

THE PSYCHOSOCIAL IMPACT OF PROFESSIONAL GAMBLING, PROFESSIONAL VIDEO GAMING & ESPORTS



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The convergence of digital technologies, sport, and gambling industry has multiplied the possible combinations of products that, having originated in one field, have evolved into something different. This article briefly examines eSports and gambling, as well as a brief examination of the convergence between professional gambling and professional video game playing.

Professional video gaming and professional gambling

To date, professional competitive video gaming and professional gambling have not been widely researched or recognized in the academic literature (Faust, Meyer & Griffiths, 2013). Professional competitive gaming comprises players who regularly compete in tournaments organized and run by the gaming community, often for large monetary gains. This is similar to professional gamblers (such as professional poker players) who also regularly compete in tournaments and make a career out of their gambling skill.

Numerous studies have demonstrated the benefits of gaming including improved spatial cognitive benefits, prosocial behaviour, and skill development (e.g., Green & Bavelier, 2007; Greitemeyer & Osswald, 2010; Spence & Feng, 2010). Studies have also suggested that video games can provide an enriched medium for strategic problem solving in both video gaming (Hong & Liu, 2003; Shaffer, 2006) and gambling (Parke, Griffiths & Parke, 2005). Other studies support the differences between novice and advanced levels of play in video games. For instance, research has demonstrated measurable differences between novice and expert game players, the latter group often demonstrating enhanced short-term memory, executive control/self-monitoring, pattern recognition, visual-spatial abilities (e.g., object rotation), and task-switching efficiency, along with more efficient problem-solving skills (e.g., Andrews & Murphy, 2006; Boot, Kramer, Simons,

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Fabiani, & Gratton, 2008; Hong & Liu, 2003; Van Deventer, & White, 2002). There have also been writings on professional gambling (particularly poker players) highlighting a wide variety of transferable skills that can be learned and/or enhanced including critical evaluation, numerical ability, pragmatism, interpersonal skills, problem-solving, goal orientation, face management, and self-control (Parke et al., 2005; Griffiths, 2007).

Professional video gaming has the potential to change the dynamics and motivations of gaming. For instance, if a player can make a financial living and career from playing a video game, it becomes an occupation rather than a hobby. This raises interesting questions about the role of context in excessive gaming and potential addiction (Griffiths, 2010). When video game players are capable of financially supporting themselves from their play, this matter becomes more complex. For example, how would one categorize a professional video game player who was making over £100,000 per year playing video games, but was also experiencing social difficulties as a result of excessive video game use?

When it comes to professional video gaming (and likewise professional gamblers such as poker players), many players will play excessively and spend hours and hours every single day either practicing or competing. For many players, their whole life is dominated by the activity and may impact on their relationships and family life. However, this does not necessarily mean they are addicted to video gaming or gambling because the excessive game playing is clearly a by-product of the activity being their job. However, it could perhaps be argued that they are addicted to their work (and in this case, their work comprises video game playing or gambling).

Workaholics have been conceptualized in different ways. For instance, Griffiths (2011) noted that workaholics are typically viewed as one (or a combination) of the following. They are (i) viewed as hyper-performers, (ii) work as a way of stopping themselves thinking about their emotional and personal lives, and (iii) are over concerned with their work and neglect other areas of their lives. Some of these may indeed be applied to competitive gamers and professional gamblers (particularly the reference to 'hyper-performers' and the fact that other areas of their lives may be neglected in pursuit of their ultimate goal).

Research appears to indicate there are a number of central characteristics of workaholics. In short, they typically: (i) spend a great deal of time in work activities, (ii) are preoccupied with work

even when they are not working, (iii) work beyond what is reasonably expected from them to meet their job requirements, and (iv) spend more time working because of an inner compulsion, rather than because of any external factors (Griffiths, 2011). Again, some or all of these characteristics can be applied to professional video gamers and professional gamblers.

As noted above, professional video gamers and professional gamblers are likely to play for extended periods of time and sacrifice other areas of their lives if they have the potential to make a living from their chosen profession. This single-minded dedication may become a problem for some players because the goal of becoming a professional gambler or video gamer is often unrealistic. There are currently no accurate statistics relating to the number of professional gamblers or gamers, but anecdotal evidence suggests that only a very small percentage of the total number of gamblers and video gamers generate sufficient income to support themselves financially. Although viability may change in the future (as the opportunities to make money from gambling and video gaming diversifies), at present, the great majority of players have little chance of becoming successful and financially independent professionals. For this reason – i.e., the motivation to become professional – players may be more susceptible to excessive use than the average gambler or video game player. Additionally, even successful professional video gamers and gamblers are likely to play for extended periods of time, as playing less than eight hours each day could mean that they are not practicing enough compared to other professional players. Those who treat problematic gamblers and video game players need to keep this factor in mind.

Professional gambling and video gaming, as with gambling and video game playing more generally, has psychosocial advantages and disadvantages and is thus an important area to consider when evaluating the gaming area in all its forms as a whole. It may be critical to include questions about professional gambling and gaming (and context more generally) in measures evaluating the degree, extent, and "addictive" potential of gambling and video game use. Furthermore, it would appear essential for psychologists to inquire about professional gambling and gaming in a clinical interview during which a client reports gambling or playing video games. If clients turn out to be professional gambler or video gamer, this will likely distinguish them in many ways from a person who simply gambles or plays video games excessively for fun and/or escape.

Gambling on eSports

Over the past few years, the popularity of eSports events has grown enormously. Such events typically involve professional video game players competing in multiplayer video game competitions. This includes many different genres of professional video game playing including (amongst others) RTS (real time strategy) games, FPS (first-person shooter) games, and MOBA (multiplayer online battle arena) games. While there is great controversy about whether video gaming should be classed as a sport, the growth and promotion of eSports via online streaming platforms (the most notable being Twitch) has become increasingly noticeable (Popper, 2013).

Betting on eSports (i.e., professional video gaming) has also increased in popularity over the last few years and has given rise to allegations of unregulated and underage gambling. The eSports market is large. According to a 2016 report by Superdata, professional eSports is growing exponentially and is worth an estimated \$612 million (US) a year. Furthermore, Eilers and Krejčík Gaming estimate that real money betting on eSports betting will reach \$10 billion (US) by 2020 (Wood, 2016). Hibai-Gonzalez and Griffiths (2016) have observed that the professionalization and 'sportification' of this entertainment form has brought sports-world elements to it including stadium-like facilities, cheering stands, sponsors, big financial rewards, and competition. Instant replays, jumbotrons (i.e., super-huge television screens), and referees add to the sport dramatisation. In some notorious cases, prizes have gone beyond the \$10 million [US] threshold in a

packed arena housing 73,000 fans (Wingfield, 2014). Sportification is the process of incorporating the logics of sport to non-sporting contexts (e.g., poker, eSports; (McMullan and Miller [2008]). This can materialise in many ways but most commonly occurs when (i) other industries capitalise on the positive attributes of sport (e.g., popularity, engagement, or sanity and health inferences); and (ii) non-sport fields try to increase the entertainment and playability of their products and their association with joy and excitement.

Twitch, the online platform that streams live video gaming, informs its' advertisers that it has 100 million monthly viewers, who watch for an average of 106 minutes a day (Melbourne & Campbell, 2015). Betting on eSports presents new challenges. As Melbourne and Campbell (2016) observed in relation to betting on the game Counterstrike: Global Offensive (CSGO):

"Gambling – licensed, regulated, and by adults – is generally accepted in eSports. There is growing concern, though, that teenagers are being attracted to different forms of betting facilitated by third-party providers. One such platform is CSGO Lounge (an independent site not affiliated with Valve Software, which develops the game itself). The site allows spectators to bet in-game add-ons known as skins – weapons, tools and the like – on the results of matches. Not all skins are created equal, and the rarity of some means they can cost hundreds of real dollars on marketplace sites like SkinXchange.com. The temptation is too much for some".

Put simply, skin gambling is the use of virtual goods and items



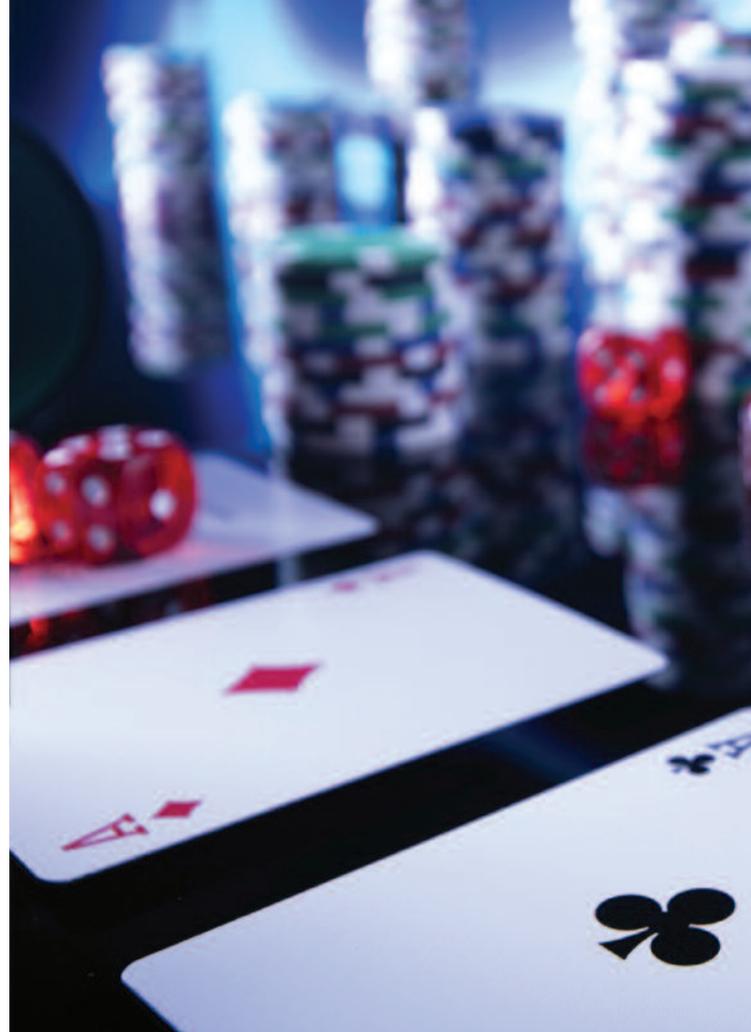
(typically cosmetic elements that have no direct influence on gameplay) as virtual currency to bet on the outcome of professional matches. Melbourne and Campbell also claim on the basis of interviews with industry insiders that underage skin gambling is a “huge problem”. Justin Carlson (lead developer of SkinXchange) claims there are “countless” parents whose children have used their credit cards without their knowledge to buy skins and bet on gaming on other sites. Although anecdotal, Carlson claims that some minors have “racked up hundreds or thousands of dollars in skins on ‘SkinXchange’ just to lose them all on some betting or jackpot site”. It’s clear that people trading skins in eSports has grown over the last few years and various regulators around the world – such as the UK Gambling Commission (UKGC, 2016) – are considering regulation and says it is an “emerging product” and an “area for continuing future focus”.

One of the complicating factors for eSports gambling is that while cash is the currency for many gamblers, there is a growing trend towards the use of virtual currencies, or ‘in-game items’ (Cleghorn & Griffiths, 2015), which according to the UK Gambling Commission (2016) can be “won, traded, sold or used as virtual currency to gamble with and converted into money or money’s worth”. These, according to the UKGC, “include digital commodities (such as ‘skins’) which can be won or purchased within the confines of computer games and can then be used as a form of virtual currency on a growing number of gambling websites”. No academic research has examined underage skin gambling but this is an issue that is unlikely to diminish over the coming years.

It is also worth noting that this massive interest in eSports followed by a massive audience has led most major betting operators to include eSports in their daily gambling offer. However, the singularities of eSports market pose new challenges that conventional online betting sites struggle to address. Suraj Gosai, co-founder of Blinkpool, an eSports dedicated betting platform highlighted the two main problems: in-play betting limitations and odds algorithmic programming (Bracken, 2016). For in-play betting to be viable, companies need to get access to reliable, instantaneous, and unambiguous data that can settle bets and separate winners from losers.

Data companies like Perform do that in sport, and betting operators rely on their data to offer in-play action to gamblers. The problem in eSports is that actions are not as quantified and standardised as in real-life sports. To counteract that, Blinkpool created a computer vision technology that extracts data from real-time action and promotes hyper-contextual opportunities, that is, 10- to 45-second in-play betting mini-markets concerning very specific developments in the narrative of the games.

Odds programming in sports betting is fundamentally based on historical data from hundreds of thousands of games, from which each factor (home advantage, table position, head-to-head, etc.) is weighted in to determine the probability of an event occurring. In the fixed-odds betting market, the bookmaker makes available to bettors that probability plus a benefit margin. When placing a bet, an individual bets against the probability that the house has predicted. This is not yet feasible in eSports because the historical data are scarce and the modelling is complex. Companies are circumventing this problem by offering exchange betting rather than fixed-odds. This method comprises peer betting, that is, bettors do not bet against the house but between



one another. This way, the house gets a commission from winning bets and operates a much less risky business (Bracken, 2016).

Concluding Comment

The future of professional video gaming and betting on eSports is uncertain from both a regulatory perspective and from the perspective of examining the psychosocial impact of such activities. The gambling and video game industries are always two steps ahead of the regulators, legislators, policymakers, and academic researchers. Therefore, the field is in a constant state of flux and needs monitoring closely for further change in an evolving market. While there can be many positives (financially, psychologically, and skills-wise) at an individual level, there are some potential downsides concerning adolescent engagement and excessive use across the lifespan that require protective measures to be put in place by both operators and policymakers.



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