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## Suicidal Ideation and Suicide Attempts in Treatment-Seeking Pathological Gamblers

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### Abstract

This study assessed rates and correlates of suicidal ideation and suicide attempts in individuals seeking treatment for pathological gambling. At intake to gambling treatment programs, 342 pathological gamblers completed the Addiction Severity Index and the South Oaks Gambling Screen. Participants were categorized into three groups: no suicidal ideation ( $N = 175$ , 51%), suicidal ideation alone ( $N = 109$ , 32%), and suicide attempters ( $N = 58$ , 17%). After controlling for gender, age, treatment site, and substance abuse treatment histories, differences among the groups emerged in terms of severity of psychiatric, social/family, and gambling problems. Compared with nonsuicidal gamblers, those with suicidal ideation suffered from more psychiatric symptoms, were less satisfied with their living situations, and experienced more days of conflict in the month before entering gambling treatment. Compared with pathological gamblers with no history of suicidal ideation, those with suicidal ideation spent more money gambling in the month before entering treatment, reported greater cravings for gambling, and had higher South Oaks Gambling Screen scores. These data confirm other reports of high rates of suicidality in pathological gamblers and may suggest the need for more intensive and focused treatments in pathological gamblers with suicidality.

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Pathological gambling is characterized by loss of control over gambling, financial debt, family and social difficulties, legal and employment problems, and psychological distress. A meta-analysis of prevalence surveys (Shaffer et al., 1999) indicates that the lifetime prevalence rate of pathological gambling in the adult population is approximately 1.8%.

In epidemiological studies, disordered gambling seems to be associated with depression and suicidality. For example, Cunningham-Williams et al. (1998) and Bland et al. (1993) found that disordered gamblers identified in general population surveys were more likely to meet criteria for affective disorders than respondents with no gambling problems. In a survey of college students, Ladouceur et al. (1994) found that 27% of those identified as pathological gamblers had attempted suicide, compared with 7% of students without gambling problems. Phillips et al. (1997) reviewed mortality data between the years 1969 and 1991 from three major gambling areas. Compared with other metropolitan areas, they found elevated rates of suicide among resident and nonresident visitors in these gambling venues.

Studies of treatment-seeking pathological gamblers likewise point to a relationship among gambling, depression, and suicide. In studies that used structured diagnostic instruments in

gamblers seeking inpatient treatment (Linden et al., 1986; McCormick et al., 1984; Taber et al., 1987; Ramirez et al., 1983; Roy et al., 1988) rates of major depression ranged from 32% to 76%. Specker et al. (1996) found that gamblers seeking outpatient treatment had much higher rates of major depression (35% current, 70% lifetime) compared with control subjects (5% current, 23% lifetime).

High rates of suicidal ideation and suicide attempts have also been reported in treatment-seeking pathological gamblers. An early study of 162 Gamblers Anonymous (GA) members in the United Kingdom (Moran, 1969) found that 77% contemplated suicide and 20% had attempted it. Frank et al. (1991) sampled 164 GA members and found 48% reported suicidal ideation alone, with an additional 13% relating histories of suicide attempts. In relatively small studies of pathological gamblers seeking professional out-patient treatment, 35% to 42% contemplated suicide and between 22% and 31% reported attempts (Ibañez et al., 1992; Schwarz and Lindner, 1992; Specker et al., 1996). Among 50 male pathological gamblers in an inpatient unit (McCormick et al., 1984), 80% reported suicidal ideation and 12% attempted suicide.

McCormick et al. (1984) examined the ontology of depression and pathological gambling, and gambling preceded depression in 86% of the cases. Another study (Blaszczynski and Farrell, 1998) reviewed 44 case records of completed suicides in which the coroner identified gambling to be a reason for the suicide. Almost one third had a previous suicide attempt, and one quarter had sought treatment for gambling before the suicide. Despite high rates of suicidality in gamblers, few studies have compared gambling behaviors and psychosocial problems in pathological gamblers with and without suicidality. Frank et al. (1991) found that gamblers with a history of suicidal thoughts or suicide attempts had an earlier age of initiating gambling and more severe gambling problems, including higher debts and increased participation in some forms of illicit behavior, compared with nonsuicidal gamblers.

However, a possible confound in studying the relationship between suicidality and pathological gambling is the presence of substance use disorders. Thirty percent to 50% of pathological gamblers have a substance use disorder (Black and Moyer, 1998; Cunningham-Williams et al., 1998; Linden et al., 1986; McCormick et al., 1984; National Opinion Research Center, 1999; Ramirez et al., 1983; Specker et al., 1996; Welte et al., 2001). In substance abusers, rates of depression typically range from about 30% to 50% (Coelho et al., 2000; Hasin and Nunes, 1998), and suicide attempts are as high as 49% (Pages et al., 1997; Roy, 2001). Given the high rates of comorbidity between substance use disorders and pathological gambling, suicidality may be independently or interactively associated with substance problems in pathological gamblers.

Risk factors for suicide attempts include a past history of suicide attempts and help-seeking behavior, such as entering a treatment program (Goldney et al., 1995; King, 1994; Rhimer, 1996). A better understanding of suicidality in gamblers may lead to better clinical treatment and outcomes. Thus, this study sought to evaluate rates and correlates of suicidality in treatment-seeking pathological gamblers.

## Methods

Research subjects were drawn from a retrospective analysis of 343 consecutive admissions of individuals initiating outpatient treatment for pathological gambling throughout the State of Connecticut between August 1998 and July 2000. Approximately half of the sample was drawn from admissions to a state-funded gambling treatment center; these participants were initiating standard care, which combined 12-step, cognitive-behavioral, and educational

group and individual sessions. The other half of the sample was beginning treatment in a National Institutes of Health–funded study evaluating cognitive-behavioral therapy for pathological gambling. Inclusion criteria included age older than 18 years, DSM-IV diagnosis of pathological gambling, and one or more gambling days in the previous month. Exclusion criteria were uncontrolled major psychiatric disorder (*e.g.*, psychosis) and non-English speaking. Only five individuals refused to participate, and all withdrawals were related to dissatisfaction with random assignment procedures in the treatment study. Participants signed written informed consent, as approved by the University of Connecticut Health Center Institutional Review Board. Most participants learned about the treatment programs through one or more of the following sources: media advertisements, professional social service referrals, the Connecticut Compulsive Gambling Helpline, or word-of-mouth referrals.

### Instruments

The Addiction Severity Index (ASI; McLellan et al., 1985) was administered to all participants at intake to treatment. The ASI assesses severity of medical, psychiatric, employment, family/social, legal, alcohol, and drug problems experienced in the past month. Composite scores are derived from responses to items within each of these problem areas. Responses are standardized and summed to produce a mathematical estimate of status in each area and range from .00 to 1.00, with higher scores indicative of more severe problems. A number of studies have shown the reliability and validity of this instrument in a variety of substance abusing populations (Kosten et al., 1983; McLellan et al., 1985), and the ASI is one of the most commonly used instruments for clinical and research purposes in addiction populations.

A gambling section of the ASI has also been created (Lesieur and Blume, 1991). It has adequate to excellent reliability and validity in assessing gambling problems in substance abusers who also present with gambling problems, as well as among individuals with a primary diagnosis of pathological gambling (Lesieur and Blume, 1991, 1992; Petry<sup>3</sup>).

Participants also completed the South Oaks Gambling Screen (SOGS; Lesieur and Blume, 1987), which measures gambling-related problems. The SOGS has good reliability and validity in clinical samples, and scores of 5 or greater are indicative of a diagnosis of pathological gambling. Although SOGS scores were not criteria for entry in these studies, all participants scored greater than 5, suggesting that all individuals seeking gambling treatment were likely to meet diagnostic criteria.

A question about intensity of cravings for gambling was also included. Responses were coded on a 10-point Likert scale, with higher scores indicative of more extreme cravings. This scale was used in a previous study of pathological gambling and was shown to change in response to successful gambling treatment (Sylvian et al., 1997).

### Data Analysis

Participants were divided into groups based on responses to questions of lifetime suicidality: no significant thoughts of suicide, suicidal ideation alone (with no attempts), or suicide attempt(s). Demographics were compared across groups by using Chi-square for categorical data and analysis of variance (ANOVA) for continuous data. Variables that were non-normally distributed were transformed if possible or nonparametric tests were used.

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<sup>3</sup>Petry NM (unpublished manuscript) Validity of the Addiction Severity Index in assessing gambling problems.

Multivariate analysis of covariance (MANCOVA) evaluated differences among the groups based on levels of suicidality. Because other studies relate age, gender, and substance abuse histories to gambling behaviors and suicidality (*e.g.*, Petry, 2002; Petry, 2000; Rossow and Lauritzen, 1999), analyses controlled for these variables as well as for treatment site (state program or treatment study). Age was entered as a covariate, and gender, substance abuse treatment history, and site were fixed factors. Variables related to gambling were the dependent variables in one analysis and ASI composite index scores in the second analysis. Suicidality status emerged as a significant predictor in both overall analyses, as well as in two of the seven ASI domains. Therefore, subsequent analyses evaluating differences with respect to specific variables comprising these domains are protected against multiple comparisons (Tabachnick and Fidell, 1996). Analysis of covariance then evaluated differences among groups on specific items associated with each problem area. Gender, substance abuse treatment histories, and site again were included as fixed factors, with age as a covariate. When differences were noted, Dunnett's post hoc tests were used to evaluate differences between each group and every other. Chi square analyses were used to test differences among groups for dichotomous variables. When overall differences emerged, post hoc Chi square tests compared each group with others (Fleiss, 1973).

Data analyses were conducted on SPSS (SPSS, Chicago, IL). The alpha value was .05, and all tests were two-tailed. Missing data, comprising less than 5% of the total data, were not interpolated, so degrees of freedom vary slightly depending on how many participants responded to each item.

## Results

Table 1 shows demographic characteristics across the sample. No differences in gender, age, race, or income were noted across the three groups. However, marital status differed ( $\chi^2_4 = 11.76, p < .05$ ) and participants with a history of suicide attempts were less likely to be married. Substance abuse treatment histories also differed among the groups ( $\chi^2_2 = 13.47, p < .001$ ), with gamblers with suicide ideation or attempts more likely than nonsuicidal gamblers to have received treatment for a drug or alcohol problem.

Variables related to gambling are shown in Table 2. After controlling for age, gender, treatment site, and history of substance abuse treatment, differences among the three groups emerged in the over-all MANCOVA ( $F_{12,644} = 3.41, p < .001$ ). Although no differences were noted between those with a history of suicide attempts and ideation alone, those without any history of suicidal ideation spent less money gambling in the 30 days before treatment entry ( $F_{2,336} = 3.40, p < .05$ ). SOGS scores differed among the groups ( $F_{2,336} = 9.55, p < .001$ ), with nonsuicidal participants having the lowest scores. Cravings for gambling were higher in the suicidal gamblers ( $F_{2,336} = 5.98, p < .01$ ), with all three groups differing from one another. Trends toward earlier ages of gambling initiation were noted in the suicidal participants ( $p = .11$ ). Although days gambled and gambling debts did not differ among the groups, bankruptcy rates were higher among the suicidal gamblers ( $\chi^2_2 = 5.83, p < .05$ ). The suicidal gamblers also were more likely to have sought professional gambling treatment previously ( $\chi^2_2 = 9.24, p < .01$ ).

After controlling for age, gender, substance abuse treatment histories, and treatment program, the overall MANCOVA determined differences in psychosocial problems, as measured by ASI composite scores ( $F_{14,586} = 3.17, p < .001$ ). Severity of family/social and psychiatric problems differed among the groups based on histories of suicidality ( $F_{2,298} = 6.83$  and  $37.73, p < .001$ ). Post-hoc tests showed that, for family/social problems, the gamblers without suicidality differed from both those with ideation alone and attempts, but these latter two groups did not differ from one another. For psychiatric problems, all three

groups differed from one another. Nonsignificant trends toward increased medical and drug problems were noted in gamblers with suicidality ( $p < .10$ ). No differences in alcohol, legal, or employment problems were noted among the groups. Adjusted means and standard errors are presented in Table 3.

Table 4 shows variables specific to family/social and psychiatric problems. Gamblers with suicidal ideation and suicide attempts were less likely to be happy with their living situation than those without suicidality ( $\chi^2_2 = 7.81, p < .05$ ). The groups also differed in terms of days of conflict in the past month ( $F_{2,328} = 3.06, p < .05$ ), with the gamblers with suicidal ideation reporting more conflict than those without suicidality.

In terms of psychiatric distress, participants with suicidality endorsed more problems on virtually every variable, as shown in Table 4. Participants with lifetime histories of suicidality were more likely to be in treatment for a psychiatric problem at time of entry for gambling treatment ( $\chi^2_2 = 15.00, p < .001$ ), and they were more likely to report a lifetime history of treatment for psychiatric problems ( $\chi^2_2 = 28.89, p < .001$ ). Participants with both suicidal ideation and suicide attempts reported experiencing psychiatric problems on more days in the past month than participants without suicidality ( $F_{2,328} = 14.57, p < .001$ ). The percentages experiencing recent (past 30 days) depression, anxiety, difficulties with understanding or memory, violent tendencies, and use of psychiatric medications all differed across the groups ( $\chi^2_2 = 30.49, 14.06, 31.26, 12.93, \text{ and } 25.50$ , all  $p$ -values  $< .01$ ). Not surprisingly, the groups also differed with respect to suicidal ideation in the 30 days prior to the treatment episode ( $\chi^2_2 = 98.13, p < .001$ ). About half of those with lifetime suicidal ideation or suicide attempts also reported recent suicidal ideation in the month before treatment entry. Suicide attempts in the 30 days before treatment initiation were relatively rare, with only 2.4% of the full sample (13.8% of those with a lifetime history of suicide attempts) reporting a recent suicide attempt.

Because lifetime histories of suicidality may be unrelated to current gambling problems, all analyses were repeated comparing just those gamblers who reported suicidal ideation in the month before initiating gambling treatment ( $N = 71, 21.3\%$ ) with those who reported no significant suicidal ideation in the previous month ( $N = 262, 78.7\%$ ). Because only eight participants reported suicide attempts in the previous month, this group was too small for separate analysis. Virtually identical results were obtained compared with when lifetime classifications were used. In terms of the MANCOVA evaluating gambling variables, suicidal ideation was a significant predictor in the overall analysis ( $F_{6,313} = 5.93, p < .001$ ). Those with suicidal ideation in the previous month reported spending larger amounts of money gambling, had higher SOGS scores, and experienced increased cravings for gambling ( $F_{1,318} = 7.06, 15.11, \text{ and } 19.76, p < .01$ ; data not shown). Suicidality also emerged as a significant predictor in the overall MANCOVA of ASI composite scores ( $F_{7,292} = 19.29, p < .001$ ) and was associated with increased family/social and psychiatric scores ( $F_{1,298} = 9.97, p < .01$  and  $129.27, p < .001$ ).

## Discussion

These data suggest that treatment-seeking pathological gamblers with a history of suicidal ideation or suicide attempts have more significant gambling problems, as well as family/social distress and psychiatric symptoms, than pathological gamblers without suicidality. The correlates of suicidality will be discussed along with clinical implications for treating gamblers.

Compared with pathological gamblers with no history of suicidal ideation or suicide attempts, pathological gamblers with suicidality were more likely to be single, but no

differences in age, gender, or income were apparent among the groups. Gamblers with a history of suicidality were more likely to have been treated for a substance use disorder. Nevertheless, few participants were currently abusing substances when entering treatment for gambling as shown by low alcohol and drug ASI composite scores. These results are consistent with observations by McCormick et al. (1984) and Blaszczynski and Farrell (1998), who found that current substance use problems seemed unrelated to suicidality in pathological gamblers.

Nevertheless, because substance abuse may be associated with suicidality (*e.g.*, Pages et al., 1997; Roy, 2001), analyses controlled for a history of substance abuse treatment, as well as age, gender, and treatment site. Differences in severity of gambling problems emerged among the three groups. Participants with suicidal ideation gambled more money before entering treatment, had higher SOGS scores, and reported increased gambling cravings relative to nonsuicidal gamblers. Bankruptcies were also more common among gamblers with suicidality.

These results obtained from treatment-seeking pathological gamblers are consistent with those from another report. Frank et al. (1991) found that about half of GA members reported suicidal ideation, and an additional 13% reported suicide attempts. That study found increased severity of gambling problems, greater debts, and earlier onset of gambling in suicidal gamblers compared with non-suicidal gamblers. Although they also found greater illegal activity among suicidal gamblers, this study did not, perhaps because it controlled for substance abuse histories, which are also associated with legal problems (*e.g.*, Ball and Ross, 1991). In both studies, few differences among the suicide attempters and the contemplators were noted, perhaps because the sample size of suicide attempters allowed for a detection of only large effect sizes between groups.

In other studies of suicide (*e.g.*, Graham and Burvill, 1993), interpersonal difficulties and family pathology are identified as psychosocial stressors that may precipitate suicide attempts. Similar interpersonal distress was apparent in these suicidal pathological gamblers, as evidenced by elevated composite scores on the ASI family/social section. Compared with non-suicidal gamblers, those with suicidality were less satisfied with their marital and living arrangements and experienced more days of conflict in the month before entering gambling treatment. The high rates of divorce among the suicidal gamblers are also consistent with another report of suicidal gamblers (Frank et al., 1991) and may be reflective of increased interpersonal distress.

Not surprisingly, ASI psychiatric composite scores and almost all measures of psychiatric symptoms and psychiatric treatment histories differed among the groups. Almost three quarters of gamblers with suicidal ideation or suicide attempts reported depression at the time of intake to gambling treatment. Despite receipt of current psychiatric treatment and even psychiatric medication by 23% to 46% of these gamblers, considerable rates of psychiatric distress were noted. However, slightly less than half of gamblers with a history of suicidality were experiencing suicidal ideation at time of treatment entry. Thus, for the majority of these participants, suicidality occurred in the past and may not be related to current gambling problems.

Dates of suicidality were not obtained from participants in the cognitive-behavioral treatment study, but dates of most recent suicidal ideation or suicide attempt were recorded in 75 participants in the state treatment program. Suicidality occurred subsequent to onset of gambling problems in all but one participant. These results are consistent to those of Ibañez et al. (1992), who found that suicide was directly related to gambling in all their suicide attempters. Although other life events may lead to suicidality in some individuals who later

develop pathological gambling, very similar results were obtained when participants in this study were categorized by recent thoughts of suicide. Therefore, a lifetime history of suicidality seems related to increased gambling and psychosocial problems among individuals who seek gambling treatment.

Some issues associated with this study design may influence interpretation of these results. First, the sequence and perceived relationships between the onset of gambling problems and suicidality was not evaluated systematically in all participants, and more detailed assessments of suicidality in pathological gamblers may be warranted. Moreover, structured diagnostic assessments for depression and other psychiatric disorders were not conducted. Better understanding of the temporal onset of pathological gambling, depressive disorders, and suicidality may reveal unique or shared contributions to risk for suicide.

The results of this study are also limited by the self-report nature of suicidal ideation and suicide attempts that may be influenced by recall bias (Pokorny, 1983). More precise classification of suicidality may better distinguish the groups. Rudd and Joiner (1998) suggest six categories: suicidal ideation alone, suicidal threat, suicide-related behaviors (no intent to die but act committed to gain attention, punish others, or plead for assistance), suicide attempt without injuries, suicide attempt with injuries, or completed suicide. Larger sample sizes may be necessary to evaluate suicidality across these dimensions in pathological gamblers.

Only treatment-seeking gamblers were included in this study. Non-treatment-seeking individuals may differ in substantial ways from treatment-seeking individuals, but future studies will need to evaluate these associations in other samples. Because the recruitment sites were outpatient settings, rates of suicidal ideation and suicide attempts may be low compared with gamblers seeking inpatient treatment (McCormick et al., 1984). All participants in this study were from southern New England, and prevalence of suicidality in this sample was similar to that reported in gamblers from diverse areas including New Jersey (Frank et al., 1991), Minnesota (Specker et al., 1996), Spain (Ibañez et al., 1992), Germany (Schwarz and Lindner, 1992), and the United Kingdom (Moran, 1969). Nevertheless, future studies should replicate the relationships between suicidality and severity of gambling and psychosocial problems in other samples.

In summary, suicidality is a significant clinical concern in pathological gamblers. Although clinicians cannot reliably predict low base-rate phenomena such as suicide (Rudd and Joiner, 1998), an awareness of risk factors may assist in preventing future attempts in gamblers seeking assistance. In general population studies, history of suicidal ideation and suicide attempts is a risk factor for future attempts, as are previous psychiatric treatment, recurrent depression, family history of suicidality, and male gender (Goldney et al., 1995; King, 1994; Rhimer, 1996). Blaszczynski and Farrell (1998) hypothesized that the highest risk period for completed suicides in pathological gamblers may be following a significant loss, such as an arrest for criminal activity or revelation of the extent of gambling-related debts. Whether these, or other, factors are associated with suicidality in pathological gamblers can only be determined conclusively by longitudinal studies. Such studies have yet to be conducted, but these data suggest that screening for suicidal ideation and history of attempts should be included in all intake evaluations for treatment-seeking pathological gamblers. More intensive psychiatric treatment, including adjunctive therapy for comorbid depression, may be recommended for pathological gamblers who report a history of suicidal ideation or suicide attempts.

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**TABLE 1**

Demographic Characteristics—Values Represent Means and Standard Errors (in Parenthesis), Unless Otherwise Noted

	No Suicidal Ideation	Suicidal Ideation Alone	History of Suicide Attempt(s)
N	175	109	58
Age	43.4 (0.9)	42.8 (1.1)	43.7 (1.5)
Male (%)	62.3	60.6	53.4
Race (%)			
White	87.9	88.8	86.0
Black	8.6	8.4	5.3
Hispanic	1.1	9	5.3
Native American	0.6	0.0	0.0
Asian	1.1	1.9	1.8
Years of education	12.8 (0.2)	12.7 (0.2)	12.1 (0.4)
Income (median and interquartile range)	\$35,000 (32,000)	\$30,000 (26,000)	\$30,000 (27,250)
Marital Status (%) <sup>*</sup>			
Single	20.4 <sup>b</sup>	18.8 <sup>b</sup>	34.0
Married/remarried	54.3	49.5	28.0
Divorced/separated	25.3	31.7	38.0
Widowed	1.1	3.7	6.9
Ever received treatment for substance abuse problems (%) <sup>**</sup>	18.4 <sup>a,b</sup>	30.6	41.4
Currently in substance abuse treatment (%)	5.2	1.9	10.3

<sup>a</sup>Post hoc tests show differences from participants with suicidal ideation alone,  $p < .05$ .

<sup>b</sup>Post hoc tests show differences from participants with suicide attempts,  $p < .05$ .

<sup>\*</sup>Groups differ,  $p < .05$ ;

<sup>\*\*</sup>groups differ,  $p < .001$ .

**TABLE 2**

Gambling Variables—Values Represent Means and Standard Errors (Adjusted for Age, Gender, History of Substance Abuse Treatment, and Study Site), Unless Otherwise Noted

	No Suicidal Ideation	Suicidal Ideation Alone	History of Suicide Attempt(s)
Amount gambled in last 30 days (\$) *	1,797 (610) <sup>a</sup>	4,037 (719)	2,474 (927)
SOGS score ***	11.9 (0.32) <sup>a</sup>	13.9 (0.38) <sup>b</sup>	12.7 (0.49)
Cravings for gambling **	7.0 (0.25) <sup>a,b</sup>	7.6 (0.29) <sup>b</sup>	8.5 (0.37)
Age started gambling	24.3 (0.88)	21.9 (1.0)	22.4 (1.3)
Days gambled in past month	14.1 (0.9)	13.7 (1.0)	13.3 (1.3)
Current gambling debt (\$)	18,800 (4,000)	21,500 (4,700)	12,400 (6,000)
Filed bankruptcy (%) *	11.2 <sup>a</sup>	24.7	21.9
Ever previously sought professional gambling treatment (%) **	12.6 <sup>a,b</sup>	23.9	27.6

<sup>a</sup>Post hoc tests reveal differences from participants with suicidal ideation alone,  $p < .05$ .

<sup>b</sup>Post hoc tests reveal differences from participants with suicide attempts,  $p < .05$ .

\* Groups differ,  $p < .05$ ;

\*\* groups differ,  $p < .01$ ;

\*\*\* groups differ,  $p < .001$ .

**TABLE 3**

Addiction Severity Index Composite Scores—Values Represent Adjusted Means and Standard Errors (in Parenthesis), Unless Otherwise Noted

	No Suicidal Ideation	Suicidal Ideation Alone	History of Suicide Attempt(s)
Medical	0.26 (0.03)	0.31 (0.03)	0.36 (0.04)
Employment	0.25 (0.02)	0.21 (0.02)	0.27 (0.03)
Alcohol	0.09 (0.01)	0.08 (0.01)	0.06 (0.02)
Drug	0.02 (0.004)	0.09 (0.01)	0.01 (0.01)
Legal	0.09 (0.02)	0.11 (0.02)	0.08 (0.03)
Social *	0.29 (0.02) <sup>a,b</sup>	0.40 (0.03)	0.35 (0.03)
Psychiatric *	0.26 (0.02) <sup>a,b</sup>	0.45 (0.02) <sup>b</sup>	0.48 (0.03)

<sup>a</sup>Post hoc tests show differences from participants with suicidal ideation alone,  $p < .05$ .

<sup>b</sup>Post hoc tests show differences from participants with suicide attempts,  $p < .05$ .

\* Groups differ,  $p < .001$ .

**TABLE 4**

Social and Psychiatric Variables—Values Represent Adjusted Means and Standard Errors (in Parenthesis), Unless Otherwise Indicated

	No Suicidal Ideation	Suicidal Ideation Alone	History of Suicide Attempt(s)
Satisfied with current marital/living situation (%) <sup>*</sup>	58.9 <sup>a,b</sup>	45.3	41.4
Days of conflict in past month <sup>*</sup>	3.4 (0.7) <sup>a</sup>	5.9 (0.9)	3.8 (1.1)
Currently receiving psychiatric treatment (%) <sup>***</sup>	10.2 <sup>a,b</sup>	23.1 <sup>b</sup>	40.6
Ever received treatment for psychiatric problems (%) <sup>***</sup>	39.4 <sup>a,b</sup>	55.7 <sup>b</sup>	79.3
Days experienced psychiatric problems in past month <sup>***</sup>	8.5 (1.0) <sup>a,b</sup>	15.0 (1.2)	16.0 (1.5)
In past month, experienced problems with:			
Depression <sup>***</sup>	43.9 <sup>a,b</sup>	74.3	72.4
Anxiety <sup>**</sup>	57.8 <sup>a,b</sup>	74.0	81.0
Understanding/memory <sup>***</sup>	27.7 <sup>a,b</sup>	53.3	63.8
Controlling violent behavior <sup>**</sup>	4.0 <sup>a,b</sup>	10.6	19.0
Suicidal ideation <sup>***</sup>	0.0 <sup>a,b</sup>	46.2	41.1
Suicide attempt <sup>***</sup>	0.0 <sup>a,b</sup>	0.0 <sup>b</sup>	13.8
Currently taking prescription medication for psychological problems (%) <sup>***</sup>	15.0 <sup>a,b</sup>	32.7	46.4

<sup>a</sup>Post hoc tests show differences from participants with suicidal ideation alone,  $p < .05$ .

<sup>b</sup>Post hoc tests show differences from participants with suicide attempts,  $p < .05$ .

<sup>\*</sup> Groups differ,  $p < .05$ ;

<sup>\*\*</sup> groups differ,  $p < .01$ ;

<sup>\*\*\*</sup> groups differ,  $p < .001$ .