CYBERPSYCHOLOGY & BEHAVIOR Volume 12, Number 4, 2009 © Mary Ann Liebert, Inc. DOI: 10.1089/cpb.2009.0062

Social Responsibility Tools in Online Gambling: A Survey of Attitudes and Behavior among Internet Gamblers

Mark D. Griffiths, Ph.D.¹ Richard T.A. Wood, Ph.D.² and Jonathan Parke, Ph.D.³

Abstract

To date, little empirical research has focused on social responsibility in gambling. This study examined players' attitudes and behavior toward using the social responsibility tool PlayScan designed by the Swedish gaming company Svenska Spel. Via PlayScan, players have the option to utilize various social responsibility control tools (e.g., personal gaming budgets, self-diagnostic tests of gambling habits, self-exclusion options). A total of 2,348 participants took part in an online questionnaire study. Participants were clientele of the Svenska Spel online gambling Web site. Results showed that just over a quarter of players (26%) had used PlayScan. The vast majority of those who had activated PlayScan (almost 9 in 10 users) said that PlayScan was easy to use. Over half of PlayScan users (52%) said it was useful; 19% said it was not. Many features were seen as useful by online gamblers, including limit setting (70%), viewing their gambling profile (49%), self-exclusion facilities (42%), self-diagnostic problem gambling tests (46%), information and support for gambling issues (40%), and gambling profile predictions (36%). In terms of actual (as opposed to theoretical) use, over half of PlayScan users (56%) had set spending limits, 40% had taken a self-diagnostic problem gambling test, and 17% had used a self-exclusion feature.

Introduction

FOR MANY YEARS, experts in problem gambling have been recommending to gaming companies (especially online gaming companies and companies that offer loyalty cards) that they should consider using their large data sets to help identify problem gambling behavior. Despite the potential to exploit gamblers, some gaming companies are now beginning to use their large data sets to help problem gamblers rather than to promote their gaming products to them (e.g., Svenska Spel, Nova Scotia Gaming Corporation).

For instance, the Swedish gaming company Svenska Spel recently launched a package of social responsibility tools (PlayScan) that aims to prevent problems with gaming in an active way. PlayScan was designed to detect players at risk of developing gaming problems and offers them tools to change their behavior. Unlike the conventional purpose of customer databases (i.e., to increase sales), the objective of PlayScan is the opposite. PlayScan aims to detect and help those who would benefit from playing less. PlayScan has been compared to a safety belt (i.e., something you use without intending to actually make use of). The tool measures increases and/or

decreases of players' gaming behavior and uses a "traffic light" identification system. If a player's gaming is stable and without risky gaming behavior, it gives a green signal to the player. A yellow signal indicates some risky gaming. Serious problems with gaming are shown by a red signal. The use of the system is voluntary, but Svenska Spel strongly recommends that its customers use it.

PlayScan uses the player's behavior from the preceding year, which is then matched against a model based on behavioral characteristics for problem players. It operates through a combination of genetic programming (i.e., a neural network analog) and Bayesian models. In order to reach a level at which the model fitted actual gambling behavior, the variables were extensively calibrated. If it predicts players' behavior as risky, players get an advance warning along with advice on how they can change their patterns in order to avoid future unhealthy and/or risky gaming. If a players' behavior indicates gaming problems, they are deleted from the direct advertising address lists. Via PlayScan, players are offered use of Svenska Spel's social responsibility control tools (e.g., personal gaming budgets, self-diagnostic tests of gaming habits, and the chance to self-exclude from gaming).

¹Psychology Division, International Gaming Research Unit, Nottingham Trent University, Nottingham, United Kingdom.

²GamRes Limited, Montreal, Canada.

³The Gambling Lab, Manchester, United Kingdom.

The extent to which online gaming companies are engaging in socially responsible practices and using social responsibility tools has been little researched. A study by Smeaton and Griffiths³ examined a representative selection of 30 UKowned Internet gambling sites. Each site was examined in relation to what safeguards were in place to encourage the social responsibility of Internet gamblers. Thirteen indicators of responsible gambling were examined. The main findings indicated that half of the gaming operators did an initial age check of the player (15 of 30); almost two thirds did an age verification check of the player (19 of 30); only a small minority did a credit check on the player (4 of 30); most had credit limits for the players (27 of 30 had a maximum or minimum limit; only a small minority made reference to controlled gambling (4 of 30); only a small minority offered a hyperlink to helping organizations and/or self-help groups (4 of 30); a third showed some evidence of social responsibility practices (10 of 30); only one operator had a facility for gamblers who wanted to exclude themselves (1 of 30); just over one third had a facility to instantly exit during gambling (11 of 30); one third had a built-in pause and confirmation facility (10 of 30); only one sixth gave no encouragement to continue gambling (5 of 30; most on border); and two thirds gave players easy access to their account balance (20 of 30). Admittedly, this study is now relatively old considering the speed at which the Internet gambling industry has moved over the last few years coupled with the fact that social responsibility has now become increasingly important for gaming companies.

McDonnell-Phillips⁸ conducted a national survey of gambler precommitment behavior in Australia, utilizing a telephone survey of 482 regular gamblers who played electronic gaming machines (EGMs) and/or bet on horse racing. The key findings suggested that virtually all the players, problem gamblers included, reported that they tried to self-regulate by having some kind of spending limit in mind. They found that most regular gamblers expressed limits in terms of weekly rather than monthly or annual spending, suggesting that budgets were not usually considered over the long term. Most players were in favor both of the option to set their own limits when gambling and of receiving detailed statements about how much they had spent on gambling for a given day or month. Interestingly, players did not respond well to the term *limit* even when they acknowledged that they attempted to manage their own spending. Limit may sound too restrictive and imposing for some players even when they have the option of setting it themselves.

Broda et al. conducted a series of studies that examined 47,000 subscribers to bwin, an online sports betting and gaming site, over a 2-year period and compared the behavior of players who tried to exceed their deposit limit with all

other players. Deposit limit referred to the amount of money deposited into a player's spending account and did not include any accumulated winnings. Bwin sets a mandatory deposit limit of no more than 1000 Euros (approximately US\$1,390) per 24 hours or 5000 Euros (about US\$6970) per 30 days. Players can also set their own deposit limits (per 30 days) below the mandatory limits. Overall, the studies found that only 0.3% of players attempted to exceed their deposit limit. The large mandatory limit may be one reason for this finding, as the authors noted that the majority of players never came close to reaching the maximum deposit limit. However, the vast majority of the sample (i.e., 95%) never deposited more than 1050 Euros per 30 days, a fifth of the maximum allowed 5000 Euros. However, it should be noted that the study did not distinguish between those who attempted to exceed either the mandatory limit or their own personally set deposit limits.

The Global Online Gambler Survey¹⁰ collected data from 10,865 participants from 96 countries who reported that they had gambled at Internet casino sites, Internet poker sites, or both within the 3 months prior to the research (see Table 1). The survey focused on demographic variables, information on behavior and attitudes, player protection and satisfaction, responsible gambling, and positive and negative aspects of Internet gambling.

Although no single feature stood out as critically important, 51% to 75% of players (across all five features) stated that they would consider some responsible gaming elements at least quite useful. The most popular option was receiving regular financial statements, with 75% of respondents considering this option to be at least quite useful, and the least popular feature was a self-set time limit, with 51% reporting this as at least quite useful. Those players who were younger, female, gambled out of boredom, and reported losing more money were significantly more likely to consider responsible gambling features to be useful. There was a trend that if players were supportive of one type of responsible gambling feature, they would generally support the use of various consumer protection strategies. The same study also utilized a series of focus groups of regular gamblers in five countries (Canada, United States, Sweden, United Kingdom, Germany). Overall, the attitudes among focus group participants were that the onus for playing responsibly should rest only with the player. Both survey and focus group data showed that players preferred informed choices, as promoted by receiving regular financial statements. Most players were very much opposed to mandatory spending limits, which they regarded as patronizing and overly restrictive.

Given the relative lack of research into attitudes toward social responsibility by gamblers and how they are using social responsibility tools, this study examined players' atti-

Table 1. Players' Perceptions of the Value of Responsible Gambling Features (N=10,865)

Feature	Not at all useful	Not very useful	Quite useful	Very useful	Extremely useful
Self-set spending limits Self-set time limits Self-exclusion Regular financial statements Self-assessment test	11% (962)	18% (1,576)	40% (3,452)	18% (1,558)	12% (1,046)
	19% (1,604)	31% (2,614)	32% (2,708)	12% (989)	7% (556)
	16% (1,347)	26% (2,145)	35% (2,857)	13% (1,046)	10% (813)
	9% (766)	16% (1,318)	42% (3,530)	20% (1,700)	13% (1,086)
	14% (1,186)	23% (1,932)	38% (3,165)	15% (1,273)	9% (723)

(Source: International Gaming Research Unit, 2007).

tudes and behavior toward using such tools within PlayScan. The study included an assessment of online gambler feedback in relation to the overall relevance of PlayScan but also involved data collected from Internet gamblers who have not used PlayScan to examine their perceptions of PlayScan. It also examined the extent to which PlayScan is experienced as beneficial by those who have received the intervention and is seen as beneficial by those who have not.

Method

Participants

A total of 2,348 participants took part in the study (1,725 males, 560 females; 56 missing responses) with a mean age of 43.9 years (age range 18–84 years; SD = 12.8 years). Participants were clientele of the Svenska Spel online gambling Web site and self-defined as online gamblers.

Design and materials

An online survey was constructed that contained mostly closed questions, although most questions allowed the participants an opportunity to add further information if they so wished. Questions related to many areas, including how long they had been playing online at Svenska Spel; how often they gambled online; how they viewed Svenska Spel in comparison to other gaming operators; whether or not they had used PlayScan; reasons they had used PlayScan; reasons they had not used PlayScan; when they first used PlayScan; how easy PlayScan was to use; how helpful PlayScan was to them; how helpful they perceived PlayScan was to other players; how useful individual features of PlayScan were; whether they had used any of the self-exclusion features; why they used self-exclusion features; whether their individual ratings had changed since using PlayScan; the benefits of using PlayScan; the best and worst features about PlayScan; and basic demographic information (gender, age, etc.). Data were collected online because this medium, according to some researchers, is particularly well suited for investigating online gambling behavior. 11,12 Participants were informed that all responses would be confidential. Participants who wanted to take part followed a link that led them to the online questionnaire where further instructions were given on how to complete it. Once the questionnaire was completed, the participants pressed 'Send', and their responses were automatically sent to Svenska Spel, who then passed on the data set to the research team.

Procedure

The survey was sent out online to 10,412 online Svenska Spel players, representing approximately 10% of the player base, on June 27, 2008 (with a further reminder sent out on July 11, 2008). The questionnaire was closed on August 3, 2008. Of the 10,412 questionnaires, 698 e-mail addresses came back as being incorrect, leaving a total sample of 9,714 possible players who received the questionnaire. Of these 9,714 players, 2,348 completed the questionnaire with a net response rate of 24.2%. As an incentive to participate, all respondents who completed the survey were given a Triss scratch ticket by Svenska Spel. Most of the questionnaires were filled out in June (n = 1,252) and July (n = 1,090) with just 5 people completing it in early August.

Results

Gender of participants

Three quarters of participants who responded to the survey were male (75.5% male; 24.5% female).

Gambling frequency

All participants were asked how often they gambled with Svenska Spel online. Of those who responded (n = 2,335), a small minority (3.5%) gambled every day, a third (32%) gambled a few times a week, and just under half (46%) gambled a few times a month. The remaining participants (18.5%) gambled less often. Participants were also asked how often they gambled online with other gaming companies. Of those who responded (n = 2,328), 62% did not gamble online with anyone else but Svenska Spel. Of those who did gamble with other gaming companies, a small minority gambled every day (2%), approximately 1 in 14 gambled a few times a week (7%), approximately 1 in 10 gambled a few times a month (9%), and 1 in 5 gambled less often than a few times a month (20%).

Length of time online gambling

All participants were asked when they had first started gambling online with Svenska Spel. Of the 2,332 who responded, 81.5% had been gambling online with Svenska Spel for more than a year, 8% began 7 to 12 months ago, 7% began 3 to 6 months, 2.5% began 1 to 2 months, and 1% began within a month of the survey.

Customer care by Svenska Spel compared to other gaming companies

All participants were asked to consider how Svenska Spel looked after their players in comparison to other gaming sites they had played on. Of the 2,323 responses, over half of the sample (52%) had never played on another site, so could not make any comparison. In addition, 1 in 5 responses (21%) said they were not sure. Of those who felt they could make a comparison, 23% said that Svenska Spel treated them better than other gaming companies compared to 4% who said Svenska Spel treated them worse.

PlayScan usage

All participants were asked if they had used PlayScan. Of the 2,332 responses, 26% had, and 74% had not. Of those participants who had activated PlayScan and responded (n = 594), 39% had done so more than a year ago, 24%, 7 months to 1 year ago; 24%, 3 to 6 months ago, 7%, 1 to 2 months ago, and 6%, within a month of completing the survey. Respondents who had not used PlayScan were also asked why they had not activated PlayScan. Of the 1,727 responses, the main reason given for not using it was that 75% of players did not think they needed it. Lesser reasons included 17.5% reporting they did not know what PlayScan did, 11% reporting PlayScan was just for problem gamblers, 7.5% reporting they could not be bothered, 4.5% reporting they did not want Svenska Spel gathering data on them, and 1% reporting it took too much time to sign up. Participants were given the opportunity to add further comments about why they had not activated PlayScan. The majority of respondents to the open-ended section of this question (n = 76)

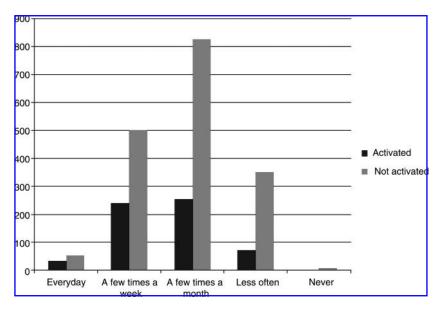


FIG. 1. Frequency of play at Svenska Spel and PlayScan activation.

reported that they felt they did not need PlayScan because they kept in control of their own limits, they did not gamble often enough, or they did not gamble with large enough sums of money to warrant setting it up (n = 65). Others reported having not got around to signing up to PlayScan yet or not feeling as though the games they played warranted activation of PlayScan.

PlayScan usage, gender, gambling frequency, and length of time gambling online

Results showed that higher-frequency players were significantly more likely to use PlayScan ($\chi^2 = 47.71$, df = 4; p < 0.0001) (see Fig. 1). However, length of time spent gambling online with Svenska Spel had no relationship with whether the player had used PlayScan (the length of time players had gambled online with Svenska Spel had no bearing on whether they had activated a PlayScan account) ($\chi^2 = 2.68$, df = 4; p < 0.61). Results also showed that males were more likely than females to activate a PlayScan account (26% males, 20% females) ($\chi^2 = 7.66$, df = 1; p = 0.006).

PlayScan usage, nonusage, and age

PlayScan users were compared to those who had not activated PlayScan. This showed that the average age of PlayScan users (42.4 years) was slightly lower than that of those who had not used PlayScan (44.5 years), a finding that was statistically significant (t = 3.26, df = 2,277; p < 0.001). In relation to reasons for not using PlayScan, there were a number of significant age differences. Younger respondents were significantly less likely to know what PlayScan was (t = 3.37, df = 1,720; p < 0.001), significantly more likely to say they could not be bothered to activate PlayScan (t = 8.22, df = 1,720; p < 0.0001), and significantly more likely to say they did not want Svenska Spel to collect data on them (t = 2.35, df = 1,720; p < 0.02). Older respondents were significantly more likely to say that they did not need PlayScan (t = 2.09, df = 1,720; p < 0.04).

Ease and usefulness of PlayScan

PlayScan users were asked how easy the system was to use. Of the 593 participants who responded, the majority (58%) said it was very easy, and 30% said it was somewhat easy. A further 11% said it was neither difficult nor easy, with the remaining very small minority (1%) reporting it was either somewhat or very difficult to use. PlayScan users were also asked how useful the system was to them. Of the 591 participants who responded, the majority (52%) said it was "quite useful" or "very useful" compared to 19% who said it was either "quite useless" or "completely useless." The remaining respondents (29%) had neutral feelings about the usefulness of PlayScan.

Reasons for using PlayScan

PlayScan users were asked what their reasons were for using the PlayScan system. Of the 587 users who responded to the question, the most popular reasons were being curious about what PlayScan was (47%), wanting to set time and money limits (34%), and wanting to play safely (23%). Lesser reasons for using PlayScan included players who were concerned they were playing too much (12%), players wanting to better understand their playing behavior (11%), and/or players wanting some help with their gambling (1%). A further 8% said they did not know the reasons they started using PlayScan.

Useful features of PlayScan

PlayScan users were asked about which particular features were of most use to them. Of the 570 who responded to the six specific questions (see Table 2), the most useful feature was the setting of spending limits, with over two thirds of respondents (70%) reporting the feature to be "quite useful" or "very useful." The other "quite/very useful" endorsement ratings were being able to view their gambling profile (49%), performing self-tests of gambling behavior (46%), being able to self-exclude for a certain period of time (42%), getting in-

Table 2. Ratings of Useful Features of PlayScan as Rated by Respondents ($N\!=\!570$)

PlayScan feature	Completely useless	Quite useless	Don't know	Quite useful	Very useful
To view my current gambling profile (e.g., green, yellow, red)	12.8%	12.7%	25.5%	37.8%	11.2%
Getting information about my predicted future gambling profile	13.7%	16.1%	34.4%	27.4%	8.4%
Setting a spending limit	8.2%	10.5%	11.2%	33.2%	36.8%
Performing a self-test of my gambling behavior	11.8%	12.6%	29.3%	32.3%	14%
Excluding myself for a specific period of time	16.7%	15.1%	26%	24.6%	17.7%
Getting information about support for gambling issues	17.4%	11.8%	31.2%	24%	15.6%

formation about support for gambling issues (40%), and getting information about predicted gambling profile (36%; see Table 2). Respondents were also asked which features of PlayScan (if any) they had used. Of those who responded (n = 566), 56% had used spending limits, 40% had taken a self-test, 17% had used a self-exclusion feature, and 0.4% had contacted a gambling helpline.

Self-exclusion features in PlayScan

PlayScan users were asked about which particular selfexclusion features were the most useful to them personally. Of the 569 who responded to the six specific questions (see Table 3), the most useful self-exclusion feature rated by users was the 7-day self-exclusion, rated as "quite/very useful" by just under half of respondents (46%). This was followed by 1month self-exclusion (24%), 24-hour self-exclusion (24%), and permanent self-exclusion (16%). PlayScan users were also asked why (if at all) they used the self-exclusion features. Of the 669 participants who responded, only 17% had used any of the self-exclusion features. Just over 1 in 10 respondents (12%) used a self-exclusion feature so they could avoid playing online for a while to save some money, 1 in 10 respondents (10%) used a self-exclusion feature because they thought they were gambling online too much and needed a break, and a tiny minority (0.5%) used a self-exclusion feature because they never wanted to gamble online again. There were other idiosyncratic reasons given for using the selfexclusion features (2.6%).

Changes in PlayScan rating

All participants who had used PlayScan were asked if their rating had changed since using it. Of the 567 respondents, 89% said their rating had stayed the same (presumably "green" throughout). The remaining players reported they had gone from green to yellow (5.6%), from yellow to red (0.5%), from green to red (0.2%), from red to yellow (0.7%), from yellow to green (5%), and from red to green (1.2%). This

suggests that overall, 11% of PlayScan users had been made aware of a change in their rating over time. (Note: the total change in scores adds up to 103.2%, reflecting that a small proportion of players experienced more than one change rating during their time using PlayScan).

Perceived benefits of PlayScan

Participants were asked about the benefits they had got from using PlayScan (see Table 4). Of those who responded (n=566), just under two thirds of participants (63%) "completely agreed/somewhat agreed" with the statement that they felt better informed about their playing behavior, two thirds (66%) "completely agreed/somewhat agreed" that they felt more confident that they could play moderately, and 4 in 10 participants (41%) "completely agreed/somewhat agreed" PlayScan had helped them to gain better control over their playing behavior.

Best features of PlayScan

Participants were also asked in an open-ended question to nominate what they considered the best features of PlayScan. Overall, 254 participants responded to this free-response question. They generated four core groups of factors that were considered as the best aspects of PlayScan:

Limit setting: The option for players to set limits and help with budgeting (40%; n = 101).

Self-monitoring: The option for players to keep track of their spending and general gambling behavior through self-monitoring (36%; n = 91).

Protection of the vulnerable: That it can help protect those vulnerable players who may be experiencing problems (11%; n = 27).

Education and awareness: That it can generate improved awareness of play and educate gamblers about their own gambling habits from an independent and objective perspective (7%; n = 18).

Table 3. Ratings of Self-Exclusion Features of PlayScan as Rated by Respondents Who Used PlayScan (N=569)

Self-exclusion feature	Completely useless	Quite useless	Don't know	Quite useful	Very useful
24-hour self-exclusion	27.6%	13.2%	35.2%	15.1%	8.8%
7-day self-exclusion	29%	11.8%	35.3%	32.3%	14%
1-month self-exclusion	30.6%	9.5%	36.4%	14.1%	9.5%
Permanent self-exclusion	36.4%	8.3%	39%	9.5%	6.9%

PlayScan benefit statement	Completely agree	Somewhat agree	Don't know	Completely disagree
I feel better informed about my playing behavior I feel more confident that I can play moderately PlayScan has helped me to gain better control over my playing behavior	25.8%	37.5%	20.8%	11.2%
	31.1%	35%	20.8%	13.1%
	16.3%	25.4%	34.6%	23.7%

Table 4. Ratings of Statements Relating to Benefits of PlayScan as Rated by Respondents Who Used PlayScan (N= 566)

A variety of other issues (7%; n = 17), such as ease of use and value for money, were also raised, although these received less support.

Worst features of PlayScan

Players were also asked in an open-ended question to suggest what they considered as the "worst features of PlayScan." Of the 136 responses to this question, the most popular response, given by 50% of the respondents, was that there was nothing negative about PlayScan. However, five specific areas of concern (and some other more idiosyncratic areas) were identified by a small minority of players:

Frustration with limit settings (18%; n = 24): Players voiced that it can be frustrating to have their play restricted whenever they reach their limits, especially when it can take as long as a month to reset these limits, even if the player makes a mistake and accidentally adjusts the settings.

Voluntary nature of the settings (7%; n = 10): Players also suggested that if this tool is voluntary, players who may benefit most (e.g., problem gamblers) may not activate the tool or may use it in an ineffective way (e.g., setting high limits).

Limit settings should not include winnings (5%; n=7): Among a very few respondents, there were some clear views that limits should focus only on net expenditure rather than on absolute expenditure. In other words, limits should consider only expenditure from the amount initially deposited rather than including additional winnings as well.

Conflicts of interest (3%; n = 4): A small minority of players expressed some cynicism regarding the intended purpose of PlayScan, including questioning the role of marketing. Need for better information (4%; n = 5): A small number of players called for more information regarding how the tool works and the expected benefits. These players also wanted messages and features to be more prominent during the player experience.

Other issues (12.5%; n = 17): Finally, a variety of other issues (e.g., privacy concerns, wanting more than three levels of play rating) were also raised, although these received less support (fewer than 3 people per concern):

Discussion

The results of the survey of Svenska Spel online gambling clientele provide a mix of both somewhat predictable and somewhat interesting findings. Three quarters of participants who responded to the survey were male, and a quarter of respondents were female. Given the general finding that men

are more likely than women to be online gamblers,¹³ this finding is not surprising. Gambling frequencies reported by players in this survey (such as 3.5% gambling online every day and a third of players gambling online a few times a week) were generally higher than those found in national prevalence surveys, although very similar to other studies of online gambling.¹³ Such surveys have found that high-frequency gamblers are more likely to access mediums such as the Internet because of factors such as convenience, 24/7 accessibility, and good value for the gambler.

The results of the survey taken as a whole reveal a "hardcore" loyalty to Svenska Spel. Findings revealed that almost two thirds of respondents (62%) did not gamble online with anyone else but Svenska Spel. In addition, when asked to compare Svenska Spel with other gaming companies in term of social responsibility, over half of the sample (52%) said they could not make any comparison because they had not gambled on other gaming companies' Web sites. Such findings suggest there is significant trust of Svenska Spel among its clientele and confirms previous qualitative research on Swedish online poker players who also had high trust in the company. 14 These high levels of social responsibility appear to have influenced what respondents thought about Svenska Spel compared to other operators. Of the minority who had gambled on both the Svenska Spel Web site and on other Web sites, players were almost 6 times more likely to say that Svenska Spel treated them better than other gaming companies (23% of players said Svenska Spel treated them better; 4% said that other gaming operators treated them better than Svenska Spel).

The online survey revealed that just over a quarter of players (26%) had used PlayScan. Given that PlayScan is voluntary rather than mandatory, it is hard to assess whether or not this is a healthy uptake by players (there are no studies by which to make a similar comparison). Those who had not activated a PlayScan account were clearly of the view that they themselves did not need it, something also confirmed by the majority of the open-ended qualitative responses. Some clearly had the view that initiatives such as this were really aimed at problem gamblers. The vast majority of those who had activated PlayScan (almost 9 in 10 users) said that PlayScan was easy to use, whereas only 1% said that it was difficult to use. Furthermore, over half of PlayScan users (52%) said it was useful, while only 19% said it was not. The most popular reason for using PlayScan was somewhat surprising: almost half of PlayScan users had tried it out of curiosity. However, a third used PlayScan to set spending limits, and almost a quarter used it to play more safely. All of the reasons given for using PlayScan (apart from curiosity value) are also the reasons Svenska Spel introduced it in the first place (e.g., to ease concerns over playing too much, limit

setting, understanding gambling behavior, help with gambling if needed).

Most players had more than one reason why PlayScan was useful. Many features were seen as useful, including spending limit setting (70%), viewing their gambling profile (49%), self-exclusion facilities (42%), self-diagnostic gambling tests (46%), information and support for gambling issues (40%), and gambling profile predictions (36%). These findings are very similar to those reported by the International Gaming Research Unit's¹⁰ study of almost 11,000 Internet gamblers who reported that participants found various responsible gambling features at least "quite useful," including spending limits (70%), time limits (51%), self-exclusion (58%), regular financial statements (75%), and self-diagnostic tests (63%). Other research on player card use has reported similar findings of what responsible gaming features players like best, such as access to financial statements highlighting wins and losses. 8,15,16 In terms of actual (as opposed to theoretical) use, over half of PlayScan users (56%) had set spending limits, 40% had taken a self-test, 17% had used a self-exclusion feature, and less than 1% had contacted a gambling helpline. This usage most likely reflects the broad range of gambling behavior (occasional gambling to social gambling to problem gambling).

The types of self-exclusion feature favored varied somewhat predictably according to the respondents' own needs. Given the (presumed) unproblematic nature of gambling among respondents, it was unsurprising that only 16% thought permanent self-exclusion would be useful to them personally. If anything, this might appear to be a slightly higher figure than might have been predicted, as it could be argued that nonproblem gamblers would be unlikely to make use of a permanent self-exclusion. The 7-day exclusion period was the most useful with almost a half of PlayScan users (46%) endorsing this as their most favored. This may have been especially useful for those who do not want to gamble for a particular period, such as the week before a monthly pay day. One-month and 1-day self-exclusion periods were most popular for around half the PlayScan users (approximately 25% each). These types of self-exclusion are more likely to be associated with nonproblem gamblers who may want to restrict their gambling behavior to a very specific instance, such as preceding a night of heavy drinking (e.g., 24-hour selfexclusion) or a particular time of the year such as Christmas holidays (e.g., 1-month self-exclusion).

These results suggest that for PlayScan users, self-exclusion is not a tool for problem gamblers but more generally a tool for responsible gambling. However, it was noted that only 17% of PlayScan users had actually used a self-exclusion feature so that they could save some money or because they thought they were gambling too much. Only a very tiny minority (0.5%) said they used it because they never wanted to gamble again. Although it cannot be proved from the data reported here, there is a high likelihood that these latter respondents were problem gamblers.

In relation to the traffic light ratings of gambling behavior, it would appear from the self-report data that the vast majority of respondents (9 in 10 PlayScan users) were in control of their gambling, as they reported no change in their (presumably) green light ratings. The remainder of the users showed relatively small fluctuations from both positive to negative ratings, and a tiny minority went from negative to

positive ratings. Some PlayScan users' ratings clearly went up and down (as the total for changes in score totaled over 100% of users). This reflects the findings in the research literature that some players dip in and out of problem gambling over long periods of time and that problem gambling is not necessarily chronic or totally fixed.¹⁷

Furthermore, some consideration should be given to the implications of using a traffic light system for player behavior. This is particularly important in relation to presenting customers with a green evaluation. Although, the accuracy of the tool is extremely high, there may still be a risk that players are being labeled as green (low risk) when in fact they could be at-risk or problem gamblers. Svenska Spel may want to consider what safeguards could be put in place to minimize such instances. Furthermore, consideration should be given to possible alternatives to using green. It may in fact be appropriate, but a further review may be appropriate.

PlayScan users showed relatively high endorsements of the benefits of PlayScan, including feeling better informed about behavior (63% versus 11% who did not feel better), feeling more confident that they can play moderately (66% versus 13% who did not feel more confident), and gaining better control over their playing behavior (41% versus 24% who did not feel PlayScan helped them better control behavior). While this latter finding was not an overwhelming endorsement, it most likely reflects that most feel in control of their behavior anyway and do not necessarily need PlayScan to stay in control.

Interestingly, the findings revealed that PlayScan users were significantly more likely to be high-frequency gamblers. From the perspective of Svenska Spel, this could be perceived as a positive finding because it is the higher-frequency gamblers who are more likely to have need of PlayScan, particularly as high-frequency gamblers are more likely than low-frequency gamblers to be problem gamblers. Although somewhat speculative, it could be argued that high-frequency gamblers in denial about their problem may be less likely to activate PlayScan in the first place. The findings also showed that PlayScan users were significantly more likely to be male than female. Given that high-frequency gamblers are more likely to use PlayScan and are more likely to be male, it is therefore no surprise that PlayScan users are more likely to be male. Having said that, some research suggests that female gamblers are more likely than males to access online guidance and help, as evidenced by an evaluation of the GamAid Web site. 18 The International Gaming Research Unit 10 also reported that females in their sample were more likely to endorse responsible gambling tools.

Results indicated that there was no relationship between the length of time participants had been an online gambler on the Svenska Spel Web site and PlayScan activation. Such a finding suggests that the decision to activate PlayScan can occur at any time in a person's playing career and that promotion of PlayScan by Svenska Spel should not be targeted only at new clientele but should also be reinforced among those who have been playing a long time. Furthermore, we suggest that Svenska Spel should not underestimate the potential for helping red customers and not just those at risk. These tools have the potential to increase the level of understanding and control among problem gamblers. Although such tools will not be helpful to everyone, and some severe problem gamblers will always find a way to gamble, these

tools will be very useful for at least some gamblers across the problem gambling spectrum, even those experiencing severe problems.

The average age of PlayScan users was significantly lower than those who had not used PlayScan, although somewhat paradoxically, younger respondents were less likely to know what PlayScan was and were more likely to say they could not be bothered to activate PlayScan. There is no obvious reason for these findings; most likely, they are a result of the large number of participants in the study. Older respondents were significantly more likely to say they did not need PlayScan. This is more understandable given that problem gambling peaks in the 16- to 34-year-old age group. ¹⁷

The results of the open-ended questions (while only involving a relatively small number of free responses) provided some more in-depth and interesting findings. The best things about PlayScan very much reflected responses made in the closed questions elsewhere with factors such as limit setting, the ability to self-monitor behavior, protection of vulnerable individuals, and education and awareness about gambling behavior. Given these are the types of socially responsible behavior that Svenska Spel is trying to encourage among its players, it can be seen as a very positive finding in relation to PlayScan.

In the open-ended question to nominate what they considered the worst thing about PlayScan, the vast majority said there was nothing bad about PlayScan at all, which again is a very positive finding about PlayScan. However, the worst things about PlayScan (admittedly by a very small number of respondents) brought up some issues not identified elsewhere in the survey. Issues included frustration with the limit settings, the voluntary nature of the settings, the spending limits not including winnings, conflicts of interest, and the need for better information.

It is interesting and to some extent ironic that the primary concern among players regarding PlayScan is that they cannot reverse their decisions regarding limits for up to 1 month. While activation of the tool is voluntary, the intention of the tool is to protect customers from losing control during periods when it may be difficult to think clearly or rationally (e.g., during sustained losing periods or after "bad bets" when players are tempted to chase their losses). Therefore, it is very positive that such frustrations are being voiced, as these are indications that the tool is performing well, even if that means protecting players from themselves in certain situations. As noted from the qualitative findings, many of the players realized the benefits of such an approach despite some initial frustration within session.

Perhaps the most relevant negative issue raised relates to when gamblers win. If a player has a limit of \$300 per month and then deposits \$300 and wins \$1000, there is a good argument to be made that the player should then be allowed to lose \$1300. According to a small number of players in the online survey, this is not what is happening. Limits must relate to net expenditure and not absolute expenditure. The issue of it taking a long time to readjust the limits if (a) a mistake is made or (b) the initial limit set was too low is something that Svenska Spel could review if it was deemed to be a problem for a significant minority of customers. However, the evidence gathered for this report suggests that it is not a major issue. Furthermore, a mistake or setting the limit too low on initial use can both be rectified at the end of a

preset period and would be unlikely to happen again given that the players would have (hopefully) learned from their mistakes.

It may also be likely that if it became acceptable to reverse some decisions for some situations (e.g., a so-called "mistake"), a precedent may be set whereby problem or at-risk gamblers may use this as a way to circumvent limits. Customer care staff could find it difficult to distinguish between genuine mistakes and desperate attempts by at-risk or problem gamblers to gamble beyond their agreed limits.

There were, of course, a number of limitations to this study in addition to those already mentioned. The response rate of the online survey was relatively low at 24%, although fairly typical for this type of research. Unfortunately, there is little means of finding out whether those who responded to the survey were representative of the whole target population. Of the people who did respond, only 24% had used PlayScan. Again, there is no way of knowing whether these PlayScan users were representative of all PlayScan users. The data in the online survey were self-report data and come with all the known problems of self-report data. However, it could be argued that self-report was the only practical way to evaluate the impact of PlayScan on player behavior. There is always the possibility that some players exaggerate and/or tell lies or do not respond. One initiative might be to hold regular focus groups to allow players a more open forum in which to raise issues. Another suggestion for future research may be to match the frequency-playing data with players' reasons for not using PlayScan. It would also be interesting to collect data on those individuals who perceived they did not need to use PlayScan, as there are data to suggest that many problem gamblers do not necessarily perceive themselves as having a gambling problem.

PlayScan is not designed to identify people with gambling problems but instead to identify when patterns of gambling behavior begin to change. Such changes may be subjectively better (i.e., toward green) or worse (i.e., toward red). Either way, players should then be able to make more informed choices. What is important after that is what the player does with the information provided. Some players may ignore a red rating and develop a problem. For others, a warning may be enough for them to change their behavior. Consequently, the ultimate value of PlayScan cannot be measured quantitatively because the outcome for each player depends entirely upon his or her reaction. The overall efficacy of PlayScan is defined by those players who use it and gain insight into their playing habits. If such information is considered useful in helping them to gamble responsibly, then PlayScan should be considered successful by that measure alone. It is worth considering that the number of people who score red (or even yellow) is low and there is no independent way to determine how many people are able to better regulate their player behavior through the increased behavioral transparency gained as well as through using additional tools like temporary selfexclusion. In other words, how can we tell if PlayScan is preventing players from developing problems? The best way to answer this question is to ask players directly how useful they find the PlayScan service for helping them play responsibly (which is what this study did). PlayScan is designed to be a voluntary service to assist players to make informed choices. What is important for the future is that player feedback is regularly monitored to ensure that players

continue to receive a service that they perceive as user friendly, enjoyable, and useful in helping them to gamble responsibly. In other words, it contributes to an overall longterm positive and healthy gambling experience.

Acknowledgment

This study was funded by Svenska Spel.

Disclosure Statement

No competing financial interests exist.

References

- Griffiths MD, Parke J, et al. The social impact of Internet gambling. Social Science Computer Review 2002; 20, 312–20.
- Griffiths MD. Internet gambling: issues, concerns and recommendations. CyberPsychology & Behavior 2003; 6:557–68.
- Smeaton M, Griffiths MD, et al. Internet gambling and social responsibility: an exploratory study. CyberPsychology & Behavior 2004; 7:49–57.
- Griffiths MD, Parke A, Wood RTA, et al. Internet gambling: an overview of psychosocial impacts. Gaming Research & Review Journal 2006; 27:27–39.
- Griffiths MD, Wood RTA, Parke J, et al. Gaming research and best practice: gaming industry, social responsibility and academia. Casino & Gaming International 2007; 3:97–103.
- Griffiths MD, Wood RTA. Responsible gaming and best practice: how can academics help? Casino & Gaming International 2008; 1:107–12.
- 7. Griffiths MD, Wood RTA, Parke J. (2008) An empirical evaluation of PlayScan. Report prepared for Svenska Spel.
- 8. McDonnell-Phillips Pty Ltd. (2005) *Analysis of Gambler Precommitment Behaviour*. Report prepared for Gambling Research Australia, Victorian Department of Justice, Melbourne.
- Broda A, LaPlante DA, Nelson SE, et al. Virtual harm reduction efforts for Internet gambling: effects of deposit limits on actual Internet sports gambling behaviour. Harm Reduction Journal 2008; 5:27.
- International Gaming Research Unit. (2007) The global online gambling report: an exploratory investigation into the attitudes and behaviours of Internet casino and poker players. Report for eCOGRA (e-Commerce and Online

- Gaming Regulation and Assurance). www.ecogra.com/Downloads/eCOGRA_Global_Online_Gambler_Report.pdf (accessed May 25, 2009).
- 11. Wood RTA, Griffiths MD. Online data collection from gamblers: methodological issues. International Journal of Mental Health and Addiction 2007, 5:151–63.
- 12. Griffiths MD. The use of online methodologies in data collection for gambling and gaming addictions. International Journal of Mental Health & Addiction 2009, DOI 10.1007/s11469-009-9209-1.
- Griffiths MD, Wardle J, Orford J, et al. Socio-demographic correlates of Internet gambling: findings from the British Gambling Prevalence Survey. CyberPsychology & Behavior 2007; 12:199–202.
- 14. Wood RTA, Griffiths MD. Why Swedish people play online poker and factors that can increase or decrease trust in poker Web sites: a qualitative investigation. Journal of Gambling Issues 2008; 21:80–97.
- 15. Bernhard BJ, Lucas AF, Jang D. (2006) Responsible gaming device research report. Las Vegas: University of Nevada, Las Vegas International Gaming Institute.
- 16. Focal Research Consultants. (2007) Assessment of the behavioral impact of responsible gaming device (RGD) features: analysis of Nova Scotia player-card data—Windsor Trial. Report prepared for Nova Scotia Gaming Corporation.
- 17. Wardle H, Sproston K, Orford J, et al. (2007) *The British gambling prevalence survey* 2007. London: Stationery Office.
- 18. Wood RTA, Griffiths MD. Online guidance, advice, and support for problem gamblers and concerned relatives and friends: an evaluation of the Gam-Aid pilot service. British Journal of Guidance & Counselling 2007; 35:373–89.

E-mail: mark.griffiths@ntu.ac.uk

This article has been cited by:

1. Mark Griffiths, Heather	Wardle, Jim Orford, Kerry Sprostor	n, Bob Erens. 2009. Interne	t Gambling, Health,	Smoking and Alcohol
Use: Findings from the 2	007 British Gambling Prevalence Su	ırvey. International Journal	of Mental Health and	Addiction . [CrossRef]