

The Social Impact of Internet Gambling

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Technology has always played a role in the development of gambling practices and continues to provide new market opportunities. One of the fastest growing areas is that of Internet gambling. The effect of such technologies should not be accepted uncritically, particularly as there may be areas of potential concern based on what is known about problem gambling offline. This article has three aims. First, it overviews some of the main social concerns about the rise of Internet gambling. Second, it looks at the limited research that has been carried out in this area. Third, it examines whether Internet gambling is doubly addictive, given research that suggests that the Internet can be addictive itself. It is concluded that technological developments in Internet gambling will increase the potential for problem gambling globally, but that many of the ideas and speculations outlined in this article need to be addressed further by large-scale empirical studies.

Keywords: Internet gambling, addiction, social impact, gambling practices

Griffiths (1999a) has argued that technology has always played a role in the development of gambling practices. Technology continues to provide new market opportunities, with Internet gambling being at the forefront. It would appear that Internet gambling will take off for several reasons. For instance, it is easy to access and participate in an activity that comes into the home via television. Furthermore, there are many other developments that look likely to facilitate uptake of Internet gambling services, including (a) sophisticated gaming software, (b) integrated e-cash systems (including multicurrency), (c) multilingual sites, (d) increased realism (e.g., “real” gambling via web cams, player, and dealer avatars), (e) live remote wagering (for gambling alone and gambling with others), and (f) improving customer care systems. According to some estimates, U.S.\$2.3 billion a year is being spent on Internet gaming worldwide, and the market has more than tripled in size since 1997 (Mitka, 2001). One study, which featured details on more than 1,400 gambling sites available worldwide, estimated that the number of Internet gamblers will grow from approximately 4 million people in 1999 to 15 million by the year 2004 (Sinclair, 2000).

Another factor relating to Internet gambling is the changing nature of family entertainment. The increase in, and development of, home entertainment systems is changing the pattern of many families’ leisure activities. The need to seek entertainment leisure outside the home is greatly reduced, as digital television and home cinema systems offer a multitude of interactive entertainment services and information. The result of this is that many families adopt a leisure pattern known as “cocooning,” where the family or individual concentrates their leisure time around in-house entertainment systems (Griffiths & Wood, 2000). Rather than going out, the entertainment comes to them directly via digital television and Internet services. In the not-too-distant future, part of this entertainment for many families may be

Internet gambling. It is argued that this situation is of great potential concern, given the increasing literature on the dangers of offline gambling proliferation. Therefore, the rest of this article examines three main areas in relation to Internet gambling. First, it overviews some of the main social concerns about the rise of Internet gambling. Second, it looks at the limited research that has been carried out in this area. Third, it examines whether Internet gambling is doubly addictive, given research that suggests that the Internet can be addictive itself.

The uptake of gambling depends on many factors. Internet gambling is provided by a network of networks that span geographical borders and is not discrete. Therefore, 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. The rise of Internet gambling will provide marketing opportunities and marketing threats. Many may start to set up their own Internet gambling sites because the initial set-up costs will be minimal in comparison to, say, a casino. This will have implications for the social impact of Internet gambling. The following are areas of concern that build and expand on Griffiths's (1999a) previous work.

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 from simply clicking to the next Internet gambling link? These are all serious concerns that regulatory authorities and Internet gambling service providers will have to take on board.

Internet Gambling in the Workplace

Internet gambling is one of the newer opportunities for gambling in the workplace. An increasing number of organizations have unlimited Internet access for all employees, and many employees have their own computer terminal in their own office that allows such activity to take place without arousing suspicion. Internet gambling is a somewhat solitary activity that can happen without the knowledge of management and the employee's coworkers. This has potentially large implications for work efficiency and productivity, and is an issue that employers will have to take seriously and develop effective gambling policies for the workplace environment (for an overview of issues concerning Internet gambling in the workplace, see Griffiths, 2002).

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 (Griffiths,

1993). This is well known by those in commerce (i.e., people typically spend more on credit and debit cards because it is easier to spend money using plastic) and the gaming industry. This is the reason that 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 regambled without hesitation as the psychological value is much less than the real value. Evidence would seem to suggest that people will gamble more using e-cash than they would with real cash (Griffiths, 1999a).

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 that 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 (a) embedding, (b) circle jerks, and (c) 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 web page through the use of meta-tags. A meta-tag is a command hidden in the web page to help search engines categorize sites (i.e., telling the search engine how they want the site indexed). One common way to get extra traffic flowing through a web page 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 web page. 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, which at the moment is perfectly legal.

Circle jerks. Another potentially unscrupulous tactic used by both Internet sex and gambling sites is telescoping windows often referred to as circle jerks. If someone online accesses a particular type of site and tries 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 concern regarding Internet gambling is the way sites can collect other sorts of data about the gambler. Customer data are 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, 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 who 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 themselves, which 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 their 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 sells 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 personalized and customized 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 will know your favorite game and the amounts you have wagered. Basically, they can track the playing patterns of any gambler. They will know more about the gambler's playing behavior than the gamblers themselves. They will be able to send the gambler offers and redemption vouchers, complimentary accounts, and so forth. 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 GAMBLING: EMPIRICAL RESEARCH

To date, there has been very little empirical research into Internet gambling. As far as the authors are aware, there have been only two prevalence studies and one small qualitative study investigating Internet gambling. Griffiths (2001) carried out a U.K. prevalence survey examining Internet gambling. Of the 2,098 people surveyed (918 men and 1,180 women), only 495 of them (24%) were Internet users. The results showed that not a single person gambled regularly on the Internet (i.e., once a week or more) and that only 1% of the Internet users were occasional Internet gamblers (i.e., less than once a week). Results also showed that a further 4% had never gambled but would like to do so, whereas the remaining 95% had never gambled on the Internet and said they were unlikely to do so. Participants age 15 to 19 years ($n = 119$) were also asked about whether they had ever gambled on the Internet, and if they had whether they had used a parent's credit card. No one in the sample had done so, although 4% said they would like to. Female participants ($n = 1,180$) were also asked about their attitudes toward gambling online as compared to gambling in a betting shop. Of those surveyed, 73% said they would never gamble on the Internet. However, others reported that they would prefer gambling on the Internet when compared to a betting shop because it was a safer place to gamble (2%), less intimidating (9%), more anonymous (9%), more fun (2%), and more tempting (13%).

Griffiths (2001) argued that the results were not that surprising, given the relatively low use of the Internet in the United Kingdom (i.e., traditionally in the United Kingdom most people have to pay by the minute for Internet access, which most likely inhibits use). Although there has been speculation that Internet gambling will be addictive, there was no evidence from this study. This study should therefore be viewed in context in that it was carried out at a time when Internet use was an irregular activity in the United Kingdom.

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 men (6.3% vs. 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. Although rates of Internet gambling were not excessive, they argued that the simultaneous expansion and diffusion of Internet access and gambling indicates that continued monitoring is necessary.

Finally, a small qualitative study comparing case studies of Internet gamblers and traditional gamblers has been reported by Parke and Griffiths (2001). They reported that traditional gamblers expressed a strong desire to gamble on the Internet for reasons such as convenience (hours and proximity), improved facilities (accounts, etc.), and tax-free betting. However, there are barriers to Internet gambling, including the inability to obtain valid credit or debit cards and the lack of the physical transaction of collecting winnings that can be highly rewarding. Parke and Griffiths's (2001) study indicated a number of subtle differences between the two types of gambler on a number of dimensions (i.e., financial stability, motivation, physiological effects, competition, need for acknowledgement, and social facilitation). These are briefly discussed below.

Financial Stability

In comparing traditional gamblers with Internet gamblers, one of the primary differences appeared to be financial stability. Internet gamblers set aside a sum at the start of the month specifically for gambling. When these funds ran out, they stopped gambling. Traditional gamblers admitted to gambling money that they could not afford.

Motivation

Internet and traditional gamblers appeared to be different in terms of motivation to gamble. Traditional gamblers gambled for more expressive and affective reasons than Internet gamblers. Traditional gamblers enjoyed gambling as a means of escape. The "real" gambling environment was more conducive to satisfying these needs than Internet gambling in the home.

Physiological Effects

Traditional gamblers reported greater physiological effects (e.g., increased heart rate) when gambling compared to Internet gamblers. For instance, traditional gamblers reported more feelings of nausea, dizziness, and stomach contractions after experiencing a sizeable loss. This correlates to the previous conclusion that these gamblers are more expressive and impulsive and find the consequences of losing more aversive, as such losses are often unplanned.

Competition

Internet gamblers appeared to be more competitive than traditional gamblers. Betting against a bookmaker is less competitive because the competition is not focused directly at

any one individual (i.e., they are betting against a firm or trying to beat the system). Typically, it is the one-on-one element that successfully taps into the need for competition among the gambling population. Internet gambling sites have successfully introduced person-to-person gambling (e.g., Flutter.com), making such sites more desirable to competitive gamblers.

Need for Acknowledgement

The study also suggested that Internet gambling sites might satisfy a deeper psychological need—the need for self-esteem. Typically, gambling establishments have always operated in a social environment. An important aspect of such an environment has been the level of social reinforcement that exists. When group members win, they often receive reinforcement from the rest of the group through praise, congratulations, and, most important, respect. At first sight, it would appear that social reinforcement is unavailable in Internet gambling, that is, if you win on an Internet gambling site, who is there to witness it? However, some operators offer customers the opportunity to have their own identity on the gambling site. Furthermore, some sites' use of message boards appear to facilitate social reinforcement as the Internet site itself will let everyone know via an e-mail that that gambler has won and how much. Where gamblers previously had to publicize their own success, Internet technology can do an even better job without the gambler having to do anything.

Social Facilitation

Parke and Griffiths (2001) speculated that one positive aspect relating to Internet gambling might be to reduce risk because it reduces the social facilitation effect. Gambling with friends and other spectators tends to increase the level of risk-taking in making bets and increases the length and frequency of visits to gambling environments. Considering the solitary nature of Internet betting, it could be assumed that these risks would be lower for Internet gambling. However, Griffiths has also reported that one of the consequences of technology and the Internet has been to reduce the fundamentally social nature of gambling to an activity that is essentially asocial. Research has shown that those who experience problems are more likely to be those playing on their own (e.g., those playing to escape; see Griffiths, 1995a). Retrospectively, most problem gamblers report that at the height of their problem gambling, it is a solitary activity (e.g., Griffiths, 1995a). Gambling in a social setting could potentially provide some kind of safety net for overspenders, that is, a form of gambling where the primary orientation of gambling is for social reasons, with the possibility of some fun and a chance to win some money (e.g., bingo). However, it could be speculated that those individuals whose prime motivation was to constantly play just to win money would possibly experience more problems. One of the major influences of technology appears to be the shift from social to asocial forms of gambling. From this alternate view, it can be speculated that as gambling becomes more technological, gambling problems will increase due to its asocial nature. The question of whether Internet gambling inhibits or exacerbates problem gambling is at present unanswered.

INTERNET ADDICTION AND INTERNET GAMBLING ADDICTION

Gambling has long been known to be potentially addictive. Coupled with increasing research reports that the Internet is addictive (Griffiths, 1995b, 1996b, 1998, 2000a; Young, 1996, 1998, 1999), it has been speculated that Internet gambling may be doubly addictive.

However, further examination of this appears to show that this may not be the case. Technological addictions such as Internet addiction can be viewed as a subset of behavioral addictions (see Marks, 1990) and feature all the core components of addiction (e.g., salience, euphoria, tolerance, withdrawal, conflict, and relapse; see Griffiths, 1995a, 1995b, 1996a). Young (1999) claimed that Internet addiction is a broad term that covers a wide variety of behaviors and impulse control problems, categorized by five specific subtypes. These are:

- Cybersexual addiction: Compulsive use of adult web sites for cybersex and cyberporn.
- Cyberrelationship addiction: Overinvolvement 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 (1999b, 2000b) 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 behavior online is not addicted to the Internet. The Internet is just the place where they engage in the behavior. However, in contrast to this, there are case study reports of individuals who appear to be addicted to the Internet itself (e.g., Griffiths, 1996b, 2000a; Young, 1996). 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 making themselves feel good about themselves. In these cases, the Internet may provide an alternative reality to the user and allow them feelings of immersion and anonymity that may lead to an altered state of consciousness. This in itself may be highly psychologically and/or physiologically rewarding.

To a gambling addict, the Internet could potentially be a very dangerous medium. For instance, it has been speculated (Griffiths, 1995b) that structural characteristics of the software itself might promote addictive tendencies. Structural characteristics promote interactivity and to some extent define alternative realities to the user and allow him or her feelings of anonymity—features that may be very psychologically rewarding to such individuals. However, 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 behavior of choice. What the Internet may do is facilitate social gamblers who use the Internet (rather than Internet users per se) to gamble more excessively than they would have done offline.

CONCLUSIONS

As was asserted at the beginning of the article, technology has always played a role in the development of gambling practices and will continue to do so. The effect of the technological revolution should not be examined uncritically, particularly if there are areas of potential concern. We make no apologies for presenting what could turn out to be worst case scenarios, as all possible implications of increased Internet gambling need to be considered. The first part of this article highlighted social issues that were all bona fide concerns. What is uncertain at the present time is how much of a concern they are or will be. Future research and monitoring of potentially unscrupulous practices will give a clearer indication in the years to come.

Clearly, many of the ideas and speculations outlined in this article need to be addressed further by large-scale empirical studies. As highlighted in the second section of this article,

empirical evidence is very limited. As a consequence, the potential social concerns are not borne out by the empirical data, although this is not something to be complacent about. Because there are so little data, no firm conclusions can be drawn either positively or negatively. Numerous directions have been noted for such further validating research. Substantially more data are required to generalize the findings of Parke and Griffiths (2001) to the Internet gambling population as a whole. Their results, although interesting, were based on very small numbers of interviewees. Participant recruitment is currently very difficult for this particular group. However, it is anticipated that as this population grows and the use of Internet data gathering techniques becomes more commonly accepted, researchers will have access to larger samples.

Whether Internet gambling will turn out to be doubly addictive remains to be seen. The limited data appear to suggest individuals who are actually addicted to the Internet itself are not those people who experience other addictions (like gambling) online. However, for the social gambler, the Internet may be more addictive because of factors such as convenience, event frequency, asocial nature, and anonymity. Clearly, this is an area of concern that must be addressed sooner rather than later, given the almost exponential increase in Internet gambling globally.

The primary intention of this article was to draw together what little we know about the recent and, perhaps more important, the potential future effects that the Internet will have on gambling behavior. What is clear from this account is that several aspects of the Internet (the structural characteristics) will make gambling significantly more convenient and enjoyable. Furthermore, its appeal might be enhanced by catering for certain psychological needs (e.g., self-esteem and competition) that other traditional forms of gambling do not currently offer. It could therefore be argued that such developments would increase the potential for problem gambling globally.

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