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Internet gambling in problem gambling college students

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Abstract

Internet gambling is popular in college students and associated with problem gambling behaviors. This study evaluated Internet gambling in 117 students participating in study evaluating brief interventions to reduce gambling; the brief interventions consisted of minimal advice, motivational enhancement therapy, and cognitive-behavioral therapy (1–4 sessions). Compared to their counterparts who did not gamble via the Internet ($n = 60$), those who reported recent Internet gambling ($n = 57$) wagered in greater frequencies and amounts and reported missing school more often and more problems with family and anxiety due to gambling. Recent Internet gamblers demonstrated similar reductions in gambling over time and in response to the brief interventions as non-Internet gamblers. These data suggest that Internet gambling is common in problem gambling college students, and students who wager over the Internet can benefit from brief interventions.

Keywords

gambling; problem gambling; Internet; college students

Gambling is a popular activity among adolescents and college students. Up to 23% of college students gamble weekly or more, and between 3% and 14% develop a gambling problem (Engwall, Hunter, & Steinberg, 2004; Petry & Weinstock, 2007; Weinstock, Whelan, Meyers, & Maccausland, 2007). Gambling problems are associated with poor academic performance, heavy alcohol consumption, illicit drug use, nicotine use, and suicide attempts (Engwall et al., 2004; LaBrie, Shaffer, LaPlante, & Wechsler, 2003; Winters et al., 1998). The Internet is considered one of the most dangerous forms of gambling because of its anonymity, accessibility, and 24-hour availability.

Rates of participation in Internet gambling activities vary vastly depending on the population studied. In nationally-based epidemiology surveys of adults, Internet gambling participation appears to be fairly low. For example, only about 1.3% to 8% of Spanish, British and Norwegian adults report having wagered on the Internet (Bakken, Gotestam, Grawe, Wenzel, & Oren, 2009; González-Ibáñez & Volberg, 2008; Griffiths, Wardle, Orford, Sproston, & Eren, 2009). In contrast, 23% to 37% of college students, who are high utilizers of computers and the Internet more generally, report having used the Internet to place a bet (Floros & Siomos, 2012; Petry & Weinstock, 2007).

Regardless of the population studied, Internet gambling is ubiquitously associated with high rates of problem gambling behaviors. In epidemiological as well as student surveys, individuals who have wagered via the Internet have substantially higher rates of problem and pathological gambling than their counterparts who have not placed bets using the Internet (Griffiths et al., 2009; Griffiths & Wood, 2007; Griffiths & Barnes, 2008; Ladd & Petry, 2002; Matthews, Farnsworth, & Griffiths, 2009; Petry & Weinstock, 2007; Wood, Griffiths, & Parke, 2007). For example, in a sample of 1,356 college students (Petry & Weinstock, 2007), 23% reported ever gambling on the Internet, with 6.3% reporting Internet gambling at least weekly. Almost two-thirds (61.6%) of regular Internet gamblers were pathological gamblers, compared with 23.9% of infrequent Internet gamblers and 5.0% of non-Internet gamblers (Petry & Weinstock, 2007).

Little research has addressed whether Internet problem gamblers, however, have distinguishing features from their counterparts who gamble problematically on other forms of gambling. Individuals who develop problems with different forms of gambling vary in terms of demographic characteristics (Blaszczynski & Nower, 2002; Ledgerwood & Petry, 2010; Petry, 2003a). Those with primary problems related to sports, animal, and card betting tend to be male, while those with primary problems associated with slot machines and bingo tend to be women (Grant & Kim, 2002; Petry, 2003a). Pathological gamblers who wager primarily on sports are more likely to have substance use problems, while primary slot machine and scratch/lottery ticket gamblers tend to have higher levels of anxiety, psychosis, and suicidality (Petry, 2003a). Individuals with different preferred forms of gambling also appear to have different motivations for gambling. Sports and card bettors, for example, report seeking thrills and competition, while slot machine gamblers may wager to ease psychological distress (LaPlante, Nelson, LaBrie, & Shaffer, 2011; Petry, 2003a; Welte, Barnes, Wieczorek, Tidwell, & Hoffman, 2007). An investigation of Internet gambling among youth finds that delinquency and substance use are both related to gambling severity in Internet gamblers, while only delinquency contributes to gambling severity in non-Internet gamblers (Brunelle, Leclerc, Cousineau, Dufour, Gendron, Martin, 2012). Thus, interventions may need to take into account specific gambling motivations and correlates that may be unique to Internet gamblers (Lloyd et al., 2010).

However, surveys of gamblers reveal that Internet gamblers are less likely to seek treatment than their non-Internet gambling counterparts (Gainsbury, Russell, Hing, Wood, & Blaszczynski, in press), and treatment-seeking samples rarely report the Internet as their primary form of gambling. In samples of patients entering gambling treatment clinics, less than 1% indicated that the Internet is their preferred modality of gambling (Álvarez-Moya et al., 2010; Petry, 2003a; Petry et al., 2006; Petry, Weinstock, Lederwood, & Morasco, 2008). Low rates of Internet gambling may relate to the wide availability of other gambling activities in many areas of the US and Spain, because in Norway rates of treatment seeking for Internet gambling rose markedly after slot machines were banned in that country (Bu & Skutle, 2013).

The generally low rates of Internet gambling in treatment-seeking individuals may also reflect other variables that impact treatment seeking. One such factor is age. Very few adolescents, college students and young adults present for gambling treatment (Monaghan &

Wood, 2010), even though this age group experiences gambling problems at disproportionately high rates (Dickson, Derevensky, & Gupta, 2008; Hansen & Rossow, 2008; Huang & Boyer, 2007; Molde, Pallesen, Bartone, Hystad, & Johnsen, 2009; Petry et al., 2008). Petry, Weinstock, Morasco, and Ledgerwood (2009) outline the importance of active screening and brief interventions in populations such as college students who are at high risk for gambling problems. The primary purpose of the present study was to evaluate the prevalence and correlates of Internet gambling in a sample of college students who screened positive for gambling problems and participated in a brief intervention study (Petry et al., 2009).

Internet gamblers were expected to have more severe gambling problems than their counterparts who did not recently gamble via the Internet. Additionally, Internet gamblers were anticipated to have more psychosocial problems along a number of dimensions, including substance use, psychological, and social domains. The temporal stability of Internet gambling was examined over a nine-month period, and use of the Internet to access gambling was expected to remain fairly stable in this population. Nevertheless, Internet gamblers were expected to be as likely as non-Internet gamblers to reduce gambling in response to the brief interventions.

Methods

Participants

Participants were recruited via direct screenings in common areas (e.g., cafeterias, student unions) or classrooms at three public universities in the Northeast and additional flyers posted at other local college campuses. Whether they called in response to an advertisement or were screened directly, participants, after providing assent as approved by Universities' Institutional Review Boards, completed a self-report questionnaire asking about demographic characteristics and recent gambling and the South Oaks Gambling Screen (SOGS) (Leisure & Blume, 1987). All individuals who were 18 years and classified as recent problem gamblers were invited to participate in the study. Recent problem gambling was operationally defined by scores 3 on the SOGS, and spending \$100 and gambling on 4 days in the past 2 months.

Students who appeared to meet the above inclusion criteria ($n = 128$) were invited to an in-person evaluation. After obtaining written informed consent from the 122 participants who attended the evaluation, additional assessments were administered and exclusion criteria evaluated. Study exclusion criteria were current symptoms of suicidality or psychosis, and desire for more intensive treatment for gambling than provided in the study; only one person was excluded for psychiatric symptoms and none for desire for more intensive treatment. An additional 4 participants were not continued in the study because they no longer met the minimum gambling inclusion criteria at the baseline evaluation, resulting in 117 participants.

Measures

Assessments were administered at baseline and 6 and 36 weeks later. Participants received \$20 in gift certificates for completing the baseline evaluation, and \$15 for each follow-up. Follow-up rates were 97.4% at the week 6 and 96.6% at the week 36 evaluations.

The SOGS (Leisure & Blume, 1987) assessed frequency of participation in various gambling activities and the extent of gambling-related problems. In terms of gambling participation, questions inquired about frequency of wagering on various activities including: cards, sports, playing games of physical skill (e.g., bowled, shot pool, played golf or some other game of skill for money), scratch tickets, lottery, slot machines, dice, animals (horses, dogs, etc.), bingo, high-risk stocks and bonds. Because Internet gambling did not exist at the time the SOGS was developed, an item related to Internet gambling was added for this study. Responses were coded on a 5-point likert scale, ranging from “never” to “daily.” In addition to items about types of gambling which are not included in scoring the SOGS, 20 items inquire about gambling-related problems, and scores range from 0 to 20. The SOGS is reliable and valid in assessing gambling problems (Stinchfield, 2002; Weinstock et al., 2007; Wulfert et al., 2005), with scores ≥ 3 commonly used to indicate problem gambling (Petry, 2005). A lifetime version of the SOGS was administered at baseline and a past-month version at all three time points. In this sample, Cronbach's alpha was 0.73–0.78 across administrations.

National Opinion Research Center DSM-IV Screen for Gambling Problems (NODS) was administered at baseline to assess the Diagnostic and Statistical Manual of Mental Disorders-IV (American Psychiatric Association, 1994) pathological gambling criteria over the past year. Test-retest reliability is 0.99, and the NODS classifies 95% of treatment-seeking gamblers as pathological (Gerstein et al., 1999). Cronbach's alpha in this sample was 0.83.

The Addiction Severity Index, including its Gambling section (ASI-G) (Lesieur & Blume, 1991; Petry, 2003b, 2007), was used to examine substance use, psychiatric, and gambling problems at baseline and follow-ups. The ASI (McLellan, Luborsky, Cacciola, Griffith, McGahan, & O'Brien, 1988) and its gambling section (Lesieur & Blume, 1991; Petry, 2003b; Petry, 2007), has good internal consistency, test-retest reliability and validity. Cronbach's alpha of the gambling section in this sample was adequate--0.71 (Petry et al., 2009).

Randomization

As described in the primary trial (Petry et al., 2009), participants were randomized to one of four conditions outlined below after completing the baseline evaluation.

a. Assessment only control—Researchers informed students assigned to this condition they would be re-contacted for follow-ups at 6 and 36 weeks. No treatment was delivered.

b. Brief advice—These participants met for 10–15 minutes with a therapist after the evaluation. Using a one-page handout (Petry, 2005), the therapist (1) outlined the participant's level of gambling in relation to others college students, (2) described risk

factors for problem gambling, and (3) provided concrete suggestions to curtail significant gambling problems: limiting money spent gambling; reducing time and days gambling; not viewing gambling as a way of making money; and spending time on other recreational activities.

c. Motivational enhancement therapy (MET)—These participants received a 50-minute individual session after the evaluation, during which therapists provided personalized feedback about their gambling and discussed positive and negative consequences of gambling. Participants also completed a change plan worksheet.

d. MET+Cognitive behavioral therapy (CBT)—These participants received the same initial MET session outlined above and were encouraged to return for three weekly individual sessions of CBT that addressed: (1) identifying internal (mood) and external (e.g., peer pressure) gambling triggers, (2) coping with internal triggers, and (3) coping with external triggers. The CBT used handouts modified from Petry (2005).

Data analyses

Based on responses to the item about frequency of past month Internet gambling in the SOGS, participants were classified as not recently having gambled on the Internet ($n = 60$) or having recently gambled on the Internet ($n = 57$). This time frame was selected because it is one in which self reports are reliable and valid; one month is also consistent with the time frame used in other studies (Weinstock, Whelan, & Meyers, 2004; Kuentzel, Henderson, & Melville, 2008). The vast majority of those with recent Internet gambling reported regular Internet gambling in the last month, with only 5 of the 57 participants (8.8%) reporting a single Internet gambling episode in the prior month. Fifteen (26.3%) reported Internet gambling between 2 and 6 times, 23 (40.4%) reported Internet gambling more than 6 times but less than daily, and 14 of these 57 participants (24.6%) reported daily Internet gambling in the past month. Other dividing points were considered (e.g., combining once and never Internet gamblers, using lifetime time frames) and yielded similar results to those reported herein. In addition to the 57 recent Internet gamblers, another 23 participants ($n = 80$; 68.4% of the full sample) reported ever having gambled on the Internet in their lifetimes. Because Internet gambling in the distant past is probably unlikely to impact current gambling and for ease of interpretation, only results from the most straightforward division of none versus any recent Internet gambling are presented.

The two groups (no recent Internet gambling versus any recent Internet gambling) were compared in terms of demographic and baseline characteristics using chi-square, independent t-tests, or Mann Whitney U tests, as appropriate given the nature and distribution of the variables. Some variables were log or square root transformed prior to analyses to normalize distributions.

The stability of Internet gambling was assessed by comparing reports of past-month versus lifetime Internet gambling. Additionally, participation in Internet gambling was evaluated at each of the follow-ups. The relationships between Internet gambling and frequencies of other forms of gambling were also evaluated using Mann Whitney U tests.

The primary study from which these data were drawn (Petry et al., 2009) demonstrated significant effects of the three brief interventions relative to the assessment only control condition in reducing gambling problems. Because the three brief interventions did not differ significantly from one another, they were combined for the purposes of the present analyses, designed to assess if Internet gamblers fared differentially overall or in response to brief interventions. Repeated measures analyses of variance examined main and interactive effects of time, receiving a brief intervention or not, and Internet gambling status. The ASI-gambling score was chosen as the primary outcome because it is sensitive to changes in gambling over time and takes into account days and dollars gambled in the past month, along with severity of recent gambling problems (Petry, 2003a, 2007). Analyses were conducted on SPSS v. 15.

Results

In the full sample of 117 problem gamblers, 57 (48.7%) reported gambling on the Internet in the month before initiating the brief intervention study. Few differences in demographics were noted between recent Internet gamblers and those who did not report recent Internet gambling (Table 1). Recent Internet gamblers tended to be younger by about a half a year although differences on this variable did not reach significance, and they were significantly more likely to attending college at the campus from which most participants were drawn. The two groups did not differ in terms of any substance use variables.

However, recent Internet gamblers gambled more frequently and in larger magnitudes than their counterparts who had not recently gambled on the Internet (Table 2). They had greater gambling debts, experienced more problems with family members and missed school related to gambling, and were more likely to report significant problems with anxiety. However, there were no differences between these two groups in terms of age of gambling initiation or severity of gambling problems as assessed by SOGS or DSM-IV pathological gambling criteria.

Frequency of participation in other types of gambling activities was generally similar between the recent Internet gamblers and their counterparts who had not wagered over the Internet in the month prior to initiating the study. The most common gambling activity was card playing, with 79.5% ($n = 93$) of the sample reporting betting in this manner in the month before the study. Other common gambling activities, in order of prevalence, were buying scratch/instant tickets, betting on sports games, playing games of skill for money, buying lottery tickets, playing slot machines, and betting on dice games; between 22.8% and 49.6% of the sample had wagered on each of these activities in the month before initiating the study. Only 3.4% to 10.3% of participants reported betting on animals, bingo, and high-risk stocks and bonds in the past month. Frequencies of wagering on these activities did not vary between the recent Internet gamblers and non-Internet gamblers (all $ps > .13$; data not shown).

Recent Internet gamblers, not surprisingly, reported greater frequency of lifetime Internet gambling than their counterparts without recent Internet gambling, $U = 55.84$, $p < .001$. For example, 77.2% ($n = 44$) of the 57 recent Internet gamblers reported wagering on the

Internet weekly or more often over their lifetimes. Thirty-eight percent ($n = 23$) of the non-recent Internet gamblers reported some lifetime experience with Internet gambling, but only 11.6% ($n = 7$) of this group had ever wagered weekly or more often on the Internet. In the prospective analysis of frequency of Internet gaming, the two groups again differed in the expected manner. For example, over the 9-month study period, only 8.5% ($n = 5$) of participants with no recent Internet gambling at baseline reported ever gambling over the Internet at follow-up evaluations; participation in continued Internet gambling was more common among those who had wagered on the Internet in the month preceding the baseline evaluation, $ps < .001$ (data not shown; available from authors).

The repeated measures ANOVA revealed significant main effects of time, $F(2,216) = 25.72, p < .001$, and recent Internet gambling experience, $F(1,108) = 8.80, p < .004$ on ASI-G scores. In the sample overall, ASI-G scores decreased over time, and ASI-G scores were higher throughout the study period (indicating more severe problems) among participants with recent Internet gambling at baseline (Figure 1). Compared to the assessment only control condition, randomization to one of the brief interventions was associated with significantly greater reductions in ASI-G scores over time, $F(2,216) = 3.45, p = .03$. The interaction effect between Internet gambling status at baseline and treatment condition, however, was not significant, $F(2,216) = 0.73, p = .48$, indicating that those with and without recent Internet gambling responded equally well to the brief interventions.

Discussion

This is the first study providing a comprehensive assessment of Internet gambling in college students, a population with high rates of experience with Internet gambling. Most notably, a very large percentage of these problem gamblers had lifetime, as well as past-month, experience wagering on the Internet. These data are in contrast to adult treatment-seeking gamblers, relatively few of whom report gambling on the Internet (Álvarez-Moya et al., 2010; Petry et al., 2006, 2008). The differences in rates of participation in Internet gambling may relate to demographic characteristics, such as the relatively young age of college students and the ubiquitous use of the Internet in college settings, making Internet gambling more normative in this sample relative to adult populations.

Although many students reported having wagered online, few noted the Internet to be their primary method of gambling; instead, the vast majority reported that card/poker gambling, not limited to the Internet, was their primary form of gambling (Petry et al., 2009). Students who had recently wagered on the Internet tended to be about a half a year younger. Younger students may have greater difficulty accessing casinos due to the minimum age of 21 years in local casinos, and therefore younger students may have been more likely to wager online. Internet gambling may also be normative and encouraged in certain social groups, as one campus had substantially higher rates of Internet gambling than the other campuses.

Recent Internet gamblers wagered more frequently and with greater amounts of money than their counterparts who had not recently gambled on the Internet. Studies have shown the overall frequency of gambling to be higher for individuals who wager on the Internet relative to other forms of gambling (Welte, Barnes, Tidwell, & Hoffmann, 2009). Moreover,

similarly to the present study, Internet gamblers tend to engage in all types of gambling frequently, and they have higher average gambling expenditures than non-Internet gamblers (Wood & Williams, 2009).

In terms of consequences, recent Internet gamblers experienced more school and family problems, as well as significant problems with anxiety than their non-Internet gambling peers. Previous studies have shown that problem gambling among adolescents and college students is associated with multiple behavioral, psychological, interpersonal, and academic problems (Ellenbogen, Derevensky, & Gupta, 2007; Hardoon, Gupta, & Derevensky, 2004; Messerlian, Byrne, & Derevensky, 2004; Petry & Weinstock, 2007), and that Internet gambling may be particularly troublesome (Brunelle et al., 2012).

Numerous similarities between Internet and non-Internet gamblers were also apparent. Both groups began to gamble at an early age, similarly to ages of onset reported in other studies (Burge, Pietrzak, & Petry, 2006; González-Ibáñez & Volberg, 2008; Lynch, Maciejewski & Potenza, 2004). Although rates of substance use did not differ between the two groups of problem gamblers, adolescent and young adult problem gamblers are more likely to drink alcohol, smoke tobacco, and use drugs than their non-problem gambling counterparts (Barnes, Welte, Hoffman, & Tidwell, 2009; Shaffer & Korn, 2002).

Gambling outcomes did not differ based on recent Internet gambling status, and both those with and without recent Internet gambling experience responded equally well to the brief interventions. These data suggest that brief interventions are suitable for reducing gambling problems, regardless of the forms of gambling in which the students engage. The lack of differences between groups in terms of outcomes may also reflect that college students do not differ markedly in terms of their gambling patterns over time regardless of whether or not they wager on the Internet.

Results from this study point to high rates of Internet gambling in college students and the potential of brief interventions for reducing gambling problems, but these findings must be interpreted in light of limitations of the study design. First, this was a brief intervention study, and as such the assessment battery was intentionally short so extensive details of psychosocial problems were not collected. Second, the duration of the follow-up was only nine months, and it is unclear whether benefits observed in the short-term persisted. Third, all evaluations relied upon self-report indices; although generally reliable and valid in assessing gambling, response biases may have impacted outcomes. Finally, these data were limited to college students in the Northeastern United States; the results may not generalize to college students more broadly.

Despite these limitations, these data were collected from a relatively large sample of college student problem gamblers from several campuses. Participants were randomly assigned to different interventions, and rates of follow-up completion were excellent. These data clearly show that Internet gambling can be a significant problem for some students, and brief interventions are useful for decreasing gambling, regardless of how gambling is accessed. As gambling opportunities continue to spread, colleges need to consider instituting problem gambling awareness campaigns (McKinley & Wright, 2012), as well as assessing for

gambling problems in their students and integrating prevention (Larimer et al., 2012) and brief treatment interventions (Petry, 2005; Petry et al., 2009) to reduce the consequences of this disorder.

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Figure 1.

Changes in Addiction Severity Index gambling scores over time and in relation to Internet gambling status and treatment assignment. Values represent group means and standard errors. Participants with no recent Internet gambling are designated by squares, and those with recent Internet gambling are designated by circles. Participants assigned to the assessment only control condition are shown in non-filled symbols, and those assigned to a brief intervention are shown in filled symbols. Effects of time, Internet gambling status, and treatment assignment were significant ($p < .05$; see text for more details).

Table 1

Baseline demographics and substance use characteristics

Variable	No recent Internet gambling	Recent Internet gambling	Statistic (df)	p value
N	60	57		
Age	20.6 ± 2.0	20.0 ± 1.3	<i>t</i> (115) = 1.92	.06
Years of education	14.3 ± 1.8	14.1 ± 1.2	<i>t</i> (115) = 0.90	.37
Grade point average	3.0 ± 0.5	3.1 ± 0.6	<i>t</i> (45) = -0.71	.48
Annual income	\$7,692 ± \$9,568	\$8,157 ± \$9,193	<i>t</i> (115) = -0.27	.79
Days worked in past month	7.8 ± 9.3	7.7 ± 8.7	<i>t</i> (115) = 0.05	.96
Male gender, % (n)	81.7 (49)	87.7 (50)	χ^2 (1) = 0.82	.36
Race/ethnicity, % (n)			χ^2 (4) = 6.96	.13
Caucasian	81.7 (49)	89.5 (51)		
African American	6.7 (4)	0 (0)		
Asian American	8.3 (5)	8.8 (5)		
Native American	0 (0)	1.8 (1)		
Other	3.3 (2)	0 (0)		
Site of recruitment, % (n)			χ^2 (3) = 21.37	<.001
Campus A	41.7 (25)	73.7 (42)		
Campus B	36.7 (22)	7.0 (4)		
Campus C	20.0 (12)	10.5 (6)		
Other campus	1.7 (1)	8.8 (5)		
Smoking status, % (n)			χ^2 (2) = 1.19	.55
Never	73.3 (44)	71.9 (41)		
Past, not now	8.3 (5)	14.0 (8)		
Current smoker	18.3 (11)	14.0 (8)		
Age first smoked ^a	15.6 ± 2.3	15.3 ± 2.7	<i>t</i> (30) = 0.35	.73
Age first drank alcohol ^a	15.7 ± 3.0	15.4 ± 2.3	<i>t</i> (114) = 0.59	.56
Days of past month alcohol use	8.4 ± 7.0	9.0 ± 7.7	<i>t</i> (115) = 0.04	.96
Age first used marijuana*	16.4 ± 2.2	16.1 ± 2.3	<i>t</i> (78) = 0.71	.47
Days of past month marijuana use	2.7 ± 6.7	2.5 ± 6.7		
Age first used cocaine ^a	18.7 ± 2.5	18.0 ± 1.7	<i>t</i> (22) = 0.69	.49
Any past month cocaine use, % (n)	3.3 (2)	1.6 (1)	χ^2 (1) = 0.29	.58
Ever treated for substance abuse, % (n)	16.7 (10)	10.5 (6)	χ^2 (1) = 0.93	.33

Values represent means and standard deviations unless otherwise noted.

^a Age of first use is reported only among users.

Table 2

Baseline gambling and psychological variables

Variable	No recent Internet gambling (n = 60)	Recent Internet gambling (n = 57)	Statistic (df)	p value
Age first gambled, mean (SD)	14.8 ± 3.5	14.3 ± 3.4	<i>t</i> (115) = 0.83	.40
Age began regular gambling, mean (SD)	17.5 ± 3.9	18.0 ± 1.5	<i>t</i> (114) = -0.85	.39
Lifetime SOGS score, mean (SD)	6.5 ± 3.7	7.2 ± 3.6	<i>t</i> (115) = -1.07	.28
Past month SOGS score, mean (SD)	4.1 ± 3.2	4.5 ± 3.6	<i>t</i> (115) = -.059	.55
DSM-IV gambling criteria, mean (SD)	3.7 ± 2.0	3.8 ± 2.1	<i>t</i> (115) = -0.18	.85
Gambling debt, median (IQ)	\$0 (\$122)	\$40 (\$350)	<i>U</i> = -2.03	<.05
Days gambled past month, mean (SD)	3.3 ± 1.2	3.9 ± 1.0	<i>t</i> (115) = -2.69	<.001
Dollars gambled past month, median (IQ)	\$122 (\$207)	\$400 (\$857)	<i>U</i> = -4.96	<.001
Ever sought help for gambling	1.7 (1)	5.3 (3)	χ^2 (1) = 1.14	.28
Experienced in past month				
People criticizing your gambling	38.3 (23)	54.4 (31)	χ^2 (1) = 3.03	.08
Problems with family members due to gambling	10.0 (6)	26.3 (15)	χ^2 (1) = 5.28	<.02
Missed school due to gambling	13.2 (5)	31.7 (13)	χ^2 (1) = 3.85	<.05
Significant anxiety	8.3 (5)	21.1 (12)	χ^2 (1) = 3.80	<.05
Significant depression	6.7 (4)	3.5 (2)	χ^2 (1) = 0.59	.43
In treatment for a psychological problem	10.0 (6)	5.3 (3)	χ^2 (1) = 0.92	.33
Ever prescribed psychiatric medication	10.0 (6)	15.8 (9)	χ^2 (1) = 0.87	.34

Values represent percentages (n), unless otherwise noted. SD = standard deviation; IQ = interquartile range.