The WAGER, Vol. 13(3) - Game Preferences of Pathological Gamblers and Odds of Recovery

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Researchers have speculated as to whether different types of games have different associations with disordered gambling (Ladd & Petry, 2007; Urbanoski & Rush, 2006). However, few studies have tested this speculation in a rigorous manner. This week's WAGER takes a second look (see WAGER 13(2) for the first look) at Kessler, Hwang, LaBrie, Petukhova, Sampson, Winters, & Shaffer (2008) who examined the epidemiology of gambling and games played. In this WAGER, we will examine the study's assessment of the distribution of pathological gambling (PG) and recovery across different forms of gambling.

The National Comorbidity Survey Replication (NSC-R), a nationally representative sample of 9,282 English speaking adults (Kessler & Merikangas, 2004), used the Composite International Diagnostic Interview (CIDI; Kessler & Ustun, 2004) to assess DSM-IV criteria (American Psychiatric Association, 1994) for Axis I disorders among participants. For gambling, the instrument also assessed what types of games each participant played and, for gamblers who experienced problems, whether they experienced recovery (defined as being symptom free for the two years prior to the interview).

Table 1. Lifetime prevalence of types of gambling and their associations with PG and recovery (adapted from Kessler et al., 2008).

Game type	Game Type Prevalence (%)	Odds of PG among Participants Playing Each Game Type (CI)	Odds of Recovery among Problem Gamblers* Playing Each Game Type (CI)
Lotto/numbers	62.2	0.6 (0.2-2.4)	0.2* (0.1-0.8)
Slots, bingo, pull tabs	48.9	0.5 (0.2-1.2)	0.3* (0.1-0.8
Casino sports book	44.7	1.4 (0.5-4.3)	4.8* (1.5-15.5)
Office sports pool	44.3	1.7 (0.4-6.5)	0.3 (0.1-1.2)
Games with mental skill	35.8	12.2* (3.1-47.7)	8.9 (8.9-0.7-114.6)
Gambling machines	26.1	3.3* (1.3-8.4)	1.3 (0.4-4.1)
Horse race; dog/cock fight	25.0	3.2* (1.3-8.6)	1.0 (0.4-2.6)
Games with physical skill	22.7	1.8 (0.6-5.3)	2.5 (0.8-7.7)

Note. CI = confidence interval; OR = odds ratio. Presented ORs are adjusted for sex, race-ethnicity-age of onset (AOO) of 1st gambling, years since 1st gambling,

and 11 game types.

+ Problem gamblers defined as participants who endorse one or more DSM-IV criteria for PG.

*p < 0.05

More than half (54.7) of gamblers with problems (i.e., meeting 1 or more lifetime DSM-IV criteria for PG) played 7 or more games, compared to 17.1% of non-problem gamblers. All groups favored games in a similar ranked order. Table 1 shows those who played "games of mental skill" (e.g., cards) were more likely to qualify for PG than others. Table 1 also shows that casino sports book gambling at casinos was associated with higher odds of recovery among problem gamblers than other games, whereas slots, bingo, and pull tabs were associated with lower odds of recovery.

These results reflect patterns of association, so we cannot determine whether gambling problems developed as a result of game choice or influenced game choice. Therefore, implicating one game as more dangerous or more difficult to recover from than another exceeds the limits of this study's methodology.

The study is important for many reasons. It employs a representative sample and used replicable and reliable methods to collect data. The study shows that people with gambling problems do not play games randomly; there are some significant trends associated with likelihood of developing problems and the likelihood of recovery. Future research using longitudinal designs will be necessary to shed light on the psychosocial or game characteristics that account for the patterns shown in the table and, perhaps ultimately, hold potential to improve prevention and early detection.

What do you think? Comments can be addressed to Leslie Bosworth

References

American Psychiatric Association. (1994). DSM-IV: Diagnostic and statistical manual of mental disorders (Fourth ed.). Washington, D.C.: American Psychiatric Association.

Kessler, R. C., Hwang, I., LaBrie, R., Petukhova, M., Sampson, N. A., Winters, K. C., et al. (in press). DSM-IV pathological gambling in the National Comorbidity Survey Replication. Psychological Medicine

[preprint available]

Kessler, R. C., & Merikangas, K. R. (2004). The National Comorbidity Survey Replication (NCS-R): Background and aims. International Journal of Methods in Psychiatric Research, 13(2), 60-68.

Kessler, R. C., & Ustun, T. B. (2004). The World Mental Health (WMH) Survey Initiative version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). International Journal of Methods in Psychiatric Research, 13(2), 93-121.

Ladd, G. T., & Petry, N. M. (2007). Disordered Gambling Among University-Based Medical and Dental Patients: A Focus on Internet Gambling. Psychology of Addictive Behaviors, 16(1), 76-79.

Urbanoski, K. A., & Rush, B. R. (2006). Characteristics of people seeking treatment for problem gambling in Ontario: Trends from 1998 to 2002. Journal of Gambling Issues, 16.