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Characteristics of Black and White Callers to a Gambling Helpline

Abstract

Objective—Characteristics of black and white problem gamblers using a gambling helpline serving Southern New England were examined to identify race-related differences.

Method—Logistic regression analyses were performed on data obtained from 2000–2003, inclusive, from 1627 callers (151 (9%) black and 1476 (91%) white).

Results—Black gamblers, in comparison to white ones, were more likely to be female and less likely to have a post-high school education. After controlling for differences in gender and education, race-related differences were observed on multiple variables. Black gamblers were more likely than white ones to report longer durations of gambling problems and less likely to report problems with casino slot machines, depression secondary to gambling, daily tobacco use, and mental health treatment. High proportions of both groups reported psychiatric problems related to gambling, including depression and suicidality.

Conclusions—Race-related differences in gambling behaviors, psychiatric problems, and mental health and substance abuse treatment exist in problem gamblers and may have implications for program planning and outreach efforts.

INTRODUCTION

While clinical and community-based studies indicate that gambling and gambling problems are common among multiple racial groups (1), studies examining the etiology and treatment of pathological gambling have largely comprised white participants or have recruited insufficient racial minority members to allow analyses of potential racial group differences among non-white subjects (2) thus generating a knowledge gap about the relationship between race and gambling problems. Investigations in the United States involving adults of African and European descent have generally (3–4) but not uniformly (5) suggested increased risk for problem gambling and/or pathological gambling among blacks in comparison to whites. Together, these findings suggest a health disparity that warrants addressing in order to optimize prevention and treatment strategies.

Identifying people with pathological gambling and engaging them in treatment during earlier stages of the illness is a current challenge (6). Gambling helplines represent an important outreach strategy to guide primarily treatment-naïve individuals with problem gambling into treatment. Gambling helpline findings complement those from general population and treatment samples and elucidate the characteristics of a group of problem gamblers who are likely to be in early stages of readiness for intervention (7). Despite the popularity of gambling helplines, few systematic studies have examined the race-related characteristics of problem gamblers using these services (8) and none have focused on blacks. An improved understanding of factors related to racial differences in gambling helpline callers could help resource and program planning for gambling treatment programs.

The present study investigated race-related differences between black and white callers to a gambling helpline. Given race-based differences in education and marital status in the general population (9), we hypothesized that black callers to the gambling helpline would be less likely than white ones to be married and to have received post-high school education. Given epidemiological findings indicating high proportions of black women with gambling problems

(10), we hypothesized that higher proportions of black callers as compared to white ones would be women. Given high rates of gambling problems in blacks (10) in conjunction with hypothesized diminished treatment utilization (see below), we hypothesized that black callers as compared to white ones would demonstrate differences in patterns of gambling; e.g., have on average a longer duration of problem gambling and report less frequently problems with forms of gambling (slot machines) reported to have rapid progression to problematic levels. Given findings suggesting that blacks are less likely than whites to have received mental health treatment (11), we hypothesized that black callers would be less likely than white ones to have utilized gambling, substance abuse, and other mental health treatments. As treatment-seeking is influenced by problems in these domains, substance abuse and mental health problems were examined in blacks and whites. While race-related differences in forms of gambling problems have been reported (e.g., Asian American gamblers are more likely than white ones to engage in baccarat (12)), studies to date have not specifically explored forms of gambling problems in blacks; consequently, we examined possible race-related differences in forms of problem gambling among black and white callers.

METHOD

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. Data used in the current analyses were obtained from 2741 calls received from January 1, 2000 to December 31, 2003, inclusive. As previously described (6–7), analyses were restricted to calls from problem gamblers (1941 of the 2741 calls), where the term “problem gambler” is used to describe callers seeking help for gambling problems. Of these, 1797 callers provided information on race and age and were 18 years or older. Of these, 170 were excluded because the caller did not self-identify as either black or white (70 were Latino/Hispanic, 77 were Asian/Pacific Islander, 1 was American Indian, and 22 endorsed “Other”) leaving 1627 calls for analysis.

Gambling helpline questionnaire items were grouped as in previous studies (6–7), into the following categories: 1) demographics; 2) gambling types and durations; 3) forms of problematic gambling; 4) psychiatric problems secondary to gambling; 5) problems secondary to gambling; 6) financial problems; 7) types of debt; 8) substance use problems; and 9) treatments received. The variables of “years of gambling” and “anxiety secondary to gambling” were removed due to colinearity with the variables “years of problem gambling” and “depression secondary to gambling”, respectively.

Logistic regression analyses were completed as described previously (6–7) for each of the nine categories of variables to determine relationships to the dependent variable of race (black versus white). Nine regression models, one for each category, were generated. A conservative approach using a Bonferroni correction was used in examining the nine logistic regression models, using $p < 0.006$. Because black and white callers differed significantly on gender and education, odds ratio analyses for non-demographic categories were adjusted for gender and education. If the overall model for a particular category was significant, individual variables within the model were examined for significant relationship to black race, using the results of the logistic regression analysis. Before completion of the logistic regression analyses, independent variables in each category were examined for colinearity and multicollinearity by using correlation matrices and the equivalent model that was adjusted by weight matrix. The SAS System (Cary, N.C.) was used for data coding, estimating models, and data analysis.

RESULTS

The sample included 151 black (9%) and 1476 white (91%) adult problem gamblers. During logistic regression analysis, each of the 9 categories of variables distinguished the groups of black and white callers (Table 1). For the categories of problems secondary to gambling, financial problems, and types of debt, the statistical significance appeared attributable to the inclusion of gender and education, which contributed significantly to each model. For the other categories, variables distinguishing black and white callers reaching significance at $p < 0.05$ are described below. Each of these categories (except possibly “Types of Debt” which was at the $p < 0.006$ significance threshold) remained statistically significant after controlling for multiple comparisons. The variables of gender and education are not tabulated outside of the demographics category.

While comparable proportions of black and white callers were married, black gamblers were less likely than whites to have a post-high school education and more likely to be female (Table 1). Compared with whites, blacks reported, on average, longer durations of problem gambling and were less likely to endorse a problem with casino slot machine gambling.

Whereas similar proportions of black and white callers reported gambling-related suicidal ideation or suicidal attempts, blacks were less likely than whites to endorse depression secondary to gambling. Whites were more likely than blacks to report daily tobacco use. Although lower proportions of blacks as compared to whites reported problems with alcohol or drug use, between-group differences were not significant (Table 1).

Compared to whites, blacks were less likely to report having received mental health treatment. Fewer blacks as compared to whites reported prior professional/12-step gambling treatment, and this difference approached, but did not reach statistical significance at $p < 0.05$. Comparable percentages of blacks and whites reported prior professional/12-step substance abuse treatment (Table 1).

DISCUSSION

Multiple similarities were observed across racial groups; e.g., similarly substantial proportions of blacks and whites reported familial and financial problems related to gambling, with similarly high reports of credit-related and overall debt. These findings suggest that interventions targeting these domains (family therapy, financial counseling, and interventions related to access to credit) are important for both black and white problem gamblers.

Our hypothesis that black problem gamblers would be less likely than white gamblers to be married and to have received post-high school education was partially supported. Whereas a smaller percentage of black gamblers as compared to white ones in our study were married (39% v. 45%), this difference was not statistically significant, possibly reflecting limited statistical power related to the study’s sample size. Black callers were less likely than white callers to have received a post-high school education. The extent to which education might influence involvement in gambling and the development of gambling problems across racial groups warrants consideration. While the increase in racial minorities attending college may expose them to an environment where gambling is common and treatment services are scarce (13), it may also better prepare them to manage their finances and reduce the long-term risk of engaging in risky financial ventures.

Higher proportions of black problem gamblers, as compared with white ones, were women, and this supports previous research indicating that racial minority women may be at particularly high risk for problem gambling (10). Attending to gender differences nested within cultural/

racial groups is important in reducing the risk of stereotyping and enhancing treatment efficacies (14).

Our hypothesis that black callers would demonstrate differences in patterns of gambling, including a longer duration of problem gambling, as compared with whites, was supported. Helpline callers reported gambling problems of a protracted duration (overall average > 7 years) with blacks endorsing a significantly longer duration than whites. This difference remained significant after controlling for gender differences, suggesting that the finding is not attributable to the telescoping phenomenon described in women with gambling problems (15). This longer duration of problem gambling could reflect differences in treatment-seeking or service utilization.

The finding that whites were more likely than blacks to report casino slot machine gambling problems has not been previously reported. While the precise basis of this difference is currently unclear, slot machine gambling has been described as “escape-oriented” (6). Future studies on race and problem gambling may benefit from examining escape-oriented constructs such as sensation seeking and dissociation.

Our hypothesis that blacks would be less likely than whites to report having utilized mental health, gambling, and substance abuse treatments was partially supported. Blacks were less likely to report having received mental health treatment; this finding could be related to their reporting fewer mental health problems, particularly depression secondary to gambling. Future studies investigating the relationships between depression and other mental health disorders, racial group status, gambling behaviors and treatment-seeking are warranted.

While a higher proportion of whites reported receiving prior gambling treatment (attending professional treatment or Gamblers Anonymous), this finding approached significance at $p=0.05$ but was not statistically significant. An improved understanding of treatment-seeking behaviors among minority groups at various stages of problem and pathological gambling is needed. Although similar proportions of both groups reported prior substance abuse treatment, a significantly higher proportion of whites as compared to blacks reported daily tobacco use (57% v. 41%); this finding suggests that tobacco use may be an important target for resource and program planning in gambling treatment programs, especially among whites.

Limitations of this study include the use of self-report measures, the absence of formal diagnostic assessments of pathological gambling and other mental health disorders, regional differences in the availability of forms of gambling, the telephone-based nature of data collection, and the potential for bias secondary to callers’ subjective interpretations of questions or incomplete provision of data (6). A comprehensive assessment of psychiatric disorders would not only better define the sample with regard to psychological problems, it would also elucidate further examination of race-related mental health utilization rates among black and white gamblers. This study investigated black and white callers only; while this strategy was employed to limit variability, future research should examine other racial groups. The extent to which gambling helplines introduce a sampling bias (i.e., racial groups may differ in their likelihood to use them) is currently unclear.

Despite these limitations, the current study represents an important investigation of racial differences in the characteristics of problem gamblers among blacks and whites. The present study is the first, to our knowledge, to investigate specifically race-related differences among black and white problem gamblers using a gambling helpline. As gambling helplines offer the possibility of directing large numbers of individuals with gambling problems to appropriate treatments, they are of substantial clinical significance (6). Since the majority of callers had never utilized professional or self-help gambling treatments, they represent an important help-

seeking clinical sample. The findings of differences in the characteristic of black and white callers have implications for program planning and outreach efforts.

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Table 1
Variables Distinguishing Black and White Callers to the Connecticut Council on Problem Gambling Helpline

Variable	Black		White		Odds Ratio ¹	CI	P ²	χ ²	df	p
	N	N Total	%	N						
Demographics										
Age 55 or older	24	143	16.8	225	1293	17.4	0.52-1.33	0.44		<.001
Gender (male)	65	143	45.5	779	1293	60.3	0.38-0.79	<0.01		
Education										
Less than high school	17	143	11.9	82	1293	6.3	0.50-0.88	<0.01		
High school or GED	64	143	44.8	508	1293	39.3				
Post-high school	62	143	43.4	703	1293	54.4				
Annual Income										
0 to \$14,999	16	143	11.2	181	1293	14.0	0.83-1.27	0.78		
\$15,000 to \$34,999	65	143	45.5	460	1293	35.6				
\$35,000 to \$59,999	49	143	34.3	441	1293	34.1				
\$60,000 and over	13	143	9.1	211	1293	16.3				
Married/Cohabiting	55	143	38.5	583	1293	45.1	0.53-1.1	0.14		
Forms of Gambling Problems										
Non-casino lottery	61	145	42.1	558	1370	40.7	0.72-1.48	0.85		
Casino slot machine	72	145	49.7	744	1370	54.3	0.44-0.97	0.03		
Casino table	58	145	40.0	532	1370	38.8	0.85-1.86	0.25		
Other non-casino gambling	11	145	7.6	152	1370	11.1	0.36-1.31	0.25		
Psychiatric Problems Secondary to Gambling										
Depression	96	144	66.7	1102	1395	79.0	0.36-0.79	<0.01		
Suicide ideation or attempts	25	144	17.4	346	1395	24.8	0.46-1.18	0.21		
Problems Secondary to Gambling										
Family	101	146	69.2	969	1373	70.6	0.62-1.32	0.60		
Financial	126	146	86.3	1152	1373	83.9	0.75-2.06	0.40		
Illegal activity without arrest	20	146	13.7	219	1373	16.0	0.49-1.36	0.43		
Illegal activity with arrest	18	146	12.3	129	1373	9.4	0.81-2.44	0.23		
Financial Problems										
Debt	128	147	87.1	1150	1378	83.5	0.80-2.21	0.27		
Bankruptcy	25	147	17.0	236	1378	17.1	0.62-1.55	0.93		
Types of Debt ⁴										
Debt to institutions	26	123	21.1	212	1076	19.7	0.72-1.82	0.57		
Debt to bookie or loan shark	3	123	2.4	66	1076	6.1	0.14-1.56	0.22		
Credit debt	86	123	69.9	789	1076	73.3	0.55-1.27	0.39		
Debt to familiar person	61	123	49.6	569	1076	52.9	0.60-1.28	0.48		
Substance Use Problems										
Problem with drugs	13	141	9.2	156	1362	11.5	0.56-1.99	0.86		
Problem with alcohol	22	141	15.6	292	1362	21.4	0.50-1.38	0.48		
Daily tobacco use	58	141	41.1	777	1362	57.1	0.34-0.70	<0.001		
Treatments Received										
Mental health	13	147	8.8	206	1387	14.9	0.28-0.93	0.03		
Gambling (Professional/12-step)	12	147	8.2	211	1387	15.2	0.30-1.01	0.05		
Substance abuse (Professional/12- step)	124	147	84.4	204	1378	14.7	0.76-1.98	0.41		
Gambling Types and Durations ³										
Duration of problem gambling (years)		7.9	10.1		6.7	8.1	1.00-1.04	0.045		
Number of gambling types		2.3	2.2		2.5	2.4	0.90-1.06	0.58		
	Mean	SD	Mean	SD	Mean	SD	95% Confidence Interval			

¹ Odds ratios for all categories (except for demographics in which gender and education are contained) were adjusted for gender and education.

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² Bolded values reached statistical significance at $p < .05$.

³ $N = 143$ for Blacks, 1325 for Whites for variables within this category.

⁴ Each of these categories (except possibly "Types of Debt") remained statistically significant after conservatively controlling for multiple comparisons with a Bonferroni correction.