

# Gambling Alone? A Study of Solitary and Social Gambling in America

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## Abstract

In his acclaimed 2000 book *Bowling Alone*, Robert Putnam documents a disturbing social trend of the broadest kind. Putnam cites a wide variety of data that indicate that over the past fifty years, Americans have become increasingly socially disengaged. In developing this theme, Putnam specifically cites the increase in casino gambling (and especially machine gambling) as evidence in support of his argument. Building on the empirical and theoretical work of Putnam, this exploratory article examines the sub-phenomenon of “gambling alone” by exploring sample survey data on solitary and social gambling behavior among adults who reside in Las Vegas, Nevada. Specifically, to further understand these phenomena, a number of demographic, attitudinal, and behavioral variables are examined for their explanatory power in predicting solitary vs. social gambling behavior.

**Key words:** social capital, gambling, problem gambling, bowling alone

As more jurisdictions embrace gambling as a source of revenue for government programs and as a recreational outlet for the populace, an increasing number of scholars have directed their attention toward the manners in which people gamble. Most of this behavioral research focuses on the pathological aspects of gambling behavior (see Shaffer, Hall, and Vanderbilt 1997; National Research Council 1999; and Volberg 2001 for overviews). This work emphasizes the problematic or “disordered” aspects of gambling behavior against the backdrop of the diagnostic psychological literature (see American Psychiatric Association 1994).

In the midst of this increased attention, one potentially prominent aspect of gambling behavior remains overlooked. While it has become fashionable to echo the claim that gambling in America is “sweeping the nation,” relatively few observers have noted that it is *machine* gambling – an activity that is often engaged in isolation – that increasingly predominates in the nation’s gaming jurisdictions.

The gaming sites of the mid-twentieth century featured buzzing poker rooms and cacophonous rows of craps tables with only a smattering of slot machines dotting the green felt landscape. Whatever else they may have been, the gambling activities of these times were undeniably social – or at least they unfolded in settings with other players present. Eventually, however, casino operators began to engage in more sophisticated analyses of gambling behaviors, and as a result, they began to recognize shifts in gambling behavior, and in turn began to remove tables in favor of more profitable gambling machines (Earley 2000).

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As Kilby, Lucas, and Fox point out in their examination of gaming regulatory data, the economic parameters of this transformation are striking:

In the casinos of the past, table games were king. Not only were table games the most popular, but they were also the most profitable. On the Las Vegas Strip, where table games once ruled, slots now dominate... Statewide in Nevada, slots generate over 67% of the total casino win. The comparison is even more dramatic if you were to look at departmental profits (2005, p. 107).

This transformation left gamblers in a social environment where their gambling successes or failures were no longer as directly or viscerally tied to those of other players. Instead, the gambling act increasingly involved interaction with machines rather than other humans. Today, a “deforestation effect” is clearly visible in casino spaces, as increasingly sophisticated machines continue to encroach upon gambling terrain long inhabited by wooden tables. Breathless pronouncements about the current “poker boom” aside, the business advantages of machine games, coupled with strong consumer demand, promise to make these electronic games even more popular in America in the future.

Given this development, the social aspects of this transformation would seem to be of primary importance to those interested in researching gamblers. Do gamblers “gamble alone”? And more specifically, how are those who gamble alone different from those who gamble socially? This paper attempts to provide a first step in understanding these phenomena by conducting an exploratory analysis of empirical data on gambling alone.

The major impetus for this study comes from Harvard professor Robert Putnam’s enormously influential book, *Bowling Alone: The Collapse and Revival of American Community* (2000). Putnam’s primary thesis contends that Americans are engaging in far fewer social activities than they have in the past, and that this reduction in what he calls “social capital” has had severe consequences for the wellbeing of communities and individuals throughout the country.

The idea itself is of course hardly new in the history of social thought, as sociologists and historians began expressing a concern for the loss of community in the face of the spread of modern, individualistic society as early as the latter nineteenth century. The German sociologist Ferdinand Toennies decried the change from personal, face-to-face community life (*Gemeinschaft*) to impersonal society (*Gesellschaft*). Similarly, the American Charles Cooley highlighted the differences between informal, personal, primary groups and more formal, impersonal secondary groups in his description of modern, industrial society. The contemporary rise of machine-mediated electronic chat rooms, bulletin boards, and e-mail is merely the latest manifestation of this trend away from a reliance on face-to-face interaction that began more than a century ago. This paper will examine the implications of Putnam’s claims and their impact upon gambling studies, and explore some of Putnam’s arguments by examining empirical data on gambling.

## Gambling Alone

Before we delve into the claims made by Putnam, we should note that his was hardly the first research work that made broad claims about gambling’s social (or anti-social) nature. In their pioneering book on clinical approaches to problem gambling, *When Luck Runs Out*, Custer and Milt (1985) describe the allure of recreational gambling as social in character:

In addition to the chance of winning, gambling also offers for many the opportunity to socialize. For these people, the bingo game in the basement of the church or card game at the country club once or twice a week is a major social activity. The crowd at the OTB [Off Track Betting] office shares a feeling of fraternity. Real track denizens say that the minute they get inside the track grounds they feel as though they’ve “come home.” The Friday-night poker game has, for millions of Americans, become a traditional social function... even the

thousands of transients who mill about the gambling casinos of Las Vegas and other venues nightly enjoy a sense of camaraderie and belonging, a feeling of being comfortable and safe (1985, p. 30).

It is difficult to overemphasize the significance of Custer and Milt's work in the history of the field of gambling studies. It was Custer's clinical work that led to the inclusion of pathological gambling in the Diagnostic and Statistical Manual, as well as to a broader acceptance of the disorder as a legitimate public health problem (see Volberg 1994; Korn and Shaffer 1999; and Korn 2001). Custer's research, however, was based on analyses of 1970s- and 1980s-era Veteran's Administration patient populations in Brecksville, Ohio, and may well be a bit anachronistic in the rapidly-evolving field of gambling studies today. A generation later, the gambling act has broadened and changed in dramatic ways. In fact, Putnam argues that gambling – and virtually all forms of everyday recreational life, for that matter – has evolved in decidedly anti-social (and unhealthy) ways.

Putnam's story is a classic "declensionist narrative," portraying the present as a poor and deteriorating imitation of a lost past. The first section of *Bowling Alone* sets out to establish that Americans are increasingly spending their free time alone rather than in formal and informal group settings. Whereas cultural commentators have complained for years that American families no longer gather together at the dinner table, Putnam presents a seemingly endless series of findings that reveal a far more vast and ominous transformation.

According to Putnam, to a significant degree and "by virtually every conceivable measure," social engagement appears to be dying out (or at least in severe decline). To support this argument, he marshals an impressive amount of data from fifty years' worth of diverse and broad-based social surveys. His findings hold true not only at the informal level (the critics are right, it seems: American families are spending less time together), but also at the formal level (as Shriners, the PTA, Republicans, Democrats, and volunteer organizations alike share one thing in common: declining membership). Often, Putnam attributes this profound fifty-year decline to technological factors, which makes sense: virtually every technological "toy" introduced over the past fifty years has thrived upon single-individual "play."

Interestingly, one factor identified as an indicator of this decline is the rapid disappearance of card game playing, which Putnam suggests has decreased fifty percent since the early 1980s. The author goes so far as to predict the extinction of card games as a social activity-- a prediction that already appears a bit problematic, given the apparent rebirth of poker nights.

Most germane to our work, Putnam relates this unfortunate tale of decline to the growth of machine gaming in casinos:

Substitutes for card playing have emerged, of course, everything from computer and video games to casino gambling. Like cards, these pastimes provide the spice of chance. *Unlike card playing, however, these successors are distinguished by their solitary nature.* My informal observation of internet-based bridge games suggests that electronic players are focused entirely on the game itself, with very little social small talk, unlike traditional card games. Even fanatics of Microsoft Solitaire rarely play in a group and *any visitor to the new mega casinos that dot the land has chilling memories of acres of lonely "players" hunched in silence over one-armed bandits.* Bridge, poker, gin rummy, and canasta are not being replaced by some equally "schmoozable" leisure time activity (2000, p. 104-105, emphases added).

Hence, Putnam spends the first half of his book indicting the solitary nature of everyday life in America as a whole, and with gambling spaces in particular. The second half of Putnam's book then attempts to explain the meaning of this finding. In addressing the "so what?" question, Putnam proceeds to argue that social people tend to be healthy people, and that isolated people tend not to be healthy. He maintains that this holds true

at the individual, community, and state levels: states that score high on public health indicators tend to score higher on social indicators (notably, Nevada is cited as a not-so-social state, and a not-so-healthy state) in the same way that healthy individuals tend to be social. "Bowling alone," then, in all of its forms, represents nothing short of a public health crisis in America.

Given that Putnam's work makes bold claims about the dire public health consequences of this dramatic change, and given that the field of gambling studies has recently embraced a public health perspective (Volberg 1994; Korn and Shaffer 1999; and Korn 2001), the field's neglect of "gambling alone" is perhaps especially remarkable. At the very least, given the enormous influence of Putnam's work both within and outside of academia (Putnam himself has been invited to consult for both the Clinton and Bush administrations on the policy implications of *Bowling Alone*), clearly those who are interested in empirical research on gambling must seriously consider his impassioned arguments. Though he cites an overall increase in casino attendance in America (2000, p. 105), Putnam concedes that he is basing his comments on the anti-social nature of casino gambling on his own "informal observations," and not upon systematic empirical research.

In the following sections, we attempt to address this shortcoming by investigating empirically the trend that might properly be called "gambling alone." In addition to examining the general question of the tendency for individuals to gamble alone, we also explore the relationship between the tendency for individuals to gamble alone and a range of social variables.

## Method

Data for the present study were taken from a telephone survey conducted at the Cannon Center for Survey Research at the University of Nevada, Las Vegas. The estimation sample totaled 453 interviews and was drawn from the Las Vegas Metropolitan Area in Clark County, Nevada. Interviews averaged between fifteen and seventeen minutes in length, and phone numbers of interviewees were randomly selected using random-digit dialing (RDD) techniques (Czaja & Blair, 1996).

Within households, individuals were selected by rotating gender and age factors to ensure representativeness with these variables. Respondents were asked a variety of questions about their gambling activities, including how often they "gamble(d) alone." This latter question inquired specifically as to whether they gambled alone "frequently," "sometimes," "rarely," or "never." For our analyses, we examined the fairly sizable number of respondents who "frequently" gambled alone (N=74) and compared this group with those who did not frequently gamble alone. In addition, data was gathered on a range of demographic characteristics that we examine in light of the propensity to gamble alone.

## Results

Table 1 and 2 displays three sets of demographics: those of the full sample; those of respondents who indicated that they gambled in the past month; and those respondents who indicated that they frequently gambled alone. Specific to Table 1, the first two columns reflect the mainstreaming of gambling activity, insofar as the gambling population is strikingly similar to the general population.

The third column displays the general characteristics of the population with which we are most concerned: those who indicated that they frequently gamble alone.

**TABLE 1: STUDY DEMOGRAPHICS: FULL SAMPLE AND GAMBLED PREVIOUS MONTH SUB-SAMPLES.**

SEX	FULL SAMPLE N = 453		GAMBLED LAST MONTH N = 255		GAMBLE ALONE N = 74	
	N	%	N	%	N	%
MALE	205	45.3%	122	47.8%	42	56.8%
FEMALE	248	54.7%	133	52.2%	32	43.2%
RACE	N	%	N	%	N	%
WHITE	343	77.1%	200	78.7%	61	82.4%
BLACK	42	9.4%	23	9.1%	7	9.5%
HISPANIC	34	7.6%	18	7.1%	5	6.8%
ASIAN	12	2.7%	6	2.4%	0	0
OTHER	14	3.1%	7	2.8%	1	1.4%
AGE	N	%	N	%	N	%
21 – 34	135	29.8%	66	25.9%	13	17.6%
35 – 49	139	30.7%	74	29.0%	17	23.0%
50 – 64	83	18.3%	60	23.5%	23	31.1%
65 and >	96	21.2%	55	21.6%	21	28.4%
<b>MEAN AGE</b>	46.08, sd=17.03		47.57, sd=16.82		52.01, sd=16.93	
MARITAL STATUS	N	%	N	%	N	%
MARRIED	250	56.3%	138	54.3%	29	39.2%
SINGLE	72	16.2%	43	16.9%	14	18.9%
SEP/DIVORCED	86	19.4%	53	20.9%	19	25.7%
WIDOWED	36	8.1%	20	7.9%	12	16.2%
NUMBER IN HOUSEHOLD	N	%	N	%	N	%
1	79	17.8%	50	19.7%	28	37.8%
2	155	35.0%	106	41.7%	28	37.8%
3-4	136	30.7%	66	26.0%	11	14.9%
5 and >	67	15.1%	32	12.6%	7	9.5%
<b>MEAN NUMBER</b>	2.91, sd=1.68		2.64, sd=1.49		2.16, sd=1.37	

<b>TABLE 1 (CONTINUED)</b>						
<b>EMPLOYMENT STATUS</b>	<b>FULL SAMPLE N = 453</b>		<b>GAMBLED LAST MONTH N = 255</b>		<b>GAMBLE ALONE N = 74</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
WORKING FT/PT	261	58.8%	148	58.3%	40	54.1%
UNEMPLOYED	43	9.7%	26	10.2%	6	8.1%
STUDENT	7	1.6%	1	0.4%	0	0
HOMEMAKER	32	7.2%	14	5.5%	2	2.7%
RETIRED	101	22.7%	65	25.6%	26	35.1%
<b>EDUCATION</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
HS GRAD and <	162	36.7%	105	41.5%	32	43.2%
SOME/COL GRAD	230	52.1%	122	48.2%	36	48.6%
GRAD DEGREE	49	11.1%	26	10.2%	6	8.1%
<b>INCOME</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
\$20k or <	61	16.9%	38	18.5%	11	18.6%
\$25 - \$35k	102	28.3%	60	29.3%	21	35.6%
\$40 - \$55k	122	33.9%	63	30.7%	15	25.4%
\$60k and >	75	20.8%	44	21.5%	12	20.3%
<b>RELIGIOUS AFFILIATION</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
CATHOLIC	136	31.1%	82	33.2%	25	34.2%
PROTESTANT	90	20.6%	55	22.3%	20	27.4%
CHRISTIAN	66	15.1%	28	11.3%	7	9.6%
MORMON - LDS	22	5.0%	6	2.4%	1	1.4%
JEWISH	10	2.3%	6	2.4%	1	1.4%
OTHER	48	11.0%	25	10.1%	5	6.8%
NONE	65	14.9%	45	18.2%	14	19.2%
<b>IMPORTANCE OF RELIGIOUS BELIEFS</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
EXTREMELY	243	55.1%	117	46.6%	31	41.9%
SOMEWHAT	122	27.7%	81	32.3%	21	28.4%
NOT VERY/ALL	76	17.2%	53	21.1%	22	29.7%
<b>ATTEND RELIGIOUS SERVICES</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
WEEKLY or >	141	32.3%	55	22.3%	13	17.8%
MONTHLY or >	62	14.2%	38	15.4%	8	11.0%
< MONTHLY	64	14.6%	42	17.0%	14	19.2%
NOT AT ALL	170	38.9%	112	45.3%	38	52.1%

Table 2 also presents the full sample and two gambling sub-samples. In this case the measures being examined are the study-specific gambling variables. As expected, greater gambling differences exist between the sub-samples than in Table 1. Not surprisingly, people who gamble alone are more likely to gamble frequently, risk higher amounts of money, gamble for recreation and be more at risk for problem gambling.

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When Putnam addresses gender in his analysis, he either holds it constant (pp. 205, 220, 305, 331, 333, 419), or examines gender more broadly in terms of the ways in which social tolerance of certain sub-populations has increased over the years (pp. 350-356), or discusses the ways in which women in the workplace are civically engaged (p. 201). He also makes the general claim that "civic engagement and social connectedness have diminished almost equally for both women and men (p. 203). Table 3 (below), however, suggests that those who gamble alone are more likely to be male, though this difference is not statistically significant at the .05 alpha level (p=.062).

**TABLE 2: FREQUENCIES AND PERCENTAGES FOR GAMBLING VARIABLES. FULL SAMPLE, GAMBLE LAST MONTH, AND ALONE.**

FREQUENCY OF GAMBLING	FULL SAMPLE N=453		GAMBLED LAST MONTH N = 255		GAMBLE ALONE N = 74	
	N	%	N	%	N	%
FREQUENT	55	12.3%	55	21.6%	28	37.8%
MONTH/WEEK	122	27.4%	122	47.8%	31	41.9%
INFREQUENT	269	60.3%	78	30.6%	15	20.3%
<b>MONEY PUT AT RISK</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
\$100 or >	75	20.2%	53	21.2%	23	32.4%
\$51 - \$99	61	16.4%	46	18.4%	15	21.1%
\$50 or <	236	63.4%	151	60.4%	33	46.5%
<b>GAMBLING AS RECREATION</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
YES, SIGNIF.	38	10.2%	29	11.5%	19	25.7%
MODERATE	46	12.3%	41	16.3%	18	24.3%
SMALL/NO SIG.	289	77.5%	182	72.2%	37	50.0%
<b>PROBLEM GAMBLER</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
SELF ID YES	29	7.9%	18	7.4%	10	13.5%
SELF ID NO	337	92.1%	225	92.6%	64	86.5%
<b>GAMES PLAYED MOST</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
SLOTS/VP MACH.	270	71.2%	182	71.4%	45	60.8%
NOT MACHINE	109	28.8%	73	28.6%	29	39.2%
<b>GAMBLED ALONE</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
FREQUENTLY	90	23.7%	74	29.1%	74	100%
SOME/NEVER	289	76.3%	180	70.9%	0	0%

Age is implicated both directly and indirectly in a number of Putnam's arguments (2000 p. 247-276), all of which paint a favorable portrait of older generations. More specifically, Putnam argues that older generations have tended to be more civic-minded so that their passing is a major factor in the deterioration of social capital. As these "joiner generations" die off, those that follow lack the social capital of their predecessors.

If Putnam's arguments are true, it may be the case that gambling behavior is an exception to these tendencies. According to our data (see Table 3) gamblers who fall into older age categories are also more likely to gamble alone. For instance, gamblers between 50 and 64 are nearly twice as likely to gamble alone than gamblers between the ages of 21 and 34. Nor does this trend apply only to these age groups: gamblers 65 and older are just as likely to gamble alone as those between 50 and 64. Also, the mean age of those who frequently gamble alone is 52, while the mean age of those who do so only some of the time is 45.6, a difference that is statistically significant at the .01 alpha level. Contrary to what might be expected from Putnam's work, it seems that older gamblers are more likely to be solitary players, not less.

*Gamblers between 50 and 64 are nearly twice as likely to gamble alone than gamblers between the ages of 21 and 34.*

TABLE 3: GAMBLING ALONE BY GENDER AND AGE			
SEX	FREQUENTLY ALONE	SOMETIMES OR NEVER ALONE	STATISTICAL SIGNIF.
MALE	34.7%	65.3%	Chi-Square = 3.481 p = .062 N = 254
FEMALE	24.1%	75.9%	
AGE CATEGORY	FREQUENTLY ALONE	SOMETIMES OR NEVER ALONE	STATISTICAL SIGNIF.
21 - 34	19.7%	80.3%	Chi-Square = 9.156 p = .027 N = 254
35 - 49	23.0%	77.0%	
50 - 64	38.3%	61.7%	
65 and >	38.9%	61.1%	
Mean Age	52.01	45.63	T-Value = 2.742, p = .007

We next examine marital status and household composition. In Putnam's analysis, marriage is linked with a number of social capital issues. For example, he suggests that marriage is linked to increased time entertaining at home and being entertained in the homes of others (200:278), as well as with decreased time hanging out with friends (200:278). Although he claims that social capital tends to be declining for both singles and married couples (2000:185), the negative effects allegedly are less dramatic for the latter.

Our analysis (see Table 4) supports Putnam's argument here, as the married and the non-married are very different when it comes to the tendency to gamble alone. Comparatively speaking, married gamblers in our sample gamble alone far less frequently than those who are not married (i.e., those who are single, separated/divorced, or widowed). Put another way, when married persons do gamble, they are more likely to do so socially rather than in isolation. Chi-square analyses indicate that these differences are significant at the .001 level.

Similarly, the data in Table 4 on household composition also supports the notion that those who live alone also tend to gamble alone more often. Here, more than half of those gamblers who live by themselves indicated that they gamble alone frequently. These differences also are significant at the .001 level.



**TABLE 4: GAMBLING ALONE BY MARITAL AND HOUSEHOLD NUMBER**

MARITAL STATUS	FREQUENTLY ALONE	SOMETIMES OR NEVER ALONE	STATISTICAL SIGNIF.
MARRIED	21.0%	79.0%	Chi-Square = 16.422 p = .001 N = 253
SINGLE	32.6%	67.4%	
SEP/DIVORC	35.8%	64.2%	
WIDOWED	63.2%	36.8%	
NUMBER IN HOUSEHOLD	FREQUENTLY ALONE	SOMETIMES OR NEVER ALONE	STATISTICAL SIGNIF.
1	56.0%	44.0%	Chi-Square = 23.315 p = .000 N = 253
2	26.4%	73.6%	
3-4	16.9%	83.1%	
5 or >	21.9%	78.1%	
<b>Mean Number</b>	2.16	2.84	T-Value = 3.339, p = .001

We also investigated the influence of other demographic variables, including income, education, employment, religious affiliation, religious service attendance, and the importance of religion to the individual. Although there were no statistically significant differences in these analyses, we present them in hopes that future research might explore these variables more fully (see Table 5).

In Table 6 (below) we examine a wide range of gambling variables to further understand the characteristics of those who gamble alone. Here it appears that those who gamble frequently (a few times a week or more) also often gamble alone, as more than half of those who were categorized as frequent gamblers were also categorized as frequent solitary gamblers. This finding supports Putnam’s notion that gambling is indeed a form of recreation that supports his “playing alone” thesis, although not in the specific way he suggests (i.e., Putnam predicts solo gambling primarily on machines, but this speculation is not supported by our data).

Furthermore, those who risk substantial amounts of money are more likely to gamble alone, as 44% of those who wager \$100 or more during a single gambling outing indicated that they gamble alone. Perhaps because they are more serious about their recreational activity, or because they do not wish to be seen by friends wagering large amounts of money, heavy gamblers, as measured by amounts wagered, tend to gamble alone.

*Furthermore, those who risk substantial amounts of money are more likely to gamble alone.*

Of those who suggest that gambling is a significant part of their recreational life, 65.5% indicate that they gamble alone frequently, whereas only 20% of those who do not feel that gambling is a significant part of their recreational life do so.

Those who value their gambling as a key component of their recreational life also tend to gamble alone frequently.

Although the original purpose of this survey was not to determine problem gambling rates, respondents were asked directly whether they considered themselves problem gamblers. Among those who self-identified as having a gambling problem, more than half also indicated that they frequently gamble alone, a difference that was significant at the .05 level. This finding is consistent with the contention commonly voiced in group treatment or self-help settings that problem gamblers “gamble alone and heal together” (in many cases, by returning to social structures that they had abandoned in their pursuit of gambling).

Finally, when examining games most played, it turns out that those who gamble on slot and/or video poker machines are less likely to frequently gamble alone. This constitutes a highly significant finding for our own inquiry, as Putnam cites the prevalence of machine gambling as evidence that the sociality of card playing is being replaced by less “shmoozable” gambling activities, such as machine gambling (2000, p. 105). In contrast to Putnam’s melodramatically bleak portrayal of gambling machines, it is more often the case that those gambling in other areas of the casinos are playing in solitude.

<b>TABLE 5: GAMBLING ALONE BY NON-SIGNIFICANT VARIABLES</b>			
<b>RELIGIOUS AFFILIATION</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
PROTESTANT	37.0%	63.0%	Chi-Square = 3.861 p = .696 N = 246
CATHOLIC	30.5%	69.5%	
CHRISTIAN	25.0%	75.0%	
MORMON-LDS	16.7%	83.3%	
JEWISH	16.7%	83.3%	
OTHER	20.0%	80.0%	
NONE	31.1%	68.9%	
<b>ATTEND RELIGIOUS</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
WEEKLY or >	23.6%	76.4%	Chi-Square = 3.690 p = .297 N = 246
MONTHLY or >	21.1%	78.9%	
< MONTHLY	33.3%	66.7%	
NOT AT ALL	34.2%	65.8%	
<b>IMPORTANCE OF RELIG.</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
EXTREMELY	26.5%	73.5%	Chi-Square = 4.579 p = .101 N = 250
SOMEWHAT	26.3%	73.8%	
NOT VERY/ALL	41.5%	58.5%	
<b>INCOME</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
\$20K or <	28.9%	71.1%	Chi-Square = 1.941 p = .585 N = 205
\$25K - \$35K	35.0%	65.0%	
\$40K - \$55K	23.8%	76.2%	
\$60K or >	27.3%	72.7%	
<b>EDUCATION</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
HS GRAD or <	30.8%	69.2%	Chi-Square = 0.596 p = .742 N = 252
SOME/COL GRAD	29.5%	70.5%	
POST GRAD	23.1%	76.9%	
<b>EMPLOYMENT</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
EMPLOYED	27.0%	73.0%	Chi-Square = 6.670 p = .083 N = 253
UNEMPLOYED	23.1%	76.9%	
STUDENT/HOME MAKER	13.3%	86.7%	
RETIRED	40.6%	59.4%	

<b>TABLE 6: GAMBLING ALONE BY GAMBLING SPECIFIC VARIABLES</b>			
<b>FREQUENCY OF GAMBLING</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
FREQUENT	51.9%	48.1%	Chi-Square = 18.023 p = .000 N = 254
MONTH/WEEK	25.4%	74.6%	
INFREQUENT	19.2%	80.8%	
<b>MONEY PUT AT RISK</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
\$100 or >	44.2%	55.8%	Chi-Square = 9.965 p = .007 N = 249
\$51 - \$99	32.6%	67.4%	
\$50 or <	21.9%	78.1%	
<b>GAMBLING AS RECREATION</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
YES, SIGNIF.	65.5%	34.5%	Chi-Square = 29.329 p = .000 N = 251
MODERATE	43.9%	56.1%	
SMALL/NO SIG.	20.4%	79.6%	
<b>PROBLEM GAMBLER</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
			Chi-Square = 5.715 p = .017 N = 242
SELF ID YES	55.6%	44.4%	
SELF ID NO	28.6%	71.4%	
<b>GAMES PLAYED MOST</b>	<b>FREQUENTLY ALONE</b>	<b>SOMETIMES OR NEVER ALONE</b>	<b>STATISTICAL SIGNIF.</b>
			Chi-Square = 5.567 p = .018 N = 254
SLOT/VP MACH	24.9%	75.1%	
NOT MACHINE	39.7%	60.3%	

### Conclusions and Discussion

Our data clearly contradict Putnam’s impressionistic statement that the increasing popularity of machine gambling represents an anti-social (or at least non-social) development. While machine gambling does not appear to be as popular with those who gamble alone, perhaps other forces are at play here. For instance, solo gamblers tend to be more frequent and heavier bettors, and perhaps they have developed a savvy understanding that machine games cannot be “beaten” in the same way that other games (such as table poker or sports betting) can.

What is more, it would seem that gambling should not be characterized monolithically, especially as it pertains to social interaction. For instance, while craps and sports betting spaces are loudly and visibly social, other gambling spaces have their own social nuances. Table game play incorporates not only the obvious sharing of space and inevitable small talk that occurs within these confines, but also distinct table etiquette and shared codes that most players eventually adopt. Sometimes chatter is intended to gain an advantage, as is often the case with table poker. Often, however, even in non-directly confrontational games such as blackjack, players readily strike up casual conversations – as might be expected among any individuals sharing common space, interests, and conversation material.

In any case, some of our other findings do provide at least some support for Putnam’s general thesis. Interestingly, most of the demographic variables, including income, employment, education, and a number of religious characteristics, yielded no statistically significant differences in terms of gambling alone; put another way, those demographic groups gambled alone with similar frequencies. This provides partial evidence in support of Putnam’s claim that the decline of social capital is a phenomenon that transcends social divisions, although age and gender differences in our data suggest that this is not always the case, at least so far as gambling alone is concerned.

Differences in age are especially noteworthy, as Putnam claims that older persons are more likely to be more civic-minded (and hence to “play together”), yet our data suggests that they are also the most likely to gamble alone. The reasons for this seeming

anomaly are unclear. It may be that persons who seek to retire in Las Vegas do so at least in part because they already have an interest in gambling. Another possible explanation is that older gamblers already live within a well established network of social affiliations and are therefore more comfortable gambling alone. Finally, the opposite may be the case, at least for those who move to the Las Vegas area from elsewhere to retire; in essence, gambling would in this case represent a compensation for the loss of social ties in the towns and cities from which they moved. In the future, further research on the social networks of older gamblers will be necessary to shed further light on these phenomena.

While refuting the particular notion of machine gambling as a dominant factor, our findings do suggest a broader sociological agreement with Putnam's overall concerns. This consensus centers around the increased recognition of leisure activities as an important source for the development of meaningful social bonds in contemporary American society (Frey and Dickens 1990).

The concept of community was traditionally associated with informal face-to-face relations found in small towns and was seen to decline with the advent of modern urban life. Systematic empirical research conducted since the early 1970s, however, has documented the persistence of communal relations in large urban environments (see Frey and Dickens 1990). More significantly, this research has highlighted the increasing importance of leisure pursuits as a major source of social bonding in the contemporary context (one of the early studies of this type was, in fact, a study of bowlers [see Steele and Zurcher 1973]). Seen from this angle, our research would suggest that, for many people, gambling has become a relatively mainstream recreational activity in contemporary American society, and, as such, shares many of the same social characteristics as other, more celebrated leisure pursuits.

As is always the case, our study suffers from limitations that should be referenced here. Because this survey was not originally designed to measure gambling problems, the data on these sub-samples should be interpreted with caution. Furthermore, because the original design was not intended to explore "gambling alone" as a specific phenomenon, additional useful constructs (measuring favorite sociological variables such as anomie or alienation) were not included.

In addition, readers are likely to point out that data collected in Las Vegas may not be reflective of gambling behaviors observed elsewhere, and we would agree. At the same time, however, researchers have started to point out that America seems to be "Las Vegasizing" at the same time that Las Vegas seems to be "Americanizing" (Gottdiener, Collins, and Dickens 1999), and as a result, Las Vegas may no longer be the "deviant" (or even different) locale that it once was. In fact, recently Las Vegas has become a favorite "test tube" for marketing researchers, who note that the city's massive influx of new residents from around the world make it a desirable place to study people from a diverse array of backgrounds (LoScalzo, 2007).

Having said this, we have conducted these analyses in a modest and exploratory spirit, with hopes of introducing a potentially useful framework for understanding gambling behavior in America (and perhaps in other jurisdictions). In the future, it is our hope that research might explore similar processes in other areas around the world, and that "gambling alone" might be of interest to researchers seeking to better understand the contexts and consequences of our recreational choices.

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