CNS SPECTRUMS The International Journal of Neuropsychiatric Medicine

Differences in Characteristics of Asian American and White Problem Gamblers Calling a Gambling Helpline

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CNS Spectr. 2009;14(2):83-91

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Faculty Disclosures: Dr. Barry has received research funding from the National Institute on Drug Abuse. Dr. Steinberg has received financial compensation for provision of clinical care and legal consultation. Ms. Wu does not have an affiliation with or financial interest in an organization that might pose a conflict of interest. Dr. Potenza is a consultant and adviser to Boehringer-Ingelheim; has consulted for and has financial interests in Somaxon; has received research support from Forest Laboratories, GlaxoSmithKline, Mohegan Sun, the National Institutes of Health, Ortho-McNeil, Oy-Control/Biotie, and the United States Department of Veterans Affairs; has participated in surveys, mailings or telephone consultations related to drug addiction, impulse-control disorders or other health topics; has consulted for law offices and the federal public defender's office in issues related to impulse control disorders; has performed grant reviews for the National Institutes of Health and other agencies; has given academic lectures in grand rounds, CME events, and other clinical or scientific venues; has generated books or book chapters for publishers of mental health texts; and provides clinical care in the Connecticut Department of Mental Health and Addiction Services Problem Gambling Services Program.

Funding/Support: This research was supported in part by National Institute on Drug Abuse grants K12-DA00366, K12-DA14038, K05-DA00089, and R01-DA019039, Veterans Affairs VISN1 MIRECC, and Women's Health Research at Yale University School of Medicine.

Submitted for publication: August 18, 2008; Accepted for publication: January 20, 2009.

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Focus Points

- Gambling helplines serve as an important outreach strategy to guide primarily treatment-naïve individuals with problem gambling into treatment.
- The purpose of this study was to identify race-related differences among Asian American and white callers to a gambling helpline.
- Asian American callers were more likely than white callers to report gambling-related suicide attempts.

Abstract

Introduction: *The characteristics of Asian American and white problem gamblers using a gambling helpline were examined to identify race-related differences.*

Methods: *Logistic regression analyses were conducted on data obtained from callers to a gambling helpline serving southern New England in 2000–2003, inclusive.*

Results: *Of the 144 phone calls used in the analyses, 72 were from Asian American callers and 72 were from white callers who were matched on gender, education, income, marital/cohabitation status, and age. Race-related differences were observed in forms of gambling problems, psychiatric problems secondary to gambling, substance use problems, and family history. Asian American gamblers were more likely to report suicide attempts related to gambling and problems with non-strategic gambling. White gamblers were more likely to report both casino and non-casino gambling problems and personal and familial alcohol use problems. High proportions of both groups reported problems with strategic gambling, gambling-related anxiety, family and financial problems secondary to gambling, financial debt, daily tobacco use, and a family history of problem gambling.*

Conclusion: *Race-related differences should be considered in optimizing prevention and treatment strategies related to problem gambling.*

Introduction

Although gambling and gambling problems are common among multiple racial and ethnic groups in the United States and elsewhere,[1] most studies on the etiology and treatment of pathological gambling conducted in the US preclude the possibility of examining potentially important racial and ethnic group differences because of the insufficient number of racial and ethnic minority participants.[2,3] Consequently, there is a knowledge gap about the relationship between race and ethnicity and gambling problems.[4]

Investigations in the US and elsewhere have generally[5-7] but not uniformly[8] found higher frequencies of problem and/or pathological gambling among Asian ethnic groups in comparison to whites. Findings from a national phone survey,[9] conducted in 1999–2000, indicated that a significantly greater proportion of Asian Americans, compared to whites, exhibited problem or pathological gambling (6.6% vs 1.8%). Elevated frequencies of disordered gambling have also been documented in specific Asian ethnic subgroups in the US,[10] including South East Asian refugees attending community service agencies in Connecticut and California who reported lifetime disordered gambling estimates of 59% and 13.9%, respectively.[11,12] Although published investigations in the US have not systematically compared treatment utilization among Asian Americans and whites with problem or pathological gambling, studies to date indicate that Asian Americans appear less likely than whites to seek mental health[13,14] and substance abuse treatment services.[15] Together, these findings suggest a health disparity that warrants addressing in order to optimize prevention and

treatment strategies.

Identifying individuals with pathological gambling and engaging them in treatment during earlier stages of the illness is an important healthcare challenge.[16] Gambling helplines serve as an important outreach strategy to guide primarily treatment-naïve individuals with problem gambling into treatment.[17-20] Data from gambling helplines complement findings from epidemiologic, community and treatment studies and elucidate the characteristics of a group of problem gamblers who are likely to be in early stages of readiness for treatment.[21] Despite the widespread use of gambling helplines, few systematic studies have examined the race- or ethnicity-related characteristics of problem gamblers using gambling helplines services,[22] and none have focused on Asian Americans. An increased understanding of the factors related to racial/ethnic differences in gambling helpline callers could assist efforts to design culturally informed interventions.[3,22]

The aim of the present study was to determine whether there were race-related differences between Asian American and white callers to a gambling helpline. Given anecdotal accounts of race-related differences in gambling patterns between Asian American and white gamblers,[23] we hypothesized that Asian American callers compared with white ones would demonstrate differences in patterns of gambling (eg, compared with white callers, Asian Americans would more frequently report problems with baccarat gambling). Given findings suggesting that Asian Americans are less likely than whites to report mood and anxiety disorders and non-specific psychological distress,[24-26] we hypothesized that Asian American callers would exhibit fewer psychiatric problems secondary to gambling than would white ones. Because rates of binge alcohol use, alcohol use disorders, and tobacco use appear lower among Asian Americans compared with whites,[24,25,27] we hypothesized that Asian American callers would be less likely than white ones to report problems with alcohol and daily tobacco use and less likely to have family histories of substance use problems. Given findings suggesting that Asian Americans appear less likely than whites to have received mental health[13,14] and substance abuse treatment services,[15] we hypothesized that Asian American callers would be less likely than white ones to have utilized gambling, substance abuse, and other mental health treatments.

Methods

Data Collection

This study involved the use of de-identified data from telephone calls to the Connecticut Council on Problem Gambling (CCPG) gambling helpline, was presented to the Yale Human Investigations Committee and exempted from review. This 24-hour/day, 7-day-a-week helpline has been in operation since 1994, is operated by CCPG staff members who have received specialized training in the domains of problem and pathological gambling, and uses standardized forms to collect data that are used to provide callers with appropriate referrals, to understand the basic characteristics of helpline callers, and to monitor usage of the helpline.[2,18,28] More detailed information concerning the CCPG helpline and the data collection form have been described elsewhere.[16,17]

Data used in the current analyses were obtained from 144 calls received from January 1, 2000, to December 31, 2003, inclusive. As in the past,[16,18,21,28,29] we examined data on calls from individuals who reported problems with gambling (1,941 of the 2,742 calls). Of these, 1,502 provided information on race, (95.2 % white), age (mean: 42.8±12.6 years), education (54.7% had at least some college education), gender (59% male), and marital status (45.9% married or cohabiting). Seventy-two calls were from Asian Americans. Of the 1,430 white callers, we used data on 72 who were matched to the Asian American group on gender, education, income, marital/cohabitation status, and age. This resulted in 144 calls for the present analysis.

Gambling helpline data were grouped as in previous studies[18,29] into nine categories: 1) gambling types and durations (years of gambling, years of problem gambling, and number of types of gambling problems); 2) forms of problematic gambling (casino and non-casino gambling, strategic gambling, non-strategic gambling); 3) psychiatric problems

secondary to gambling (anxiety, depression, suicide ideation, and suicide attempts); 4) problems secondary to gambling (family, financial, illegal activity without arrest, and illegal activity with arrest); 5) financial problems (debt and bankruptcy); 6) types of debt (debt to institutions [bank, government], debt to bookie or loan shark, debt to casino credit line or credit card, and debt to a familiar person [an acquaintance, friend, family, or coworker]); 7) substance use problems (alcohol, drug, and tobacco); 8) treatments received (professional substance abuse, 12-step substance abuse, professional gambling, 12-step gambling, and mental health); and 9) family history (alcohol use problem, drug use problem, and gambling problem). Forms of gambling involving a process that is amenable to systematic alteration to modify the odds of winning (eg, poker, sports gambling) may be viewed as "strategic".[17] Forms of gambling were categorized as "strategic" or "non-strategic" as previously.[17] The variable of "depression secondary to gambling" was removed due to colinearity with "anxiety secondary to gambling" and "suicide ideation secondary to gambling." Since no Asian American respondents reported problems with drugs, 12-step substance abuse treatment or professional treatment for gambling, these factors were excluded from the logistic models due to quasi-complete separation. The mental health variable in the "treatments received" category refers to non-drug, non-gambling mental health care targeting depression, anxiety, or other mental health problems.

Logistic regression analyses were completed as previously described[16,21] for each of the nine categories of variables to determine relationships to the dependent variable of race (Asian American vs white). Nine regression models, one for each category, were generated. If the overall model for a particular category was significant, individual variables within the model were examined for significant relationship to Asian American race. Before completion of the logistic regression analyses, independent variables in each category were examined for colinearity and multicolinearity by using correlation matrices and the equivalent model that was adjusted by weight matrix. χ^2 analyses were performed on variables removed due to non-endorsement by either Asian American or white respondents to explore for possible significant differences between the respondent groups. We used Pearson χ^2 tests to examine differences in the relative frequencies of specific forms of problem gambling most frequently reported by Asian American or white problem gamblers (using a threshold of ≥10% endorsement by either group). Statistical significance for both the logistic regression analyses and χ^2 tests was set at $P<.05$. We applied a Bonferroni correction for multiple comparisons in the analyses involving χ^2 tests based on the number of specific forms of gambling examined. The SAS System (Cary, NC) was used for data coding, estimating models, and data analysis.

Consistent with the 1997 US Office of Manage-ment and Budget guidelines[30] on the categorization of race and ethnicity, the terms "race" and "race-related" (and not "ethnicity" or "ethnicity-related") were used to characterize study findings pertaining to white and Asian American participants. The guidelines, which were followed in the Census 2000, employ two categories for ethnicity: "Hispanic or Latino" and "Not Hispanic or Latino," with the stipulation that Hispanics or Latinos may be of any race. Ethnicity was not assessed in this study.

Results

The sample included 72 Asian American and 72 white adult problem gamblers who were matched on gender (χ^2=0.00, df=1, P=1.00), education (χ^2=0.00, df=2, P=1.00), income (χ^2=0.00, df=4, P=1.00), marital/cohabitation status (χ^2=0.03, df=1, P=.87), and age (F=0.01, df=1, P=.94). The majority of callers from both racial groups were male (61.1%) and had a post-high school education (72.2%). The majority reported earning $5,000–14,999 (40.3%) or $15,000–24,999 (27.8%); 12.5% reported annual earnings of <$5,000 and the remaining callers reported earning either $25,000–34,999 (9.7%) or at least $125,000 (9.7%). The majority of Asian American (56.9%) and white (55.6%) callers were married/cohabitating. The mean age was 36.0±10.6 years for the Asian American group and 36.1±10.6) years for the white group.

During logistic regression analysis, four of the nine categories of variables (forms of gambling problems, psychiatric problems secondary to gambling, substance use problems, and family history) distinguished the groups of Asian American and white callers at $P<.05$ (Table 1). The remaining five categories of variables did not distinguish the groups at $P<.05$ (Table 1). Asian American and white callers reported similarly high frequencies of family (68.6% vs 70.2%,

P=.97) and financial (80.0% vs 85.1%, *P*=.37) problems secondary to gambling, debt related to gambling (83.3% vs 86.8%, *P*=.57) and credit debt (80.0% vs 75.5%, *P*=.90), and a relatively long duration of problem gambling (3.4 vs 3.7 years, *P*=.96) (Table 1). Asian American and white callers reported comparable rates of 12-step gambling participation (8.7% vs 7.4%, *P*=.83).

TABLE 1.
Variables Distinguishing Asian American and White Callers to the Connecticut Council on Problem Gambling Helpline*

Variable	Asian Americans			Whites			OR†	CI	P‡	X^2	df	P
	n	N	%	n	N	%						
Forms of Gambling Problems										18.62	3	.003
Casino and non-casino	18	69	26.1	36	71	50.7	0.24	0.11-0.53	**.0003**			
Strategic gambling	56	69	81.2	52	71	73.2	2.20	0.92-5.27	.08			
Non-strategic gambling	65	69	94.2	60	71	84.5	4.60	1.31-16.2	**.0017**			
Psychiatric Problems Secondary to Gambling										7.97	3	.047
	52	71	73.2	55	69	79.7	0.59	0.26-1.35	.21			
Anxiety	21	71	29.6	16	69	23.2	1.06	0.45-2.53	.89			
Suicide ideation	8	71	11.3	1	69	1.5	9.41	1.03-85.6	**.047**			
Suicide attempts												
Problems Secondary to Gambling										2.12	4	0.71
Family	48	70	68.6	47	67	70.2	1.01	0.47-2.18	.97			
Financial	56	70	80.0	57	67	85.1	0.65	0.25-1.67	.37			
Illegal activity without arrest	12	70	17.1	8	67	11.9	1.61	0.59-4.33	.35			
Illegal activity with arrest	3	70	4.3	5	67	7.5	0.61	1.37-2.70	.51			
Financial Problems										0.94	2	.62
Debt	55	66	83.3	59	68	86.8	0.76	0.29-1.98	.57			
Bankruptcy	11	66	16.7	15	68	22.1	0.71	0.29-1.68	.43			
Types of Debt										4.78	4	.31
Debt to institutions	11	50	22.0	7	53	13.2	1.84	0.64-5.31	.26			
Debt to bookie or loan shark	2	50	4.0	7	53	13.2	0.26	0.05-1.40	.12			
Credit debt	40	50	80.0	40	53	75.5	0.94	0.34-2.59	.90			
Debt to familiar person	31	50	62.0	30	53	56.6	1.39	0.62-3.13	0.42			
Substance Use Problems										8.14	2	.017
Problem with alcohol	2	68	2.9	10	70	14.3	0.19	0.04-0.89	**.036**			
Daily tobacco use	29	68	42.7	39	70	55.7	0.61	0.31-1.2	0.15			
Treatments Received										1.21	3	.75
Mental health	6	69	8.6	7	68	10.3	0.89	0.28-2.83	.84			
Professional substance abuse	1	69	1.4	3	68	4.4	0.33	0.03-3.27	.34			
12-step gambling	6	69	8.7	5	68	7.4	1.15	0.33-3.98	.83			
Family History										10.98	3	.012
Alcohol use problem	9	70	12.9	22	65	33.9	0.27	0.11-0.69	**.006**			
Drug use problem	1	70	1.4	3	65	4.6	0.56	0.05-6.51	.65			
Gambling Problem	27	70	38.6	20	65	30.8	1.83	0.84-3.98	.13			
	Mean		SD	Mean		SD		95% CI				
Gambling Types and Durations‡										1.77	3	.62
Years of gambling	8.6		6.9	9.8		7.8	0.98	0.93-1.04	0.53			
Years of problem gambling	3.4		3.9	3.7		3.4	1.00	0.89-1.12	0.96			
Number of gambling types	2.4		2.0	2.8		2.5	0.93	0.79-1.09	0.37			

Data drawn from 144 calls received from January 1, 2000 to December 31, 2003, from 72 Asian American and 72 white individuals with gambling problems, who were matched on gender, education, income, marital/cohabitation status, and age.
† Bolded values reached statistical significance at $P<.05$.
‡ N=69 for Asian Americans, 64 for whites for variables within this category.[1]

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Forms of Gambling Problems (χ^2=18.62, *df*=3, *P*<.01)

Compared with white gamblers, Asian American ones were less likely to report the combination of both casino and non-casino gambling problems (26.1% vs 50.7%, *P*<.01) and more likely to report problems with non-strategic gambling (94.2% vs 84.5%, *P*<.01). Given these group differences, an exploratory analysis examined the frequencies of specific forms of problem gambling most frequently reported by Asian American or white problem gamblers (using a threshold of ≥10% endorsement by either group). Of the individual types of gambling explored, three (any non-casino lottery, non-casino sports betting, casino baccarat) displayed between-group differences at *P*<.05 (Table 2). Of these variables, non-casino lottery and casino baccarat gambling remained significant following a Bonferroni adjustment for multiple comparisons (corresponding to *P*<.006). Of the individual types of non-casino lottery gambling, between-group differences in scratch-off gambling problems were most substantial (17.7% (12/68) of Asian Americans versus 38.6% (27/70) of white callers; *df*=1, χ^2=7.60, *P*<.006).

TABLE 2.
Forms of Problematic Gambling Most Frequently Reported by Asian American and White Problem Gamblers

Forms of Gambling	*Asian American*	*White*	*df*	χ^2	P*
Any non-casino lottery	21.7% (15/69)	44.3% (31/70)	1	8.11	**.005**
Non-casino charitable gambling	3.8% (2/53)	10.2% (5/49)	1	1.69	.26
Non-casino sports betting	4.4% (3/69)	18.6% (13/70)	1	7.39	.009
Casino baccarat	17.7% (12/68)	0.0% (0/69)	1	17.98	**.0003**
Casino blackjack	53.6% (37/69)	46.4% (32/69)	1	0.73	.39
Casino poker	15.7% (11/70)	18.8% (13/69)	1	0.24	.63
Casino roulette	11.6% (8/69)	8.7% (6/69)	1	0.32	.57
Casino slots	45.1% (32/71)	49.3% (35/71)	1	0.25	.61

* Bonferroni adjustment for multiple comparisons was applied to analyses testing for differences in forms of gambling. The adjusted level is $P<.006$. Significant differences at the adjusted level are indicated in bold.

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Psychiatric Problems Secondary to Gambling (χ^2=7.97, *df*=3, *P*<.05)

Whereas similar proportions of Asian American and white callers reported gambling-related suicide ideation (29.6% vs 23.2% *P*=.89) and anxiety (73.2% vs 79.7%, *P*=.21), Asian American callers were more likely than white ones to report gambling-related suicide attempts (11.3% vs 1.5%; *P*<.05) (Table 1).

Substance Use Problems (χ^2=8.14, *df*=2, *P*<.05)

Lower proportions of Asian Americans as compared to whites endorsed problems with alcohol (2.9% vs 14.3%, *P*<.05) (Table 1). Similarly high proportions of Asian American compared to white callers reported daily tobacco use (42.7% vs 55.7%; *P*=.15).

Family History (χ^2=10.98, *df*=3, *P*<.05)

Whereas similar proportions of Asian American and white callers reported a family history of problems with drug use (1.4% vs 4.6%; *P*=.65) and gambling (38.6% vs 30.8%; *P*=.13), Asian Americans were less likely than whites to report a family history of alcohol use problems (12.9% vs 33.9%; *P*<.01) (Table 1).

Variables Excluded Due to Low Response Frequency

Asian American callers were less likely than white ones to report drug problems (0.0% vs 8.6%, *P*<.05), participation in 12-step substance abuse groups (0.0% vs 5.9%, *P*<.05), and use of professional gambling treatment (0.0% vs 4.4%, *P*<.05).

Discussion

The present study is one of the first to examine race-related differences in problem gamblers, and the first—to our knowledge—to systematically examine differences between Asian American and white callers to a gambling helpline. Multiple similarities were observed across racial groups. For example, similar proportions of Asian American and white callers endorsed familial and financial problems secondary to gambling, with comparably high frequencies of debt, particularly credit debt. These findings suggest that interventions targeting these domains (eg, family therapy, financial counseling, and interventions related to access to credit) represent important clinical considerations for similar proportions of Asian American and white problem gamblers. The identified differences between Asian American and white problem gamblers may help to inform the optimization of prevention and treatment strategies, as discussed below.

Gambling Behaviors and Race

Our hypothesis that Asian American callers as compared to white ones would demonstrate differences in patterns of gambling was supported. Specifically, Asian Americans callers were more likely to report problems with baccarat gambling and less likely to report problems with both casino and non-casino gambling, particularly non-casino lottery gambling and, more specifically, scratch cards. While the precise basis of the race-related difference in baccarat gambling is currently unclear, it may be a function of acculturation or other sociocultural factors,[10,31] and suggests that public health gambling interventions should target problems associated with baccarat gambling among Asian Americans (eg, posting advertisements for a gambling helpline or treatment services in different Asian languages in casinos and training casino staff in identifying problem gambling among Asian Americans). Outreach activities of this sort are particularly important, given that some Asian Americans may not view problem or pathological gambling as a psychiatric disorder that is associated with significant problems in multiple domains of functioning.[10,32,33]

The finding that Asian American compared to white problem gamblers were less likely to report problems with both casino and non-casino forms of gambling suggests that whites may exhibit a greater tendency to experience problems in multiple gambling domains. The extent to which this represents a "poly-gambling" problem, analogous to a poly-substance dependence, warrants additional investigation. The finding of gambling problems across multiple domains more frequently in whites compared to Asian Americans, in conjunction with the alcohol use problems following a similar pattern (see below), suggest that compared Asian American problem gamblers, white problem gamblers are more likely to exhibit addictive behaviors in multiple domains.

The basis of race-related difference in non-strategic problem gambling, particularly scratch-ticket gambling, merits further investigation. One possibility is that both groups differ on instrumental attitudes related to lottery gambling (ie, the extent to which lottery gambling is viewed as a wise decision). A Canadian study found that positive instrumental attitudes toward lottery gambling was a significant predictor of lottery gambling participation among men of European descent but not among men of Chinese descent.[34] If future research corroborates this finding among Asian American and white gamblers in the US, public-health interventions related to lottery gambling, especially targeted at whites, may be warranted.

Psychiatric Promblems Secondary to Gambling and Race

Our hypothesis that Asian American callers compared with white ones would be less likely to report psychiatric problems secondary to gambling was not supported. Similarly high proportions of Asian Americans and whites endorsed anxiety secondary to gambling (73.2% vs 79.7%) and suicide ideation (29.6% vs 23.2%). Moreover, Asian American gamblers were more likely than white ones to report suicide attempts secondary to gambling (11.3% vs 1.5%). The frequencies of suicide ideation endorsed by Asian American and white callers and the frequency of suicide attempts endorsed by Asian American callers are noticeably higher than the estimated lifetime prevalence rates of suicide ideation (13.5%) and suicide attempts (4.6%) reported in the National Comorbidity Survey[35] and suggest the importance of public health interventions that emphasize psychiatric problems that may accompany problem gambling including anxiety, suicide ideation, and suicide attempts—especially among Asian American gamblers. The suggested need for public health interventions is bolstered by the accompanying high level of alcohol use problems reported by both Asian American and white callers.[36] Whereas problems associated with gambling may have traditionally been minimized among some Asian subgroups,[32,33] it is important that clinicians not adopt a "model minority" characterization of Asian Americans since this may result in the under-detection of disordered gambling and co-occurring psychopathology.[10]

In the current study, for example, in comparison to white participants, Asian American participants reported comparable rates of anxiety and suicide ideation secondary to gambling and higher rates of suicide attempts. Further research on the origins of elevated rates of suicide attempts and the nature of the suicide attempts among Asian American callers is warranted and may benefit from an examination of cultural factors such as shame and stigma.[10]

Individual and Familial Substance Use and Race

Our hypothesis that Asian American callers would be less likely than white ones to report individual and familial problems with substance use was partially supported. Whereas numerically fewer Asian American callers reported lower rates of problems with alcohol (2.9% vs 14.3%) and daily tobacco use (42.7% vs 55.7%), these differences reached statistical significance only for problems with alcohol. While the percentage of Asian American callers reporting problems with alcohol (2.9%) is numerically lower than the reported rate of alcohol use disorder (4.5%) among Asian Americans in the 2001–2002 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), the corresponding percentage among white callers (14.3%) in the current study numerically exceed that reported for whites (8.9%) in the NESARC.[25] The estimates of daily tobacco use among Asian American (42.7%) and white (55.7%) callers exceed the rates of past-month tobacco use for Asian Americans (14.6%) and whites (33.9%), ≥12 years of age, respectively, in the 2005 National Survey on Drug Use and Health[24] and is also higher than the endorsed rates of past-year tobacco use among Asian American (22.2%) and white (36.0%) adults, as reported in the 2001–2002 NESARC.[37] Thus, the current findings suggest that while prevention and treatment interventions targeting tobacco smoking are relevant for Asian American and white problem gamblers, those related to alcohol use may be particularly relevant for white problem gamblers.

Whereas the frequency of drug use problems among Asian callers (0.0%) is numerically lower than the estimate of past 12-month *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* drug use among Asian American adults (1.4%) in the 2001–2002 NESARC, the respective frequency among white callers (8.6%) is numerically greater than the NESARC estimate of drug use disorders among white adults (1.9%).[25] These findings suggest that illicit substance use may be an important target for resource and program planning for whites in gambling treatment programs.

Whereas similarly low proportions of Asian American and white callers reported family histories of drug use problems (1.4% vs 4.6%), Asian Americans were less likely than whites to report family histories of alcohol use problems (12.9% vs 33.9%). While the prevalence of familial histories of alcoholism varies among Asian American subgroups, these rates still tend to be noticeably lower than those endorsed by whites.[38] The estimates of family histories of alcohol use problems among Asian American (12.9%) and white (33.9%) callers in this study exceeds the rates of positive family histories for alcoholism for Asian Americans (6.0%) and whites (15.0%), respectively, in the National Health Interview Survey.[39] The extent to which family histories of alcohol use problems—especially among whites—comprise a potential risk factor for the development or progression of problem or pathological gambling (eg, shared genetic contribution) merits further research attention.

Treatment and Race

Our hypothesis that Asian American callers would be less likely than white ones to have utilized gambling, substance abuse, and other mental health treatments was partially supported. Asian American callers were less likely than white callers to report 12-step substance abuse participation (0.0% vs 5.9%) and professional gambling treatment (0.0% vs 4.4%). However, comparable percentages of Asian American and white callers reported participation in 12-step gambling (8.7% vs 7.4%), professional substance abuse (1.4% vs 4.4%), and mental health treatments (8.6% vs 10.3%). The low frequencies of substance abuse treatments (both 12-step and professional) among Asian American callers is likely related to the relative absence of reported problems with substance use in this group compared to the white callers. Fewer Asian American callers compared with white ones reported having participated in professional gambling treatment. The basis of this difference is unclear and points to the importance of examining racial minority group members' models of mental illness and decision-making processes about treatment. However, the small percentages of problem gamblers in general having sought prior self-help or professional gambling treatment highlights the need for additional outreach and engagement efforts across racial and ethnic groups.

Limitations, Strengths, and Future Directions

As previously described,[16,18] limitations in interpreting gambling helpline data include reliance on self-report measures, the absence of instruments allowing formal diagnoses of pathological gambling and other psychiatric disorders, regional differences in the availability of forms of gambling, the telephone-based nature of data collection, potential bias due to

callers' subjective interpretations of questions, and incomplete provision of data. While Asian Americans include individuals from many different nationalities or ethnic subgroups who exhibit considerable variability in linguistic background, religious affiliation, and generational status, these factors were not examined in the current study and merit further research investigation. We did not systematically assess the types of mental health services received; given the high rates of suicide attempts among Asian American callers, further research on this area may benefit from an enhanced understanding of the types of treatment sought. The study investigated Asian American and white callers only; while this strategy was deliberately employed to limit variability, future research should examine other racial and ethnic groups. While we examined problems secondary to gambling (ie, family, financial, illegal activity), we did not assess whether any of these problems predated the onset of problem gambling. Future studies might benefit from a more comprehensive investigation of these problems (eg, childhood maltreatment, trauma, unpaid bills) before and after the onset of problem gambling. Increased understanding of these factors may have implications for the identification and prevention of risk factors associated with problem gambling.

Despite these limitations, the current study represents an important investigation of race-related differences in the characteristics of problem gamblers among Asian Americans and whites. The present study is the first, to our knowledge, to investigate specifically race-related differences among Asian American and white gamblers using a gambling helpline. As gambling helplines offer the possibility of directing large numbers of individuals with gambling problems to treatment settings, they are of substantial clinical significance.[18]

Conclusion

Differences in the characteristics of Asian American and white gambling helpline callers highlight the importance of considering race-related factors in the study of individuals with gambling problems. The high frequencies of familial gambling problems among both Asian American and white callers suggest that the presence of such histories may be an important target for problem gambling prevention interventions. In contrast, a family history of alcoholism may be particularly relevant for prevention efforts related to gambling problems amongst white individuals. In addition, high frequencies of credit debt, tobacco use, and anxiety among both study groups (and high frequencies of suicide attempts among Asian American callers) suggest clinical domains that may be important for clinicians to assess and address in gambling treatments for members of these racial groups. Future studies should investigate the extent to which the current findings extend to other populations (eg, community samples) and the influence of race on effective prevention and treatment approaches for problem and pathological gambling.

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