A study on Internet Gaming Addiction and its Relation to Aggression and ADHD

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Abstract

This research is conducted to investigate the association between online game to aggression and ADHD, known as the psychological characteristics associated with the risk of online game addiction among the population. The findings of this research have revealed an intriguing profile that shows that some psychological features such as aggression and ADHD (Attention-Deficit Hyperactivity Disorder) can predispose certain people to becoming addiction to online gaming. This research would improve our understanding of online risk factors in terms of aggression and ADHD.

Keywords: Internet addiction, Aggression, ADHD (Attention-Deficit Hyperactivity Disorder)

Introduction

Throughout the 2000s, video gaming became common, although research on the addiction to Internet gambling indicate the negative effects, prevalence and related risk factors of excessive gambling. Study on online gaming addiction has grown both in quantity and in consistency in recent years. Gaming dependency study dates back to 1983, when the first article found that video gaming addiction is an issue for students. Shortly afterward, Shotton (1989) conducted the first observational study on gaming addiction, focused on self-reports from young male players who said they were "hooked" in their games. The early research had a lack of standardized psychometric methods for gaming addiction. Analysis reveals, nevertheless, that self-reports align with structured steps. Then additional experiments were performed in the 1990s, which initially measured gaming dependency on the pathology standards stipulated in Diagnostic and Statistical Manual on Mental Disorders (DSM).

Internet Gaming Addiction

Video game players could achieve educational benefits (Freitas & Griffiths, 2007) as well as social and therapeutic benefits (Gentile et al., 2009). But evidence suggests that playing video games excessively could become addictive (Griffith, 2002), particularly playing online video games where the game never ends and there is a 24-7 possibility. The rising prevalence of social networking and video games allows many more addicts. Gaming dependency has become a global societal problem that impacts families around the world as well as countries like China, U.S.A. and Canada. Online addiction may have a detrimental effect on students' desire to leave school, damage friendships and family relationships (Griffiths, 2002), youth delinquency, and suicide. The players who suffer from single, stress and violence are more likely than stable players to be addicted to the game (Jeong, Kim & Lee, 2016).

Considering the increasing public health epidemic of addictive sports, the potential to enact or improve government legislation, analogous to alcohol consumption, gambling and substance addiction, is raised (Park & Ahn 2010. But in the western world rules are mostly restricted to ranking schemes assessing content and age suitability rather than improper usage, which make rating-based attempts very unacceptable. South Korea, China and few Asian countries have created government policies on issue gaming. The Entertainment Software Rating Board (ESRB) rating systems are used, for example, in Europe, the Pan European Game Information (PEGI) and North America (Laczniak et al. 2017).

Internet Gaming Addiction and Aggression

Aggression is an active or concealed social contact, often negative, with the intention of causing injury to another person. It can happen reactively or without aggression. Aggression in humans can be triggered by many causes, including agitation because of blocked targets to contempt. More people have access to video gaming with the rise of the Internet. Online gaming is a common entertainment type which affects players' quality of life (Shen & Williams, 2011). A particular type of game involving violent online gaming (VOGE) worries academics, regulators and the general public considerably. Teens grow into adulthood and start displaying problem habits or negative feelings. The prefrontier development remains incomplete in which regulates anxiety and frustration, plays a significant role in the actions of adolescents. Adolescents also emit testosterone, the male hormone, larger than in the juvenile phase, and this hormone promotes aggression and indignation. Aggressive behavior is meant to injure or damage others and involves angry feelings, contributing to offensive behavior (Duke et al., 2014).

Aggression increases during puberty and gradually declines slowly as adulthood begins. Adolescent hostility has been documented to be related to antisocial activity, such as delinquency, alcohol and abuse as well as criminality and school maladjustment. Families influence socialization of teenagers, and may also play an important role in the anti-social and criminal behavior of adolescents. Parents play the most important role in the socialization process of teenagers. It is understood that contact between teenagers and parents is positively related to success, self-esteem, and psychological wellbeing and negatively linked to isolation, depression, substance addiction and violence. Open and unrestricted contact between parents and children tends to discourage criminal conduct, while closed and repressive communication has a detrimental impact on the child and contributes to crime (Cheung CS, Pomerantz, 2012).

Due to the quick growth of information and communication technologies in recent years, high-speed Internet has made Internet gaming popular. The internet is now part of children and adults' entertainment habits, but Internet gaming dependency can lead to a number of social, physical and psychological problems. One research has demonstrated that the IGD induces the same modifications in the brain as those caused by alcohol and drug addiction. In self-recognition, action planning, information integration and the store of feelings, instincts and wishes, the front lobe plays the most important role. It evolves progressively between the ages of 12 and 20 at most; such brain changes thus impact teenagers rather than adults. Middle school students are the most popular Internet gaming users. An Internet survey found that teens are the largest (30.6 percent) of all age groups in the high-risk overdependence group. To date, IGD risk factors include fatigue, depression, anxiety, impulsiveness, aggressiveness and financial status. Aggression is recognized as one of IGD's origins (Brooks et al., 2015). A common concern is that playing aggressive online games can affect violence on both the short and the long term (Anderson & Bushman 2002) through cognitive and emotional effects (Anderson and others 2010).

Similar to the general model of violence, individuals addicted to intensely violent video games appear to show offensive cognitions and convictions. Aggression is characterised as any actions directed at another person with an imminent intention of harm (Anderson & Bushman, 2002). Aggression is conditioned by factors in personality (e.g. self-control) and circumstance (e.g. media attention to violence). Persons with personality characteristics such as neuroticism, depression, and poor self-control are more likely to develop aggression (Teng & Liu, 2013). In light of Young's (1998) study, which postulated that Internet Addiction is an impulse control condition (as described by DSM-IV criteria), the interrelationship of internet use and self control and violence can be explained. Specifically, the long-term use of the Internet and the unnecessary spending of time playing video games may lead to a reduction in self-control, such as impulse-control issues. Immature people have trouble limiting their efforts to fulfill their needs, which makes them more aggressive. In brief, the literature indicates that online violent games can increase the likelihood of violence through the use of scenarios and personality variables to intensify rage and animosity (Anderson & Bushman 2002).

Internet Gaming Addiction and ADHD

Attention-deficit/hyperactivity disorder (ADHD) is a lifelong disease that affects thousands of children and continues to develop into adulthood. ADHD is a mixture of persistent issues such as attention support, hyperactivity and emotional instability. Few populations seem to be at greater risk of developing video game addiction than others, such as men, younger individuals or people with ADHD (Ho et al., 2014). ADHD is a common adult neurodevelopmental condition in children. The inherited predisposition to neurobiological imbalance such as behavioral inhibition, self-regulation and self-control contributes to everyday activity difficulties. Symptoms usually include hyperactivity, impulsiveness which carelessness and can make it impossible for people with ADHD to handle and respond successfully to the complex demands of life. The actual reported prevalence rate of adult ADHD for individuals aged 18–44 is approximately 4% in the USA (25,26). Luman, Tripp, and Scheres (Metin et al., 2015) suggested that changed reward sensitivity could contribute to addictive, impulsive and compulsive behavior for individuals with ADHD. Research indicates that individuals with ADHD have less movement, specifically in the vision, sound, and touch regions, in cortical regions correlated with concentration, impulse regulation and stimulus integration, and greater perception of incoming stimuli, which could sensitivize them particularly to enhancing stimuli in video games. This along with attention deficiencies, will make it difficult for people with THD to control their time and actions, which may result in difficulties handling video game play behavior. People with ADHD may prefer limited immediate reinforcement over large delays (Jelenchick et al., 2015), which implies that they may be more affected than other persons by reinforcement contingencies in video games, and that they may be at a greater danger of addiction to videogames, particularly if they play games more strongly. Consistent with neurobiological studies, a correlation between exposure to video games and ADHD is apparent. Higher Internet addiction rates have been observed in both unattended and hyperactive communities, particularly in internet video game activity, relative to non-ADHD (Ko el al, 2009). Furthermore, self-reported internet gaming addiction in children diagnosed with ADHD studies have demonstrated that there is a correlation between ADHD and video game addiction, no one has tested whether the link between ADHD symptoms and video game addiction is based upon the degree of strengthening of game type chosen or most frequencies.

Scope of the Study

The constructions considered for research work are particularly influential constructs for earlier research, but other interventions can have a stronger effect on the reduction of dependency by integrating different systems. The severity of the ADHD symptoms positively forecast the severity of the video game addiction symptoms. This research indicates that persons with a greater severity of the ADHD symptoms could be more likely to develop problematic play behaviors. The kinds of difficulties people with ADHD

frequently face time management issues, priority setting, etc in addition to the fact that ADHD itself is a risk factor for addiction, can raise the risk of trouble play. However, it can be said that those who play a lot of internet games will have attention deficit problems and are more aggressive.

The supportive relationship between violence and addiction to online gaming indicates that violent behavior can make it easier to establish online addiction. A variety of studies have shown that young men tend to play violent games online and offline rather than peaceful ones. As the feeling of searching, if game aggression is rewarding to those who participate, it implies that the action is replicated and contributes to too much or too much addiction in certain individuals. Thus, higher levels of aggression are correlated to the behavioral objectives.

References

Anderson, C. A., & Bushman, B. J. (2002). Human aggression. Annual Review of Psychology, 53(1), 27-51.

Brooks F, Magnusson J, Klemera E, Chester K, Spencer N, Smeeton N. (2015) HBSC England National Report: health behaviour in school-aged children (HBSC): World Health Organization collaborative cross national study. Available from: https://www.researchgate.net/publication/282857316_HBSC_England_National_Report-2015.

Cheung CS, Pomerantz EM (2012). Why does parents' involvement enhance children's achievement? The role of parent-oriented motivation. J Educ Psychol.;104:820–832.

Duke SA, Balzer BW, Steinbeck KS. (2014) Testosterone and its effects on human male adolescent mood and behavior: a systematic review. J Adolesc Health.;55:315–322.

Freitas, S. D., & Griffiths, M. (2007). Online gaming as an educational tool in learning and training. British Journal of Educational Technology,38(3), 535-537.

Gentile, D. A., Anderson, C. A., Yukawa, S., Ihori, N., Saleem, M., Ming, L. K.Sakamoto, A. (2009). The Effects of Prosocial Video Games on Prosocial Behaviors: International Evidence From Correlational, Longitudinal, and Experimental Studies. Personality and Social Psychology Bulletin,35(6), 752-763.

Griffiths, M. D. (2002). Videogame Addiction: Fact or Fiction? Childrens Learning in a Digital World,85-103.

Ho RC, Zhang MW, Tsang TY, Toh AH, Pan F, Lu Y, Cheng C, Yip PS, Lam LT, Lai CM, et al. (2014) The association between internet addiction and psychiatric co-morbidity: a meta-analysis. BMC Psychiatry. 14:183.

Jelenchick LA, Eickhoff J, Zhang C, Kraninger K, Christakis DA, Moreno MA.(2015) Screening for adolescent problematic internet use: validation of the problematic and risky internet use screening scale (PRIUSS). Acad Pediatr.;15(6):658–65.

Jeong, E. J., Kim, D. J., & Lee, D. M. (2016). Why Do Some People Become Addicted to Digital Games More Easily? A Study of Digital Game Addiction from a Psychosocial Health Perspective. International Journal of Human–Computer Interaction,33(3), 199-214.

Ko CH, Yen JY, Chen SH, Yang MJ, Lin HC, Yen CF.(2009) Proposed diagnostic criteria and the screening and diagnosing tool of internet addiction in college students. Compr Psychiatry. 50(4):378–84.

Laczniak, R. N., Carlson, L., Walker, D., & Brocato, E. D. (2017). Parental Restrictive Mediation and Childrens Violent Video Game Play: The Effectiveness of the Entertainment Software Rating Board (ESRB) Rating System. Journal of Public Policy & Marketing,36(1), 70-78.

Metin O, Saracli O, Atasoy N, Senormanci O, Kardes VC, Acikgoz HO, Demirci E, Ayan UB, Atik L, Tahiroglu AY.(2015) Association of internet addiction in high school students with ADHD and tobacco/alcohol use. [Turkish]. Dusunen Adam. 28(3):204–12.

Park, B., & Ahn, J. (2010). Policy analysis for online game addiction problems. System Dynamics Review, 26(2), 117-138.

Shen, C., & Williams, D. (2011). Unpacking time online: Connecting internet and massively multiplayer online game use with psychosocial well-being. Communication Research, 38(1), 123-149.

Shotton M. (1989) Computer addiction? A study of computer dependency. London: Taylor and Francis.

Teng, Z., & Liu, Y. (2013). The role of neuroticism in the relation between self-esteem and aggressive emotion among 1085 Chinese adolescents. Psychology, 4, 729-735.

Violent video game effects on aggression, empathy, and prosocial behavior in eastern and western countries: a meta-analytic review. Psychological Bulletin, 136(2), 151-173.

Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. Cyberpsychology & Behavior, 1(3), 237-244.