ADDICTION TRENDS: INTERNET V CASINO GAMBLING

BY MARK GRIFFITHS

Gambling addictions always result from an interaction and interplay between many factors including the person's biological and/or genetic predisposition, their psychological constitution, their social environment and the nature of the activity itself (Griffiths, 1999). There is no precise frequency level of a gambling game at which people become addicted since addiction will be an integrated mix of factors in which frequency is just one factor in the overall equation. This brief paper attempts to examine whether Internet gambling is problematic, and more importantly, whether Internet gambling is potentially more problematic than casino gambling. To do this it briefly overviews the empirical research on Internet gambling. It also outlines the literature on 'Internet addiction' and examines whether Internet gambling is therefore 'doubly addictive'.

o date there has been very little empirical research into Internet gambling and there have been only three academically published prevalence studies specifically investigating it. Griffiths (2001) carried out a UK prevalence survey examining Internet gambling. Of the 2098 random people surveyed (918 male and 1180 female), only 495 of them (24%) were Internet users. The results showed that not one person gambled regularly on the Internet (i.e., once a week or more) and that only one percent of the Internet users were occasional Internet gamblers (i.e., less than once a week). As noted, there has been speculation that Internet gambling will be addictive; there was no evidence from this study. However, the data for this study was collected in 1999 and is now very out-of-date in respect to the known rise in the number of people gambling on the Internet.

In Canada, Ialomiteanu and Adlaf (2001) reported on the prevalence of Internet gambling among Ontario adults. Their data were collected by a random telephone survey of 1,294 Ontario adults. Overall, 5.3% had gambled on the Internet during the past 12 months. Although women were more likely to gamble Online than males (6.3% versus 4.3%), the difference was not statistically significant. Only marital status was significantly related to Internet gambling. Those previously married (divorced, widowed) were significantly more likely to report Online gambling compared to those who were married (10.9% vs. 4.9%). There were no dominant age, regional, educational or income differences. The study did not examine any aspects of problem gambling.

In the US, Ladd and Petry (2002) carried out a survey into gambling among 389 self-selected individuals from university health and dental clinics. Embedded within their questions was the South Oaks Gambling Screen (SOGS). They reported

that 90% of the sample had gambled within the last year and that 70% had gambled within the previous two months of the survey. It was also reported that 31 individuals (8%) had gambled on the Internet at some point in their lives and that 14 of them (3.6%) engaged in Internet gambling weekly. Mean scores on the SOGS showed that the Internet gamblers had significantly higher scores than the non-Internet gamblers (7.8 compared to 1.8). Ladd and Petry concluded that Internet gamblers were significantly more likely to be problem gamblers than non-Internet gamblers.

However, there were a number of limitations to the study. Firstly, the individuals were self-selecting and were recruited from a dental clinic. This could have had a large influence on the results. Secondly, the study treated Internet gamblers and non-Internet gamblers as separate and distinct groups when in fact it is likely that most, if not all Internet gamblers, also gambled in traditional ways as well. Although it could be the case that gambling on the Internet leads to a higher prevalence of gambling problems it could equally be the case that those who already have gambling problems are more likely to gamble on the Internet, as well as at other gambling venues (e.g., casinos, racetracks, etc.).

There are - of course - many studies currently being undertaken by research groups all around the world (including my own). However, until these have gone through the peer review process it is hard to assess the social impact and addictiveness of Internet gambling.

INTERNET GAMBLING: SOCIAL ISSUES

The uptake of gambling depends on many factors. Internet gambling is global, accessible and has 24-hour availability. In essence, technological advance in the form of Internet gambling is providing convenience gambling. Theoretically, people can gamble all day every day of the year. This will have implications for the social impact of Internet gambling. Here are some of the major areas of potential concern (Griffiths & Parke, 2002).

PROTECTION OF THE VULNERABLE

There are many groups of vulnerable individuals (e.g., adolescents, problem gamblers, drug/alcohol abusers, the learning impaired etc.) who in offline gambling would be prevented from gambling by responsible members of the gaming industry. However, Internet gambling sites provide little in the way of 'gatekeeping'. In cyberspace how can you be sure that adolescents do not have access to Internet gambling by using a parent's credit card? How can you be sure that a person does not have access to Internet gambling while they are under the influence of alcohol or other intoxicating substances? How can you prevent a problem gambler who may have been barred from one Internet gambling site, simply clicking to the next Internet gambling link? These are all serious concerns that both regulatory authorities and Internet gambling service providers will have to take on board.

ELECTRONIC CASH

For most gamblers, it is very likely that the psychological value of electronic cash (e-cash) will be less than 'real' cash (and similar to the use of chips or tokens in other gambling situations). Gambling with e-cash may lead to what psychologists call a 'suspension of judgement'. The





suspension of judgement refers to a structural characteristic that temporarily disrupts the gambler's financial value system and potentially stimulates further gambling. This is well known by both those in commerce (i.e., people typically spend more on credit and debit cards because it is easier to spend money using plastic), and by the gaming industry. It is the reason why 'chips' are used in casinos and why tokens are used on some slot machines. In essence, chips and tokens 'disguise' the money's true value (i.e., decrease the psychological value of the money to be gambled). Tokens and chips are often re-gambled without hesitation as the psychological value is much less than the real value. Anecdotal evidence would seem to suggest that people gamble more using e-cash than they would with real cash.

UNSCRUPULOUS OPERATORS

Many concerns about the rise of Internet gambling concern unscrupulous practices operated by some Internet gambling sites. A major issue concerns the 'trustworthiness' of the site itself. For instance, on a very basic trust level, how can an Internet gambler be sure they will receive any winnings from an unlicensed Internet casino operating out of Antigua or the Dominican Republic? There are, however, other issues of concern including the potentially unscrupulous practices of (i) embedding, (ii) circle jerks, and (iii) Online customer tracking. These are briefly overviewed below.

Embedding – One seemingly common practice is the hidden 'embedding' of certain words on an Internet gambling site's webpage through the use of 'meta-tags'. A meta-tag is a command hidden in the Web page to help search engines categorise sites (i.e., telling the search engine how they want the site indexed). One common way to get extra traffic flowing through a webpage is to embed common words that people might be searching for on the Internet (e.g.. 'Disney').

Some Internet gambling sites appear to have used the word 'compulsive gambling' embedded in their webpage. In essence, what such unscrupulous sites are saying is "index my casino site in with the other compulsive gambling sites" so people will 'hit' this site when they are looking for other information related to compulsive gambling. Someone looking for help with a gambling problem will get these sites popping up in front of them. This is a particularly unscrupulous practice that is legal.

Circle jerks – Another potentially unscrupulous tactic used by Internet gambling sites is telescoping windows often referred to as 'circle jerks'. If someone Online accesses a particular type of site and try to get out of it, another box offering a similar type of service will usually 'pop up'. Many people find that they cannot get out of the never-ending loop of sites except by shutting down their computer. Obviously, those sites that use 'circle jerks' hope that a person will be tempted to access a service they are offering while their site is on the screen.

Online customer tracking - Perhaps the most worrying concerns over Internet gambling is the way sites can collect other sorts of data about the gambler. Customer data is the lifeblood of any company. Internet gamblers can provide tracking data that can be used to compile customer profiles. Such data can tell commercial enterprises (such as those in the gambling industry) exactly how customers are spending their time in any given financial transaction (i.e., which games they are gambling on, for how long, and how much money they are spending etc.). This information can

help in the retention of customers, and can also link up with existing customer databases and operating loyalty schemes.

Companies that have one central repository for all their customer data have an advantage. It can also be accessed by different parts of the business. Many consumers are unknowingly passing on information about their online behaviour that raises serious questions about the gradual erosion of privacy. Customers are being profiled according to how they transact with service providers. Linked loyalty schemes can then track the account from the opening established date.

The technology to sift and assess vast amounts of customer information already exists. Using very sophisticated software, gaming companies can tailor its service to the customer's known interests. When it comes to gambling, there is a very fine line between providing what the customer wants and exploitation. The gaming industry sell products in much the same way that any other business sells things. They are now in the business of brand marketing, direct marketing (via mail with personalised and customised offers) and introducing loyalty schemes (which create the illusion of awareness, recognition and loyalty).

On joining loyalty schemes, players supply lots of information including name, address, telephone number, date of birth, and gender. Those who operate Internet gambling sites will be no different. They know your favourite game and the amounts you have wagered. Basically they can track the playing patterns of any gambler. They know more about the gambler's playing behaviour than the gamblers themselves. They can send the gambler offers and redemption vouchers, complimentary accounts, etc. Supposedly, all of these things are introduced to enhance customer experience. Benefits and rewards to the customer include cash, food and beverages, entertainment and general retail. However, more unscrupulous operators will be able to entice known problem gamblers back onto their premises with tailored freebies (such as the inducement of 'free' bets in the case of Internet gambling). The introduction of Internet gambling has come at a price, and that price is an invasion of the gambler's privacy.

INTERNET ADDICTION AND INTERNET GAMBLING ADDICTION

Gambling has long been known to be potentially addictive. Coupled with several research reports that the Internet may be addictive (e.g., Griffiths, 2000a), it has been speculated that Internet gambling may be 'doubly addictive'. However, further examination of this appears to show no evidence for such speculations. Young (1999) claims Internet addiction is a broad term that covers a wide variety of behaviours and impulse control problems, and categorised by five specific subtypes. These are:

- Cybersexual addiction: compulsive use of adult websites for cybersex and cyberporn.
- Cyber-relationship addiction: over-involvement in Online relationships.
- Net compulsions: obsessive online gambling, shopping or day-trading.
- Information overload: compulsive web surfing or database searches.
- Computer addiction: obsessive computer game playing (e.g. Doom, Myst, Solitaire etc.)

Griffiths (2000a) has argued that many of these excessive users are not 'Internet addicts' but just use the Internet excessively as a medium to fuel other addictions. Put very simply, a gambling addict who engages in their chosen behaviour Online is not addicted to the Internet. The Internet is just the place where they engage in the behaviour.

However, in contrast to this, there are case study reports of individuals who appear to be addicted to the Internet itself (e.g., Young, 1996; 2000b). These are usually people who use Internet chat rooms or play fantasy role playing games - activities that they would not engage in except on the Internet itself. These individuals to some extent are engaged in text-based virtual realities and take on other social personas and social identities as a way of raising self-esteem. Nevertheless, to date there is no evidence that Internet gambling is 'doubly addictive' particularly as the Internet appears to be just a medium to engage in the behaviour of choice

Another concern that has been noted concerns the relative anonymity of Internet gambling, which may lead to disinhibition and increased levels of gambling. However, Griffiths (2003) has pointed out that using Online customer tracking Internet gambling operators can collect lots of data about the gambler. Rather than being used for potentially exploitative practices, such information could be used in a socially responsible manner by Internet gambling sites (i.e., they could target intervention measures to players that they identify as playing excessively). One of the benefits of the Internet is that it can also be used to provide information, and as such could help raise gambler's awareness of the signs of problem gambling, or direct them to relevant help lines and treatment services.

CASINO GAMBLING AND ADDICTION

One of the problems in assessing whether casino gambling is potentially addictive is that just like Internet gambling, 'casino gambling' is not a type but a medium in which people gamble. Casino gambling can therefore refer to roulette gambling, slot machine gambling, gambling on table games (e.g., poker, baccarat, blackjack), and virtual roulette gambling etc. Very little research has specifically been done on casino gamblers mainly because empirical research tends to concentrate on the potential addictiveness of specific types of activity rather than where the gambling took place.

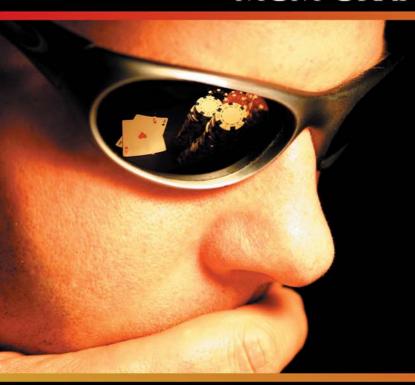
Probably the most researched type of gambling concerns slot machines and their derivatives (e.g., fruit machines, poker machines, video lottery terminals etc.). However, empirical research does not tend to attach much importance to where the slot machine playing takes place in terms of addictiveness potential. The argument is that to a particular person, the potential addictiveness will be present irrespective of whether the slot machine was played in a casino, a betting shop, an amusement arcade or in an Online casino.

There is no doubt slot machines are potentially addictive and there is now a large body of research worldwide supporting this (see Griffiths, 1995 and 2002 for comprehensive overviews). In the past ten years, slot machines (in all their different guises) have been the predominant form of gambling by pathological gamblers treated in self-help groups and professional treatment centres in Spain, Germany and Holland.

There is also evidence that approximately half of all calls



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to gambling helplines are for problematic slot machine gambling (e.g., Griffiths, Scarfe & Bellringer, 2001). Young males (particularly adolescents) seem to be particularly susceptible to slot machine addiction in the UK with up to 6% of adolescents experiencing problems with their slot machine playing at any one time using DSM criteria (Griffiths, 2002). However, there are big cultural differences.

Obviously this does not mean that everyone who plays slot machines will become addicted (in the same way that not everyone who drinks alcohol will become an alcoholic). What it does mean is that given a cluster of factors (genetic/biological predisposition, social upbringing, psychological constitution, situational and structural characteristics) a small proportion of people will unfortunately experience severe problems.

There is no doubt that the structural characteristics of the particular gambling activity contribute to this. In the case of slot machines, it has been argued (Griffiths, 1993) that a combination of the technological aspects of structural characteristics (event frequency, the near miss, symbol ratio proportions, light and sound effects, the suspension of judgement etc.) all contribute towards repetitive play in some individuals.

Empirical evidence worldwide clearly shows that slot machine gambling is the most problematic form of gambling. To date, there is no empirical evidence that gambling on the Internet causes anything like the problems reported with slot machines and other traditional forms of gambling (such as gambling at casinos or on horse racing) but this is more likely to be because there is so little research into Internet gambling.

CONCLUSIONS

Over the past decade technology has continued to provide new market opportunities not only in the shape of Internet gambling but also in the shape of more technologically advanced slot machines, video lottery terminals (VLTs), electronic scratchcards, and gambling on video game based CD ROMS to name a few (Griffiths, 2003; Wood, Gupta, Derevensky, & Griffiths, 2004).

Furthermore, other established gambling forms are becoming more technologically driven (e.g., bingo, keno). To what extent does technology facilitate excessiveness? There are a number of factors that make online activities like Internet gambling potentially seductive and/or addictive. Such factors include anonymity, convenience, escape, dissociation/immersion, accessibility, event frequency, interactivity, disinhibition, simulation, and asociability.

In general, structural characteristics of gambling appear to be enhanced through technological innovation (Griffiths, 2003). Despite these factors, there is no evidence - to date that Internet gambling is any more addictive than other types of gambling including casino gambling.

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