Published in final edited form as:

J Soc Serv Res. 2011 July ; 37(4): 422–427. doi:10.1080/01488376.2011.578037.

Gambling Behaviors Among Oxford House Residents: A Preliminary Investigation

John M. Majer, PhD[Assistant Professor of Psychology],
Harry S. Truman College, Department of Social Sciences, Chicago, IL.

Robert S. Angulo, BA[graduate student of Forensic Psychology],
DePaul University, Center for Community Research, Chicago, IL.

Darrin M. Aase, PhD[Postdoctoral Fellow], and
DePaul University, Center for Community Research, Chicago, IL.

Leonard A. Jason, PhD[Professor of Psychology]
DePaul University, Center for Community Research, Chicago, IL.

Abstract

The present study investigated the prevalence of gambling behaviors among 71 individuals recovering from substance-dependent disorders and living in self-run recovery homes (Oxford Houses). Residents were given the *South Oaks Gambling Screen* to assess gambling behaviors and pathological gambling, and 19.7% of the sample was identified as having probable pathological gambling. These residents reported proportionately more involvement in a variety of gambling behaviors than other residents. Engagement in various gambling activities was consistent with previous investigations and suggested that self-run recovery homes such as Oxford Houses might be suitable referral sources for recovering persons who have comorbid gambling problems.

Keywords

Gambling; substance abuse; comorbidity; Oxford Houses; recovery homes

Gambling, broadly defined, has existed in many societies, including ancient to modern, and from primitive to complex (Goodman, 1998, p. 145). Gambling has also remained enormously popular today, particularly in the United States where cable television shows that feature gambling activities (e.g., ESPN's *Texas Hold'em* and *Pokerstars.net*) model gambling behaviors. Because it can be a form of escapism, gambling often becomes problematic, especially among college students who report high rates of pathological gambling compared with the general population (Weiss & Loubier, 2010). In addition, research evidence suggests that gambling is related to mental health problems (Momper,

Copyright © Taylor & Francis Group, LLC

Address correspondence to: John M. Majer, PhD, Harry S. Truman College, Department of Social Sciences, 1145 W. Wilson Ave., Chicago, IL 60640 (jmajer@ccc.edu).

Publisher's Disclaimer: Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

All work related to this investigation was done within the United States.

Nandi, Ompad, Delva, & Galea, 2009), including comorbid substance use (Crockford & el-Guebaly, 1998; Cunningham-Williams, Cottler, Compton, Spitznagel, & Ben-Abdallah, 2000; Hodgins, Peden, & Cassidy, 2005).

Hodgins et al. (2005) found that persons with pathological gambling, both in treatment and those not receiving treatment, reported high life-time substance use. In addition, pathological gambling was uniformly associated with poor health measures, including alcohol dependence, among 40–60-year-old adults diagnosed with alcohol-related disorders (Desai, Desai, & Potenza, 2007), and there is some research evidence to suggest a positive relationship between gambling and substance use in terms of problem severity (Morasco et al., 2006). This type of psychiatric comorbidity, in other words substance dependence and co-occurring pathological gambling, may produce unique risks for recurrent substance use (i.e., relapse).

For instance, Barry and Petry (2008) found persons with substance use disorders performed worse on decision making in relation to gambling tasks than a control group. In addition, Goudriaan, Oosterlaan, de Beurs, and van den Brink (2005) found decision-making deficits were not related to psychological disorders such as anxiety, attention-deficit/hyperactivity disorder, or depression among persons who had problem gambling and alcohol dependence. It is likely that persons recovering from substance dependence are at risk for poor decision-making strategies with regard to their ongoing abstinence, particularly those who have gambling problems. Thus, it is important for social service providers to identify effective interventions and posttreatment referral sources for persons with substance dependence and gambling problems, such as the Oxford House model.

Oxford Houses are self-run, democratically operated recovery homes based on peer support for persons recovering from substance dependence (Jason, Davis, Ferrari, & Anderson, 2007). There are approximately 1,500 Oxford Houses, mostly in the United States, Canada, and Australia. Oxford House residents live without professional treatment staff in the homes, and unlike residential treatment settings for substance dependence, residents can live in an Oxford House indefinitely as long as they maintain complete abstinence, cover their rent and fair share of House chores, and participate in the democratic process (Oxford House, Inc., 2006). Research evidence suggests that these peer-based settings could help recovering persons who also have co-occurring pathological gambling.

For instance, Majer, Jason, Ferrari, and North (2002) found considerable rates of psychiatric comorbidity among Oxford House residents, with 69% of residents reporting continued abstinence at 6-month follow-up. In addition, a longitudinal investigation with a national sample of Oxford House residents demonstrated that residents with high psychiatric problem severity (versus those without) reported comparable outcomes in terms of abstinence, attrition, and use of psychiatric services (Majer et al., 2008). In a 2-year longitudinal investigation (Jason, Olson, Ferrari, & Lo Sasso, 2006), where participants were randomly assigned to an Oxford House or usual care condition (e.g., outpatient treatment, other professionally led recovery home, etc.) upon discharge from inpatient treatment, participants in the Oxford House condition reported significantly higher levels of abstinence and income and lower levels of criminal behavior than those who received usual care. In this same sample, longer stays in Oxford Houses were significantly related to higher levels of self-regulation, which may facilitate better decision making (Jason et al., 2007), even among those who reported psychiatric comorbidity. Taken together, these studies suggest that substance-dependent persons who have co-occurring psychiatric problems such as pathological gambling would also use the Oxford House model.

The present study investigated the prevalence of gambling behaviors in a sample of persons who had substance use disorders and were living in self-run recovery homes (Oxford Houses) within the United States. Although this investigation was exploratory in nature, a certain amount of comorbid pathological gambling prevalence among Oxford House residents was expected based on known prevalence rates among persons with substance use disorders in other settings.

METHOD

Participants

Seventy-one (44 males, 23 females who identified their gender) Oxford House residents were recruited for the present study. Fourteen of these participants were recruited from three Oxford Houses in the Chicago metropolitan area through the assistance of an Oxford House member who helped the research team meet House members during weekly House meetings. During these meetings, participants responded to survey items voluntarily. Refreshments were provided by the research staff as an incentive. All others were recruited at a national Oxford House convention. The average age of the sample was 42.0 years ($SD = 10.41$). The sample consisted of 64.7% Caucasian, 32.4% African American, 1.5% Latino, and 1.5% multiracial. With regard to marital status, 52.9% were single, 32.4% were divorced, 7.4% were separated, 5.9% were married, and 1.5% were engaged. The majority of residents (56.7%) reported having a GED/high school diploma; 17.9% reported having an associate's degree, 11.9% had a bachelor's degree, 6% had less than a high school degree, 4.2% completed a certificate program, and 3.0% had a graduate degree.

Procedure

Approval from a university institutional review board was obtained for the study, and all participants were engaged in a process of informed consent. Participant recruitment ($n = 14$) occurred at Oxford House weekly house meetings located in the Chicago metropolitan area during the winter and spring of 2008, and the Oxford House National Convention in New Orleans, LA, in October of 2008. An attempt was made to secure a random volunteer sample at this National Convention (i.e., a table was set up in a room where individuals could complete their surveys with our research staff). Data collected from both sources were analyzed and did not reveal significant differences in outcome variables; thus, we collapsed cases from both methods ($n = 71$) for our analyses. In each case, participants were given instructions on how to self-administer their anonymous surveys and were told it would take approximately 10 to 20 minutes to complete all measures.

Measures

The *South Oaks Gambling Screen* (SOGS), a standardized measure of pathological gambling and gambling behaviors (Gambino & Lesieur, 2006; Lesieur & Blume, 1987), is scored on a scale of 0 to 20 for the categorization of present gambling problems based on the *Diagnostic and Statistical Manual of Mental Disorders*, third edition, criteria: no gambling problem (scores <3), problem gambling (scores 3–4), and probable pathological gambling (scores >5). The SOGS consists of 16 items that are dichotomously scored, including scored subitems and other items that are not scored but nonetheless yield meaningful information. Reliability coefficients of the SOGS have ranged between .69–.97 across investigations (Vassar, 2008), and the internal consistency (Cronbach's $\alpha = .79$) was good for the present study.

Missing Data

A complete-case approach was used to evaluate demographic and gambling data. Participants with missing data were excluded from analyses, and there were complete case data for about 95% of all participants for analyses. A missing values analysis of all variables indicated that the data were missing completely at random; Little's test; $\chi^2(135) = 91.37, p = .99$.

RESULTS

The frequency of gambling behaviors is presented in Table 1. Playing cards, lotteries, and slot machines were the most frequent gambling behaviors reported. Results of the SOGS revealed 49.3% of the sample had no gambling problem, 31.0% of the sample had a problem gambling, and 19.7% had probable pathological gambling. There were no significant differences observed in relation to residents' ethnicity, education status, gender, marital status, or age between the three gambling category groups.

Gambling behaviors were further examined by testing for differences between gambling category groups' scores on nonscored SOGS items. Proportionately more residents in the probable pathological gambling group reported that they play cards for money more than once a week than residents in the other groups, $\chi^2(4, n = 71) = 19.89, p = .001$. In addition, compared with residents in other groups, proportionately more residents in the probable pathological gambling group reported that they bet on horses or other animals, $\chi^2(4, n = 71) = 24.59, p < .001$; bet on sports, $\chi^2(4, n = 71) = 24.42, p < .001$; play dice games, $\chi^2(4, n = 71) = 25.24, p < .001$; play the numbers or bet on lotteries, $\chi^2(4, n = 71) = 12.45, p = .014$; go to the casino, $\chi^2(4, n = 71) = 15.83, p = .003$; play the stock and/or commodities market, $\chi^2(4, n = 71) = 17.19, p = .002$; play gambling machines, $\chi^2(4, n = 71) = 19.17, p = .001$; and play a game of skill for money, $\chi^2(4, n = 71) = 16.03, p = .003$. No other significant group differences were observed.

DISCUSSION

The present study found considerable variation in terms of gambling behaviors reported by recovering substance-dependent persons living in self-run, democratically operated recovery homes; these findings are consistent with previous investigations with other substance abuse populations (Toneatto & Brennan, 2002; Wickwire, Burke, Brown, Parker, & May, 2008). In addition, proportionately more residents who were assessed with probable pathological gambling based on SOGS scores were involved in a variety of gambling behaviors compared with other residents; this suggests that the use of the SOGS did not overdiagnose pathological gambling (Strong & Kahler, 2007; Strong, Lesieur, Breen, Stinchfield, & Lejuez, 2004) in the present sample. About 50% of the sample did not report any gambling problem, whereas 19.7% were assessed with having probable pathological gambling. This is a higher rate than what has been reported in other studies that examined gambling among persons seeking or receiving primary treatment for substance abuse issues (Ciarrocchi, 1993; Griffiths, 1994; Lesieur & Heineman, 1988; Toneatto & Brennan, 2002; Wickwire et al., 2008).

However, rates of problem and pathological gambling in the present study might be consistent with those found in a National Epidemiologic Survey on Alcohol and Related Conditions that found high rates of alcohol use disorders (73%) among pathological gamblers (Gebauer, LaBrie, & Shaffer, 2010). In addition, results from a national longitudinal investigation demonstrated that pathological gambling is developed after the onset of substance dependence in most cases (Kessler et al., 2008). It is possible that efforts

toward (substance) abstinence maintenance take priority over gambling abstinence, and this might explain the prevalence of pathological gambling in the present study.

One important consideration in the present study is that it investigated a sample of recovery home residents who were most likely not new in their recovery, as a national investigation of the Oxford House model found residents to have 19 months of continuous abstinence from alcohol and drugs on average (Jason et al., 2007). It is possible that the prevalence rates of comorbid gambling among substance-dependent persons in later recovery stages might be higher than the rates among those persons who are new into their abstinence (and who are frequently sampled). Of course, such claims can only be verified by more rigorous designs consisting of persons who are recovering from comorbid substance dependence and pathological gambling and are not receiving primary treatment.

Although the present study explored gambling behaviors among Oxford House residents within a cross-sectional design, some longitudinal investigations involving Oxford House residents found good outcomes among residents with psychiatric comorbidity including increased levels of self-regulation (Jason et al., 2007), successful transition from Oxford Houses to communities (Majer et al., 2002), and decreased psychiatric inpatient treatment utilization (Majer et al., 2008). In lieu of these investigations, the rates of gambling behaviors and probable pathological gambling prevalence in the present study suggest that the benefits of living in an Oxford House extend to those with problem gambling behaviors and comorbid pathological gambling recovering from substance dependence.

There are some limitations to the present study. The unique sample and its size creates issues for external validity, and not much is known about comorbid gambling pathology among persons recovering from substance dependence and living in recovery homes, especially those that are self-run such as Oxford Houses. There was no control or comparison group that would otherwise provide a wider context for understanding the results of this investigation. Self-selection might have been an issue because convenience sampling techniques were used. In addition, there was no control for social desirability in the data analysis. Nonetheless, this is most likely the first systematic study of gambling behavior among persons recovering from substance dependence and living in self-governed recovery settings (i.e., Oxford Houses). Future investigations, with multiple measures and assessment intervals, and with comparison groups (e.g., those who are in professionally led treatments) would help us better understand the extent of the Oxford House model in terms of helping recovering substance-dependent persons who also have pathological gambling.

Conclusions

Gambling behavior is common among substance-dependent persons who typically have comorbid disorders such as pathological gambling. Most research has uncovered rates of gambling behavior among those who are entering primary treatment. Findings in the present study suggest some persons recovering from substance dependence who live in recovery homes such as Oxford Houses do engage in gambling behaviors. Social service providers should inquire about gambling practices among clients who are recovering from substance dependence, especially those who have been clean and sober for substantial lengths of time and who might be seeking help for issues other than their substance use (e.g., family of origin, previous abuse/trauma, and gambling). In addition, social service providers should familiarize themselves with the Oxford House model by visiting several Oxford Houses and learning about this unique, affordable, and effective residential intervention for persons recovering from substance dependence, including those with psychiatric comorbidity. Overall, results of the present study suggest that recovering substance-dependent persons with problem gambling behaviors utilize the Oxford House model of residential care, and

social service providers should consider the Oxford House model as a referral source. More information can be found at www.oxfordhouse.org.

Acknowledgments

The authors received financial support from the National Institute on Drug Abuse, Bethesda, MD, USA grant DA19935; National Institute on Alcoholism and Alcohol Abuse grant AA16973; and the National Center on Minority Health and Health Disparities grant MD002748.

REFERENCES

- Barry D, Petry N. Predictors of decision making on the Iowa Gambling Task: Independent effects of lifetime history of substance use disorders and performance on the Trail-Making Test. *Brain and Cognition*. 2008; 66:243–252. [PubMed: 17942206]
- Ciarrocchi J. Rates of pathological gambling in publicly funded outpatient substance abuse treatment. *Journal of Gambling Studies*. 1993; 9:289–293.
- Crockford D, el-Guebaly N. Psychiatric comorbidity in pathological gambling: A critical review. *The Canadian Journal of Psychiatry*. 1998; 43:43–50.
- Cunningham-Williams R, Cottler L, Compton W, Spitznagel E, Ben-Abdallah A. Problem gambling and comorbid psychiatric and substance use disorders among drug users recruited from drug treatment and community settings. *Journal of Gambling Studies*. 2000 December.16:347–376. [PubMed: 14634303]
- Desai RA, Desai MM, Potenza MN. Gambling, health, and age: Data from the National Epidemiologic Survey on Alcohol and Related Conditions. *Psychology of Addictive Behaviors*. 2007; 22:431–440. [PubMed: 18072825]
- Gambino B, Lesieur H. The South Oaks Gambling Screen (SOGS): A rebuttal to critics. *Journal of Gambling Issues*. 2006; 17:1–16.
- Gebauer L, LaBrie R, Shaffer HJ. Optimizing DSM-IV-TR classification accuracy: A brief biosocial screen for detecting current gambling disorders among gamblers in the general household population. *The Canadian Journal of Psychiatry*. 2010; 55:82–90.
- Goodman, M. *Jews in a Graeco Roman world*. New York, NY: Oxford Press; 1998.
- Goudriaan A, Oosterlaan J, de Beurs E, van den Brink W. Decision making in pathological gambling: A comparison between pathological gamblers, alcohol dependents, persons with Tourette syndrome, and normal controls. *Cognitive Brain Research*. 2005; 23:137–151. [PubMed: 15795140]
- Griffiths M. An exploratory study of gambling cross addictions. *Journal of Gambling Studies*. 1994; 10:371–384.
- Hodgins D, Peden N, Cassidy E. The association between comorbidity and outcome in pathological gambling: A prospective follow-up of recent quitters. *Journal of Gambling Studies*. 2005; 21:255–271. [PubMed: 16134008]
- Jason LA, Davis MI, Ferrari JR, Anderson E. The need for substance abuse aftercare: Longitudinal analysis of Oxford House. *Addictive Behaviors*. 2007; 32:803–818. [PubMed: 16843612]
- Jason LA, Olson BD, Ferrari JR, Lo Sasso A. Communal housing settings enhance substance abuse recovery. *American Journal of Public Health*. 2006; 96:1727–1729. [PubMed: 17008561]
- Jason LA, Olson BD, Ferrari JR, Majer JM, Alvarez J, Stout J. An examination of main and interactive effects of substance abuse recovery housing on multiple indicators of adjustment. *Addiction*. 2007; 102:1114–1121. [PubMed: 17567399]
- Kessler RC, Hwang I, LaBrie RA, Petukhova M, Sampson NA, Winters KC, Shaffer HJ. DSM-IV pathological gambling in the National Comorbidity Survey Replication. *Psychological Medicine*. 2008; 38:1351–1360. [PubMed: 18257941]
- Lesieur HR, Blume SB. The South Oaks Gambling Screen (SOGS): A new instrument for the identification of pathological gamblers. *American Journal of Psychiatry*. 1987; 144:1184–1188. [PubMed: 3631315]
- Lesieur HR, Heineman M. Pathological gambling among youthful multiple substance abusers in a therapeutic community. *British Journal of Addiction*. 1988; 83:765–771. [PubMed: 3207936]

- Majer JM, Jason LA, Ferrari JR, North CS. Comorbidity among Oxford House residents: A preliminary outcome study. *Addictive Behaviors*. 2002; 27:837–845. [PubMed: 12201387]
- Majer JM, Jason LA, North CS, Ferrari JR, Porter NS, Olson BD, Molloy JP. A longitudinal analysis of psychiatric severity upon outcomes among substance abusers residing in self-help settings. *American Journal of Community Psychology*. 2008; 42:145–153. [PubMed: 18581228]
- Momper S, Nandi V, Ompad D, Delva J, Galea S. The prevalence and types of gambling among undocumented Mexican immigrants in New York City. *Journal of Gambling Studies*. 2009; 25:49–65. [PubMed: 18704662]
- Morasco BJ, Pietrzak RH, Blanco C, Grant BF, Hasin D, Petry NM. Health problems and medical utilization associated with gambling disorders: Results from the national epidemiologic survey on alcohol and related conditions. *Psychosomatic Medicine*. 2006; 68:976–984. [PubMed: 17132843]
- Oxford House, Inc.. Oxford House manual. Silver Springs, MD: Paul Malloy; 2006.
- Strong DR, Kahler CW. Evaluation of the continuum of gambling problems using the DSM-IV. *Addiction*. 2007; 102:713–721. [PubMed: 17493106]
- Strong DR, Lesieur HR, Breen RB, Stinchfield R, Lejuez CW. Using a Rasch model to examine the utility of the South Oaks Gambling Screen across clinical and community samples. *Addictive Behaviors*. 2004; 29:465–481. [PubMed: 15050667]
- Toneatto T, Brennan J. Pathological gambling in treatment-seeking substance abusers. *Addictive Behaviors*. 2002 May;27:465–469. [PubMed: 12118632]
- Vassar M. Characterizing score reliability of the South Oaks Gambling Screen. *South African Journal of Psychology*. 2008; 3:541–549.
- Weiss SM, Loubier SL. Gambling habits of athletes and nonathletes classified as disordered gamblers. *Journal of Psychology*. 2010; 144:507–521. [PubMed: 21053765]
- Wickwire EM, Burke RS, Brown SA, Parker JD, May RK. Psychometric evaluation of the National Opinion Research Center DSM-IV screen for gambling problems (NODS). *The American Journal on Addictions*. 2008; 17:392–395. [PubMed: 18770081]

TABLE 1

Frequency of Gambling Behaviors Among Oxford House Residents

Gambling Activity	Frequency of Behavior		
	Not at all	Less than once a week	Once a week or more
Played cards for money	39.4%	40.8%	18.3%
Bet on horses or other animals (off-track betting)	71.8%	21.1%	5.6%
Bet on sports	66.2%	18.3%	14.1%
Played dice games	71.8%	18.3%	8.5%
Went to casino (legal or otherwise)	32.4%	50.7%	14.1%
Played the numbers or bet on lotteries	22.5%	57.7%	18.3%
Played bingo	60.6%	35.2%	2.8%
Played the stock and/or commodities market	90.1%	5.6%	2.8%
Played slot machines, poker machines, or other gambling machines	33.8%	52.1%	14.1%
Bowled, shot pool, played golf, or played some other game of skill for money	62.0%	25.4%	12.7%

Note. $n = 71$.