

Profile of Internet Gamblers: Betting on the Future

*Christopher Woodruff
Susan Gregory*

Abstract

The commercial casino industry in 2002 provided more jobs, higher wages, and more tax revenues to states and local communities than ever before. At the same time Internet gambling sites operated by offshore companies have seen explosive growth since the introduction of the World Wide Web in 1995 (Rose, 2003). This research developed profiles of current land based casino patrons who have gambled on the Internet, those who have not but are willing to try, and those who have not and would not in the future consider Internet gambling. Two hundred surveys were collected at two Detroit, Michigan casinos, asking questions varying from demographic information to gambling experience, and the willingness to try new things. The conceptual framework for this project was based on Roger's Diffusion of Innovation Theory, and Forsythe and Bailey's Perceived Time Poverty Model. Income, education, marital status, prior Internet purchasing and online banking experiences have a significant impact on past behaviors and future intentions regarding Internet gambling. Hours of Internet usage had more of an impact on behaviors than the issue of accessibility.

Key Words: Internet, gambling, casino, profile, Internet-Gambled

As we enter the twenty-first century, we are forced to realize that the development of the Internet is as significant as the discovery of electricity or television. The Internet has become a mechanism for information dissemination, a medium for collaboration, and model for interaction between people whatever their geographic location, wealth, or stature. With gambling's appeal and market force, and the Internet's broad access, it was only a matter of time before gambling would become available on the Internet (Feldman, 2004).

The commercial casino industry in 2003 provided more jobs, higher wages, and more tax revenues to states and local communities than ever before. As of September 2004, there are 35 states that have some form of casino gaming. Forty-six states in the U.S. allow some form of gaming. Eleven states have commercial (non Indian) casinos, 28 have Indian casinos, and 7 have racetrack casinos. Some states have more than one of the three with two states having all three forms (American Gaming Association, 2004).

Internet gambling operated by offshore companies has seen explosive growth since the introduction of the World Wide Web in 1995 (American Gaming Association, State of the States, 2004). In 2002 BetOnSports.com took 33 million bets online of which 95% came from the United States (Richtel, 2004).

Tax advocates and established brick-and-mortar casinos have complained about lost revenue to Internet casinos since the advent of Internet gambling (Bell, T., 1999). States clearly lose out with such gambling for two reasons. First, states are unable to collect tax revenue from Internet gamblers since the Internet casino operators themselves are not regulated. Another loss is to the communities around land based casinos. If people do not travel to casinos, they also do not buy gas, or eat food, or stay in hotels, or spend money on other community activities (World Online Gambling, 2003). The Interstate Wire Act of 1961 (18 United States Code Annotated § 1084, otherwise known as the Federal Wire

Christopher Woodruff, MS,
CHE
Adjunct Faculty
Hotel & Restaurant
Management Program
Eastern Michigan University

Susan Gregory, Ed.D., CHE
Associate Professor
Hotel & Restaurant
Management Program
Eastern Michigan University
202 Roosevelt Hall
Ypsilanti, MI 48197
734-487-0845
susan.gregory@emich.edu

Act) which banned interstate sports betting over the telephone is the argument for considering Internet gambling to be illegal. In 2001 three states had laws specifically banning Internet gambling (Clarke & Dempsey, 2001) and by the end of 2004 there were four additional states that had enacted Internet gambling restrictions (Gambling Law US, 2004).

Review of Literature

The history of gambling in North America suggests that the United States has a long practice of allowing some sort of legal gaming and a degree of tolerance for illegal gambling. Also suggested is that social tolerance of legal gambling can change rapidly (Rose, 2003).

The growth of gambling has been remarkable; in the last 30 years gambling has transformed itself from sinful to well accepted (Dunstan, 1997). Regardless of viewpoint, there is little doubt that gambling is very popular in the United States. By 1994 every state except Utah and Hawaii had some form of legal gambling and casino gambling is legal in all but 4 states; Utah, Hawaii, Tennessee and Vermont (American Casinos and Gambling in United States, 2004).

Gambling – Good for Communities or Bad for Societies?

The level of support for the casino industry remains high. A recent survey revealed that 83% of Americans view casino gaming as an acceptable form of entertainment (American Gaming Association, 2004). The survey also found that 90% of Americans believe gambling is a question of personal freedom (American Gaming Association, 2004). Finally, nearly 75 % of respondents think casinos “can be an important part of a community’s entertainment and tourism options” (American Gaming Association, 2004). Though for more than a century, Americans have believed that the social ills fostered by gambling outweigh its recreational value. As a result, gambling has been extensively regulated in order to restrict access to and control the operation of legalized gambling facilities. These restrictions have not diminished gambling’s popularity (Keller, 1999). Moreover, significant technological developments, notably the Internet, threaten to circumvent the current regulatory approach in ways unimaginable just a few years ago. The action at virtual casinos is nonstop and accessible to anyone with Internet access. Keller concluded that the government’s interest in regulating Internet gambling is at least as strong as, if not stronger than, its interest in traditional gambling. He concluded by saying that there is nothing unique about Internet gambling that should lead the federal government to abandon its traditional protective role in this area, and that there is no reason why existing gambling laws cannot be applied online as successfully as other laws have been (1999).

Gaming in Michigan

The expansion of gaming in Michigan has paralleled national social trends in gaming acceptance and is the geographical focus of this research. There was an explosion of gaming activity on Indian reservations in the 1980s. By the end of 1996, 17 Indian casinos run by seven different Indian tribes were operating in Michigan (Michigan Gaming Control Board, 2001). In 1996 voters decided to permit three privately owned casinos within the Detroit city limits. Detroit is the fifth largest gaming market in the United States, with revenues of 1.1 billion dollars in 2002 (American Gaming Association, 2003).

Internet Gambling Phenomenon

If a person likes gambling but does not live near a casino, each time he felt like rolling the dice, playing the slots, or competing in blackjack, a person had to travel, which takes time and money. The Internet is changing all of this. Now with a simple mouse click, he can enter casinos with no costly travel arrangements (Carter, 2002).

The increasing number of people who use the Internet and the growing consumer confidence in conducting online financial transactions has led to a greater number of people who are willing to engage in Internet gambling.

Real online gaming is when the betting, playing, and collecting of money is done entirely through the Internet (Carter, 2002). An Internet or online casino is an Internet site where you can play casino type games such as blackjack, or a slot machine, for real money. While some sites will let you play for free, the reason most play is to win money (Carter, 2002). Your wins and losses are real, and the host Internet casino will charge your credit card or take money out of your bank account to pay for your losses. If you win, the casino will put your winnings into your bank account.

All Internet casinos are located outside the United States though nearly half of all online bets are placed by people in the United States (Richtel, 2004). Having said this, most of the companies that run casinos offshore are actually operated from the United States with the computer servers located offshore (Carter, 2002). Indeed many of the companies are listed on the NASDAQ stock exchange. The reason these small countries allow online gambling is that it can help boost their economy. Companies pay up to \$100,000 to secure a gaming license, as well as paying ongoing taxes (Carter, 2002). Great Britain and Costa Rica allow Internet gambling (Richtel, 2004).

The methods for transferring money between player and host are the main legal issues being discussed today by government agencies. The increasing number of people who use the Internet and the growing consumer confidence in conducting online financial transactions has led to a greater number of people who are willing to engage in Internet gambling (National Gambling Impact Study Commission, 2001). Online wagering promises to revolutionize the way Americans gamble because it opens up the possibility of immediate, individual, 24-hour access to gambling in every home (National Gambling Impact Study Commission, 2001).

Laws Concerning Internet Gambling

With the appeal and marketing power of gambling, and with the easy access to the Internet, it was only a matter of time before gambling on the Internet became big business. A Georgia State University law article concluded that with the conception and development of Internet gambling four questions must be addressed by policy makers. First, if Internet gambling is desirable, how should it be developed? If not, how should it be controlled? Second, which level of government is best suited to regulate or control Internet gambling? Third, in cyberspace how can governments generate revenue from gambling activities? And finally, what kinds of social costs are involved in Internet gambling (Feldman, 2004)?

Internet gambling presents substantial new challenges to governments and regulatory agencies. Existing approaches to gaming are limited by the nature of Internet technology and the international nature of the activity. A recent feasibility study concluded that prohibition of Internet gambling is an ineffectual alternative and that licensing of gambling service providers is the appropriate approach (Clarke and Dempsey, 2001). Tom W. Bell, a professor at the Chapman School of Law, stated in 1999 that any attempt to ban Internet gambling is really doomed to futility. He noted that Internet gambling can not effectively be stopped, and gambling is very popular in the United States. For these two reasons, he believes Internet gambling will be legalized (Bell, 1999). In March 2004, the World Trade Organization ruled that the United States was in violation of its free trade obligations by prohibiting Internet gambling (Richtel, 2004).

Old-fashioned casinos and new wave Internet casinos both have the power to make people rich. Despite this similarity, the two businesses have not been able to link their wealth-making promise for the benefit of each other. Legal hurdles have prevented such cooperation. While there are some legislative moves to open up at least part of the online gambling industry, the potential changes are minimal. Some proposals even want

regulations on Internet gambling, and even the most deregulatory proposals offer far less government oversight than what exists outside the United States (Etzel, 2000). While only three states have laws specifically banning Internet gambling, it is considered illegal elsewhere based on a 1961 law banning interstate sports betting over the telephone (Clarke & Dempsey, 2001).

The collection of online gambling debts is also considered unenforceable in most states. This is causing concern for the major credit card issuers. For example, an individual places bets at online casinos and charges a huge amount on his credit card(s). Then with high losses, the individual files a lawsuit against the credit card company to remove the debt from his account. Based on an old law (Federal Wire Act of 1961) that makes gambling debts legally uncollectible in all 50 states, the individual has the debt wiped out. Currently Yahoo and Google Internet search engines do not allow advertisements for online casinos (Richtel, 2004)

According to information from the report of the National Gambling Impact Study Commission (NGISC) in May 1998, there were approximately 90 online casinos, and a year later there were more than 250 online casinos. Net gambling should grow from \$1.5 billion in 2000 to \$6 billion worldwide by 2003 – a fraction of the \$350 billion world gambling total. Online gambling is already clicking actively overseas in places such as Europe, Asia, and Australia (Marcial, 2001).

As the number of Internet casinos continues to rise, an Idea Brief from the New Century Foundation has suggested several alternatives for putting a complete Internet gaming ban into effect. One would be to update and strengthen existing wire communication laws. Another is to enact new laws that would require Internet service providers to shut down any gambling sites hosted on their networks. Finally the study suggests laws to prohibit the use of electronic payment methods in Internet gambling transactions or to make Internet gaming debts legally unenforceable, creating a financial incentive for credit card issuers to avoid such transactions (Enforcing a Ban on Internet Gambling, 2000).

Internet gambling may still be small compared with the revenues of U.S. land based casinos which is 50 times bigger, but technology is gradually helping to globalize one of the world's most idiosyncratic and local industries ("Business: Betting Against the House, 1999).

Profiles of the Internet Gambler

The data on Internet gamblers is only emerging (American Gaming Association, 2004). Internet gamblers are less educated than the Internet population as a whole, and women outnumber men among the patrons. Web users earning less than \$25,000 a year represent 11% of the online population. However, they also represent 13% of all visitors to gambling sites, which is high for such a minority population. In addition, users between 25 and 54 years of age are most likely to visit gambling sites. Statistics indicate that teenage Internet gambling is the fastest growing addiction. It was also found that younger people tend to take more risks and have higher rates of gambling because, in part, they use computers more (American Gaming Association, 2004).

The median age of Internet gamblers is 31.7 years. Internet gamblers in the United States tend to be younger than the average worldwide audience of Internet gamblers (DataMonitor, 2002). Around five percent, or 4.5 million, have gambled online and one million do so every day (American Gaming Association, 2004). Internet gamblers are very technologically aware, which will increasingly open up opportunities for gambling services to be delivered on alternative platforms. Internet gamblers come from the middle of the income range and are evenly distributed between the sexes (DataMonitor, 2002).

Most people see Internet gambling as a leisure activity. However, for some it can become a trap. All of an individual's resources and interests become focused on the next

Statistics indicate that teenage Internet gambling is the fastest growing addiction.

chance to Internet gamble (Kossman, 2002). Studies have indicated that approximately five percent of the population experience current problems with gambling. Nearly 40% of those who make more than \$50,000 a year have gambled on the Internet (American Gaming Association, 2004). A survey by the American Psychological Association (APA) says of the 8.1 % of the survey participants who had Internet-gambled, 74% were either problematic or pathological gamblers. Nearly half of all Internet gamblers play weekly (Ladd, 2002).

The APA study warns that with the explosive growth of the Internet, people who use the Internet to gamble may have more serious gambling problems than those who go to casinos or play lotteries. The study found those who Internet gamble experience the most significant levels of gambling behaviors, known as level 2 (problematic), and level 3 (pathological) (Ladd, 2002).

Internet gambling contributes to loss of work productivity, extended amounts of time spent online, and the potential for extensive financial losses (Custer, 2002). It does not matter that the activity is unregulated or illegal. To players, Internet gambling is above all else convenient. It means no trips to casinos, there is no need to get dressed, or tell a spouse, or face public shame from losing. But it also means they can win or lose a lot, quickly ("Business: Betting Against the House 1999).

Internet gambling is above all else convenient. It means no trips to casinos, there is no need to get dressed, or tell a spouse, or face public shame from losing. But it also means they can win or lose a lot, quickly.

As the online gambling business booms, a growing number of politicians and law enforcers are doing everything in their power to shut it down. Worry over unregulated offshore internet casinos that may "rip off" bettors, prey on compulsive gamblers, or lure minors into the betting world are the main causes of concern (Pascual, 2000). Nearly 10% of Internet gambling sites are not

licensed and are not regulated by anyone (Carter, 2002). They can do as they wish with the players, without responsibility to the player or any government. These are bad situations for both the player and the honest site operators that can take away gambling pleasure from the Internet players (Carter, 2002).

Future of Internet Gaming

A very recent development to the legality of Internet gambling was addressed by the World Trade Organization (WTO). The WTO has ruled that American laws restricting Internet gambling violate global trade pacts (Miller, 2004; Richtel, 2004). The ruling calls into question proposals to ban U.S. Internet gambling. Each U.S. state sets its own gambling laws, but the U.S. Department of Justice maintains that all Internet gambling is illegal. Few individuals have been prosecuted for gambling on the Internet, but many website owners have. In effect, U.S. citizens could legally place Internet wagers with offshore companies, but not with company's right here in the U.S. (Miller, 2004)

Another recent development is the use of Internet casino advertising. In 1980 the Supreme Court ruled that advertising promoting an unlawful activity does not receive constitutional protection and may be censored. So now not only are the sites being scrutinized but also any company who may choose to let Internet gaming sites advertise with them (Student Press Law Center, 2000).

Methodology

This exploratory study was designed to discover the views of current land based casino gamblers toward Internet gambling. The development of theoretical linkages for this study was based on two models. One is the Diffusion of Innovation Theory (Rogers, 1995), and the other is a Perceived Time Poverty Model (Bailey & Forsythe, 1996).

Diffusions of Innovation Theory provides a framework through which an individual passes from first knowledge of an innovation (Internet gambling), to forming an attitude toward the innovation, to a decision to adopt or reject the innovation, (whether to

consider Internet gambling), followed by a decision to implement the new idea (to actually Internet gamble), and finally to confirm the decision (either to continue to adopt or reject or to later change a decision). This is based on Rogers' Diffusion of Innovation framework (Rogers, 1995).

Time Poverty Model provides a framework to see if people's predictor variables (gambling enjoyment, demographics) and their beliefs about their perceived time poverty (or lack of time) contribute to their resulting consumer behavior (time spent gambling). This is based on the Time Poverty framework of Bailey and Forsythe (1996). See Figure 1.

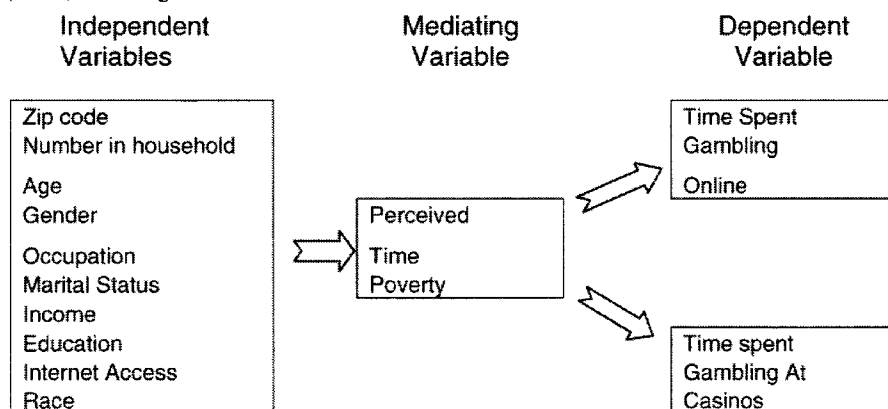


Figure 1. Conceptual Model for time poverty of Internet gambling based on a model by Bailey and Forsythe (1996)

Two overall research questions were developed:

1. What differences in demographic and behavioral characteristics exist between land based casino patrons who have Internet-gambled, and those who have not?
2. Which behavioral responses and demographic characteristics are most effective in predicting a profile for those willing to try Internet gambling versus those who would not?

Two Detroit casinos were selected to collect the data. The two sites were randomly chosen from the three Detroit casinos. The instrument used was a four-part survey. The first part assessed the importance each participant placed on his beliefs about casino and Internet gambling, and included questions about Internet usage and gambling beliefs (Chen, 2002). The second part gathered participant beliefs using the Diffusions of Innovation instrument to determine respondent's willingness to try a new innovation, Internet gambling (Rogers, 1995). The third part of the survey asked specific questions related to time poverty and the participants' beliefs as to whether their perceived time poverty resulted in the consumer behavior of Internet gambling (Bailey & Forsythe, 1996). The fourth part collected demographic information about the sample.

The participants were told who was doing the research, where the research was being done, what the survey results were being used for, and that their participation was completely voluntary. Every third person entering the casinos through the underground parking structure was approached and asked to participate. In the case of a group of people entering, one person in the group was asked to participate and the group was counted as one entity. Hence, one person from every third group (or individual) was asked to participate. If the guest indicated "yes," he or she became part of the sample and were handed a survey on a clipboard with a pen. If not, they were wished "good luck" and thanked for their time. This process was repeated until 100 surveys from each casino were collected. It was calculated by the data collectors that approximately 75 persons (or person/group) that were approached refused to answer the survey. This survey therefore had a response rate of 62%, using 275 as total people approached. The

research participants were asked to respond to questions that addressed specific details concerning the respondent's views towards a variety of gaming issues and beliefs. Additional questions assessed each participant's demographic profile, Internet use, and whether they have ever gambled on the Internet.

Study Limitations

Data were collected at two urban land based casinos in the Midwest, specifically Detroit. Information gathered was from people who happened to be at this casino at the time the data were collected. This may not represent the entire gambling community or those who have gambled the most on the Internet or are most knowledgeable about Internet gambling. Those who had Internet-gambled were not given any specific direct questions as to why they have Internet- gambled.

RESULTS and DISCUSSION

Participants were asked a variety of questions related to casino visitation habits, Internet usage, and Internet gambling views. All participants were classified as either had (73) or had not (127) gambled on the Internet indicating past behavior. Respondents were also grouped based on future intentions by asking if they would consider gambling again or for the first time on the Internet (n=132) or if they would not consider gambling on the Internet again or for the first time (n=68). These classification approaches were used to provide a foundation for building profiles of casino gamblers. The survey results produced both nominal and ordinal data that was analyzed using frequency distributions, regression analysis, and chi-squares. Statistical information was analyzed using SPSS statistical software (Statistical Programs for Social Sciences, 2001).

Two overall research questions were developed: 1. What differences in demographic and behavioral characteristics exist between land based casino patrons who have Internet- gambled, and those who have not? 2. Which behavioral responses and demographic characteristics are most effective in predicting a profile for those willing to Internet gamble in the future versus those who would not?

The impact of demographic information such as gender, age, marital status, education level, income, occupation, race, distance from casino, and number in family on past Internet gambling and future intentions was analyzed. Education level, income and marital status demographic variables showed significant correlations with past behaviors and future intentions regarding gambling online. See Tables 2 and 3 for probability levels. Education seems to be an indicator of who has or would try Internet gambling. Of those who have gambled on the Internet, 52% had a bachelors degree or higher, while among those who would not gamble on the Internet, only 23% had a bachelor's degree or higher. On the other end of the education scale, 27% of those who had Internet-gambled have a high school diploma or less, while 57% of those who would not Internet gamble have high school diploma or less ($p>.05$). This may be explained by the fact that colleges today provide computer accessibility, so while at college people learn about gambling on the Internet or they are just more familiar with computers and this aids in the comfort level of gambling online. Average household income in this study was ranged from \$35,000-\$49,999 and the mode was \$50,000-\$74,999. Households with income between \$ 50,000 and \$99,999 were the largest groups to gamble online. When asked if they would consider Internet-gambling in the future the greatest percentage increase is in the respondents with household incomes between \$25,000 and \$75,000. Marital status was significant only in regards to future intentions. Single persons responding were more likely to try Internet gambling (or continue) in the future ($p>.05$).

Those who have gambled online had the lowest average age of 36.48 years while those who would not gamble online had the highest average of 39.55 years (though not significantly different). This may indicate that younger persons may be more willing to try new things, while older people may be more set in their ways.

Marital status may be a reliable indicator of potential Internet gamblers ($p < .05$). Seventy-five percent ($n=51$) of those who would not Internet gamble are married, while only 56% ($n=41$) of Internet gamblers are married. Yet Internet gamblers have the most people in their households at 3.23 on average, compared with 3.05 for those who would not Internet gamble. In this survey those who may consider gambling online would because it may be less disturbing to their family life ($p < .001$).

Another important trait is that those who have Internet-gambled spend the most time on, and have the most access to, the Internet. Of those who have gambled online, 92% have home Internet access and 59% have work Internet access, while those who would not Internet gamble scored 73% and 42% respectively. Location of Internet access was not a significant indicator of Internet gambling activities. Availability to Internet access did not predict past Internet gambling experience or predict future intentions, regardless of previous Internet gambling experience. Of the total participants, 83% (166) have Internet access at home and 54% have Internet access at work. Some respondents had access at both work and home. Those who had access to the Internet at work were more likely to consider gambling online ($p < .01$). Researchers did not ask if they had gambled online while at work.

Using the Internet to make purchases was also an indicator of online gambling behavior. Of Internet gamblers in this research, 95% have used the Internet to purchase goods or services. There was a significant correlation between Internet purchasing experience and whether they had gambled online or would consider gambling online ($p < .001$). See Table 1

Table 1 Demographic Profile

	Past Behavior		Future Intentions	
	Have Internet-Gambled ($n=73$)	Have Not Internet-Gambled ($n=127$)	In the Future Would Consider Internet-Gambling ($n=132$)	In the Future Would Not Consider Internet-Gambling ($n=68$)
Average # in Household	3.23	3.11	3.17	3.05
Gender				
Male	47 (64%)	69 (54%)	75 (57%)	41 (60%)
Female	26 (36%)	58 (46%)	57 (43%)	27 (40%)
Average Age	36.48	39.55	36.72	39.83
Marital Status (a)				
Single	32 (44%)	40 (32%)	55 (42%)	17 (25%)
Married	41 (56%)	87 (68%)	77 (58%)	51 (75%)
Education Level(b)				
Some High School	3 (4%)	9 (6%)	8 (6%)	4 (6%)
High School	17(23%)	51 (40%)	36 (27%)	31 (46%)
Some College	15 (20%)	30 (24%)	32 (24%)	13 (19%)
Bachelor's Degree	25 (34%)	28 (22%)	40 (31%)	13 (19%)
Graduate Degree	13 (17%)	9 (7%)	16 (12%)	6 (9%)
Income				
Less than \$24,999	13 (18%)	23 (18%)	22 (17%)	14 (21%)
\$25,000 to \$49,000	23 (32%)	54 (43%)	47 (35%)	30 (44%)
\$50,000 to \$74,999	31 (43%)	40 (32%)	41 (31%)	10 (15%)
\$75,000 to \$99,999	19 (26%)	32 (25%)	12(9%)	8(12%)
\$100,000 to\$149,000	1 (1%)	4 (3%)	2 (1%)	3 (4%)
\$150,000 to\$200,000	5 (7%)	3 (2%)	8 (6%)	0 (0%)
\$200,000 and over	0 (0%)	3 (2%)	0 (0%)	3 (4%)
Race				
White, Non-Hispanic	25 (34%)	44 (35%)	46 (35%)	13 (19%)
Black or African	29 (40%)	50 (40%)	54 (41%)	25 (37%)
Hispanic or Latino	9 (12%)	14 (11%)	14 (10%)	9 (13%)
Asian	5 (7%)	8 (6%)	8 (6%)	5 (7%)
American Indian	2 (3%)	5 (4%)	3 (2%)	4 (6%)
Other	3 (4%)	6 (5%)	7 (5%)	2 (3%)
Internet Access at Home	67 (92%)	99 (78%)	116(89%)	50 (74%)
Internet Access at Work	43 (59%)	64 (50%)	75 (57%)	32 (47%)

N=200 (a) significance level of $p > .05$ regarding future intentions

(b) significance level of $p > .001$ regarding past behavior and $p > .001$ future intentions

Those who have Internet-gambled spend on average 3.32 hours per day at work and 1.97 hours at home on the Internet whereas those who have never Internet-gambled spend on average 1.05 hours per day on the Internet at work and slightly more at home. Those most likely to consider in the future Internet gambling may or may not have gambled online in the past spend more time online than those who would not in the future Internet-gamble.

Thirty-one percent of survey participants came alone on their casino visit. Those who have gambled on the Internet had the highest percent (36%), while those who would consider gambling on the Internet had the lowest number of persons indicating that they had come alone to the casino (25%). T-test calculations showed that there is no significant difference between the likeliness to Internet-gamble in the past or future and whether the survey participant came alone or with others.

People who would not Internet-gamble spent on average 22.56 days per year at land based casinos which is 20% more time per year at casinos than those who have Internet-gamble (18.75 days per year) in the past, and those who would consider Internet-gambling (17.88) in the future. T-tests showed that there is no significance between the amount of time spent at casinos and participants' likelihood to Internet-gamble. The primary purpose for visiting a land based casino was not significantly different between any of the classifications of gamblers in the study. Being with friends was listed most often followed by winning money and visiting the casino attractions.

Separate linear regression analyses were conducted using past Internet gambling behavior and future intentions as the independent variables and demographic variables as the dependent variables. Only two variables had a significant difference in responses based on a demographic variable. A greater degree of significance was reported between people who had not Internet-gambled ($p > .001$) than reported future intentions ($p < .01$). Marital status became significant ($p > .05$) when respondents were asked about future Internet-gambling consideration.

Table 2 Past Behaviors and Future Intentions Regarding Internet-Gambling

	Past Behavior		Future Intentions	
	Have Internet-Gambled (n=73)	Have Not Internet-Gambled (n=127)	In the Future Would Consider Internet-Gambling (n=132)	In the Future Would Not Consider Internet-Gambling (n=68)
Days Per Year – Land Based *	19.89	20.16	24.87	12.26
Who With				
Alone	26 (36%)	36 (28%)	42 (32%)	20 (29%)
With Others	47 (64%)	91 (72%)	90 (68%)	48 (70%)
Purpose				
Be With Friends	21 (29%)	29 (23%)	38 (29%)	12 (18%)
Visit Casino Attractions	11 (15%)	22 (17%)	18 (13%)	15 (22%)
To Win Money	18 (25%)	32 (25%)	31 (24%)	19 (28%)
To Be Seen			2 (1%)	0 (0%)
Visit Nearby Attractions	1 (1%)	1 (.8%)	14 (11%)	12 (18%)
To See Casino	4 (5%)	22 (17%)	15 (11%)	3 (1%)
Other	5 (7%)	13 (10%)	11 (8%)	7 (10%)
Hours Per Day on Internet				
Business/Work	3.32 hrs***	1.05 hrs	1.85 hrs	.91 hrs
Pleasure/Entertainment	1.97 hrs*	1.27 hrs	1.72 hrs	1.67 hrs
Have Made Internet Purchases	69 (95%)	75 (59%)	112 (86%)	32 (47%)
***			***	
Feel Comfortable Banking on the Internet	51 (70%)	40 (31%)	63 (48%)	18 (26%)
***			***	
I will get paid if I Win on the Internet	59 (81%)	6 (4%)	78(60%)	16 (23%)

N=200 * = $p < .05$, *** = $p < .000$

Table 3 Regression Analysis of Demographic Variables and Past Internet-Gambling Experience and Future Intentions

Independent Variable	Df	Sum of Squares	Mean Squares	R ² Square	F
Have Internet-Gambled					
Gender	1	.446	.446	.010	1.922
	198	45.909	.232		
Age	1	.726	.726	.016	3.149
	198	45.629	.230		
Marital Status	1	.710	.710	.015	3.080
	198	45.645	.231		
Education Level***	1	2.667	2.667	.058	12.088
	198	43.688	.221		
Income	1	.016	.016	.000	.797
	198	46.33	.234		
Race	1	.008	.008	.000	.032
	198	46.34	.234		
Future Intentions Regarding Internet-Gambling					
Gender	1	.118	.118	.000	.080
	198	293.882	1.484		
Age	1	4.307	4.307	.015	2.944
	198	289.693	1.463		
Marital Status*	1	5.695	5.695	.019	3.911
	198	288.305	1.456		
Education Level**	5	19.10	3.82	.065	.022
	194	274.89	1.41		
Income	1	1.56	1.56	.005	.305
	198	292.44	1.477		
Race	1	.005	.005	.000	.003
	198	293.99	1.48		

*p<.05; **p<.01; *** p<.001

Over 95% of those who had Internet-gambled had made purchases on the Internet compared to 59% who have never gambled online. In addition, 86% of those who would consider gambling on the Internet in the future had made purchases online. There was a significant difference at the p<.000 level for both of these respondent categories. In response to the question “I feel comfortable conducting my banking activities on the Internet,” the mean score for Internet gamblers was 3.66, while those who had never Internet-gambled was 2.26. Also, only 42% of those who indicated they would not Internet-gamble have ever banked online (p<.000).

A final indicator of predicting Internet-gambling behavior is the belief about trusting the security of payment for Internet winnings. When asked whether they agree that they would get paid if they win on the Internet, those who have gambled on the Internet have a 3.99 mean score compared to just 2.39 for those who would not Internet-gamble (p<.000). This may be because non-Internet-gamblers may not even know how they would get paid if they did win, and even if they did understand the logic, they might not trust it. This may relate to feeling confident in banking online. If people understand how funds can be transferred electronically, they may be more willing to believe they would get paid for online winnings.

Using Rogers Diffusion of Innovation Scale two categories of respondents were analyzed. Those who have Internet-Gambled were in one category and the second category was those who had never Internet-gambled were then divided into two additional groups: those who would consider Internet-gambling in the future and those who would not consider Internet-gambling in the future. Those who have Internet-gambled were most “likely to experiment,” most “likely to try new products,” and most “liked variety” (p<.000). While those who have never gambled on the Internet and would not consider doing so in the future reported higher mean scores on the question “I do not take chances” (p<.001). “Spending money on unusual items” and “liking new different styles” were shown to be significant at the p<.01 level with those who had in the past Internet-gambled. Finally “liking to try new ideas” was also shown to be significant at the p<.05 level for experienced Internet-gamblers. See Table 4.

Table 4 Innovation of Diffusion (Internet-Gambling) Beliefs of Participants

Independent Variable	Mean of Participants Who Have Internet-Gambled n=73	Mean of Participants who in the Past Have not Internet-Gambled but would Consider Internet-Gambling in the Future n=132	Mean of Participants who in the Past Have not Internet-Gambled and Would Not Consider Internet-Gambling in the Future n=68
I like to experiment ***	3.48	2.95	2.58
Want try new products ***	3.75	3.34	3.26
I like variety ***	3.53	2.95	3.00
I do not take chances ***	2.97	3.60	3.76
Do things same way	3.15	3.22	3.55
Tried and true ways	3.12	3.20	3.27
Spend moeny unusual items **	3.27	2.74	2.52
New products are gimmicks	2.58	2.77	2.73
I try new ideas *	3.47	3.09	3.02
I like to see what friends and neighbors	2.78	2.77	3.26
I like new different styles **	3.25	3.23	2.84
Look completely different angle	3.23	3.23	2.84
Pass right by new brands	2.52	2.71	2.73

Note: 1=strongly disagree, 2=disagree, 3=no opinion, 4=agree, 5=strongly agree
 * p< .05, ** p< .01, *** p< .001

Those who would not Internet-gamble believed they were the most time-pressured and are the most likely not to have enough time to do things. Internet-gamblers walk the fastest and are the ones most often in a hurry (p<.05). There was not an overall significant difference in participant’s responses regarding time pressures. See Table 5 for complete time poverty results based on the Bailey and Forsythe model of time poverty.

Table 5 Time Poverty Factors of Survey Participants

Independent Variable	Have Internet-Gambled (n=73)	Have not in the Past but Would consider Internet-Gambling in the Future (n=131)	Have not in the past and Would Not consider Internet-Gambling in the Future (n=68)
Feel time pressured	3.03	2.88	3.19
Life is fast paced	3.30	2.95	3.18
Walk faster than most *	3.04	2.71	2.50
Never have enough time	3.22	2.92	3.31
Usually in hurry	3.21	2.94	2.98

Note: 1=strongly disagree, 2=disagree, 3=no opinion, 4=agree, 5=strongly agree
 * P< .05, ** P< .01, *** P< .001, N=200

Conclusions

Thirty-seven percent of the survey participants have gambled on the Internet, compared to only 5% of the population in general that have gambled on the Internet. To further illustrate, in this study if you add those who have gambled with those who would consider Internet-gambling, the total rises to 69%. Participants who have Internet-gambled spend almost four fewer days per year on average at land based casinos. This past behavior (Internet-gambling) may predict future attitude toward Internet-gambling ($p < .001$). Once gamblers have tried Internet-gambling they are more likely to continue gambling online in the future and less likely to visit a casino in the future ($p < .000$).

Based on this research, Internet-gamblers are most likely to be younger, more likely to try new things, more educated, single, willing to bank online, spend at least two hours a day on the Internet, but are, for the most part, no more time-pressured than the general public.

Implications from Results

Internet gambling is already a reality and has the potential to grow greatly in the near future. The technology and payment issues will eventually be solved, and the legal issues will be worked out. Trying to ignore technological advances is not a realistic plan when dealing with Internet gambling. Rather than take a reactive approach to what might happen, casino and tourism leaders should be proactive in assessing the effects of Internet gambling on their casinos and communities. It is difficult to predict the full impact of Internet gambling on casino destination travel, as it is still a growing industry. However, its potential effects are so great that the casino and tourism industries should not ignore it.

While growth of Internet gambling is great news for Internet casino owners, good news for land based casino owners is also offered in that there are definite measurable profiles for casino gamblers that will continue to wager at their properties. The research findings demonstrate that most survey participants had very clear ideas and opinions about Internet gaming, casino gambling, innovation diffusion beliefs, and time poverty opinions; all this data could be used to create a particular niche.

The recent growth of Internet games such as poker has brought the attention of the general public to availability of other Internet-gambling opportunities. This phenomenon coupled with reality based television shows that feature poker tournaments may provide an opportunity for land based casinos to draw in a larger customer base with joint promotions. Some marketing recommendations based on the findings are as follows:

1. *Can't beat them – join them.* At some point the U.S. federal government is going to have to clarify the legality of Internet gambling. Therefore it is important that land based casinos play an active role in defining what is legal and what is not and the enforcement of those laws. If Internet gambling becomes legalized there are opportunities to either develop their own Internet Gambling sites or partner with existing sites.
2. *Development of Hybrid Casino.* There are also opportunities to develop a Hybrid Casino that is both virtual and physical with joint marketing activities. This could provide players an opportunity to become “rated players” in both realms and receive additional benefits associated with land based casinos’ high roller players.
3. *Development of novel attractions/activities at land based casinos.* The profile of Internet gamblers is one of persons who like innovations, new experiences and are willing to experiment. Development of new games or other entertainment that can not be easily replicated on an Internet gambling site may provide incentive for choosing land based gambling options over Internet options. This may include enhanced social interactions such as tournaments, or slot machines that have different “bells and whistles.”

Trying to ignore technological advances is not a realistic plan when dealing with Internet gambling.

Recommendations for Further Studies and Research

Recommendations for future research include interviewing only persons who have Internet-gambled, and expanding on their beliefs. Two suggestions might accomplish this. One would be to do an e-mail survey in cooperation with an Internet casino site or sites. The researcher attempted to contact five Internet gaming sites and did not get a response from any of them. The researcher's beliefs this may be because a main attraction of Internet-gaming is that it is anonymous and convenient. The site managers/owners may be unwilling to give out client e-mails fearing this could compromise the client's feeling of anonymity. This could be avoided by having a disclaimer at the top of the e-mail survey stating something about guaranteed anonymity. This might help make Internet-gaming site owners more likely to participate. Also, showing this research data to them and noting that they could get even more detailed data if they assisted in gathering survey participants might encourage participation.

It is also suggested that this study be replicated at other land based casinos to get a broader generalizable updated data base. The world of Internet gambling has changed dramatically in the past few years heightened by the advent of reality TV and poker tournaments being televised. To participate in these tournaments you must register and qualify online. As more people become aware of the potential to gamble on line there may be a change in the demographic profiler of gamblers, both on line and in the casinos.

References

- American Casinos and Gambling in United States. Retrieved December 28, 2004 from <http://gambling-law-us.com/state-law-summary>
- American Gaming Association. (n.d.). *State of the states 2004: The American Gaming Association survey of casino entertainment*. Retrieved June 6, 2004, from <http://americangaming.org/survey2004/reference/ref.html>
- American Gaming Association. (n.d.). *AGA Executive Summary*. Retrieved June 6, 2004, from <http://www.americangaming.org/survey2004/summary/summary.html>
- Bailey, A., & Forsythe, S. (1996). Shopping enjoyment, perceived time poverty, and time spent shopping. *Clothing and Textiles Research Journal*, 14(3), 1996.
- Bell, T. (1999, October). Gamblers in cyberspace. *The Futurist*. Retrieved December 12, 2001, from wysiwyg://50/http://proquest.umi.c0&Deli=1&Mtd=1&Idx=46&Sid=1&RQT=309
- Business: Betting against the house. *The Economist*. London, Sept. 4, 1999.
- Carter, R. (2002, November 21). *An open letter from the chairman*. Retrieved November 21, 2002, from <http://www.internetcommission.com/index.asp>
- Chen, J. (2001). *Measuring guest service levels in Korean American restaurants*. Unpublished survey, Eastern Michigan University.
- Clarke, R., & Dempsey, G. (2001). The feasibility of regulating gambling on the Internet. *Managerial and Decision Economics*, January-May 2001.
- Custer, R. (2002). *Assessment and psychological profiles of gamblers*. Retrieved from the World Wide Web: <http://www.trimeridian.com/typesofgamblers.html>
- DataMonitor, The Future Decoded. (n.d.). *Global online gambling, First Edition. Exploring opportunities in a maturing market*. Retrieved March 3, 2002, from http://www.mobilecommerceworld.com/EDriveFiles/DataMonitor/24_RPDF.pdf
- Dunstan, R. (1997, January). Gambling in California CRB-97-003. Retrieved June 22, 2003, from <http://www.library.ca.gov/CRB/97/03/crb97003.html> *Enforcing a ban on Internet gambling*. The Century Foundation IDEA Brief No. 16 2000. Retrieved April 29, 2004 from http://www.ideas2000.org/Issues/Social_Economic?Internet%20Gambling.pdf
- Etzel, B. (2000). Congress mulling online gambling's future, meanwhile Web players miss the IPO sweep: Dog racing, lotteries okay, but no credit cards? *The Investment Dealers' Digest*, June 12, 2000.

- Feldman, Nick (2004). *Internet gambling*. Georgia State University's Online Law Resource, Retrieved April 29, 2004 from <http://gsulaw.gsu.edu/lawand/papers/su01/feldman/>
- Gambling Law U. S. retrieved December 28, 2004, from <http://us.casinocity.com/>
- Keller, B. P. (1999). "The game's the same: Why gambling in cyberspace violates federal law," *The Yale Law Journal*, 108, (7), May, 1999.
- Kossmann, M. A. (2002). *Internet Gambling; University of Wisconsin-Eau Claire Counseling Services*. Retrieved from <http://www.uwec.edu/counsel/pubs/internetgambling.html>
- Ladd, G. T., (2002). *Disordered gambling among university-based medical and dental patients: A focus on Internet gambling*. Retrieved April 29, 2004 from <http://www.apa.org/releases/gamblingonline.html>
- Marcial, G. (2001). An online crapshoot. *Business Week*, August 13, 2001.
- Michigan Gaming Control Board (MGCB) History of Michigan Gaming, 2001, Detroit and Native American Gaming. (n.d.). Retrieved June 22, 2003, from <http://www.michigan.gov/mgcb/0,1607,7-120-1380--,00.html>
- Miller, S. (2004). *WTO overrules US on internet gambling*. Retrieved April 29, 2004 From http://www.responsiblegambling.org/staffsearch/e-library_most_recent_details.cfm?intID=
- National Gambling Impact Study Commission. (2001). *Final report on Internet gambling, 2001*. Retrieved December 8, 2002, from <http://govinfo.library.unt.edu/ngisc/reports/finrpt.html>
- Pascual, A. (2000). Offshore betting: The Feds are rolling snake eyes. *Business Week*, August 28, 2000.
- Richtel, M. (May 17, 2004). Online gambling deals with U.S. opposition. *The New York Times*. C2 Business, Ann Arbor News.
- Rogers, E. (1995). *Diffusion of innovation* (4th ed.). New York: Simon and Schuster.
- Rose, I. (2003, June 22). *History of gambling in the United States*. Retrieved June 22, 2003, from <http://www.library.ca.gov/CRB/97/03/Chapt2.html>
- SPSS Base 11.5 Application Guide. (2001). Chicago, IL. SPSS Incorporated.
- Student Press Law Center. (2000). *Online gambling ads, A risk worth taking?* Retrieved April 29, 2004, from <http://www.splc.org/legalresearch.asp?id=25>
- World Online Gambling Laws on Internet Gambling. (n.d.). *Should it be regulated?* Retrieved July 21, 2003, from <http://www.worldonlinegambling.com/laws/onlinegamingregulations.htm>

Article submitted: 8/25/04

Sent to peer review: 8/31/04

Reviewers' comments sent to authors: 10/25/04

Authors' revised version received: 1/29/05; 1/14/05

Article accepted for publication: 1/31/05