



Full length article

Investigating relationships between video gaming, spectating esports, and gambling

Joseph Macey^{a, b, *}, Juho Hamari^{b, c, d, e}^a Gamification Group, Faculty of Communication Sciences, University of Tampere, FIN-33014 University of Tampere, Finland^b Game Research Lab, Faculty of Communication Sciences, University of Tampere, Finland^c Gamification Group, Laboratory of Pervasive Computing, Tampere University of Technology, Finland^d Gamification Group, Digital Culture, University of Turku, Finland^e Gamification Group, Faculty of Communication Sciences, University of Tampere, Finland

ARTICLE INFO

Article history:

Received 21 August 2017

Received in revised form

1 November 2017

Accepted 19 November 2017

Available online 20 November 2017

Keywords:

Esports

Free-to-play

Gambling

Games

Addiction

Virtual Goods

ABSTRACT

An established body of research exists in which playing video games has been associated with potentially problematic behaviours, such as gambling. An issue highlighted by the recent emergence of game-based gambling practices such as loot boxes, social network casinos, free-to-play game mechanics, and gambling using virtual goods and skins. This study investigates relationships between a range of gambling activities and the consumption of video games in general, and the newly emergent phenomenon of esports in particular. In addition, these practices are considered in relation to established measures assessing game addiction and problematic gambling. The study employs Partial Least Squares modelling to investigate data gathered via an international online survey (N = 613). Video game addiction was found to be negatively associated with offline gambling, online gambling, and problem gambling. Video game consumption had only small, positive association with video game-related gambling and problem gambling. Consumption of esports had small to moderate association with video game-related gambling, online gambling, and problem gambling. The primary finding of this study are that contemporary video games are not, in themselves, associated with increased potential for problematic gambling, indeed, the position that problem gaming and problem gambling are fundamentally connected is questioned.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

There is an established body of research which addresses the potential associations between playing video games and a range of problematic behaviours, from aggressive or violent behaviour (Anderson et al., 2010; Olson, Kutner, Baer, Beresin, Warner, & Nicholi, 2009) to substance abuse (Desai, Krishnan-Sarin, Cavallo, & Potenza, 2010; Williams, Yee, & Caplan, 2008). The relationship between video gaming and gambling is an aspect which has continuously received a significant amount of attention; the case has been made that gaming may serve as a pathway that increases the likelihood of developing problematic gambling behaviours. This position is one in which the structural similarities between gaming

and electronic gambling are cited as a major influence (Fisher & Griffiths, 1995; Johansson & Götestam, 2004; Wood, Gupta, Derevensky, & Griffiths, 2004), as are the social benefits accrued for successful players (Griffiths & Wood, 2000), and misperceptions related to a sense of control (Gupta & Derevensky, 1996).

The concept of structural similarities between video gaming and gambling was first discussed almost three decades ago (Griffiths, 1991) and continues to be highly influential to this day (McBride & Derevensky, 2017). However, the focus of the original research was on coin-operated arcade games and gambling using slot machines (Griffiths, 1991; King, Delfabbro, & Griffiths, 2010a). It has been argued that, as both video games and gambling environments have undergone significant changes, the findings are no longer applicable to the contemporary practices of gaming and gambling (Forrest, King, & Delfabbro, 2016).

Driven primarily by online technologies (King, Delfabbro, & Griffiths, 2010b; King, Delfabbro, Kaptis, & Zwaans, 2014) the convergence of gaming and gambling has taken on new forms

* Corresponding author. Gamification Group, Faculty of Communication Sciences, University of Tampere, FIN-33014 University of Tampere, Finland.

E-mail addresses: joseph.macey@uta.fi (J. Macey), juho.hamari@tut.fi (J. Hamari).

(Lopez-Gonzalez & Griffiths, 2016). Technological developments have not simply changed the content of games, offering sophisticated immersive environments for example, but more significantly they have changed the way that games are played. The spaces of play have dispersed, no longer centralised in arcades or the home, player-versus-machine has become player-versus-player via networked sessions. Business models such as “free-to-play” (Alha, Koskinen, Paavilainen, Hamari, & Kinnunen, 2014; Hamari, Hanner, & Koivisto, 2017) and social network games have introduced gambling-like mechanics back into video games. In addition, the expansion of virtual economies and goods (Hamari & Keronen, 2017; Hamari, Alha, Järvelä, Kivikangas, Koivisto, & Paavilainen, 2017; Lehdonvirta & Castronova, 2014) has obfuscated the use of real money for gambling-like activities in games; gambling-like mechanics are no longer easily identifiable for users (Gainsbury, Russell, King, Delfabbro, & Hing, 2016; Kim, Wohl, Salmon, Gupta, & Derevensky, 2015; King et al., 2014).

All this is happening in an environment where the presence of games and game-like experiences is ubiquitous (Hamari, Huotari, & Tolvanen, 2015, p. 139; Raessens, 2006), one which has seen an increasing trend toward the liberalisation of gambling laws (Fong, Fong, & Li, 2011; Kingma, 2006; Markham & Young, 2015), and increased access to gambling activities via the internet and mobile devices (Choliz, 2016; Deans, Thomas, Daube, & Derevensky, 2016).

The phenomenon which most succinctly encapsulates these trends is that of esports; a form of sports where play is “facilitated by electronic systems”, i.e. competitive video gaming organised into leagues and tournaments (Hamari & Sjöblom, 2017; Taylor, 2012). In esports, video games are the objects and the drivers of all activity, its “sportification” (Lopez-Gonzalez & Griffiths, 2016) has brought with it a host of activities associated with traditional sports: professionalization, regulation, fan communities, and gambling.

In addition to esports (Holden, Rodenberg, & Kaburakis, 2016), the convergence of gaming and gambling is evident in social gaming (Gainsbury, King, Abarbanel, Delfabbro, & Hing, 2015; King et al., 2014) and the free-play modes offered by online casinos (Bednarz, Delfabbro, & King, 2013). It is understandable, therefore, that concerns have been raised over the potential for video game players to be exposed to factors which may encourage problematic gambling (Bednarz et al., 2013; Griffiths, King, & Delfabbro, 2009; Parker, Taylor, Eastabrook, Schell, & Wood, 2008). Results have been mixed, with some studies showing a significant relationship between playing video games and increased participation in gambling (Gainsbury et al., 2016; Kim et al., 2015; McBride & Derevensky, 2017; Wood et al., 2004) while others have not found a clear relationship (Delfabbro, King, Lambos, & Pugliese, 2009; Forrest et al., 2016; King, Ejova, & Delfabbro, 2012).

1.1. Aims of the research

An environment has developed in which the prevalence of both video gaming and gambling as leisure activities has been accompanied by technological and cultural convergence, increased ease of access, and liberalisation of gambling regulations. As such, it is imperative that relationships between video gaming and gambling require continued investigation, with specific focus on newly emergent phenomena such as esports.

Currently, there is a dearth of research which addresses esports and gambling, what published work there is largely addresses the question of legal and regulatory issues (Owens Jr, 2016; Schneider, 2015). This deficit requires urgent attention as industry analysts predict the number of global esports viewers to reach 375 million by the end of 2017, with active participants in formal, mainstream esports gambling already exceeding 2.25 million. Furthermore, it is

estimated that over 3 million people actively participate in the informal markets surrounding in-game items, such as skins lotteries (Grove & Krejcik, 2015).

This study, therefore, seeks to investigate relationships between the consumption of video games, esports and three different forms of gambling: offline, online, and video game-related gambling. The final category includes activities such as: betting on esports matches, playing fantasy esports, paying to access randomly generated in-game items, using in-game items or currencies as wagers in third-party gambling sites, and social network gambling games. Both offline and online gambling refer to established practices such as betting, playing the lottery etc., in specific contexts. These factors give rise to the following research questions:

- RQ1: Is increased consumption of video games and esports associated with increased levels of gambling?
- RQ2: Are higher rates of problematic video gaming associated with higher rates of a) gambling activity, and b) problematic gambling?

The convergence of gaming and sports embodied by esports suggests that if video gaming is associated with increased gambling, it would be in this environment that any relationships would be most pronounced. Therefore, in order to investigate the stated research questions, the following target population was identified: video game players who also watched esports, and/or who had gambled within the previous 12 months. Online questionnaires with self-selected respondents are considered the most appropriate method of obtaining data from such populations (Griffiths, 2010). Advantages of this method include: increased access to target population, global reach, it is more cost-efficient than traditional random sampling techniques, and responses are less likely to be affected by the desire for social acceptance.

1.2. Research model

This research is concerned with the relationship between consumption of digital media, in the form of video games and esports, and gambling behaviour, as such an involvement model (Binde, 2013) was developed to answer the research questions detailed above.

Previous research has linked increased consumption of video games to increased participation in gambling and raised likelihood of developing problematic gambling behaviours (McBride & Derevensky, 2017; Wood et al., 2004). This relationship has been explained in terms of structural similarities between gaming and gambling (Fisher & Griffiths, 1995; Johansson & Göttestam, 2004), the accrual of social capital (Griffiths & Wood, 2000), and maladapted cognitions such as an overdeveloped sense of control (Gupta & Derevensky, 1996). Therefore, it is hypothesised that *Video gaming habits* will be positively associated with *Offline Gambling Habits* (H₁), *Online Gambling Habits* (H₂), and *Video Game-Related Gambling Habits* (H₃). The association is expected to be most pronounced in relation to *Video Game-Related Gambling Habits* and weakest for *Offline Gambling Habits*.

An interest in esports is born out of an initial interest in video games, esports being considered a subset of the wider gaming environment (Lee & Schoenstedt, 2011), therefore, *Esports viewing habits* is anticipated to be an additional predictor of involvement in gambling, one which is itself influenced positively by *Video Gaming Habits* (H₄). Accordingly, *Esports Viewing Habits* is hypothesised as positively influencing *Offline Gambling Habits* (H₅), *Online Gambling Habits* (H₆), and *Video Game-Related Gambling Habits* (H₇). The association is expected to be strongest for *Video Game-Related Gambling Habits* and weakest for *Offline Gambling Habits*.

Download English Version:

<https://daneshyari.com/en/article/6836276>

Download Persian Version:

<https://daneshyari.com/article/6836276>

[Daneshyari.com](https://daneshyari.com)