

Commentary: Illegal Behavior and Pathological Gambling

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A complex relationship exists between illegal behavior and pathological gambling, and this relationship has significant implications in both the legal and clinical domains. Despite the importance of this relationship, relatively little research has examined illegal behavior in pathological gambling, particularly within a current gambling climate that has seen dramatic expansion over recent years. Although the article by Ledgerwood and colleagues provides additional insight into the relationship between pathological gambling and illegal behavior, many questions remain unanswered and warrant further investigation.

J Am Acad Psychiatry Law 35:302–5, 2007

Ledgerwood et al.¹ make a significant contribution to the literature in highlighting the importance of examining the possible legal consequences of pathological gambling. More severe pathological gambling was observed in those individuals who also engaged in gambling-related illegal behavior, and the authors suggest that more intensive treatment may be needed for individuals with gambling-related illegal behavior. Arguably more important than the specific findings of this study, however, may be the questions that the article raises.

Psychiatric and Legal Perspectives on Pathological Gambling

The American Psychiatric Association and the legal system appear to address pathological gambling differently. The current edition of the Diagnostic and Statistical Manual (DSM-IV-TR) sets forth the diagnostic criteria for pathological gambling, with

one criterion focusing on illegal behavior: “. . . has committed illegal acts such as forgery, fraud, theft, or embezzlement to finance gambling” [Ref. 2, p 674]. The inclusion of illegal behavior in the diagnostic criteria for pathological gambling suggests that such behavior is not merely a result of the disorder but might be considered, at least in some individuals, an intrinsic aspect of the disorder. Do the DSM criteria suggest that the neurobiology of pathological gambling gives rise to illegal behavior? This interpretation would be consistent with the finding of shared genetic contributions to pathological gambling and antisocial behavior reported in a large group of male twins.³ Similar, strong associations exist between antisocial behavior and substance dependence disorders and between illegal behavior and substance dependence disorders. However, no similar suggestions (as reflected in the diagnostic criteria) are made for substance dependence disorders despite the resulting illegal acts that are committed as a means of supporting the addiction.

Similarly unique to pathological gambling as compared with substance dependence disorders is the description in the cautionary statement section of the DSM that states:

It is to be understood that inclusion here [in the DSM], for clinical and research purposes, of a diagnostic category such as Pathological Gambling or Pedophilia does not imply that the condition meets legal or non-medical criteria for what constitutes mental disease, mental disorder, or mental disability [Ref. 2, p xxxvii].

This statement suggests, at most, a rift between the legal and psychiatric domains and, at the very least,

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indicates an important distinction as to how a diagnosis might be relevant to these domains. The rationale for isolating pathological gambling from most other psychiatric disorders and grouping it together with pedophilia raises questions regarding the extent to which these disorders are stigmatized within both the psychiatric and legal realms.

As compared with the DSM formulation of pathological gambling, the legal system appears to separate more fully the core elements of pathological gambling from behavior that follows from the disorder. In *United States v. Grillo*,⁴ pathological gambling was raised as a means of reducing the sentence for the defendant who was found guilty of mail theft and fraud. The defense claimed that when the defendant had money to gamble, he did not steal and only stole when he had no funds for gambling. The court determined that a downward departure of sentencing was allowed only if the conduct flowing from the mental disorder constituted the crime itself, but not where the mental disorder had either just a direct causal connection to the crime or provided motive for the crime. The court stated that many crimes could be committed due to a variety of motives and that the courts should not allow all those motives to affect sentencing. In addition, the court aligned itself with the Seventh Circuit, which has held that the mental disorder must significantly impair the defendant's capacity to control his conduct at the time of the offense (*United States v. Roach*, 296 F.3d 565 (7th Cir. 2002)).

The apparent discrepancies between DSM-IV-TR and the legal system may influence the consideration of specific criteria for pathological gambling. As Ledgerwood *et al.*¹ note, there are multiple illegal behaviors associated with pathological gambling. Do all illegal activities suggest the same underlying difficulties? For example, the article includes writing bad checks as an illegal behavior. Unlike a circular check-writing scheme that suggests greater criminal pathology, the occasional drafting of checks from overdrawn accounts (arguably a mistake made by thousands of people because of their poor account keeping) does not seem readily equitable with other crimes such as embezzlement. Further questions arise. For example, what if the person writing bad checks is someone who has never managed money properly? If that person is also a pathological gambler, is the behavior to be considered gambling-related? Are particular groups of pathological gamblers (for example,

those with problems with casino, horse track, or internet gambling) at greater risk of engaging in illegal behavior or specific types of illegal behavior? For example, men and women might have different propensities to commit different crimes (e.g., violent robberies or prostitution, although neither was acknowledged in the current study) to finance gambling. If the DSM-IV-TR criteria are suggesting that the illegal acts are part of the same underlying pathology that gives rise to disordered gambling (for example, psychopathy or impulsivity), then should subtyping of groups of pathological gamblers be performed based on their illegal behavior? These questions hold particular salience presently as efforts mount in preparation for DSM-V, including considerations related to pathological gambling.⁵⁻⁷

What is "Gambling-Related"?

The article by Ledgerwood and colleagues¹ uses the term gambling-related behavior but does not examine its full complexity. The phrase is not necessarily an easy concept for either the clinician or the individual with a pathological gambling disorder. For example, both illegal behavior and gambling may be in part secondary to antisocial personality disorder. Compared with rates of antisocial personality disorder of 1 to 3 percent in the general population, approximately 15 percent to 40 percent of individuals with pathological gambling have co-occurring antisocial personality disorder, and a large percentage of prison inmates have a pathological gambling disorder.⁸ Are the various illegal acts that a pathological gambler commits attributable to sociopathy, pathological gambling, or to some other factors? Although the present study assessed for categorical antisocial personality disorder, a more meaningful evaluation might also include a dimensional approach to sociopathy, as subsyndromal antisocial characteristics may influence the propensity to engage in illegal behavior. Other measures of psychiatric functioning (e.g., of depression or anxiety) also warrant investigation into their relationship to the commission of gambling-related illegal acts, particularly as disorders like major depression share genetic etiologies with pathological gambling⁹ and the presence of co-occurring disorders with pathological gambling influences treatment selection and outcome.¹⁰

Treatment Implications

Ledgerwood *et al.*¹ suggest that more intensive treatments may be needed for pathological gamblers with illegal behavior, although it is unclear precisely what treatment might work best. Measures of gambling severity (scores on the South Oaks Gambling Screen or Addiction Severity Index) did not show significant interactions with illegal behavior. That is, the study did not identify significant interactions between illegal behavior and treatment condition (cognitive behavioral therapy (CBT), CBT workbook, or Gamblers Anonymous alone) or duration, or a three-way interaction among the variables with respect to gambling severity measures. These findings suggest that CBT does not work better or worse for groups of pathological gamblers stratified on the basis of commission of illegal acts. Although improvement occurred irrespective of the presence of gambling-related illegal behavior, the persistence of a greater severity of gambling pathology is of concern. The finding of a main effect of gambling-related illegal behavior on the gambling severity measures is consistent with findings from prior studies in other populations. For example, in a study of problem gamblers calling a help line, those who reported gambling-related illegal behavior were more likely to have a severe gambling problem, owe debts to acquaintances, have received mental health treatment, and have a substance use disorder.¹¹ Nonetheless, the lack of an interaction effect suggests that, while CBT appears helpful, it is not substantially more helpful in individuals with gambling-related behavior compared with those without, and more effective interventions should be sought.

While it is possible that specific behavioral therapy might selectively target groups of pathological gamblers with gambling-related illegal behavior, pharmacological therapy should also be considered. Pharmacological treatments have shown considerable promise in the treatment of pathological gambling.¹² As these treatments were not examined in the current study, a question remains as to whether individuals who engage in illegal behavior may receive additional benefit from pharmacological therapy. Specific pharmacotherapy may be particularly helpful for pathological gamblers with gambling-related illegal behavior. Data suggestive of a positive response to specific pharmacotherapy within specific subgroups characterized by propensi-

ties to engage in illegal acts are seen in other diagnostic groups. For example, individuals with forms of alcoholism linked more closely to the propensity to commit illegal behavior (e.g., Cloninger's type II) respond preferentially to specific pharmacological treatments such as naltrexone and acamprosate.¹³ As such, use of these drugs warrants direct investigation to test their efficacy and tolerability in groups of pathological gamblers characterized by commission of illegal acts.

Conclusions

The relationship between illegal behavior and pathological gambling is complex. To gain a better understanding of this relationship, careful consideration of a broad spectrum of illegal acts and gambling, the motivations underlying their commission, and the severity of the illegal and gambling behaviors is warranted. Additional investigations into these relationships in large samples of persons with pathological gambling disorder are needed. Subtyping based on illegal behavior may not only offer clinical advantages, but also reflect a distinct pathological gambling phenotype (for example, a group characterized by greater impulsivity). As such, impulsivity (or other related constructs) may represent important, clinically relevant endophenotypes for better understanding the complex relationship between illegal behavior and pathological gambling. The identification and further characterization of such endophenotypes could assist in better understanding of the neurobiology underlying the relationship between illegal behavior and pathological gambling. Careful consideration of such measures in treatment studies could facilitate the generation of improved pharmacological and psychosocial treatments for specific groups of individuals with pathological gambling disorder.

References

1. Ledgerwood DM, Weinstock J, Morasco BJ, *et al*: Clinical features and treatment prognosis of pathological gamblers with and without recent gambling-related illegal behavior. *J Am Acad Psychiatry Law* 35:294–301, 2007
2. American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders (Text Revision): DSM-IV-TR* (ed 4). Washington, DC: American Psychiatric Press, 2000
3. Slutske WS, Eisen S, Xian H, *et al*: A twin study of the association between pathological gambling and antisocial personality disorder. *J Abnorm Psychol* 110:297–308, 2001
4. *United States v. Grillo*, 111 Fed. Appx. 631; 2004 U.S. App. LEXIS 19087 (2nd Cir. N.Y.)

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5. Potenza MN: Should addictive disorders include non-substance-related conditions?, in *Diagnostic Issues in Substance Use Disorders: Refining the Research Agenda for DSM-V*. Edited by Saunders JB, Schuckit MA. Washington, DC: American Psychiatric Press, Inc, 2007, pp 251–68
6. Petry NM: Should the scope of addictive behaviors be broadened to include pathological gambling?, in *Diagnostic Issues in Substance Use Disorders: Refining the Research Agenda for DSM-V*. Edited by Saunders JB, Schuckit MA. Washington, DC: American Psychiatric Press, Inc, 2007, pp 269–83
7. Hollander E, Kim S, Zohar J: OCSDs in the forthcoming DSM-V. *CNS Spectrums* 12:320–3, 2007
8. Argo T, Black DW: Clinical characteristics, in *Pathological Gambling: A Clinical Guide to Treatment*. Edited by Grant JE, Potenza MN. Washington, DC: American Psychiatric Press, 2004, pp 39–53
9. Potenza MN, Xian H, Shah K, *et al*: Shared genetic contributions to pathological gambling and major depression in men. *Arch Gen Psychiatry* 62:1015–21, 2005
10. Potenza MN: Impulse control disorders and co-occurring disorders: dual diagnosis considerations. *J Dual Diagn* 3:47–57, 2007
11. Potenza MN, Steinberg MA, McLaughlin SD, *et al*: Illegal behaviors in problem gambling: analysis of data from a gambling helpline. *J Am Acad Psychiatry Law* 28:389–403, 2000
12. Grant JE, Potenza MN: Treatments for pathological gambling and other impulse control disorders, in *A Guide to Treatments That Work*. Edited by Gorman J, Nathan P. Oxford, UK: Oxford University Press, 2007, pp 561–77
13. Kiefer F, Helwig H, Tarnaske T, *et al*: Pharmacological relapse prevention of alcoholism: clinical predictors of outcome. *Eur Addict Res* 11:83–91, 2005