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THE INVESTIGATION OF THE RELATIONSHIP BETWEEN PSYCHOLOGICAL AND BEHAVIORAL FINDINGS AND DIGITAL GAME DEPENDENCY IN ADOLESCENTS

ERGENLERDE DİJİTAL OYUN BAĞIMLILIĞI İLE PSİKOLOJİK VE DAVRANIŞSAL BULGULAR ARASINDAKİ İLİŞKİNİN İNCELENMESİ

Öğr. Gör. Melike BAŞ

Selçuk Üniversitesi Akşehir Kadir Yallagöz Sağlık Yüksekokulu, Akşehir / Konya, e-mail: melikebas@selcuk.edu.tr

ABSTRACT

Introduction: Trends in digital games have increased due to reasons such as technological developments, increasing urbanization, fewer playgrounds. Digital games are a growing activity among adolescents. Adolescents and young adults are most interested in digital games that are users of all ages. Nowadays, the time that adolescents spend playing games is steadily increasing. It is known that digital games affect psychological, physical, social and psychological health of adolescents.

Objective: In this study, it is aimed to investigate the relation between digital game addiction and psychological and behavioral problems that can be experienced in adolescents.

Method: In the study, the articles scanned and accessed in Science Direct, Pubmed, Medline, Ulakbim and Google Academic databases were scanned in a non-systematic way using the keywords "digital game", "computer game", "behavioral", "psychological" and "dependency" .

Findings: Low self-efficacy, anxiety, low self-esteem, incoordination and shyness were found in adolescents with digital gaming addiction. Game addiction also emerges as a cause of depression, social phobia and anxiety disorder. Gaming addicts were identified as individuals who thought of social neglect, social and psychological isolation, reluctance to leisure activities, aggressive behavior, psychological stress, drop in school performance, falling in sleep quality and suicidal thoughts and less satisfaction in life. Violent games, especially violent games of adolescents, can lead to psychosocial problems such as aggression, loneliness, depression, tendency towards violence, isolation, lack of attention.

Conclusion: Adolescents use digital games as the most common entertainment tool. The intensive use of digital technology contributes to the problem of inadequate protective measures for adolescents and to the progression. It may be possible to assess the behavior of the adolescent at home and at school by co-operation between the guidance teacher-health professional and the parent-health professional. The Ministry of National Education, the Ministry of Health and the Ministries of Family and Social Policy can make arrangements nationwide by making decisions.

Keywords: Digital Gaming, Adolescence, Psychological, Behavioral, Addiction

ÖZET

Giriş: Teknolojik gelişmeler, şehirleşmenin artması, oyun alanlarının az olması gibi nedenler ile dijital oyunlara eğilim artmıştır. Dijital oyunlar, ergenler arasında giderek artan bir aktivitedir. Her yaşta kullanıcısı olan dijital oyunlara en çok ergenler ve genç erişkinler ilgi göstermektedirler. Günümüzde, ergenlerin oyun oynayarak geçirdikleri süre giderek artmaktadır. Dijital oyunların, ergenlerin psikolojik, fiziksel, sosyal ve psikolojik sağlıklarını etkiledikleri bilinmektedir.

Amaç: Bu araştırmada, ergenlerde dijital oyun bağımlılığı ile yaşayabilecekleri psikolojik ve davranışsal problemler arasındaki ilişkinin incelenmesi amaçlanmıştır.

Yöntem: Araştırmada, "dijital oyun", "bilgisayar oyunu", "davranışsal", "psikolojik" ve "bağımlılık" anahtar kelimeleri kullanılarak Science Direct, Pubmed, Medline, Ulakbim ve Google Akademik veri tabanlarında taranmış ve ulaşılan yayınlar sistematik olmayan bir biçimde taranmıştır.

Bulgular: Dijital oyun bağımlısı olan ergenlerde, düşük öz-yeterlik, anksiyete, düşük benlik saygısı, uyumsuzluk ve utangaçlık saptanmıştır. Oyun bağımlılığı aynı zamanda, depresyon, sosyal fobi ve anksiyete bozukluğunun bir nedeni olarak ortaya çıkmaktadır. Oyun bağımlısı kişiler, sosyal ihmal, sosyal ve psikolojik izolasyon, boş zaman aktivitelerine karşı isteksizlik, saldırgan davranışlar, psikolojik stres, okul performansında düşme, uyku kalitesinde düşme ve intihar düşüncesi

ile yaşamdan daha az memnun olma düşüncesi olan bireyler olarak belirlenmiştir. Ergenlerin, özellikle şiddet içeren oyunlar saldırganlık, yalnızlık, depresyon, şiddete eğilim, izolasyon, dikkat eksikliği gibi psikososyal problemlere yol açabilmektedir. Dijital oyun oynayan ergenlerde, psikolojik problemlerin yanı sıra okul başarısında azalmanın olduğu saptanmıştır.

Sonuç: Ergenler, dijital oyunları en yaygın eğlence aracı olarak kullanmaktadırlar. Dijital teknolojinin yoğun biçimde kullanılması, ergenler için koruyucu önlemlerin yetersizliği problemin oluşmasına ve ilerlemesine katkı vermektedir. Ergenler için okullarda gerçekleştirilebilecek dijital oyun bağımlılığının belirlenmesine ilişkin çalışmalar ile, buna yönelik önleme çabaları önerilebilir. Rehber öğretmen- sağlık profesyoneli ve ebeveyn- sağlık profesyoneli arasında oluşturulacak işbirliği ile ergenin evdeki ve okuldaki davranışlarının değerlendirilmesi mümkün olabilir. Milli Eğitim Bakanlığı, Sağlık Bakanlığı ile Aile ve Sosyal Politikalar Bakanlıklarının bir arada alacakları kararlar ile, ülke çapında düzenlemeler gerçekleştirilebilir.

Anahtar Kelimeler: Dijital Oyun, Ergen, Psikolojik, Davranışsal, Bağımlılık

1. INTRODUCTION

The most important developmental tools in childhood are games, cultural, psychological, physical and social contributions. It helps the children to express themselves to their friends, to improve their relations and communication skills, and to increase their social skills (Kuss, 2013).

Computer and internet make life easier in many areas (D. Gentile, 2009). Computers, the Internet and mobile devices are provided to children by parents, and children can easily access computer-based games (Kuss, 2013). More reasons for digital games, access to technology, easy access to mobile phones and access to digital games are other reasons. In addition, parent and peer influence is important for the development of attitudes and behaviors (Armsden & Greenberg, 1987). Another reason for demanding digital games is the inadequacy of playgrounds and the effect of urbanization. In recent years, it has been observed that the internet and the computer become a gaming tool, especially the adolescents spend a lot of time on computer-based games (Durkee et al., 2012; Tsitsika et al., 2014). In one study, peer influence in adolescents' digital play addiction was noted (Gunuc, 2017). Internet and digital gaming addictions are more common among adolescents. In a study based on digital gaming addiction rate among adolescents in Turkey, 10% were found to be 1 (Gunuc & Kayri, 2010). Factors related to digital game dependence can be listed as age, culture, access to technology, parental education, income level (Durkee et al., 2012; Tsitsika et al., 2014).

The fact that computer based games are connected to the internet causes the children to move away from the face-to-face communication with their friends, causing social anxiety and tension in social skills (D. Gentile, 2009).

Studies show that lack of parental control is an important factor in digital game addiction, due to the lack of a home environment. Digital play addiction causes depression, low self-esteem and anxiety in children (King, Delfabbro, & Griffiths, 2010). Digital gaming addiction is defined as the ability of the gaming individual to leave the game, constant game thinking and game play (D. Gentile, 2009).

Nowadays, the time that adolescents spend playing games is steadily increasing. It is known that digital games affect psychological, physical, social and psychological health of adolescents. In this study, it is aimed to investigate the relationship between digital game addiction and psychological and behavioral problems that can be experienced in adolescents.

2. METHOD

In the study, the articles scanned and accessed in Science Direct, Pubmed, MEDLINE, ULAKBİM and Google Academic databases were scanned in a non-systematic way using the keywords "digital game", "computer game", "behavioral", "psychological" and "dependency".

3. FINDINGS AND DISCUSSIONS

3.1. Psychological And Behavioral Findings Caused By Digital Games

Social anxiety is related to being more limited in interpersonal communication. Individuals with social anxiety choose to pursue other ways of reducing social anxiety and social relations. Children and adolescents prefer to play computer-based games with the aim of reducing social anxiety (Lo, Wang, & Fang, 2005; Weinstein et al., 2015). Studies have indicated that there is a relationship between social anxiety disorder and computer-based gaming addiction (Kuss & Griffiths, 2012; Mehroof & Griffiths, 2010). Digital play addiction causes problems such as sleeplessness, difficulty in continuing schooling, inability to participate in family programs, and difficulty in participating in school activities (Kuss & Griffiths, 2012). Zboralski and colleagues have found that the use of computers and the Internet is associated with aggression and anxiety (ZboralskiACD et al., 2009). In a survey of 2,500 people in Norway, the use of problem video games has been associated with low life satisfaction, depression, and high anxiety (Mentzoni et al., 2011). In the rewarded players after violent games, it was determined that the players who increased the aggressive thoughts and aggressive behaviors and the ones punished after the violent games increased the hostile emotions but did not increase the aggressive thinking and behavior (Carnagey & Anderson, 2005). In a different study of violent digital games, it has been reported that repeated exposure to violent video games causes individuals to increase their aggressive behavior through changes in cognitive and personality factors associated with depersonalization (Bartholow, Sestir, & Davis, 2005). Adolescents who were exposed to too much video game violence reported that they were more aggressive, frequently engaged in discussion with teachers, reported that physical brawls did not participate much, and that they performed worse at school (D. A. Gentile, Lynch, Linder, & Walsh, 2004). Bullying and physical fighting tendencies are more common in adolescents who play violent video games (Olson et al., 2009).

In a study with adolescents, the playing of a violent video game for men led to more aggression than watching television violence (Polman, De Castro, & van Aken, 2008). In a study performed on adolescents, it was observed that the nervous system interfered with magnetic resonance imaging due to a short-term violent video game, according to nonviolent video game (Wang et al., 2009). Findings show that violent games have both short- and long-term consequences, as well as a reduction in social behavior (Greitemeyer & Mügge, 2014). In more than one hour of consoles and adolescents playing digital games, more attention deficit and hyperactivity disorder symptoms have been observed. In addition, over-spending time for digital games has caused school problems in these individuals (Greitemeyer & Mügge, 2014). In the 8-18 age group, which is a digital game addict, children and adolescents were found to have low school grades, attention problems and comorbidities (D. Gentile, 2009). It has been found out that video games have caused attention problems in studies conducted with 3034 children and adolescents in Singapore (D. A. Gentile, Swing, Lim, & Khoo, 2012). There has been an increase in hostile emotions in university students playing violent video games (Hasan, Bègue, Scharkow, & Bushman, 2013). In a study of adolescents playing violent digital gaming, they observed the suppression of unwanted thoughts and behaviors by magnetic resonance imaging. In adolescents who play violent games in short vaults, it has been determined that there is desensitization towards violence (Hummer et al., 2010). Somatization, paranoid, phobic, anger, obsessive, interpersonal susceptibility and depression scores were found to be higher in adolescents aged 14-18 who played problem video games (Starcevic, Berle, Porter, & Fenech, 2011).

The meta-analysis study proved that exposure to violent video games caused aggressive behavior. Individuals have reported that empathy is reduced, increased in aggressive behavior,

and having an aggressive conception. It has been determined that the problems that are developing are not affected by gender and eastern-western culture (Anderson et al., 2010). Ferguson's meta-analysis argues that violent video games do not constitute aggressive behavior in individuals (Christopher John Ferguson, 2007). The study of the same researcher for three years suggests that digital games have no effect on aggression (Christopher J Ferguson, San Miguel, Garza, & Jerabeck, 2012). In adolescents who spend too much time on digital games, low academic achievement has been identified (Anand, 2007; Sharif & Sargent, 2006). In a study of children and adolescents in Taiwan, it has been suggested that digital play addiction is associated with distress, family function, and social skill level. Digital gaming addiction is negatively associated with academic achievement (Chiu, Lee, & Huang, 2004). It has been found that playing limited computer games among adolescents is related to adequate sleep (King et al., 2013; Sharif & Sargent, 2006). Children and adults who play digital games spend part of their time as sedans (Fullerton, Taylor, Dal Grande, & Berry, 2014).

It is predicted that digital gaming addiction may lead to addictions related to substance use (Saquib et al., 2017). Adolescents who are addicted to digital gaming view digital games as a way of escaping cognitive reality (Taquet, Romo, Cottencin, Ortiz, & Hautekeete, 2017).

4. CONCLUSIONS AND RECOMMENDATIONS

It is very important to take some precautions in order to prevent addiction because of the excessive time period of violent games and adolescents to digital games. Health professionals, parents and teachers should be informed about the negative effects of digital games to increase their awareness, since the adolescent's game addiction situation can be observed by the teacher or the parent. The presence of increased psychological and behavioral symptoms of adolescence due to play addiction may require psychiatric help.

Adolescents use digital games as the most common entertainment tool. The intensive use of digital technology contributes to the problem of inadequate protective measures for adolescents and to the progression. Efforts to prevent digital gaming addiction that can be implemented in schools for adolescents can be suggested with efforts to prevent this. It may be possible to assess the behavior of the adolescent at home and at school by co-operation between the guidance teacher-health professional and the parent-health professional. The Ministry of National Education, the Ministry of Health and the Ministries of Family and Social Policy can make arrangements nationwide by making decisions.

REFERENCES

Anand, V. (2007). A study of time management: The correlation between video game usage and academic performance markers. Cyberpsychology & behavior, 10(4), 552-559.

Anderson, C. A., Shibuya, A., Ihori, N., Swing, E. L., Bushman, B. J., Sakamoto, A., . . . Saleem, M. (2010). Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries: A meta-analytic review. Psychological bulletin, 136(2), 151.

Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. Journal of youth and adolescence, 16(5), 427-454.

Bartholow, B. D., Sestir, M. A., & Davis, E. B. (2005). Correlates and consequences of exposure to video game violence: Hostile personality, empathy, and aggressive behavior. Personality and Social Psychology Bulletin, 31(11), 1573-1586.

Carnagey, N. L., & Anderson, C. A. (2005). The effects of reward and punishment in violent video games on aggressive affect, cognition, and behavior. Psychological science, 16(11), 882-889.

Chiu, S.-I., Lee, J.-Z., & Huang, D.-H. (2004). Video game addiction in children and teenagers in Taiwan. Cyberpsychology & behavior, 7(5), 571-581.

Durkee, T., Kaess, M., Carli, V., Parzer, P., Wasserman, C., Floderus, B., . . . Bobes, J. (2012). Prevalence of pathological internet use among adolescents in Europe: demographic and social factors. Addiction, 107(12), 2210-2222.

Ferguson, C. J. (2007). The good, the bad and the ugly: A meta-analytic review of positive and negative effects of violent video games. Psychiatric Quarterly, 78(4), 309-316.

Ferguson, C. J., San Miguel, C., Garza, A., & Jerabeck, J. M. (2012). A longitudinal test of video game violence influences on dating and aggression: A 3-year longitudinal study of adolescents. Journal of psychiatric research, 46(2), 141-146.

Fullerton, S., Taylor, A. W., Dal Grande, E., & Berry, N. (2014). Measuring physical inactivity: do current measures provide an accurate view of "sedentary" video game time? Journal of obesity, 2014.

Gentile, D. (2009). Pathological video-game use among youth ages 8 to 18: a national study. Psychological science, 20(5), 594-602.

Gentile, D. A., Lynch, P. J., Linder, J. R., & Walsh, D. A. (2004). The effects of violent video game habits on adolescent hostility, aggressive behaviors, and school performance. Journal of adolescence, 27(1), 5-22.

Gentile, D. A., Swing, E. L., Lim, C. G., & Khoo, A. (2012). Video game playing, attention problems, and impulsiveness: Evidence of bidirectional causality. Psychology of Popular Media Culture, 1(1), 62.

Greitemeyer, T., & Mügge, D. O. (2014). Video games do affect social outcomes: A meta-analytic review of the effects of violent and prosocial video game play. Personality and Social Psychology Bulletin, 40(5), 578-589.

Gunuc, S. (2017). Peer Influence in Internet and Digital Game Addicted Adolescents: Is Internet/Digital Game Addiction Contagious? International Journal of High Risk Behaviors and Addiction, 6(2).

Gunuc, S., & Kayri, M. (2010). The profile of internet dependency in Turkey and development of internet addiction scale: study of validity and reliability. Hacettepe University Journal of Education, 39, 220-232.

Hasan, Y., Bègue, L., Scharkow, M., & Bushman, B. J. (2013). The more you play, the more aggressive you become: A long-term experimental study of cumulative violent video game effects on hostile expectations and aggressive behavior. Journal of Experimental Social Psychology, 49(2), 224-227.

Hummer, T. A., Wang, Y., Kronenberger, W. G., Mosier, K. M., Kalnin, A. J., Dunn, D. W., & Mathews, V. P. (2010). Short-term violent video game play by adolescents alters prefrontal activity during cognitive inhibition. Media Psychology, 13(2), 136-154.

King, D. L., Delfabbro, P. H., & Griffiths, M. D. (2010). Recent innovations in video game addiction research and theory. Global Media Journal: Australian Edition, 4(1), 1-13.

King, D. L., Gradisar, M., Drummond, A., Lovato, N., Wessel, J., Micic, G., . . . Delfabbro, P. (2013). The impact of prolonged violent video-gaming on adolescent sleep: an experimental study. Journal of sleep research, 22(2), 137-143.

Kuss, D. J. (2013). Internet gaming addiction: current perspectives. Psychology research and behavior management, 6, 125.

Kuss, D. J., & Griffiths, M. D. (2012). Online gaming addiction in children and adolescents: A review of empirical research. In: Akadémiai Kiadó, co-published with Springer Science+ Business Media BV, Formerly Kluwer Academic Publishers BV.

Lo, S.-K., Wang, C.-C., & Fang, W. (2005). Physical interpersonal relationships and social anxiety among online game players. Cyberpsychology & behavior, 8(1), 15-20.

Mehroof, M., & Griffiths, M. D. (2010). Online gaming addiction: the role of sensation seeking, self-control, neuroticism, aggression, state anxiety, and trait anxiety. Cyberpsychology, behavior, and social networking, 13(3), 313-316.

Mentzoni, R. A., Brunborg, G. S., Molde, H., Myrseth, H., Skouverøe, K. J. M., Hetland, J., & Pallesen, S. (2011). Problematic video game use: estimated prevalence and associations with mental and physical health. Cyberpsychology, behavior, and social networking, 14(10), 591-596.

Olson, C. K., Kutner, L. A., Baer, L., Beresin, E. V., Warner, D. E., & Nicholi II, A. M. (2009). M-rated video games and aggressive or problem behavior among young adolescents. Applied Developmental Science, 13(4), 188-198.

Polman, H., De Castro, B. O., & van Aken, M. A. (2008). Experimental study of the differential effects of playing versus watching violent video games on children's aggressive behavior. Aggressive behavior, 34(3), 256-264.

Saquib, N., Saquib, J., Wahid, A., Ahmed, A. A., Dhuhayr, H. E., Zaghloul, M. S., . . . Al-Mazrou, A. (2017). Video game addiction and psychological distress among expatriate adolescents in Saudi Arabia. Addictive Behaviors Reports, 6, 112-117.

Sharif, I., & Sargent, J. D. (2006). Association between television, movie, and video game exposure and school performance. Pediatrics, 118(4), e1061-e1070.

Starcevic, V., Berle, D., Porter, G., & Fenech, P. (2011). Problem video game use and dimensions of psychopathology. International Journal of Mental Health and Addiction, 9(3), 248-256.

Taquet, P., Romo, L., Cottencin, O., Ortiz, D., & Hautekeete, M. (2017). Video Game Addiction: Cognitive, emotional, and behavioral determinants for CBT treatment. Journal de Thérapie Comportementale et Cognitive, 27(3), 118-128.

Tsitsika, A., Janikian, M., Schoenmakers, T. M., Tzavela, E. C., Olafsson, K., Wójcik, S., . . . Richardson, C. (2014). Internet addictive behavior in adolescence: a cross-sectional study in seven European countries. Cyberpsychology, behavior, and social networking, 17(8), 528-535.

Wang, Y., Mathews, V. P., Kalnin, A. J., Mosier, K. M., Dunn, D. W., Saykin, A. J., & Kronenberger, W. G. (2009). Short term exposure to a violent video game induces changes in frontolimbic circuitry in adolescents. Brain Imaging and Behavior, 3(1), 38-50.

Weinstein, A., Dorani, D., Elhadfi, R., Bukovza, Y., Yarmulnik, A., & Dannon, P. (2015). Internet addiction is associated with social anxiety in young adults. Annals of Clinical Psychiatry, 27(1), 4-9.

ZboralskiACD, K., OrzechowskaDEF, A., TalarowskaDE, M., DarmoszAB, A., JaniakGF, A., JaniakGF, M., . . . GałeckiADE, P. (2009). The prevalence of computer and Internet addiction among pupils Rozpowszechnienie uzależnienia od komputera i Internetu. Postepy Hig Med Dosw.(online), 63, 8-12.