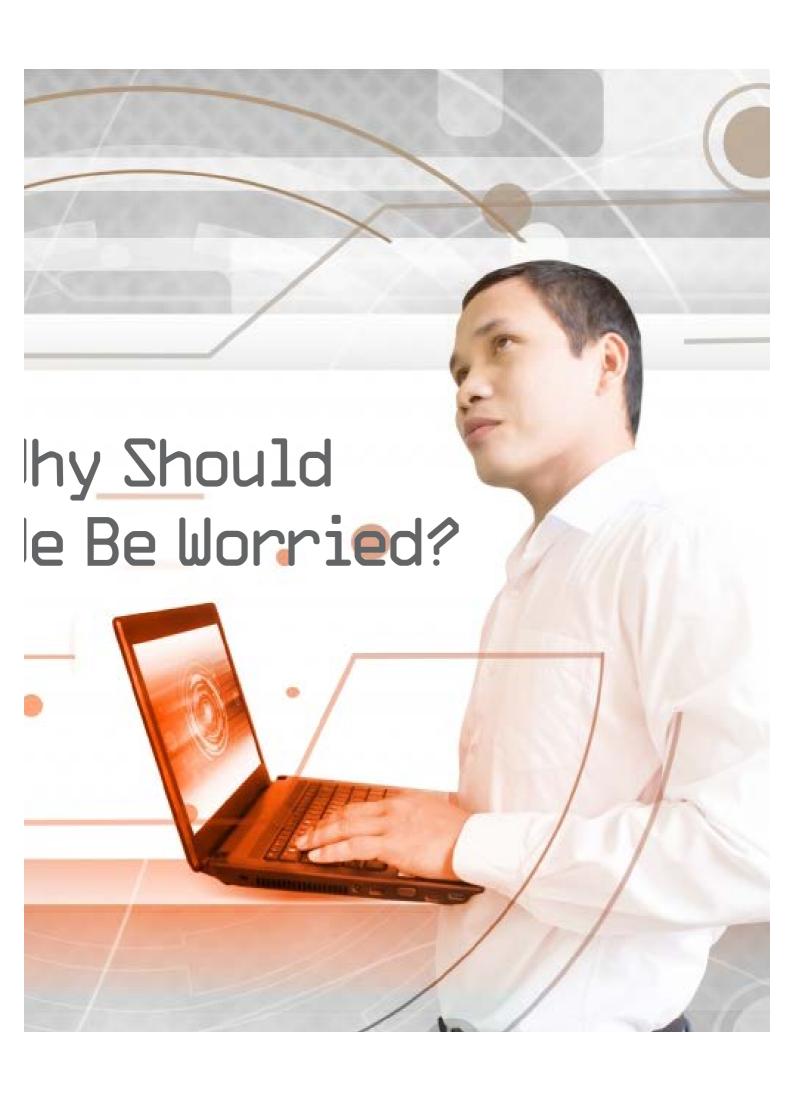


Kate Anthony & Mark D. Griffiths



ocial media platforms have undoubtedly impacted on many areas of our lives. Even if we have no use for computer or smartphone communication, we are bombarded by the ubiquitous blue thumbs-up or the Twitter bird in our TV advertising or high street browsing. At the extreme end in the social media we hear of cyberbullying on Facebook and criminal prosecution for hate crime via tweeting, or of the teenagers who innocently send explicit photos to their partners only to find wide distribution of the material further down the line. These forms of abuse do exist on the Web, but they are simply public manifestations of human behaviour that would exist without the Internet in some form – from misogyny in the workplace to playground battles. Scaremongering does little to protect us from abusive online behaviour, and we need new strategies to build resilience against it, particularly for our young people.

But there is one area of online behaviour that only occasionally hits the national broadsheet headlines, and that is the new forms of gambling traditional forms gambling behaviour that have been given new life through social media. Research has shown that gambling is a form of leisure that is enjoyed without problems by most of the population who partake in it. However, there remain a small minority of gamblers who experience harm (Responsible Gambling Trust, 2012) and as a result suffer the usual life issues that most addictions can bring including loss of relationships, loss of jobs, health problems, debt, and resulting homelessness (Griffiths, 2004). Criminal implications of losing money through gambling affect the prison population, and there are aspects of gambling, such as frustration with machines in amusement arcades, that can result in violence (Parke & Griffiths, 2005).

When we see the inviting environment of the World Wide Web, and away from the media, we rarely think of these negative aspects of its existence. In a leisure pursuit capacity, we see tweets and 'likes' and candy

and clouds. Social media has changed our language – we are 'friended' and 'instagrammed', 'tweeted' or 'pinged'. The red notification icon on Facebook itself can affect our mood - has our status been liked, or our recent selfie? In the world of teenagers, a photo without enough likes can be a damning comment on their actual identity (for instance, a recent research presentation by Alison Preston of OfCom at the Parentzone Digital Families conference in London put the "acceptable" number of likes on a selfie at 30-40 within 4 minutes [OfCom, 2014]).

We don't seek to add to the media frenzy around negative online behaviour in general. However, there is a growing element online that implications for treatment of addiction that runs the risk of being lost in the inviting glow of crushing candies and buying cartoon cows for our virtual farms - and that is the issue of addictive social gaming. We seek to bring this to the of attention practitioners. Addiction has many forms, and social gaming runs the

risk of being lost as somehow glib or less important, mostly because gaming is fun – right?

Over the last couple of years, there have been an increasing number of media reports about the potentially exploitative and/or addictive nature of various types of social game that can either be played via social networking sites or be after downloading played apps from online commercial enterprises such as iTunes. Most social games are easy to learn and communication between other players is often (but not always) a feature of the game, and they typically have highly accessible user interfaces that can be played on a wide variety of different devices (e.g., smartphones, tablets, PCs, laptops, etc.).

There are arguably four main concerns relating to social gaming. Firstly, there are concerns about the way games companies are making money from players by making them pay for in-game assets, ingame currency, and/or access to other levels within the game.

Secondly, there are concerns about how engrossing the games can be that have led to various news reports claiming that a small minority of people appear to be "addicted" to them. Thirdly, there have been concerns that some types of social games are a gateway to other potentially problematic leisure activities - most notably gambling. Finally, social gaming can be seen as a trigger to those already in recovery, igniting the very stimuli they seek to avoid by using them as a means to replace gambling.

VIRTUAL ASSETS AND FINANCIAL SPENDING

Almost anyone that has engaged in social gaming will have played 'freemium' products. Freemium social games give free access to the game being played, but players must pay for so-called 'premium' services. In games like Candy Crush Saga (CCS), players are not charged to

advance through the first 35 levels but after that, it costs 69p for another 20 levels. Players can avoid paying money by asking their friends on Facebook to send them extra lives. Players on CCS are encouraged to buy 'boosters' such as virtual 'candy hammers' for around £1.25. Although this does not appear to be much money, the buying of in-game assets and items can soon mount up. Last year, many news outlets covered the story of how two boys (aged just six and eight years of age) spent £3200 on their father's iPhone buying virtual farm animals and virtual farm food with real money at £70 a time. Another case involved a ten-year-old boy who ran up a £3,000 bill on the game Arcane Empire on iTunes.

Games played via social networking sites that are 'freemium' games are psychological 'foot-in-thedoor' techniques that lead a small minority of people to pay for games and/or game accessories that they may never have originally planned to buy

before playing the game (akin to 'impulse buying' in other commercial environments). It is arguable that many of the games played on social network sites share similarities with gambling, especially as they both involve in-game spending of money.

Although in our view social gaming operators need to be more socially responsible in how they market their games and how they stimulate inpurchasing, game parents themselves also need to take responsibility when letting their children play social games or allowing them to download gaming apps. Simple measures that can help stopping children unwittingly buy in-game items for real money include:

- Not giving children access to online store passwords;
- Personally overseeing any app that they download;
- Using parental controls on phones and tablets;
- Unlinking debit/credit card cards from online store accounts (i.e., not storing payment details with online stores); and

 Talking with children themselves about the buying of in-game extras.

SOCIAL GAMING ADDICTION

Games like CCS are genderneutral games that have a 'moreish' quality (a bit like eating chocolate). Social games like CCS and Farmville take up the entire player's cognitive ability because anyone playing on it has to totally concentrate it. By being totally absorbed players can forget about everything else while engaging in the activity. These are some of the psychological of consequences other more mainstream chemical addictions (e.g., alcoholism) and behavioural addictions (e.g., gambling addiction).

At their heart, social games are deceptively simple and fun but can be highly rewarding on many different levels (e.g., psychological, social, physiological, and financial). Social games like CCS and Farmville may not seem to have much connection to gambling,

but the psychology used by the games developers is very similar. People cannot become addicted to something unless they are being constantly rewarded for engaging in the activity. Like gambling and video game playing more generally, the playing of social games provides constant rewards (i.e., behavioural and psychological reinforcement) that in a small number of instances could result in a person becoming 'addicted' to the game they are playing.

Even when games do not involve money, most social games introduce players to the principles and excitement of gambling. Small unpredictable rewards lead to highly engaged, repetitive behaviour. In a minority, this may lead to addiction. Basically, people keep responding in the reinforcement absence of hoping that another reward is just around the corner - a psychological principle rooted in operant conditioning and called the partial reinforcement extinction effect - something that is used to great effect in both slot machines and most

video games (Sparkman, 1979). At present there is little empirical evidence that social gaming is causing addiction-like problems on the scale of more traditional online games (e.g., World of Warcraft, League of Legends, etc.), although researchers are only just beginning to research into the social gaming area, particularly in light of the recent DSM-5 inclusion of it as a diagnosable disorder (see Petry et al, 2014, for a discussion).

SOCIAL GAMBLING

One social networking activity that has only recently come into focus is gambling via social networking sites. Although the playing of gambling games for points (e.g., poker) have been popular for a number of years, a number of gaming operators are now using Facebook as a platform in which to offer gambling for real money following the introduction of Bingo Friendzy in August 2012.

Social gaming companies have been accused of leveraging the mechanics of gambling to build their gaming empire. One of the key psychological ingredients in both gambling (such as playing a slot machine) and social gaming is the use of operant conditioning and random reinforcement schedules. Basically, random reinforcement schedules games relate to the unpredictability of winning and/or getting other types of intermittent rewards (Skinner, 1938).

The psychosocial impact of this new leisure activity has only just begun to be investigated by academic researchers in the gaming field. Social networking sites have the potential to normalise gambling behaviours as part of the consumption patterns of a non-gambling leisure activity, and may change social understandings of the role of gambling among young people. There is no money changing hands but teenagers are learning the mechanics of gambling and there are serious questions about whether gambling with virtual

money encourages positive attitudes towards gambling in people (and young people particularly). For instance, does gambling with virtual money lead to an increased prevalence of actual gambling? Research has demonstrated that one of the risk factors for problem gambling among adolescents is the playing of the 'play for free' gambling games on the internet (games that are widespread on Facebook and other social networking sites).

Based on the available empirical literature, it has been argued that it may be distinguish important to between the different types of money-free gambling being made available - namely social networking modes (on social networking sites) and 'demo' or 'free play' modes (on internet gambling websites). Initial considerations suggest that these may be different both in nature and in impact. For example, some researchers have argued players gambling in social networking modes may experience a different type

and level of reinforcement than those gambling in 'demo' mode on an internet gambling site. On some social networking sites, the accumulation of 'play money' or 'points' may have implications for buying virtual goods or services or being eligible for certain privileges. This may increase the value and meaning of the gambling event to the individual.

Additionally, when considering the 'flow' and intention of individuals accessing such sites, it could be argued that individuals accessing money free gambling through social networking sites may be more likely to be induced or persuaded to play given that these website visitors' primary intention may have been social interaction (i.e., the primary function of the website) as opposed to those playing in 'demo' mode where gambling is the primary function of the website. Other features, such as stylish and appealing characters and graphics, and (what some might deem to be) aggressive viral marketing tactics, also appear to play an important part in the acquisition, development, and maintenance of social gaming behaviour.

USING SOCIAL GAMING IN RECOVERY

Much like the recovering alcoholic will turn to alcoholfree beer to aid recovery, gamblers (and other addicts) may turn to replacement activities to help them through the gaps in their lives that used to be filled by their potentially damaging behaviour. There are two dangers in this - the first is that a whole new addictive behaviour is gained: that of social gaming addiction. The second is that playing on social casinos online for free is detrimental to recovery as it generates strong urges to engage in real money gaming. Anecdotal qualitative research shows that people in recovery report that:

 The feeling of gaming on social casinos is almost identical to real money gaming as it generates a dissociative state leading to a substantial loss in terms of time and it also provides them with an "escape from reality".

 The guilt felt by problem gamblers who have engaged in no money gaming is of a similar strength to the guilt and remorse they would feel had they played for money.

Furthermore, some clients have reported in groups that:

- They began gaming on social casinos before moving onto real money gaming which eventually became a problem.
- They wanted to replicate the "big money wins" experienced during social casino gaming that they would have had if they had been playing for money.

In addition to taking clues from traditional theories around addictive behaviour for treatment planning, there are important nuances in how we need to treat addiction in the digital future. As we can see above, those in the treatment field are citing more and more cases of the use of social gaming to replace gambling addiction by those in recovery, only to find that the games are addictive as the gambling play or are triggering the need to gamble real money. As one client in a text-based gambling recovery forum put it:

"Its the same rush, the same waste of time, the same futile effort. The same hangover.... Whats 'free' about that?"

CONCLUSION

New types of social gaming and gambling-like experiences that people of all ages are now being exposed to raise various moral, ethical, legal and social issues. Given that most of the issues highlighted here are somewhat anecdotal, more empirical research is needed in these new online activities as the line between social gaming, non-financial forms of gaming, and gambling are beginning to blur.

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