

PATHOLOGICAL GAMBLING AND PERSONALITY DISORDERS: AN EXPLORATORY STUDY WITH THE IPDE

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This article describes the most frequent personality disorders related to pathological gambling. Participants included 50 pathological gamblers assessed with the IPDE, and 50 normative subjects from the general population with the same demographic features (age, sex, and socioeconomic level). Thirty-two percent of the clinical sample (vs. the 8% of the normative sample) showed at least one personality disorder. The most prevalent disorders were Borderline (16%), followed by Antisocial, Paranoid, Narcissistic, and Non-specified (8% each). Gamblers with personality disorders presented an average of 1.5 disorders and they reported higher gambling severity and more severe symptoms of anxiety, depression and alcohol abuse. The implications of this study for clinical practice and research are discussed.

Several studies report on the role of psychiatric comorbidity in pathological gambling (Crockford & El-Guebaly, 1998), but few have examined the role of personality disorders. Investigations of personality profiles of pathological gamblers are inconsistent, except for impulsivity (Blaszczynski, Steel, & McConaghy, 1997). These studies offer some support for the classification of pathological gambling as an impulse disorder in the DSM-IV-TR (American Psychiatric Association, 2000). The few studies of the relationship between PDs and pathological gambling do not draw definitive conclusions (cf. Black & Moyer, 1998; Blaszczynski & Steel, 1998; Lesieur & Blume, 1990; Specker, Carlson, Edmonson, Johnson & Marcotte, 1996). There are large discrepancies across studies in the prevalence of PDs, which range from 25% (Specker et al., 1996) to 93% (Blaszczynski & Steel, 1998). In addition, the aver-

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age number of diagnosed PDs for each patient is over four, suggesting overdiagnosis due to the use of self-report questionnaires.

The present study seeks to address this problem by assessing PDs in pathological gamblers with a semistructured diagnostic interview (International Personality Disorders Examination [IPDE]; Loranger, 1995; Spanish version of López-Ibor, Pérez-Urdániz, & Rubio, 1996).

METHOD

SUBJECTS

The sample consisted of 100 subjects (50 pathological gamblers and 50 normative subjects from general population). All of them gave their informed consent to take part in the study. The clinical sample consisted of patients who sought treatment at the Pathological Gambling Center of Rentería (Basque Country) during the period from October 2001 to August 2003. Criteria for inclusion in the study included: (a) meeting the diagnostic criteria of pathological gambling according to DSM-IV (American Psychiatric Association, 1994); (b) having a score of 4 to 19 on the Spanish version (Echeburúa, Báez, Fernández-Montalvo, & Páez, 1994) of the South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987) in order to prevent false positives; (c) not be suffering from another psychopathological disorder from Axis I; and (d) gambling primarily with slot machines. The adoption of the last two requirements corresponds to the goal of focusing on “pure” gamblers (unafflicted by other clinical disorders) and on a homogeneous sample regarding the type of gambling involved.

The group of gamblers had a mean age of 33.5 years ($SD = 10.2$), all of them were men, and their socioeconomic level was middle to lower-middle class. The average score on the SOGS was 11.9 ($SD = 2.5$), with a range of 9 to 18. Gambling behavior was characterized as being frequent (4 days/week), entailing a considerable amount of money invested (157 /week), and involving a substantial amount of time (8 hours/week) and of debt (3,673). Patients were dependent on gambling for nearly 6 years before seeking treatment.

The normative control group was composed of people without an Axis I disorder, selected among the normal population, and matched in age, sex, and social class with the clinical group. Mean age was 34.8 years ($SD = 9.3$), all were men, and all belonged to the middle to lower-middle socioeconomic level. There were no differences between groups.

ASSESSMENT MEASURES

The Structured Clinical Interview is an instrument designed with the objective of assessing, in an initial interview, pathological gambling ac-

according to DSM-IV criteria, as well as the main characteristics that are present in this type of patient.

Gambling Variables. The South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987; Spanish version by Echeburúa et al., 1994) is a screening questionnaire composed of 20 items that are related to gambling behavior, loss of control, the sources for obtaining money, and the emotions involved. The Spanish version has a test-retest reliability of .98 and internal consistency of .94. The correlation between the SOGS and DSM-IV criteria is .92. The range of possible scores is 0 to 19, and a score higher than 4 (the cut-off point) serves to identify probable pathological gamblers (Echeburúa et al., 1994). The Pathological Gambling Dependent Variables Questionnaire (Echeburúa & Báez, 1994) provides some relevant information about the dependent variables of gambling: the amount of money, the frequency, and the time dedicated weekly to gambling on average.

Personality Traits and Disorders. The Impulsivity Scale (BIS-10; Barratt, 1985; Spanish version of Luengo, Carrillo de la Peña, & Otero, 1991) consists of 33 items aimed at assessing impulsivity (range: 0-132).

The International Personality Disorders Examination (IPDE; Loranger, 1995; Spanish version of López-Ibor et al., 1996) is a semistructured diagnostic interview designed to assess PDs. The IPDE covers all of the criteria for the 11 Axis II disorders of the DSM-IV. To establish reliable diagnoses, the behavior or trait must be present for at least 5 years to be considered and the criterion must be met before the age of 25. A self-administered IPDE screening questionnaire is available prior to the interview to assist in identifying personality disorders that might be of focus in the interview. The interrater reliability of the IPDE is generally good (median kappa is .73), as well as the test-retest reliability (median: .87) (Blanchard & Brown, 1998).

Psychopathological Variables. The State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, 1970; Spanish version of TEA, 1982) consists of 20 items related to anxiety-trait and another 20 related to the anxiety-state. The range of scores is from 0 to 60 on each scale.

The Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979; Spanish version of Vázquez & Sanz, 1999) consists of 21 items, and measures the intensity of symptoms of depression (range: 0-63).

The Alcohol Use Disorders Identification Test (AUDIT; Babor, De la Fuente, Saunders, & Grant, 1989; Spanish version of Echeburúa, 1996) is a questionnaire elaborated by the World Health Organization for the early identification of problems related to alcohol. It consists of 10 questions referring to the quantity and frequency of alcohol consumption, drinking behavior, and to the reactions or problems related to alcohol (range: 0-36).

The Inadaptation Scale (IS; Echeburúa, Corral, & Fernández-Montalvo, 2000) reflects the extent to which the subject's gambling problems cause

maladjustment in everyday life (social, work, leisure, couple and family) (scoring range: 0-30).

PROCEDURE

Pre-treatment assessment of the pathological gamblers was conducted in two sessions. During the first session, data related to gambling behavior were collected, and measures of psychopathological characteristics and the IPDE screening test were administered. The IPDE was administered during the session interview.

The assessment of the normative sample was carried out after a previous stratification in age, sex, and social class with those subjects of the previous group. For assessment of this group one session was used to administer the IPDE screening test and to assess the personality disorders identified in the previous screening test with the IPDE interview. In this group the assessment decreased to one session because gambling behavior and psychopathological symptoms were not assessed.

To determine interrater reliability, two experienced clinical psychologists conducted the clinical diagnosis of pathological gambling and of personality disorders together. The agreement for the gambling diagnosis was 100%. In the case of personality disorders, the interrater reliability in joint interviews was high (κ : .87).

RESULTS

PERSONALITY TRAITS AND PSYCHOPATHOLOGICAL PROFILE OF PATHOLOGICAL GAMBLERS

The mean score in the trait-anxiety scale was 21.8 [$SD = 8.4$] in the gambling group, versus 20.2 [$SD = 8.0$] ($t = 1.35$; ns) in the control group. In the case of impulsivity, gamblers obtained a mean score of 62.1 ($SD = 15.5$), which denotes a high degree of impulsivity.

In psychopathological variables, anxiety was significantly higher in the gambling group ($M = 24.9$; [$SD = 12.2$]) versus $M = 20.5$ [$SD = 10.5$]; $t = 2.52$; $p < .01$) in the control group. Depression scores were not significantly higher in the patient group ($M = 10.1$; [$SD = 5.5$]). Alcohol consumption was not increased. The mean score of 5.9 [$SD = 4.1$] was below the cut-off of 8 for abuse and 20 for dependence. However, there was a subsample of 23 cases (46 percent of gamblers) who scored above the cut-off for abuse.

Scores on the maladaptation questions were significantly higher in the group of pathological gamblers ($M = 9.2$ [$SD = 4.6$]) versus $M = 2.23$ [$SD = 0.75$]; $t = 6.16$; $p < .001$) in the control group. Nearly half of the sample showed significant maladjustment.

PERSONALITY DISORDERS

The overall prevalence of at least one personality disorder in the sample of pathological gamblers was 32% ($N = 16$). The most prevalent diagnosis was borderline personality disorder, which affected 16% of the cases, followed by Antisocial, Paranoid, Narcissistic, and Non-specified, which were each observed in 8% of the sample. In addition, participants with personality disorders met criteria for an average of 1.5 disorders. In contrast only 8% (4 subjects) in the normal sample met criteria for a personality disorder. Differences between groups were significant ($\chi^2 = 7.5$; $p < .05$).

Comparisons between gamblers with and without personality disorders indicated that those with personality disorders showed gambling severity ($t = 2.6$; $p < .05$), anxiety ($t = 3.95$; $p < .01$), depression ($t = 4.94$; $p < .001$), and alcohol abuse ($t = 4.03$; $p < .01$), than those without personality disorders.

DISCUSSION

The profile of the patients in this study is that of impulsive people with mild anxious and depressive symptoms, and with a tendency to abuse alcohol and to have problems with adaptation to daily life. These results add further evidence of elevated traits of impulsivity among pathological gamblers and suggest that this trait is important in conceptualizing the treatment of this disorder (see also Blaszczynski et al., 1997; Steel & Blaszczynski, 2002).

Personality disorder was more common in pathological gamblers than in the normal population, but not as frequent as reported in other studies (Black & Moyer, 1998; Blaszczynski & Steel, 1998; Lesieur & Blume, 1990). This discrepancy probably is due to the use of a structured interview rather than a self-report inventory.

The frequency of Cluster B disorders probably represents the role of impulsivity in the development of pathological gambling. The presence of PD is associated with greater gambling severity and more severe symptoms of anxiety, depression, and alcohol abuse. This finding raises the possibility that there are different subgroups of gamblers denoting impaired control over their behavior.

REFERENCES

- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th. ed.). Washington, DC: Author.
- American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders* (4th. ed. Revised Text). Washington, DC: Author.
- Babor, T., De la Fuente, R., Saunders, J., & Grant, M. (1989). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary health care*. Geneva, Switzerland: World Health Organization. Programme on Substance Abuse. WHO/PSA/92.4.
- Barratt, E.S. (1985). Impulsiveness subtraits: Arousal and information processing. In J.T. Spence & E.C. Itard (Eds.), *Motivation, Emotion and Personality*. North Holland: Elsevier.
- Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). *Cognitive therapy of depression: A treatment manual*. New York: Guilford Press.
- Black, D.W., & Moyer, T. (1998). Clinical features and psychiatric comorbidity of subjects with pathological gambling behavior. *Psychiatric Services*, 49, 1434-1439.
- Blanchard, J.J. & Brown, S.B. (1998). Structured Diagnostic Interview Schedules. In C.R. Reynolds (Ed.), *Assessment* (A.S. Bellack & M. Hersen. *Comprehensive Clinical Psychology*, vol. 4). Amsterdam: Elsevier Science.
- Blaszczynski, A., Steel, Z., & McConaghy, N. (1997). Impulsivity in pathological gambling: The antisocial impulsivist. *Addiction*, 92, 75-87.
- Blaszczynski, A., & Steel, Z. (1998). Personality disorders among pathological gamblers. *Journal of Gambling Studies*, 14, 51-71.
- Crockford, D.N., & El-Guebaly, N. (1998). Psychiatric comorbidity in pathological gambling: A critical review. *Canadian Journal of Psychiatry*, 43, 43-50.
- Echeburúa, E. (1996). *Alcoholismo*. Madrid: Aguilar.
- Echeburúa, E., & Báez, C. (1994). Concepto y evaluación del juego patológico. In J.L. Graña (Ed.), *Conductas adictivas: Teoría, evaluación y tratamiento*. Madrid: Debate.
- Echeburúa, E., Báez, C., Fernández-Montalvo, J., & Páez, D. (1994). Cuestionario de Juego Patológico de South Oaks (SOGS): Validación española. *Análisis y Modificación de Conducta*, 20, 769-791.
- Echeburúa, E., Corral, P. & Fernández-Montalvo, J. (2000). Escala de Inadaptación: Propiedades psicométricas en contextos clínicos. *Análisis y Modificación de Conducta*, 26, 325-340.
- Lesieur, H.R., & Blume, S.B. (1987). The South Oaks Gambling Screen (SOGS). A new instrument for the identification of compulsive gamblers. *Psychological Reports*, 70, 691-696.
- Lesieur, H.R., & Blume, S.B. (1990). Characteristics of pathological gamblers identified among patients on a psychiatric admission service. *Hospital and Community Psychiatry*, 41, 1009-1012.
- López-Ibor, J., Pérez-Urdániz, A. & Rubio, V. (1996). *Examen Internacional de los Trastornos de la Personalidad: Módulo DSM-IV. Versión española*. Madrid: Organización Mundial de la Salud.
- Loranger, A.W. (1995). *International Personality Disorders Examination (IPDE)*. Geneva, Switzerland: World Health Organization.
- Luengo, M.A., Carrillo de la Peña, M.T. & Otero, J.M. (1991). The components of impulsiveness: A comparison of the I.7 impulsiveness questionnaire and the Barratt Impulsiveness Scale. *Personality and Individual Differences*, 12, 657-667.
- Specker, S.M., Carlson, G.A., Edmonson, K.M., Johnson, P.E., & Marcotte, M. (1996). Psychopathology in pathological gamblers seeking treatment. *Journal of Gambling Studies*, 12, 67-82.
- Spielberger, C.D., Gorsuch, R.L., & Lushene, R.E. (1970). *Manual for the State/Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press (Spanish version, TEA, 1982).
- Steel, Z., & Blaszczynski, A. (2002). Impulsivity, personality disorders and pathological gambling severity. In J. J. Marotta, J.A. Cornelius, & W.R. Eadington (Eds.), *The downside: Problem & pathological Gambling*. Reno, NV: University of Nevada.
- Vázquez, C., & Sanz, J. (1999). Fiabilidad y validez de la versión española del Inventario para la Depresión de Beck de 1978 en pacientes con trastornos psicológicos. *Clínica y Salud*, 10, 59-81.