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# New Research Relating to Gambling and Drinking

A new analysis of gambling patterns among people with pathological gambling disorders also sheds some light on the relationship of problem drinking to pathological gambling: **Stewart, S.H., Zack, M., Collins, P., & Klein, R.M. (2008). Subtyping pathological gamblers on the basis of affective motivations for gambling: relations to gambling problems, drinking problems, and affective motivations for drinking. *Psychology of Addictive Behaviors*, 22(2), 257-68.**

The authors recruited 158 Canadian men and women who were screened as likely having a pathological gambling disorder according to the South Oaks Gambling Screen and who drank at least half the time when they gambled. Participants were assessed with a variety of instruments including the Inventory of Gambling Situations, the Gambling Motives Questionnaire, the Drinking Motives Questionnaire, and the Brief Michigan Alcoholism Screening Test (B-MAST). A DSM-IV assessment of pathological gambling was also conducted and showed that 87 percent of the sample met criteria for a lifetime diagnosis of a pathological gambling disorder and 39 percent met criteria for a current diagnosis.

Responses to the Gambling Motives Questionnaire were used to identify three clusters of problem gamblers according to their motives for gambling: (1) enhancement gamblers who gambled only to get positive reinforcement and hence to enhance positive feelings, (2) coping gamblers who gambled primarily for negative reinforcement so as to avoid negative thoughts and feelings (although also, occasionally, to seek positive affective reinforcement), and (3) low emotion regulation gamblers who gambled for reasons unrelated to changes in affect. The largest group of problem gamblers were enhancement gamblers who accounted for 59 percent of the sample followed by coping gamblers who accounted for slightly more than 25 percent.

Of the three groups, coping gamblers had the most severe gambling problems according to a measure based on DSM-IV criteria for pathological gambling. Enhancement gamblers scored significantly lower on this measure than coping gamblers but significantly higher than low emotion regulation gamblers. Coping gamblers also scored significantly higher on a rating of gambling frequency than did the other groups, while enhancement gamblers scored significantly higher than low emotion regulation gamblers.

These three types of pathological gamblers also differed in regards to drinking behaviors as determined by self-reports on the Drinking Motives Questionnaire. According to self-reports from the aforementioned assessment instruments, people who were classed as coping gamblers also engaged in significantly more coping motivated drinking (i.e. drinking to avoid negative feelings/situations). However, both enhancement and coping type gamblers engaged in similar amounts of enhancement-motivated drinking (i.e., drinking to enhance positive feelings). Low emotion regulation gamblers engaged in significantly less of both types of drinking.

B-MAST scores of 6 or greater are considered indicative of a probable alcohol use disorder and individuals classified as enhancement gamblers had a mean B-MAST score of 7.4, those classed as coping gamblers had a mean score of 13.94, and those who were low emotion regulation gamblers had a mean B-MAST score of 3.92. Coping gamblers also had the highest scores in regards to drinking frequency and drinking quantity and were most likely of all three groups to report drinking when losing at gambling and the most likely to report drinking when winning.

Another recent article confirms the relationship between substance use disorders and pathological gambling using data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC): **French, M.T., Maclean, J.C., & Ettner, S.L. (2008). Drinkers and bettors: investigating the complementarity of alcohol consumption and problem gambling. *Drug and Alcohol Dependence*, 96(1-2), 155-164.**

The authors also found that alcohol use disorders were significantly associated with higher rates of self-identified gambling-related problems as well as with a greater number of gambling-related problems.

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# COD Research

## Client Characteristics

**Cropsey,K.L.,Weaver, M.F., & Dupre,M.A. (2008). Predictors of involvement in the juvenile justice system among psychiatric hospitalized adolescents. *Addictive Behaviors,* 33(7), 942-948.**

The authors looked at medical records for 636 adolescents aged 12 to 17 who had been consecutively admitted to an inpatient psychiatric facility. According to records, 43.6 percent had a history of juvenile justice involvement. Adolescents in the study were more likely to have had a history of juvenile justice involvement if they were male, had parents with criminal justice involvement, had a disruptive disorder, used cocaine, were sexually active, and/or had a history of aggressive behavior.

**Fleming, C.B., Mason, W.A., Mazza, J.J., Abbott, R.D., and Catalano, R.F. (2008). Latent growth modeling of the relationship between depressive symptoms and substance use during adolescence. *Psychology of Addictive Behaviors*. 22(2), 186-197.**

The authors examined the relationship between adolescent substance use and depressive symptoms using annually collected data from the Raising Healthy Children project for 951 youth who were followed from grade 8 through grade 11. They found that a greater level of depressive symptoms at the 8th grade assessment was associated with significantly greater use of alcohol, marijuana, and cigarettes for girls and of marijuana use only for boys. This finding remained after controlling for antisocial behaviors, academic achievement, socioeconomic status, and social competency. Also, the rate of change in depressive symptoms was associated with rates of change of use for all three substances for both boys and girls. The authors were not able to establish, however, that elevated depressive symptoms at the 8th grade assessment were associated with increased substance use later or that substance use at the 8th grade assessment was associated with greater levels of depressive symptoms at later assessments.

**Fridell, M., Hesse, M., Jaeger, M.M., Kühlhorn, E. (2008). Antisocial personality disorder as a predictor of criminal behaviour in a longitudinal study of a cohort of abusers of several classes of drugs: Relation to type of substance and type of crime. *Addictive Behaviors,* 33(6), 799-811.**

The authors analyzed medical and criminal justice records for 1,052 Swedish individuals who were admitted to treatment for drug use disorders between 1977 and 1995. Individuals were followed from their first treatment episode until 2004, if they did not die earlier. The authors found that participants who had a diagnosis of antisocial personality disorder (ASPD) were 2.16 times more likely to be charged with theft and 2.44 times more likely to be charged with multiple crimes in any given year in comparison to those who did not have ASPD. The authors note that this finding supports the validity of ASPD as a diagnosis for people with co-occurring drug use disorders.

**Mason W.A., Hitchings, J.E., & Spoth, R.L. (2008). The interaction of conduct problems and depressed mood in relation to adolescent substance involvement and peer substance use. *Drug and Alcohol Dependence,* 96(3), 233-248.**

The authors assessed 429 youth living in rural areas at the age of 11 and then regularly reassessed them through the age of 18 to evaluate the relationship among conduct problems, depressed mood, and substance use by participants as well as their peers. Contrary to their expectations, they found that when conduct problems co-occurred with depressed mood at age 11 subjects had significantly lower rates of substance use at age 18 than did those who had lower levels of depressed mood. They also found that youth who had both conduct problems and depressed mood had peers with lower levels of substance use than did those who had conduct problems with lower levels of depressed mood. The authors also explore the prevention and treatment implications of their finding.

**Mangrum, L.F. & Spence, R. T. (2008). Counselor and client characteristics in mental health versus substance abuse treatment settings providing services for co-occurring disorders. *Community Mental Health Journal*, 44(3), 155-169.**

The authors compared both counselor and client characteristics for COD programs located in both mental health and substance use abuse treatment facilities funded by a State government. They found that counselors in programs located in substance use abuse treatment facilities were more likely to have graduate degrees, and that counselors in mental health facilities rated their knowledge and skills in two COD-related areas lower than counselors in substance abuse treatment facilities. Clients in mental health facilities were more likely to be diagnosed with schizophrenia, depression, and/or bipolar disorder. Clients in substance use abuse treatment facilities had more severe substance use disorders and had higher rates of treatment completion and of abstinence at completion.

**Ohlmeier, M.D., Peters, K., Te Wildt, B.T., Zedler, M., Ziegenbein, M., Wiese, B., Emrich, H.M., & Schneider, U. (2008). Comorbidity of alcohol and substance dependence with attention-deficit/hyperactivity disorder (ADHD). *Alcohol and Alcoholism*, 43(3), 300-304.**

The authors conducted a retrospective assessment of childhood attention-deficit/hyperactivity disorder (AD/HD) among 152 German substance abuse treatment clients (91 who had alcohol dependence alone and 61 who had multiple substance use disorders including alcohol dependence) using two different assessment methods (the DSM-IV and the Wender Utah Rating Scale [WURS-k]). They found that 20.9 percent of the sample likely had childhood AD/HD according to the DSM-IV assessment and 23.1 percent did according to the WURS-k assessment. Of those individuals who had alcohol dependence but not a drug use disorder and who had childhood AD/HD according to at least one assessment, 33.3 percent had AD/HD persisting into adulthood. Of those with alcohol dependence and a drug use disorder who had childhood AD/HD, 65.5 percent had AD/HD persisting into adulthood.

**Sher, L., Stanley, B.H., Harkavy-Friedman, J.M., Carballo, J.J., Arendt, M., Brent, D.A., Sperling, D., Lizardi, D., Mann, J.J., & Oquendo, M.A. (2008). Depressed patients with co-occurring alcohol use disorders: A unique patient population. *Journal of Clinical Psychiatry*, 69, 907-915.**

The authors compared a group of 318 individuals with major depression who had no history of substance use disorders to 187 who had both major depression and substance use disorders. Participants were assessed regarding demographic factors, mental health, substance use/abuse, and suicidal behaviors. Participants who had COD were significantly younger at the time of their first suicide attempt, their first major depressive episode, and their first psychiatric hospitalization. Those with COD also had a greater number of depressive episodes and suicide attempts; were more likely to be smokers; more likely to have first-degree relatives with alcohol use disorders; had more behavioral problems during childhood; and scored higher on lifetime measures of aggression, impulsivity, and hostility.

**Wilens, T.E., Biederman, J., Adamson, J.J., Henin, A., Sgambati, S., Gignac, M., Sawtelle, R., Santry, A., & Monuteaux, M.C. (2008). Further evidence of an association between adolescent bipolar disorder with smoking and substance use disorders: A controlled study. *Drug and Alcohol Dependence*, 95(3), 188-198.**

The authors assessed substance use disorders and smoking among 105 adolescents with bipolar disorder and 98 adolescents who did not have a bipolar disorder using structured interviews. Those who had a bipolar disorder had significantly higher rates of total substance use disorders, alcohol abuse disorder, drug abuse disorder, drug dependence disorder, and smoking even after controlling for age, co-occurring AD/HD, co-occurring anxiety disorders, and co-occurring conduct disorder.

**Young, R., Sweeting, H., & West, P. (2008). A longitudinal study of alcohol use and antisocial behaviour in young people. *Alcohol and Alcoholism*, 43(2), 204-214.**

The authors undertook a longitudinal study of 2,586 Scottish youth age who were age 11 at the start of the study and 15 when it concluded. The authors evaluated three possible explanations for the relationship of antisocial behaviors to alcohol use: (1) that alcohol use causes or contributes to antisocial behavior (the disinhibition model), (2) that antisocial behavior causes alcohol use (the susceptibility model), or (3) that alcohol use and antisocial behavior contribute to one

another (the reciprocal model). They found the strongest support for the susceptibility model, no support for the disinhibition model, and some support for the reciprocal model in specific gender, class, and drinking contexts.

## Services & Service Systems

### *Screening & Assessment*

**Norman, S.B., Inaba, R.K., Smith,T.L., & Brown, S.A. (2008). Development of the PTSD-alcohol expectancy questionnaire. *Addictive Behaviors*, 33(6), 841-847.**

The authors describe the development of an instrument, the Post-traumatic stress disorder-Alcohol Expectancy Questionnaire (P-AEQ), to evaluate both positive and negative alcohol-related expectancies in relation to symptoms of post-traumatic stress disorder. They note that the questionnaire had internal consistency, reliability, and concurrent validity with another accepted instrument (the Alcohol Expectancies Questionnaire). They also found that the P-AEQ appeared to be able to differentiate male veterans who had alcohol use disorders from those who did not.

### *Treatment Planning & Services*

**Fornili, K. (2008). Integrated treatment for women with co-occurring disorders and an explanatory model for policy analysis and evaluation, *Journal of Addictions Nursing*, 19(2), 109-118.**

The author presents information on the use of integrated treatment for women with COD. In doing so, she also focuses on how different factors may affect the results of policy change (such as implementing integrated treatment). She uses a model (the Geelhoed-Schouwstra framework) that takes into account the potential roles of both institutional influences (such as funding and involvement with other service sectors) and population influences (such as histories of trauma and the role of intimate partners). The particular influences that may affect outcomes for integrated treatment with this population are also discussed.

**Green, A.I. (2006). Treatment of schizophrenia and comorbid substance abuse: Pharmacologic approaches. *Journal of Clinical Psychiatry*, 67(7), 31-35.**

The author describes accepted treatment for co-occurring schizophrenia and substance use disorders, stressing the value of an integrated approach that makes use of both pharmacological and psychosocial interventions. He also discusses possible explanations for the high rate of co-occurrence for these disorders and suggests some avenues for further research.

**Rus-Makovec M. & Cebasek-Travnik Z. (2008). Co-occurring mental and somatic diagnoses of alcohol dependent patients in relation to long-term aftercare alcohol abstinence and well-being. *Psychiatria Danubina*, 20(2), 194-207.**

The authors followed 222 Slovenian adults who received treatment for alcohol dependence for a period of 24 months after treatment concluded to determine whether those who had co-occurring mental and/or medical conditions had significantly different ratings of well-being and abstinence rates than those who did not have a co-occurring condition. They did not find any significant differences regarding abstinence rates between those who did and did not have COD. They did, however, find that aftercare participation was significantly associated with higher rates of abstinence. Participants with COD did report a somewhat poorer self-image than those who did not have COD.

**Vornik, L.A. & Brown, E.S. (2006). Management of comorbid bipolar disorder and substance abuse. *Journal of Clinical Psychiatry*, 67(7), 24-30.**

The authors review current research on co-occurring bipolar and substance use disorders, including the effects of substance use on the course and treatment of bipolar disorders and the reasons why people with bipolar disorders use substances. They also discuss treatment options for these COD. Among other research, the authors present information on recent pharmacological studies that appear to support the use of carbamazepine, lithium, and valproate with this population.