7
	Male	116	38.8
	Age Group		
	30 years old and below	19	6.3
	Between 31 and 40 years old	159	52.5
	Between 41 and 50 years old	114	37.6
	Above 51 years old	11	3.6
Education Level			
Graduate of basic education of 11 years	216	71.3	
University graduate	87	28.7	

Instruments

As the data gathering instruments a Socio-Demographic Information Form and Digital Game Addiction Scale were administered to adolescents. To the parents, Socio-Demographic Information Form and Multidimensional Neglectful Behavior Scale-Parents Form were administered.

Socio-Demographic Information Form: The Forms which were administered to

adolescents and the parents were prepared by the researchers. The Form that were administered to adolescents included questions regarding the adolescents' gender, age and grade. The Form administered to parents included questions regarding the parents' gender, age group and education level.

Multidimensional Neglectful Behavior Scale (Parents Form): The scale was developed by Kaufman Kantor et al. (2003) for the purpose of assessing parents' neglectful behaviors toward

their children between the ages of 10 and 15. The scale consisted of 23 four-point Likert type items with a total number of six sub-dimensions which are supervisory, cognitive and physical neglect; failure to protect, abandonment and alcohol use. The scoring of the positive items in the scale range from almost never (3) to always (0) whereas the scoring of the negative items range from almost never (0) to always (3). The overall minimum and maximum score which can be obtained from the scale vary from 0 to 69. The high scores obtained from the scale show parents' behaviors that can be considered as neglectful. In the validity study of the original scale the total scores were found to be statistically associated with parental depression, stress in family life, lack of social support and domestic violence (Kaufman Kantor, Holt & Straus, 2003). The scale is adapted into Turkish by Beyazıt and Bütün Ayhan (2018). In the validity and reliability analyses, the overall Cronbach alpha coefficient the Turkish form of the scale was found to be .68. In the present study the Cronbach alpha coefficient for the entire scale was found as .81.

Digital Game Addiction Scale for Children: The scale is developed by Hazar and Hazar (2017) for the purpose of assessing children's level of digital game addiction. The scale is composed of 24 five-point Likert type items. The scoring of the items range from totally don't agree (1) to totally agree (5). The minimum possible score that can be obtained from the score is 24 and the possible maximum score is 120. The higher scores in scale show the level digital game addiction. In the reliability study of the scale, Hazar and Hazar (2017) computed the Cronbach alpha coefficient of the scale as .90. In this study, the Cronbach alpha coefficient in terms of the internal consistency was found to be .94.

Procedure

Prior to the onset of the data collection, the required permissions were provided from the authors of the instruments implemented and from the Ministry of Education to implement the study in the schools. In addition, the school administrations and the classroom teachers were

briefed and their authorizations were provided. Next, the adolescents were informed about the content of the study and were explained that they were free to decline or to participate in the study and their answers would be kept confidential. During the course of the study, the 1964 Declaration of Helsinki was followed in terms of the ethical guidelines and through the use of coded responses, participant anonymity was ensured. The forms were administered to a number of 472 adolescents who agreed to participate in the study.

The adolescents were distributed anonymous and closed envelopes and were asked to convey these envelopes to their mothers and fathers at home. In this procedure, the forms for fathers and mothers were sent out in separate classes in order to avoid fathers and mothers to effect each other's responses. The adolescents were asked to bring back the forms completed by their parents and hand over to their classroom teachers. Each school was visited after one week and the completed forms were collected. Out of the total of 472 forms sent to homes, 320 forms were delivered back. However, due to the high number of omitted items, 5 of the forms completed by parents and 12 of the forms completed by adolescents were excluded from the data. Consequently, a number of 303 adolescents and 303 parents (116 fathers and 187 mothers) were included in the study.

In the terms of the analysis of the data collected, Kolmogorov-Smirnov test was performed as the preliminary analysis to test the normality (Tabachnick & Fidel, 2013). The results of the test showed that parametric test conditions were not established ($p > .05$). Thus, Spearman's correlation coefficient was taken into account in the correlation analysis. SPSS 22 software was used for the analysis of the collected data.

RESULTS

The arithmetic means and the standard deviations regarding Digital Game Addiction Scale for Children and Multidimensional Neglectful Behavior Scale are presented in Table 2.

Table 2. Arithmetic Means and Standard Deviations of Digital Game Addiction Scale for Children and Multidimensional Neglectful Behavior Scale Scores

Scores	n	Minimum	Maximum	\bar{X}	SD	
Digital Game Addiction Scale for Children	303	24	114	49.78	18.94	
Multidimensional Neglectful Behavior Scale	Cognitive Neglect	303	0	26	8.63	4.09
	Supervisory Neglect	303	0	20	2.63	2.99
	Physical Neglect	303	0	20	3.00	2.53
	Abandonment	303	0	6	1.03	1.34
	Failure to Protect	303	0	6	0.25	0.74
	Alcohol Use	303	0	3	0.04	0.30
	Total	303	0	66	15.58	8.38

According to the results seen on Table 2, adolescents' mean score of Digital Game Addiction Scale for Children is 49.78 ± 18.94 . The scores vary between 24 and 114. In terms of the Multidimensional Neglectful Behavior Scale scores, parents' mean score of Cognitive Neglect subscale was 8.63 ± 4.09 , Supervisory Neglect was 2.63 ± 2.99 , Physical Neglect was 3.00 ± 2.53 ,

Abandonment was 1.03 ± 1.34 , Failure to Protect was 0.25 ± 0.74 , Alcohol Use was 0.04 ± 0.30 and Total Neglect was 15.58 ± 8.38 . Parents' scores Multidimensional Neglectful Behavior Scale vary between 0 and 66.

The Spearman's correlation coefficient results of the Digital Game Addiction Scale for Children and Multidimensional Neglectful Behavior Scale are presented in Table 3.

Table 3. The Spearman's Rank Correlation Coefficient Results of Digital Game Addiction Scale for Children and Multidimensional Neglectful Behavior Scale

Subscale and Total Scores	1	2	3	4	5	6	7	8
1. Digital Game Addiction Total	-							
2. Cognitive Neglect	.180**	-						
3. Supervisory Neglect	.204**	.394**	-					
4. Physical Neglect	.298**	.363**	.288**	-				
5. Abandonment	.169**	.220**	.283**	.191**	-			
6. Failure to Protect	.178**	.154**	.107	.157**	.131*	-		
7. Alcohol Use	.066	.077	.150**	.129*	.117*	.105	-	
8. Multidimensional Neglectful Behavior Total	.271**	.824**	.702**	.628**	.442**	.228**	.187**	-

According to the results on Table 2, total scores of Digital Game Addiction Scale are significantly and positively correlated with the Cognitive Neglect ($r=.180, p<.01$), Supervisory Neglect ($r=.204, p<.01$), Physical Neglect ($r=.298, p<.01$), Abandonment ($r=.169, p<.01$), Failure to Protect ($r=.178, p<.01$) subscales and the total score ($r=.271, p<.01$) of Multidimensional Neglectful Behavior Scale.

DISCUSSION

In the present study, it was found that adolescents' level of digital game addiction increase as their parents' level of neglectful behaviors increase. It is thought that these results provide evidence related to the link between digital game addiction in adolescents and their parents' neglectful behaviors. Digital world is integrated into adolescents' daily lives and this long-term and uncontrolled use of digital technologies has brought various addiction types into question. Various technology addictions like

Internet addiction, computer addiction and mobile phone addiction is frequently seen in adolescents as they use such technologies more than others (Thompson & Reba-Harrelson, 2013). Digital games hold a significant part of computer and Internet usage (Hazar, 2018). The constantly developing and ever-changing technologies have become a part of adolescents' life experiences. Hence, virtual world experiences interact with adolescents' cognitive and socio-emotional developmental dynamics (Atli, 2019).

For adolescents, sense of being loved and accepted is a fundamental basic need. Meeting this need is vital for a healthy emotional development. Children who grow up with love and affection are more successful in interpersonal relations (Önder, 2004; Karabekiroğlu, 2011). Children who are not exposed to love and affection by their parents, in other words, children who are neglected may use digital tools and virtual setting as a socialization method and seek the attention they need in such settings (Günüç & Kayrı, 2010; Fresthler, Johnson-Motoyama & Kepple, 2014). Adolescents start to get away from natural communication methods as the virtual world becomes the alternative for the close relation formed with parents and adolescents start to prefer interactive online games. This brings limitations to the direct expression of emotions, thoughts and behaviors by the adolescent, cause challenges in identity formation and have negative impact on the psycho-social development as a whole (Ögel, 2017).

Parents' neglectful attitudes drive the adolescents, who are trying to make decisions on his own and experiencing psychological challenges into a sense of adrift and may lead to a sense of loneliness (Beyazıt & Bütün Ayhan, 2016). Young (2009) noted that adolescents, who cannot receive the needed closeness and care, use digital settings to get away from the sense of loneliness. For the adolescent, such psychological escape becomes a secure means to cope with loneliness and real life problems by time. Gamers who feel insecure in real life and socially isolated, turn into someone who feels socially confident, connected with others through the games which are more satisfying and interesting than their own. They feel more accepted, more accomplished and feel better about themselves through their virtual characters. A number of studies in the literature provided arguments in line with this argument. The cross-sectional cohort study of Richards et al. (2010) including 4019 adolescents showed

that a low attachment to parents was related to spending more time spent in front of a screen. The amount of the time the adolescents spent for computer, TV or video games was argued to be associated with greater paternal alienation, less family time and reduced quality of family relationships. Another study, in which 98 adolescents participated, Milani, Osualdella and Di Blasio (2009) found that a low quality of relationships with parents and peers may lead to an increased risk of problematic internet use including excessively visiting entertainment sites such as chat rooms and online games. The suggestion that the emotionally insecure adolescents may search for the comfort and security within the relationships in virtual worlds and online games was also supported by the study of King and Delfabbro (2017) in which a total of 824 adolescents attending to secondary school participated showed that adolescents with digital gaming problems have less communication and trust, experience greater anger to their parents, and feel alienated in their paternal and maternal relationships. A number of other studies also have pointed out the influence of parenting and the family dynamics and showed that digital addictions are more prevalent among adolescents in dysfunctional families such as families with less satisfaction and higher conflict (Yen et al., 2007; Rehbein & Bajer, 2013) and lack parental supervision (Olson et., 2007; Morrongiello, Kane & Zdzieborski, 2011; Smith, Gradisar & King, 2015). It is thought that these findings in the literature provide findings that the nature of parent-child relations might be a prominent predisposing factor in adolescent gaming; that is, poorer relationships with parents may be linked to adolescents' digital gaming problems.

The results of the present study are significant in the sense that many studies have examined digital game addiction in terms of individual and psychological correlates but no studies have previously focused on parenting and examined the links between the concepts of digital game addiction and parental neglect. It is thought that the investigation of such possible link is crucial in terms of a current and in-depth focus on digital game addiction and endorsing efforts for the prevention of the problem. As parents' attitudes toward their children affect adolescents' addiction level to digital games, when planning the approaches for the prevention of such addictions, parents' role needs to be considered and approaches should not solely be directed

toward adolescents but toward their parents as well. In this regard, strategies such as the identification of factors causing addiction, teaching adolescents to deal with internal and external stimuli leading to addiction, helping adolescents gain new social skills are being practiced. One of the most important factors in addiction treatment is staying away from the addicted substance. At this point, a major role falls onto the shoulders of parents and teachers. Addiction can be caused by not only adolescents' psychological factors but also originate from parents' lack of parental knowledge and skills and their attitudes that can be defined as neglectful behavior. With this consideration, it is believed that training programs designed by taking different needs and characteristics of families from various socio-economic backgrounds, and aiming to develop and improve parental skills can be effective in prevention of neglect. These programs should teach parents the need to make arrangements for children's access to Internet sites and games depending on their age; that parents can play certain computer games together with their

children; and that they can train their children about the threats in the virtual world by spending time with them in virtual settings.

Despite the significance of the findings gathered from this study, the study also has certain limitations. The study group was comprised of 303 adolescents between the ages of 12 and 15 and their parents. The gathered data reflects experiences of a limited number of children. Future studies can involve adolescents as a whole and inclusion of 15-18 age range is crucial for the generalizability of the findings. Another limitation is that the study focuses on psychopathological concepts such as addiction however any psychopathological examination should solely depend on testing measurements and should also involve diagnostic assessments, interviews and observations. The future studies should also control the effect of potentially confounding disorders such as anxiety, trauma or depression and the possibility of parents' bias of recalling their rearing experiences.

REFERENCES

- Aarsand, P. 2011. Parenting and digital games, *Journal of Children and Media*; 5(3): 318-333.
- Beyazıt, U. & Bütün Ayhan, A. 2016. Kişilik gelişimi. *Çocuk gelişimi*. Ed. N. Aral, s. 158-189, Eskişehir: Anadolu Üniversitesi.
- Beyazıt, U., & Bütün Ayhan, A. 2019. The psychometric properties of the Turkish version of the Multidimensional Neglectful Behavior Scale-Parents Form. *Current Psychology*; 38(5): 1121-1130.
- Brian, D., & Wiemer-Hastings, P. 2005. Addiction to the Internet and online gaming. *Cyberpsychology & Behavior*; 8(2): 110-113.
- Büyükoztürk, Ş. 2004. *Sosyal bilimler için veri analizi el kitabı*. (4. Baskı). Ankara: Pegem Akademi.
- Coohey, C. 2003. Making judgments about risk in substantiated cases of supervisory neglect. *Child Abuse & Neglect*; 27: 821-840.
- Dubowitz, H., Pitts, S. C., Litrownik, A. J., Cox, C. E., Runyan, D., & Black, M. M. 2005. Defining child neglect based on child protective services data. *Child Abuse & Neglect*; 29: 493-511.
- Festl, R., Scharkow, M., & Quandt, T. 2013. Problematic computer game use among adolescents, younger and older adults. *Addiction*; 108(3): 592-599.
- Fresthler, B., Johnson-Motoyama, M., & Kepple, N. J. 2014. Inadequate child supervision: The role of alcohol outlet density, parent drinking behaviors, and social support. *Children and Youth Services Review*; 43: 75-84.
- Gentile, D. A. 2009. Pathological video-game use among youth ages 8 to 18: A national study. *Psychological Science*; 20(5): 594-602.
- Griffiths, M. 2008. Internet and video-game addiction, In: C. A. Essau (ed.) *Adolescent Addiction: Epidemiology, Assessment and Treatment*, pp. 231-267. USA: Academic Press.
- Grüsser, S. M., Thalemann, R., & Griffiths, M. D. 2007. Excessive Computer Game Playing: Evidence for Addiction and Aggression? *CyberPsychology & Behavior*; 10(2): 290-292.
- Günüç, S., & Kayrı, M. 2010. Türkiye’de internet bağımlılık profili ve İnternet Bağımlılık Ölçeği’nin geliştirilmesi: geçerlik-güvenirlik çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*: 39: 220-232.
- Hazar, Z. 2018. *Çağın vebası dijital oyun bağımlılığı ve başa çıkma yöntemleri*. Ankara: Gazi.
- Hazar, Z., & Hazar, M. 2016. Çocuklar için dijital oyun bağımlılığı ölçeği. *Journal of Human Sciences*; 14(1): 203-216.
- Holtz, P. & Appel, M. 2011. Internet use and video gaming predict problem behavior in early adolescence. *Journal of Adolescence*; 34(1): 49-58.
- Ivezaj, V., Potenza, M. N., Grilo, C. M., & White, M. A. 2017. An exploratory examination of at-risk/problematic Internet use and disordered eating in adults. *Addictive Behaviors*; 64: 301-307.
- Jeong, E. J., & Kim, D. H. 2011. Social activities, self-efficacy, game attitudes, and game addiction. *Cyberpsychology, Behavior, and Social Networking*; 14(4): 213-221.
- Karabekiroğlu K. 2011. *Çocuğuma nasıl davranmalıyım*. 400 sf. İstanbul: Say. ISBN: 9754689259
- Kaufman Kantor, G., Holt, M., & Straus, M. A. 2003. The Parent-Report Multidimensional Neglectful Behavior Scale. Available at: <http://pubpages.unh.edu/~mas2/NS7.pdf>, (Accessed 2018 October).
- King, D. L., & Delfabbro, P. H. 2017. Features of parent-child relationships in adolescents with internet gaming disorder. *International Journal of Mental Health and Addiction*; 15(6):1270-1283.
- Ko, C., Yen, J., Liu, S., Huang, C., & Yen, C. 2009. The associations between aggressive behaviors and internet addiction and online activities in adolescents. *Journal of Adolescent Health*; 44: 598-605.
- Kuss, J. D., & Griffiths, M. D. 2012. Internet gaming addiction: a systematic review of empirical research. *International Journal of Mental Health and Addiction*; 10(2): 278-296.
- Kwon, J., Chung, C., & Lee, J. 2011. The effects of escape from self and interpersonal

- relationship on the pathological use of Internet games. *Community Mental Health Journal*; 47(1): 113-121.
- Lee, H. R., & Jeong, E. J. 2017. Therapeutic role of player self-efficacy in online gaming. *Social Behavior And Personality*; 45(9): 1475–1484.
- Lemmens, J. S., Valkenberg, P. M., & Peter, J. 2011. The effects of pathological gaming on aggressive behavior. *Journal of Youth and Adolescence*; 40(1): 38-47.
- Lopez-Fernandez, O., Honrubia-Serrano, L., Baguley, T. & Griffiths, M. D. 2014. Pathological video game playing in Spanish and British adolescents: Towards the exploration of Internet Gaming Disorder symptomatology. *Computers in Human Behavior*; 41: 304-312.
- Lui, D. P. Y., Szeto, G. P. Y. & Jones, A. Y. M. 2011. The pattern of electronic game use and related bodily discomfort in Hong Kong primary school children. *Computers & Education*; 57(2): 1665–1674.
- Lynn, G. T., & Johnson, C. C. 2018. *Ekrana bağımlılığı*. İstanbul: Destek.
- Maguire-Jack, K., & Wang, X. 2016. Pathways from neighborhood to neglect: The mediating effects of social support and parenting stress. *Children and Youth Services Review*, 66: 28–34.
- Milani, L., Osualdella, D., & Di Blasio, P. 2009. Quality of interpersonal relationships and problematic internet use in adolescence. *Cyberpsychology & Behavior*; 12: 681–684.
- Morrongoello, B. A., Kane, A., & Zdzieborski, D. 2011. “I Think He Is in His Room Playing a Video Game”: Parental supervision of young elementary-school children at home, *Journal of Pediatric Psychology*; 36(6): 708–717.
- Olson, C. K., Kutner, L. A., Wagner, D., Almerigi, J. B., Baer, L., Nicholi, A. M., & Beresin, E. V. (2007). Factors correlated with violent video game use by adolescent boys and girls. *Journal of Adolescent Health*; 41: 77–83.
- Orr, E. S., Ross, C., & Orr, R. R. (2012). Trait and symptom differences between factions in online gaming: The vulnerable side of evil. *Computers in Human Behavior*; 28: 739–743.
- Ögel, K. 2017. *İnternet bağımlılığı. İnternetin psikolojisini anlamak ve bağımlılıkla başa çıkmak*. (3. Basım). İstanbul: İş Bankası Kültür.
- Önder A. 2004. *Ailede iletişim. Konuşarak ve dinleyerek anlaşalım*. İstanbul: Morpa.
- Pawlowska, B., Potembska, E., & Szymańska, J. 2018. Demographic and family-related predictors of online gaming addiction in adolescents. *Pol J Public Health*; 128(1), 9-13.
- Polat, O. 2017. Tüm boyutlarıyla çocuk istismarı: Tanımlar. Ankara: Seçkin Yayıncılık.
- Rehbein, F., & Baier, D. 2013. Family-, media-, and school-related risk factors of video game addiction. A 5-year longitudinal study. *Journal of Media Psychology*; 25: 118-128.
- Richards, R., McGee, R., Williams, S. M., Welch, D., & Hancox, R. J. 2010. Adolescent Screen Time and Attachment to Parents and Peers. *Arch Pediatr Adolesc Med.*; 164(3): 258–262.
- Ruiz-Casaresa, M., Trocmé, N., & Fallond, B. 2015. Supervisory neglect and risk of harm: Evidence from the Canadian Child Welfare System. *Child Abuse & Neglect*; 36: 471–480.
- Schoenmakers, T. M., Vermulst, A., Van Den Eijnden, R., & Van De Mheen, D. 2010. Online video game addiction: identification of addicted adolescent gamers. *Addiction*; 106: 205–212.
- Snodgrass, J. G., Lacy, M. G., Dengah, H. J. F., Eisenhauer, S., Batchelder, G., & Cookson, R. J. 2014. A vacation from your mind: Problematic online gaming is a stress response. *Computers in Human Behavior*; 38: 248–260.
- Snyder, M. S., & Merritt, D. H. 2015. The influence of supervisory neglect on subtypes of emerging adult substance use after controlling for familial factors, relationship status, and individual traits. *Substance Abuse*; 36: 507–514.
- Smith, L. J., Gradisar, M., & King, D. L. 2015. Parental influences on adolescent video game play: a study of accessibility, rules, limit-setting, monitoring, and cybersafety. *Cyberpsychology, Behavior and Social Networking*, 18, 273–279.
- Smyth, J. 2007. Beyond self-selection in video game play: An experimental examination

- of the consequences of massively multiplayer online role-playing game play. *Cyberpsychology Behavior*; 10(5): 717–721.
- Straus, M. A. 2006. Cross-cultural reliability and validity of the Multidimensional Neglectful Behavior Scale Adult Recall Short Form. *Child Abuse & Neglect*; 30: 1257–1279.
- Sublette, V. A. & Mullan, B. 2012. Consequences of play: A systematic review of the effects of online gaming. *Int J Ment Health Addiction*; 10: 3–23.
- Thompson, C. R. & Reba-Harrelson, L. 2013. Emerging clinical conditions. In: R. Rosner (ed.) *Clinical Handbook of Adolescent Addiction*, pp. 247-264. U.K.: Wiley-Blackwell.
- Tuğrul, B. 2014. Çocuğun gelişimini bilmek neden önemlidir? Çocuk istismarına ve ihmaline yaklaşım. Temel bilgiler içinde. Ed. O. Derman, Ankara: Akademisyen Tıp.
- Wei, H., Chen, M., Huang, P., & Bai, Y. 2012. The association between online gaming, social phobia, and depression: An internet survey. *BMC Psychiatry*; 12(92): 2-7.
- Yalçın Irmak, A., & Erdoğan, I. 2015. Genç ve erişkinlerde dijital oyun bağımlılığı: Güncel Bir Bakış. *Türk Psikiyatri Dergisi*; 26: 1-11.
- Yen, J., Yen, C., Chen, C., Chen, S., & Ko, C. 2007. Family factors of Internet addiction and substance use experience in Taiwanese adolescents. *Cyberpsychology & Behavior*; 10(3): 323-331.
- Young, K. 2009. Understanding online gaming addiction and treatment issues for adolescents. *The American Journal of Family Therapy*; 37: 355–372.