Balancing between prejudice and fact for Gaming Disorder: Does the existence of alcohol use disorder stigmatize healthy drinkers or impede scientific research?

Commentary on "Scholars' open debate paper on the World Health Organization ICD-11 Gaming Disorder proposal"

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The inclusion of Gaming Disorder (GD) criteria in the 11th Revision of the International Classification of Diseases (ICD-11) beta draft was recently criticized, and an argument was made for its removal to "avoid a waste of public resources." However, these misleading statements are believed to be based on under estimation of this ever-growing problem. Such claims may endanger public health and the psychosocial well-being of affected individuals. Thus, the seriousness of the problem was briefly emphasized in our response paper. We provided an overview of how debates of this kind were developed in our region. In addition, we addressed the arguments made on research and children's rights. The accusation that GD exerts negative impacts on children's freedom and stigmatizes healthy gamers may arise from a false belief that this new digital media is benign or not addictive. Such statements could be true in some, but not all, cases. Unwillingness to recognize the addictive potential of gaming, as well as insistence on treating GD simply as an individual problem, are reminiscent of the era in which alcoholism was viewed as a personality problem. These dangerous views place affected individuals at greater health risk and further stigmatize them. Formalization of the disorder is also expected to help in standardization of research and treatment in the field. The inclusion of GD in the upcoming ICD-11 is a responsible step in the right direction.

Keywords: Gaming Disorder, ICD-11, diagnosis, behavioral addiction, Internet game addiction

INTRODUCTION

The debate paper of Aarseth et al. (2016) arguing that the introduction of Gaming Disorder (GD) in the 11th Revision of the International Classification of Diseases (ICD-11) will cause "significantly more harm than good" raises many concerns. The authors seem to overlook the harms of pathological gaming with a groundless statement that "patients can be hard to find." On the contrary, the number of people with gaming problems is steadily increasing (Korea Creative Content Agency, 2016). Although the harms of GD have become almost common knowledge in the field, we would like to address this issue again briefly.

Second, we will discuss research issues related to the formalization of GD.

Finally, we will discuss issues regarding "moral panic," "stigma," or "rights of children" (Aarseth et al., 2016). Our experience in Korea, where Internet gaming problems are especially prevalent, will be shared.

THE HARMFUL CONSEQUENSES OF GD ARE CLEAR AND SHOULD NOT BE OVERLOOKED

One of the critiques expressed by Aarseth et al. (2016) regarding the current research knowledge is that the magnitude of the problem is unclear. Our response to this critique is "How important is this factor in formalizing a mental disorder?" One of the most conservative estimates of problematic gaming, cited recently in a news article from *The New York Times*, suggested that "at most" 1% of game players are affected by GD (Ferguson & Markey, 2017). This percentage is equivalent to the presence of schizophrenia. By the same logic, schizophrenia should not be included in the ICD-11 as a mental disorder.

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Low prevalence does not necessarily mean that behavior cannot be attributed to a disorder. Even if the incidence is 0.3% or 1%, patients deserve adequate treatment. The size of the problem is secondary to its seriousness. The following factors should also be considered in the formalization of a mental disorder: the extent of damage to psychosocial functioning, whether recovery requires clinical attention, the magnitude of the threats to public health, and the benefits of curtailing the problem.

The negative impacts of GD on physical health may include obesity due to inactivity, death from deep-vein thrombosis, or increased risk of accidents (Ayers et al., 2016; Hull, Draghici, & Sargent, 2012; Lee, 2004; Vandewater, Shim, & Caplovitz, 2004). Excessive gaming also exerts detrimental effects on psychosocial well-being. It may lead to decreased sleep and daytime performance, increased familial disputes, impulsivity, depression, suicide risk, and other related issues (Achab et al., 2011; Gentile et al., 2011; Messias, Castro, Saini, Usman, & Peeples, 2011; Wei, Chen, Huang, & Bai, 2012; Weinstein & Weizman, 2012).

Not only is GD an immediate threat to health but, when gaming problems are not properly managed, GD may also result in significant loss of future opportunities related to career or interpersonal development. Particularly, affected children may not develop to their full potentials due to the loss of opportunities to learn and develop valuable skills.

We think that the authors' arguments that the formalization of GD will repress children's freedom and heighten tensions between children and parents imply a stereotype that gaming is solely a children's matter (Aarseth et al., 2016). However, the average ages of gamers and the most frequent game buyers are actually 35 and 38 years, respectively (Entertainment Software Association, 2016). Therefore, gaming problems are not limited to children and adolescents.

The situation in South Korea demonstrates that gaming problems are not only confined to children and adolescents but also affect parents. Almost every child-abuse mortality case that received media coverage in 2016 involved parents with gaming addiction. They neglected their roles as parents in favor of gaming, and punished their children for interferences (Kim, 2016). Considering the increasing popularity of online and mobile gaming around the globe (Entertainment Software Association, 2016; Korea Creative Content Agency, 2015), these problems are not confined to Eastern Asia.

CONSENSUS ISSUES IN RESEARCH: MORE REASON TO DEVELOP UNIFORM CRITERIA

The main critique repeated throughout the paper emphasizes the lack of both clinical data and consensus regarding GD. We also agree that these are major limitations of existing research. In a sense, however, the very dearth of clinical data highlights the necessity of formalization. Without a proper diagnostic system, how is it possible to capture clinical samples screened by standardized criteria in the first place? The use of the proposed GD criteria in ICD-11 is expected to promote a higher quality of research than the current use of

unstandardized, mostly self-developed instruments for evaluating problematic gaming.

The World Health Organization (WHO) emphasizes the importance of the ICD-11 in providing "a common language for reporting and monitoring diseases" (World Health Organization, 2017). Clinical data collected based on a "common language" would be more consistent and comparable across different age groups and countries, therefore, producing more solid knowledge about the problem under debate. Furthermore, many other considerations, such as validity or specificity of the issue, can be more effectively addressed if criteria are standardized.

The evidence accumulated from confirmatory studies using GD criteria may help to set specific directions for new exploratory studies. Such evidence would guide us more explicitly in what constitutes and what does not constitute the pathology of problematic gaming. Although the GD criteria proposed in the ICD-11 do not include the familiar criteria of tolerance, withdrawal, or deceiving, as does the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), a confirmatory approach also has the potential to clarify criteria for overreliance on substance use and gambling. If confirmatory research suggests that findings are not in line with the theoretical model of substance use and gambling disorders, it would imply the need for exploratory research.

Although we acknowledge that there must be further research that explores the boundaries between normal and pathological gaming by challenging the confirmatory framework imposed on the formalization of the disorder, it should be highlighted that confirmatory and exploratory approaches are not mutually exclusive in research. These two analytic approaches can concurrently guide future research in this area.

MORAL PANIC AND CHILDREN'S RIGHT: HOW THE DEBATE DEVELOPED IN SOUTH KOREA

The presence of moral panic around gaming, which the authors pointed out, may be valid to a certain extent, but is not verified. Where is empirical evidence for the presence of moral panic? Furthermore, formalization of the disorder is not meant to suggest that gaming can only be harmful, nor that all gamers are pathological. If people misinterpret this intent, such misperceptions should be addressed through public education and health promotion campaigns, rather than through blocking the formalization of the disorder. The decision whether or not to formalize a mental disorder should not be made based on a fear of potential miscommunication.

The authors cautioned that the proposed system would identify too many false-positive cases. On the contrary, we are concerned about the instance of false-negative cases. Without a formalized diagnostic system, how can those who suffer from severe impairments caused by problematic gaming be identified, and where would they seek legitimate help? The absence of a proper diagnosis will continue to place affected people and their families outside of the public health system, untreated, and helpless.

In contrast, there have been strong and active voices coming from the gaming industry against the formalization and prevention of GD. In South Korea, the government was compelled to respond to their growing demands to mitigate the negative consequences, and implemented a series of policies to alleviate gaming problems. Since 2006, annual nationwide surveys about Internet-related problems have been conducted, but these have only briefly covered gaming issues. In 2011, the Korea Creative Contents Agency (KCCA) was designated as the sole conductor of the national annual surveys for gaming problems. However, after reporting as problematic, only 5.6% of gamers who play an average of more than 8 hr/day, the KCCA was criticized for minimization of the problem (Lee, Lee, Lee, & Kim, 2017). Suspicion of the underreport was intensified due to the fact that the KCCA is affiliated with the Ministry of Culture, Sports, and Tourism, which is in charge of promoting the gaming industry.

The gaming industry is a large business sector in South Korea; thus, the "Shutdown" Bill was only able to pass the legislature in April 2011 after numerous previous attempts (Korea Creative Content Agency, 2015). This legislation forbids the provision of gaming services to minors under the age of 16 between midnight and 6 AM. The "Shutdown" Law soon faced strong opposition by the gaming industry and a constitutional appeal was filed prior to its enactment in November 2011. The constitutionality of the new act was questioned as to whether it infringed upon the occupational freedom of the game providers, the general behavioral freedom of children under 16 years and the rights of parents.

It took two and half years for the constitutional court to reach a final decision. The court ruled seven to two that the new law was in accordance with the constitution. It stated that online gaming per se may not be an offense; however, considering the high Internet usage rate among adolescents, the difficulty of spontaneous discontinuation (i.e., the addictive nature) of online gaming and the negative consequences of gaming addiction, limiting access during the stated hours for children under the age of 16 was not an overregulation. It also ruled that the balance between the legal benefits and the losses is well-maintained when considering the important public interest of protecting children's health and preventing the development of Internet gaming addiction (Lee et al., 2017).

In 2013, the Comprehensive Addiction Management Bill, enforcing and supporting prevention and management services for GD along with gambling, alcohol, and illicit substances, was proposed. A poll conducted among 1,000 adults in early 2014 revealed that 87.2% of those surveyed believed that Internet gaming has an addictive property and, while 84.2% were in favor of this new bill, only 12.2% opposed it (Lee & Park, 2014).

The new legislative proposal again sparked an intense controversy over GD in Korean society. Y. S. Lee, a psychiatrist, wrote a letter to the editor of a major daily newspaper arguing that the new bill would "stigmatize" children and adolescents as "addicts." He contended that gaming problems could even be natural transitional developmental phenomena. He further argued that gaming also had positive aspects, and that the legislative effort should be stopped before further scientific evidence accumulated from standardized and long-term studies (Lee, 2013). The article by Aarseth et al. (2016) strongly resembled Lee's arguments.

Prompted by Lee's claims, Y. C. Shin, the president of the Korean Academy of Addiction Psychiatry at the time, wrote a response letter to the same newspaper to emphasize that the prior article by Lee was not representative of the majority's opinion. He first pointed out an undisclosed conflict of interest: Lee had been running a treatment center for gaming, sponsored by the Gaming Culture Foundation, which is funded by the gaming industry. Shin also asserted that GD is a definite risk factor to health, and affirmed his support of the new bill (Shin, 2013).

Despite many efforts, the bill failed to pass. Still, the gaming industry is redoubling its efforts to prevent any legislative movements that violate their interests. B. K. Kim, the former president of the game company that produced the world's first report on mortality by gaming (Lee, 2004), recently became a lawmaker and openly expressed his resolve to abolish gaming regulations (Lee, 2016).

Although possible negative ramifications from the formalization of GD cannot be ruled out completely, we see greater potential for public benefits as a result of this initiative. For example, the general public will have access to a more reliable source of information regarding problematic gaming. In the past, long playing hours have been conflated with gaming addiction by the public, and those affected by problematic gaming were often referred to paraprofessionals or even non-professionals for support services. Due to inconsistent information and misguidance, confusion and irrational fears about gaming have also grown. Thus, the formalization of GD may even reduce "moral panic."

Finally, we are fully aware of and respect children's rights. Introduction of the formalized system may enable the provision of more systematic education about healthy gaming, at least as it is a product of streamlining available scientific evidence. "Gaming addiction camps," mentioned as an extreme case of children's rights violation, are reported in China and are operated by non-professionals. We do not believe that the ICD-11 formalization will lead other nations to follow China's extreme example. On the contrary, it may lead to the reduction of such violations of children's rights by fostering systematic care. With the formalization of the disorder by an internationally recognized authority like the WHO, inappropriate treatment models would be eliminated gradually, since such problems could be assessed and managed by allied healthcare professionals in the best interest of the patients.

CONCLUSIONS

The debate about GD is not likely to be settled soon, particularly considering the vast array of interest groups involved in this issue. However, any attempts to underestimate or deny gaming problems raise serious concerns from public health and ethical perspectives. The effort to situate gaming problems in the framework of tensions between parents and children has been, thus far, one of the most successful tactics of the gaming industry. However, "generational conflict" and "stigmatization" are not the most concerning issues for GD. Those arguments cloud the core issue, which concerns the devastating consequences of GD that require prompt reactions from responsible members of society.

We agree with the view that most gamers are healthy and enjoy gaming as a leisure activity. However, this is not the case for every game player. The reluctance to admit the obvious addictive potentials of gaming, as well as the treatment of GD as an individual problem, remind us of the era when alcoholism was viewed as a "personality problem." This perspective will not help individuals in need, but will only contribute to the stigma that unhealthy gamers are "addicts" due to personal fault. We believe that the WHO is taking a timely and responsible step in the right direction.

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REFERENCES

- Aarseth, E., Bean, A. M., Boonen, H., Colder Carras, M., Coulson, M., Das, D., Deleuze, J., Dunkels, E., Edman, J., Ferguson, C. J., Haagsma, M. C., Bergmark, K. H., Hussain, Z., Jansz, J., Kardefelt-Winther, D., Kutner, L., Markey, P., Nielsen, R. K., Prause, N., Przybylski, A., Quandt, T., Schimmenti, A., Starcevic, V., Stutman, G., Van Looy, J., & Van Rooij, A. J. (2016). Scholars' open debate paper on the World Health Organization ICD-11 Gaming Disorder proposal. *Journal of Behavioral Addictions*. Advance online publication. doi:10.1556/2006.5.2016.088
- Achab, S., Nicolier, M., Mauny, F., Monnin, J., Trojak, B., Vandel, P., Sechter, D., Gorwood, P., & Haffen, E. (2011). Massively multiplayer online role-playing games: Comparing characteristics of addict vs non-addict online recruited gamers in a French adult population. *BMC Psychiatry*, 11(1), 144. doi:10.1186/1471-244x-11-144
- Ayers, J. W., Leas, E. C., Dredze, M., Allem, J., Grabowski, J. G., & Hill, L. (2016). Pokémon go A new distraction for drivers and pedestrians. *JAMA Internal Medicine*, 176(12), 1865–1866. doi:10.1001/jamainternmed.2016.6274
- Entertainment Software Association. (2016). Essential facts about the computer and video game industry. Retrieved from http://www.theesa.com/wp-content/uploads/2015/04/ESA-Essential-Facts-2015.pdf
- Ferguson, C. J., & Markey, P. (2017, April 1). Video Games Aren't Addictive. *The New York Times*. Retrieved from https://www.nytimes.com/2017/04/01/opinion/sunday/video-games-arent-addictive.html
- Gentile, D. A., Choo, H., Liau, A., Sim, T., Li, D., Fung, D., & Khoo, A. (2011). Pathological video game use among youths: A two-year longitudinal study. *Pediatrics*, *127*(2), e319–e329. doi:10.1542/peds.2010-1353

- Hull, J. G., Draghici, A. M., & Sargent, J. D. (2012). A longitudinal study of risk-glorifying video games and reckless driving. *Psychology of Popular Media Culture*, 1(4), 244–253. doi:10.1037/a0029510
- Kim, Y. S. (2016, March 3). Child abuse case in game addiction: Abuse and neglect of children because of virtual reality. *Naeli Newspaper*. Retrieved from http://www.naeil.com/news_view/?id_art=188794
- Korea Creative Content Agency. (2015). 2015 White paper on Korean games. Naju, South Korea: Korea Creative Content Agency.
- Korea Creative Content Agency. (2016). 2015 comprehensive survey on game over-commitment (pp. 15–52). Naju, South Korea: Korea Creative Content Agency.
- Lee, H. (2004). A new case of fatal pulmonary thromboembolism associated with prolonged sitting at computer in Korea. *Yonsei Medical Journal*, 45(2), 349–351. doi:10.3349/ymj.2004.45. 2 349
- Lee, H. K., Lee, S. Y., Lee, B. H., & Kim, E. B. (2017). Comparative investigation of prevention policy on Internet game addiction problems (Rep. No. 16-3). Seoul, South Korea: The National Assembly of the Republic of Korea, Gender Equality and Family Committee.
- Lee, S. K. (2016, February 1). I will change the perception of the society that regards game as evil. *Newspim*. Retrieved from http://www.newspim.com/news/view/20160201000227
- Lee, S. W., & Park, K. J. (2014, February 16). Eight out of 10 people favor the comprehensive addiction management. *Yonhap News Agency*. Retrieved from http://www.yonhapnews.co.kr/society/2014/02/14/0706000000AKR20140214178800001. HTML
- Lee, Y. S. (2013, November 14). Should be cautious against the game addition laws. *Hankyoreh*. Retrieved from http://www. hani.co.kr/arti/opinion/column/611194.html
- Messias, E., Castro, J., Saini, A., Usman, M., & Peeples, D. (2011).
 Sadness, suicide, and their association with video game and Internet overuse among teens: Results from the youth risk behavior survey 2007 and 2009. Suicide and Life-Threatening Behavior, 41(3), 307–315. doi:10.1111/j.1943-278X.2011.00030.x
- Shin, Y. C. (2013, November 25). Opposing to "Should be cautious against the game addition laws". *Hankyoreh*. Retrieved from http://www.hani.co.kr/arti/opinion/because/612645.html
- Vandewater, E. A., Shim, M.-S., & Caplovitz, A. G. (2004). Linking obesity and activity level with children's television and video game use. *Journal of Adolescence*, 27(1), 71–85. doi:10.1016/j.adolescence.2003.10.003
- Wei, H. T., Chen, M. H., Huang, P. C., & Bai, Y. M. (2012). The association between online gaming, social phobia, and depression: An Internet survey. *BMC Psychiatry*, 12(1), 92. doi:10.1186/1471-244x-12-92
- Weinstein, A., & Weizman, A. (2012). Emerging association between addictive gaming and attention-deficit/hyperactivity disorder. *Current Psychiatry Reports*, 14(5), 590–597. doi:10.1007/s11920-012-0311-x
- World Health Organization. (2017). ICD-11 frequently Asked questions: Why is the ICD important? Retrieved from http://www.who.int/classifications/icd/revision/icd11faq/en/ (May 6, 2017).