

## **Social casino gaming and adolescents: Should we be concerned and is regulation in sight?**

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Citation: Derevensky, J. L., & Gainsbury, S. M. (2015). Social casino gaming and adolescents: Should we be concerned and is regulation in sight? *International Journal of Law and Psychiatry*. [doi:10.1016/j.ijlp.2015.08.025](https://doi.org/10.1016/j.ijlp.2015.08.025)

### Abstract

While gambling has traditionally been viewed as an adult activity, there is a growing body of research that a significant number of adolescents are not only gambling but are experiencing gambling related problems. As ease of access via Internet wagering has increased, so too have some of the concomitant problems. Social casino gambling, often thought of gambling without risking one's money through the use of virtual currency, has become increasingly popular. The current review examines whether we should be concerned over its widespread use and whether such social games should be regulated.

**Keywords:** Gambling, Youth, Addiction, Government Regulation, Policy development, Mental Health

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### **1. Simulated Casino Gaming: An Overview**

There is little doubt that the Internet has profoundly changed our daily behavior. Convenient, easy access to the Internet is almost universal, especially among adolescents. The cost of high-speed computer access has dramatically decreased internationally during the past decade as has the cost of personal computers, laptops, tablets and smart phones. Ease of access and widespread broadband coverage has resulted in individuals being readily connected/wired to the Internet virtually 24 hours a day, 365 days per year.

One of the biggest changes to the way people have engaged with the Internet over the last few years has been seen in the growth of social networking and user generated websites. The largest social networking site, *Facebook*, launched in 2004, recently reported in excess of one billion users, however, *Facebook* alone comprises less than 30% of the unique visitors to the scores of popular social networks worldwide (iGaming Business, 2011). In addition to increase in the number of platforms and users, the frequency and time spent on social networks has also increased.

Social media gaming, that is playing a diversity of games via social networking sites, is barely five years old and represents an enormous, ever-expanding business (Morgan Stanley, 2012). Game genres are numerous and diverse, including casino-type games, role playing games, caretaking and simulation games, puzzles, arcades, competitive and dating games, as well as a host of interactive creative games (e.g., *Farmville*) amongst others.

Social games were initially developed to emphasize the social element of entertainment and player interaction, in contrast to the potential monetary benefit that players traditionally expect from gambling. However, as more and more social games incorporate elements of simulated gambling into their game play and players are able to purchase additional 'virtual' credits for money, the distinction between gambling and gaming is becoming increasingly blurred. It has been argued that governments and operators have yet to clearly define and articulate clear rules and procedures covering 'gambling' on social networking sites (Korn, Norman & Reynolds, 2010), although this is becoming a hotly debated topic at international symposia examining the impact of social media gaming and gambling. A number of regulators within Europe and Australia are beginning to more closely examine and monitor this issue. Many regulators, including the European Commission, are awaiting empirical research examining the impact of social casino gaming before addressing the issue of regulation.

An examination of many of the social casino (non-monetary gambling-style games) games suggests that such games are available on numerous sites, including Internet gambling sites where they may be offered as 'practice' or 'play-for-fun' games, with such

games having many similarities with traditional forms of online gambling activities. Both typically focus on the ‘entertainment value’ and ‘time on device’, appeal to a diverse audience, incorporate high-tech graphics and representations as well as simpler graphics suitable for lower-tech devices. Some gambling sites also promote user interaction, a central feature of social gaming. Social games are typically offered using a ‘freemium’ model, which are free to play, although players can also purchase additional credits to improve the game experience. Players are often encouraged to continue to play for non-cash promotional prizes with a growing number of sites actually including the possibility to win cash prizes through random draws or allowing individuals to accumulate points or credits which can subsequently be redeemed for prizes. The ability to play for free remains an essential component of these games. It is not mandatory for users to purchase virtual credits to play and the absence of monetary prizes has enabled operators to avoid gambling regulatory oversight. Nevertheless, social casino games have come under scrutiny with the industry and social policy experts differing as to whether or not they require regulation (Alaeddini, 2013).

The global social gambling market continues to expand at an unprecedented rate, with estimates suggesting US\$1.6 billion in revenues and 35 million people playing social casino games (SuperData Research, 2012). Revenues in the social gaming market have been primarily driven by advertising within games themselves, sales of virtual items, and micro-payments. Over half of *Facebook* users (53%) reportedly play games on social media sites, with estimates of 81 million people playing at least one social media game daily, and social casino games players reportedly spending nearly twice as much as the average social games player (SuperData Research, 2012). Similar to other social games, individuals playing gambling games excessively (‘whales’) typically represent upwards of 15% of players, but generate almost half of the revenue (GamblingData, 2012). To show the enormity of this population, the Morgan Stanley Report (2012) has suggested that there are currently 170 million social casino game players, well over triple that of actual online gamblers. Social casino games are now being developed by the world’s largest gambling companies including *Caesar’s Entertainment*, *IGT*, *Betfair*, *Paddy Power*, *Bwin Party*, and *MGM*, amongst others. Even ESPN, the largest sports network in the U.S., which hosts multiple versions of championship Texas Hold’em Poker, has established a game called *Streak-for-the-Cash*. This App, encourages individuals to build the longest streak of correct winners from a daily list of competitive matchups across the world of sports, with reportedly 3 million players having the opportunity to win upwards of \$1,000,000 (Taylor, 2010).

Globally, the social gaming industry represents approximately 5% of the online gambling revenues but its enormous potential to migrate customers to online gambling remains an enormous incentive. Such games also represent a way to diversify customer interactions and product offerings. Social networking has the highest penetration globally among youth aged 15 to 24 (Pring, 2012). Data from casual and social gaming sites suggests young adults may be among the most significant users of social games and that 13-25% of gamers are between 10- 20 years old (Newzoo, 2012). This may be a result of the increased use of mobile devices for social games play. A survey conducted in the U.S. found that 33% of youth aged 12-17 play social casino games online and Canadian studies have reported that half of the youth surveyed reported playing social casino games

(McBride, Derevensky & Gupta, 2006). However, it is important to note that as these studies were not conducted with large representative samples, the evidence concerning the extent to which youth use social casino games sites is limited. However, there is little doubt that this age group clearly receives extensive exposure and is actively engaging in these games with few prohibitions and actual restrictions.

Griffiths (2003), in early discussions of the potential impact of technology upon gambling, articulated the important salient factors which facilitate and/or promote excessive play. In spite of a lack of empirical evidence at that time, he noted that games or gambling on the Internet within a virtual environment have the potential to provide short-term comfort, excitement, entertainment and/or distraction from daily routines. There is a growing body of empirical support for his contention and there is concern that individuals may be using social media networks and gambling opportunities as a way of relieving boredom (McBride & Derevensky, 2009). Nevertheless, the salient characteristics identified by Griffiths for Internet gambling - accessibility, affordability, anonymity, convenience, escape, immersion, dissociation, disinhibition, event frequencies, interactivity, stimulation, and asocialability - are all present in both the social casino games as well as on Internet gambling sites. As the popularity of social gaming increases and gambling operators become increasingly involved, the ethical questions of whether young users' exposure or enticement to gamble and whether the risks of 'gambling' on these sites are being trivialised are being raised.

## **2. Youth Gambling and Problem Gambling: A Vulnerable Population**

There is a growing body of research suggesting that early onset of gambling behavior in general is a risk factor for problem and gambling-related harm (Derevensky & Gupta, 2004; Shead and others, 2010; Volberg and others, 2010). There is clear evidence that adolescents and young adults are engaged in multiple forms of gambling, often beginning at a fairly early age, in spite of legislative prohibitions. The recent Ipsos MORI (2011) study of underage gambling in England and Wales as well as reviews of international studies all report higher prevalence rates of gambling and problem gambling (as currently measured) amongst adolescents in spite of different methodologies and instruments used to assess problem gambling (Volberg and others, 2010).

International surveys indicate that adolescents and young adults are gambling on the Internet at high rates (Griffiths & Wood, 2007; Gupta, & Derevensky, 2011; Jackson and others, 2008; Ipsos MORI, 2006; Petry & Weinstock, 2007). In spite of regulatory prohibitions, adolescents reportedly gain access to Internet gambling sites by intentionally falsifying their age on sites without identification verification and some use their parent's accounts, either with or without permission (Ipsos MORI, 2006). Young problem gamblers have been shown to more likely to gamble online than non-problem gamblers (McBride & Derevensky, 2009a, 2012; Ipsos MORI, 2006; Olason and others, 2011; Petry & Weinstock, 2007). Most recently, results from a recent survey of Australian gamblers suggest that early age of onset was predictive of Internet gamblers being identified as problem gamblers (Gainsbury, Russell, Wood, Hing, & Blaszczyński, 2012).

While the number of land-based and online gambling venues continues to increase and has become normalized, our prevention efforts toward minimizing problem gambling have not kept pace. As the online gambling industry has matured, improved efforts have been made by regulated online gambling operators to more accurately verify their clients'

age, ultimately minimizing the ease with which an under-aged person can open an account. The lack of easy access to credit cards and ways of electronically transferring funds has also limited young people's access to online gambling. However, social gaming sites typically have no minimum age requirement, no age verification procedures, nor need for money or a credit card to play. There is evidence that gambling problems amongst teens is not a particular concern to parents and teachers (Campbell and others, 2011; Derevensky and others, in press). It is conceivable that social casino games would be of less concern than gambling involvement, suggesting that parents and teachers are not monitoring use of these games or discussing them with adolescents.

### **3. Intersection and Convergence of Social Gaming and Internet Gambling**

The landscape of gambling has changed dramatically during the past decade, with online gambling being amongst the fastest growing segment of the market (Online Casino City, 2012). Given the rise in popularity of social media sites, gambling operators have sought to capitalise on this trend by including using social media as a platform to engage and interact directly with both existing and potential customers, to advertise their products, and to provide social casino games either directly or in partnership with gaming companies.

Many online gambling operators continue to offer free-play versions of their own games, marketed as 'practice' or 'instructional' sites, allowing customers to familiarize themselves with the rules and structure of the games before risking actual money. Free casino games are typically offered on .net sites, to differentiate these from .com sites that operate gambling activities. This distinction has enabled operators to avoid requiring customers to identify themselves and provide proof of their age, for .net sites, which are advertised with fewer restrictions and virtually no regulation as is often required for online gambling sites (Monaghan & Derevensky, 2008; Monaghan and others, 2008). While advertisement of .net sites has been restricted in several international jurisdictions, such as Australia, because of the 'blatant' attempt by gambling operators to advertise sites closely tied to actual money sites and intended to increase brand awareness. Nevertheless, a review of sites offering social casino games, concluded that "the number of opportunities for young people to gamble via social media sites is overwhelming" Korn and others, 2010). The extent to which young people are able to distinguish between social casino games, practice games and gambling has not been investigated.

While poker dominates the social casino game industry, sports betting, bingo, slots and other casino type games account for 53% of the market (Morgan Stanley, 2012). Given their widespread popularity, it is not surprising that gambling operators are seeking to attract these players as future customers. Despite the investment in social casino games by gambling operators, the ability to encourage players to 'migrate' from social casino games to gambling has not been conclusively demonstrated. Although social casino games mimic gambling in many ways, players' expenditures and motivations may be significantly different. In free-play games, players reportedly focus on the competitive aspects, in contrast to 'beating the house.' Satisfaction from winning in this context appears to eliminate the need to win actual money.

In addition to games built exclusively on casino activities, many social games incorporate elements of casino games as a feature or incidental element of game play. For example, *Jetpack Joyride*, a social media game marketed to children, enables Barry to fly through bubbles and rainbows and dodge electric fields. Although not the core objective,

players can acquire ‘spin tokens’ allowing them to play a slot machine where acquired rewards are used within the game. However, the slot machine does not appear randomly, rather it recognizes when users are likely leaving the game (e.g., following a series of losses) and provides incentives to continue playing (Rogers, 2012). The long-running online game *Runescape* features ‘Squeal of Fortune’, where players ‘purchase spins’ from a virtual wheel to win prizes. Such games may be promoting a perceived illusion of control by incorporating exaggerated odds of winning while promoting favourable views of slot machines as a harmless entertainment activity.

Although restrictions for gambling operators to advertise directly on *Facebook* exist, few restrictions on social gaming sites are evident. Korn and colleagues (2010), examining the popularity of social networks frequented by youth, found that *MySpace* and *Orkut* contain the largest number of indirect gambling opportunities with over 1,000 links to commercial gambling websites. Social networks currently host hundreds of discussion forums, groups, and chat rooms focussed on gambling; many endorsed by gambling operators. As these sites are not designated as gambling sites per se, they have no age-restrictions; contain few or no mentions of responsible gambling; and typically fail to provide information about the risks of excessive gambling.

#### **4. Are Social Casino Games Harmful to Young People?**

Given the popularity of social media sites and social casino games, the question remains as to whether the intersection between social media and gambling represents a potential risk, particularly for young people, irrespective of the lack of financial investment. Social casino games are designed to enhance the playing experience, encourage ongoing play, and provide individuals with an easily accessible gaming experience. Social gaming sites cite research suggesting that clients want an “authentic Las Vegas-style casino experience.” Such sites create an opportunity for individuals to ‘practice’ their gambling strategies, enhance skills without risking losing money, while promoting positive but inaccurate attitudes towards gambling.

If social casino gaming builds a heightened self-confidence based upon misleading odds, one’s perceived illusion of control in predicting gambling outcomes may lead to an increased motivation to gamble (Parke & Griffiths, 2005). This may result in these games becoming more attractive, reducing barriers to play, and may undermine attempts to discontinue playing (Blaszczynski, Sharpe, & Walker, 2001). Sevigny and others (2005) have reported exaggerated payout rates on practice sites when compared to gambling sites. In one study, they reported that 39% of sites provided a payout rate exceeding 100% on the practice part of their website and that a multiple gambling sites used marketing strategies designed to reinforce erroneous beliefs concerning the notion of chance, randomness and independence of events.

There is some evidence linking playing social casino games with youth gambling problems among adolescent and college age students (Griffiths, Derevensky & Parke, 2012; Griffiths and others, 2010; McBride & Derevensky, 2009, Olason and others, 2011; Tsitsika and others, 2011). In a large study of American college student athletes (N=23,000), Paskus and Derevensky (2013) reported that 28.1% of male and 10.2% of females engaged in social casino games during the past year. Griffiths and Wood (2007), in a national adolescent study in the U.K., noted that amongst youth who gambled online, 29% reported playing social casino games, while Meerkamper (2010) in Canada reported

that 33% of Canadian youth have engaged in social casinos games, with 8% reporting having gambled online. The reasons expressed for playing social casino games included to relieve boredom (59%), entertainment (49%), helps with free time (30%), it's on a social network site (e.g., *Facebook*) (22%), thrill and excitement (15%), peers and friends are involved (14%), and it represents a good way to improve one's skills for money games (11%). A small percentage of these youth (7%) reported migrating to online gambling sites. Similar reasons for engaging in social casino games were found for all youth, with problem gamblers providing higher levels of endorsement (McBride & Derevensky, 2009a, 2009b).

The Ipsos MORI (2011) survey of underage gambling (ages 11-15) in England and Wales revealed that approximately 15% of children played on social casino games in the past week. Overall, 11% of children reported playing social casino games on *Facebook* and *Bebo* and the authors hypothesised that social casino games may be encouraging young people to engage in gambling for money. As well, they contend that children may get the same level of excitement from playing social casino games as received when gambling. Half of the children (51%) playing social casino games also reported gambling for money, compared with only 18% of youth who had not played social casino games. Boys (21%) were more likely to report having played on these social casino games than girls (9%). This pattern of behavior was found to continue across all types of gambling (e.g., with those playing social casino games more likely to engage in gambling on the National Lottery – 26% vs. 8%; wagering at a betting shop – 14% vs. 1%; and playing bingo for money at a club – 14% vs. 1%). Had a longer time framework been included for social casino game play (e.g., past month, past year), it is quite likely that the rates of reported gambling on social casino games would have been higher. The Ipsos MORI report cautioned legislative and regulatory bodies of the necessity to carefully monitor social casino games, suggesting that that regulatory policy may be required to cover such games.

In a recent qualitative investigation, Gupta, Derevensky and Wohl (2013) using a small number of university students (N=51), an appreciable number of college-age youth suggested a general progression of behavior which starts with pure social games, evolving into social casino games, and ultimately to online gambling. In spite of the limited sample size, there is evidence of an easy transition between the social gaming sites and migration to online gambling. One student commented, "I didn't understand how I got from one place, from playing for fun to being in trouble." The fact that social gaming sites are perceived to be an excellent venue and opportunity for "learning how to gamble," their migration to online gambling sites is potentially problematic. A considerable number of the youth interviewed commented on how they learned to gamble on *Facebook* indicating it served as a "poker training ground." Those youth with extensive online gambling experiences were a bit more skeptical about the migration between the social gaming opportunities and online gambling. However, several expressed concerns about differentiating virtual and real money, the two becoming blurred given the similarities between social casino games and online gambling.

King, Delfabbro and Griffiths (2010) have suggested that given our current knowledge of the psychological factors that promote adolescent gambling that there is little doubt that a convergence between social casino games and online gambling likely exists. This new medium of social casino gaming (a) makes gambling more readily accessible and attractive to young people, (b) likely promotes factually incorrect information to about

gambling, (c) provides an easy escape from mental health, familial and social problems, (d) creates an environment that facilitates peer pressure to gamble, (e) parental attitudes toward gambling are easily transferred, and (f) ultimately makes gambling more ubiquitous and socially acceptable.

What still remains unclear is whether a causal relationship exists between playing simulated gambling games, actual gambling for money, and problem gambling. Are youth who gamble more likely to access such pay-for-fun sites or are individuals who engage in play-for-fun sites more likely to initiate gambling as a result of their engagement in play-for-fun websites? Using statistical modelling in a study of British adolescents, playing gambling-style games for fun was found to be the single most important predictor of whether the child had gambled for money and one of the most important predictors of problem gambling (Ipsos MORI 2009). However, caution must be exercised as the data only lent itself to use of a correlational model and not a causal model. Nevertheless, it is also important to note that there may be some negative consequences independent of gambling-related problems associated with spending excessive time on social casino sites as excessive time on such sites precludes youth from engaging in alternative academic and social pursuits.

#### **5. Trends and Impact of Social Casino Games**

Predicted trends for social casino games include further monetization of games, an increase in the types of games available, growth and development of games for mobile platforms (including smartphones and Tablets), with both gambling and gaming operators entering the market. One key trend predicted to continue and to impact social casino gaming is the continued convergence of social games with online gambling in an effort to pursue new revenue models for both activities. The rate of growth of both social gaming and online gambling remains high, the activities are potentially complementary, and both industries can learn from each other's experiences. Strong ties already exist between gaming and gambling operators and many are poised to offer real money gambling via social games once the necessary regulatory approval has been given. Whether elements of social gaming can be classified as gambling could become a focus of attention if virtual currency is deemed to have monetary value (e.g., used to purchase items of significant value) or if it can be converted into money. If sites start to offer monetary prizes in an attempt to attract and retain players in an increasingly competitive environment, this may necessitate regulatory scrutiny. With regulation of social games, operators would be required to make significant changes to their sites; games and business models would need to be modified to adhere to necessary regulations (including age restrictions, provisions for limiting time and monetary expenditure, and demonstrate the fairness of games). Although a number of social gaming sites are beginning to offer real money gambling in the U.K., until legal boundaries are clarified, many operators remain focussed on social casinos games and customer engagement.

#### **6. A Call for Self-Regulation Versus Governmental Regulation**

As long as social casino games fail to pay monetary prizes, require payment, or result in harm to vulnerable populations, operators may largely escape regulation as a "gambling" activity. Yet, there remains real concern about protecting vulnerable populations, especially our youth. The "duty-of-care" principle may take precedence if research begins linking playing and potential harm. The extent to which social casino

games are encouraging young people to gamble remains open to debate. In Australia, the Interactive Gambling Act has suggested that public policy and regulation may be required given gambling simulated sites normalize gambling behavior, incorporate unrealistic odds, and may provide a false sense of winning.

Whether social gambling sites meet the standard legal definitions of gambling, the onus of responsibility for youth should not merely be relegated to parents but also to operators, the industry, and regulators will need to play a role. Calls for regulation have not surprisingly been met with strenuous opposition from operators who claim that customers are only playing for entertainment, the cost for screening youth would be prohibitive, and there are no harms associated with playing. Regulators, in general, also appear wary of attempting to impose strict restrictions on this sector given the existing difficulties they face in regulating online gambling, which arguably represents a greater concern, and that there is little research to support expressed concerns. Nevertheless, in recognition of the increasing intersection between social casino games and gambling, some operators and associations are now discussing self-regulation and responsible codes of conduct to exemplify their corporate social responsibility. Partnering with gambling operators may leave gaming operators and companies open to criticism of exploiting younger players, particularly children and adolescents. Our current knowledge and data would support Rose's (2013) contention that the social gambling industry needs to self-regulate themselves or they will become government regulated. From a public health policy perspective the issue may not if such operators will become regulated but rather when they will be regulated. Operators of social casino gaming have argued that such games are harmless, with only a small minority of players actually purchasing virtual currency. If this is true, operators would be well advised to link with researchers and open their vast data banks as some online gambling operators have recently done. In the absence of working together with the research and clinical community, critics argue that the industry has something to hide. Under pressure, the International Social Games Association (ISGA), a group of leading social gaming companies, has recently developed a set of "Best Practice Principles" calling for stronger adherence to applicable laws and regulations and transparency. In particular, they emphasize the need for "casino style games should not deliberately lead players to believe they will be successful at real-money gambling games." (ISGA, 2013).

## **7. Conclusions**

Researchers have only begun to examine the impacts of social casino gambling upon individuals in general, and potentially vulnerable populations including children and adolescents. While gaming providers have long suggested that underage youth are not the target of social casino games, their sites remain particularly attractive to youth. The authors contend that it is an inappropriate strategy to engage youth in games that mimic gambling and are closely linked to gambling sites. It is strongly recommended that minors should not be targeted, that the graphics should refrain from incorporating childlike characters, that underage minors be prohibited from playing on such sites, and that warnings should be included stating that winning on these sites may not mean that individuals when gambling for real money versus virtual money. Responsible gambling frameworks and strategies used in many online gambling sites should be included. At a minimum, social casino sites should provide appropriate information concerning probabilities of winning, warnings

about negative consequences of excessive play, and the ability to self-exclude oneself. Advertisements for both online gambling and social casino games should be subject to similar regulations. Prizes, promotional materials and/or inducements should be restricted to adults only.

The psychosocial impact of social casino gambling is only just beginning to be investigated by gambling researchers and social policy experts. An examination of the determinants and factors associated with simulated social gambling games and their potential impact is indeed complex. Other determinants such as gender, personality, social experiences, cultural, familial and attitudinal values may be similarly important. While individuals playing on social casino games may also gamble for money more frequently both on land-based and online gambling sites, only longitudinal research will be able to address the issues of causality and convergence. Finally, while much of this review focused upon the potential risks associated with the normalisation and convergence between social gambling games and potential problems associated with youth gambling, there may be some potential opportunity for positive learning and educational benefits if such games are developed with that goal in mind. de Freitas and Griffiths (2008) have argued that while digital technology may be blurring the line between social media and actual gambling, such applications may be useful as a way of educating youth through specific messaging, altering odds to reduce the probability of winning, and through the incorporation of behavioural analytics as a way of providing feedback to the user. Future research should also explore the extent to which the popularity and use of gambling-style games can be developed to have positive educational benefits and facilitate responsible attitudes towards gambling. Games that teach young people about gambling, including the independence of chance events, probabilities of winning and house advantages, may ultimately reduce the development of commonly held irrational beliefs about gambling. Operators will need to carefully examine their operating practices. Ultimately, if the industry fails to self-regulate their products governments will have little choice but to intervene.

### **Acknowledgements**

This research review was partially funded by the Manitoba Gambling Research Program of Manitoba Lotteries; however, the findings and conclusions of this paper are those solely of the authors and do not necessarily represent the views of Manitoba Lotteries.

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