

Addiction to Video Games

With violence in games being such a debated topic it may be of interest to find out *why* we play video games and why some people become seemingly addicted to playing video games. While it is understood that video game addiction is not recognised as a disorder in most medical guidance for the majority of countries, it can be evident if you spend any length of time in a community of gamers, that you will notice people sometimes play even one video game for the majority of their day, over long periods of time. An informal online discussion was started in order to collect answers to three questions from willing participants (Jarrastafari, 2014);

- *Why you play games?*
- *Do you get addicted to certain games?*
- *If so, do you know why (what hooks you)?*

Gamers opinions

Almost all of the responses mentioned or suggested that the person saw their reason for gaming as a form of escapism, with several noting the desire to do things not physically possible in real life. An almost even amount of people mentioned a combination of; improving skills and overcoming challenges; mental stimulation and high adrenaline; admiring artistry, beautiful fantasies and virtual sight-seeing; social interactions and a sense of reward. Half of the respondents said they were addicted to games, explaining that they felt a need to be competitive against other online players in order to feel a sense of achievement and that the activity itself was easy to access and more thrilling, suspenseful and engaging than other mediums like television. The remaining responders were split evenly, with some stating that they had no addiction and the others recognise that they were at an earlier point in their lives – what they consider *addicted* – but are no longer due to their adult responsibilities. Most interestingly none of the participants mentioned any form of violence as the reason they play.

This begs the question as to whether perhaps it is just the availability of free time and preference for the medium of video games that makes it appear that people are addicted to certain games.

“If the game is fun, interesting, thought-provoking or innovative, an audience is likely to get hooked on the content and identify positively with the brand or message.” - (Salmond & Ambrose, 2013)

Salmond & Ambrose (2013) describe it eloquently and ‘*addiction*’, as a word, may simply be a convenient metaphor for the phenomenon players around the world are experiencing. But is it any different from other, more historically recognised addictions?

Dictionary.com (2015) describes addiction – based on the *Random House Dictionary* - as;

Noun – *the state of being enslaved to a habit or practice or to something that is psychologically or physically habit-forming, as narcotics, to such an extent that its cessation causes severe trauma.*

- or - as based on the *Collins English Dictionary*;

Noun – *the condition of being abnormally dependent on some habit, especially compulsive dependency on narcotic drugs*

Under these definitions, it could be argued that the activity of gaming has become a habit by which people become addicted to the medium. However, does that make it as influential as medically identified sources of addiction, such as drugs? In *The evolutionary origins and significance of drug addiction*, Saah posits:

“The nature of drug addiction is three-fold: biological, psychological, and social. Although humans may be biologically and psychologically predisposed to drug use and addiction, they may often be driven towards that state by social and cultural influences. To what extent environmental stimuli affect a person's vulnerability to addiction is unknown and may be varying. However, we cannot ignore the great impact of environmental and mental stimuli in the progression towards addiction.” - (Saah, 2005)

The effects of gaming on the player

While it may seem impractical to compare the severity of video game and drug addiction, it was felt to be important that we understand similarities between the two’s biological effect on the human brain, in order to hope to answer whether or not society should be taking the possibility of bona fide video games addiction seriously.

The Game Theorists (2014) examine how addictive games are designed by use of variable ratio scale reinforcement, of which gambling is a good example (Cherry, 2015). Their argument goes on to suggest that the dopamine (a neurotransmitter which helps control reward-motivated behaviour) released in the brain during gaming, can be compared to that released by physical addictions such as drugs and junk food (sugary and high-fat). This could be an interesting comparison to note because while societies have for a

long time in history, recognised and addressed in some ways the existence of drug addiction, we have only recently taken more notice and action on studies examining the adaptations in brain reward circuitry caused by high-fat and high-sugar foods. One such study conducted by Sharma et al (2013) concluded that the heightened motivation during withdrawal or intermittent access to these types of foods may contribute to an addiction-like process in which repeated cycles of access, deprivation and resumption promote cravings and dependence. While different societies worldwide will accept and take measures to counteract these issues to varying degrees, it is still notable that both the *Centers for Disease Control and Prevention* and *World Health Organization* (2015) state that childhood obesity is one of the most serious public health challenges of the 21st century.

Since children have always been a large consumer of video games since their inception, should we be worried that their psychological development is being negatively affected by games in possibly similar ways their physiological development is being affected by junk foods? It seems an important enough issue that concerns researchers at the University of Bolton. In an article for *Video game addiction 'like being on drugs'* (Fleming, 2008), lead researcher Dr John Charlton suggests that those '*people who were addicted were less emotionally stable or neurotic, and generally more anxious, had lower self-esteem*'.

“Despite a great number of studies focusing on video game addiction, there is still lack of consensus concerning which terms to use, how the phenomenon should be defined, and what methods should be used to measure it.” - (Brunborg, et al., 2014)

However, in their full-length report (Brunborg, et al., 2014) conclude that spending time playing video games does not involve negative consequences, but adolescents who experience problems related to video games are likely to also experience problems in other facets of life. They explain that several studies have shown that use of video games is associated with a host of problems, such as; higher levels of depression (Lemona, et al., 2011) (Gentile, et al., 2010), lower academic achievement (Anand, 2007) (Skoric, et al., 2009), alcohol consumption (Ream, et al., 2011) and conduct problems (Holtz & Appel, 2011) (Rehbein, et al., 2010). However, studies have also found that time spent on video games is not related to negative outcomes (e.g. (Rani A. Desai, 2010)), suggesting that the amount of gaming in itself is not necessarily associated with detrimental effects and that there is a greater agreement that experiencing problems related to gaming is related to other negative consequences. Reviewing the literature, (King, et al., 2013) proposed that the core features of video game addiction are withdrawal symptoms experienced when not able to play video games, loss of control over how much time is spent on video games, and conflict in terms of personal relationships and school/work commitments arising from video gaming. In the ongoing

debate about how video game addiction should be conceptualized, it has been suggested that high engagement should be distinguished from addiction (e.g. (Charlton & Danforth, 2007)). The possible negative impact of time spent on games may be dependent on individual and contextual factors.

Known consequences; case studies

However, the issues of repetitive play can become so severe that people can neglect their wellbeing so much and it can cost them loss, injury or even death. Many articles and forum posts can be found online to evidence this fact. Accounts of people losing sleep, interest in their social lives, a job or worse. Alienated friends and family observe changes in a person, describing negative states of irritability to the point of “*full-blown rage*” (Lush, 2011). Relatives and neighbours are left “*surprised, shocked*” (Russell, 2013) by murders – intended or accidental – which involve video games and gun crime. Notably, the subjects of these stories span the spectrum of race, class and age; from the very young, adolescent up to adult.

The consequences of excessive video game sessions, therefore, are not limited to just those involved in the activity and that became apparent when mainstream news coverage began reporting a story from South Korea, where a couple was sentenced for neglecting their child in favour of raising a virtual one in an online fantasy game. The incident became the ‘*first legal case regarding internet addiction in Korea*’ (Salmon, 2010) and while there is an argument as to whether or not video games addiction can explain such negligence, the South Korean government responded by restricting video game sessions for under 16’s (outlawed 12-6AM) and drafting legislation to group gaming with other anti-social addictions (Strochlic, 2014). A review of the situation in 2013 (Associated Press) saw a division in opinion between the beneficiaries of video games popularity and concerned members of that society, in the run-up to further legislative measures, which would have seen a law that would classify online gaming as potentially antisocial addiction alongside gambling, drugs and alcohol.

While video games addiction may not hold headlines in the way violence in video games can, governments can only do so much in the way of legislation and parents can only do so much in monitoring and restricting excessive play. Should the developer be partly responsible for the product they create, beyond health and safety warnings and their own legal requirements? If they could, should video game designers make decisions during the concept or development of a game that could work towards preventing these social issues in some way?