Op-Ed/Editorials – The State of Public Health Research on Internet Gambling

June 27, 2007

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Scientific medical research advances in progressive stages and at a deliberate pace. This approach to knowledge development requires several stages of inquiry, analysis, and review before advocacy and action can occur. Although this structure might frustrate some (e.g., anti-gambling activists and pro-gaming corporations), it is essential to the accumulation of accurate information. Too often, well-meaning people rush ahead of scientific knowledge (e.g., despite limited evidence, policy makers worldwide are legislating Internet gaming issues). Doing so has three potential costs: (1) over-intervention for problems that are more minimal than expected or non-existent; (2) insufficient response for circumstances that require specific interventions; or (3) inappropriately applied and potentially damaging interventions for problems that require unique

strategies that are not obvious from anecdotal observation. The principle of unanticipated consequences suggests that prematurely accepting information or adopting a public policy position about a phenomenon can create more confusion than it resolves.

Consider, for example, the Unlawful Internet Gambling Enforcement Act (hereafter, Internet Gambling Act) approved by the United States Congress in 2006. Rose (Rose, 2006a, 2006b, 2006c, 2006d; 2006e) provided a series of legal analyses of the Internet Gambling Act, which expands the reach of federal anti-gambling statutes. According to Rose, the bill makes it a crime to accept or facilitate funds for unlawful Internet gambling. Not all Internet gambling is unlawful. Some forms of Internet gambling, such as horse racing, lottery, and fantasy league games, remain legal. In the absence of science related to Internet gambling, public arguments for the law included assertions about the harmfulness of Internet gambling to families and individuals (e.g., Kyl, 2003). However, it is unclear what public health equation allowed for some types of Internet gambling, but not others. Most recently, news reports suggest that online gambling is growing among ever-changing, unregulated, websites and/or disreputable web operators (e.g., Hartman, 2007; Holahan, 2006). Time will tell whether these problems are realized and if an unintended consequence of the legislation is that people who want to wager their money actually become more at-risk financially because of dealing with unscrupulous vendors.

One reason why Internet gambling alarms so many people is that it is prolific and expected to grow (Christian Capital Advisers, 2006); though, some observers note that its consumer growth is slow, compared to other forms of gambling (e.g., casinos and lottery) (Miller, 2006). Growth increases exposure, and research suggests that the newly exposed have special risks for poor health outcomes (LaPlante & Shaffer, under review; Shaffer, LaBrie, & LaPlante, 2004). Poor gambling-related outcomes often include financial distress, emotional and physical deterioration, and damaged interpersonal relationships (Shaffer & Korn, 2002). Some research suggests that disordered gambling relates to poor mental health, such as personality and psychiatric disorders (Petry, Stinson, & Grant, 2005; Slutske, Caspi, Moffitt, & Poulton, 2005).

Other speculations about potential hazards particular to Internet gambling include the apparent lack of fail-safes, such as the ability to protect individuals who are underage or people known to have problems from participating and the

potential for unprincipled marketing techniques, such as embedding (i.e., gaming sites using keywords like “compulsive gambling” for search engines) and serial pop-ups (Griffiths & Parke, 2002). Similarly, some observers have speculated that Internet gambling sites can do little to prevent gambling while intoxicated or gambling at work (Griffiths, 1999).

At this time, there is very little peer-reviewed and published empirical research about Internet gambling. With some exceptions, theoretical propositions and opinion papers represent most of the professional discussion surrounding this topic (e.g., Bulkeley, 1995; Federal Trade Commission, 2003; Griffiths, 1996; Griffiths, 2003; Griffiths, Parke, Wood, & Parke, 2006; Griffiths, 1999, 2001; Ialomiteanu & Adlaf, 2002; LaBrie, Shaffer, LaPlante, & Wechsler, 2003; Ladd & Petry, 2002; Miller, 2006; Petry & Mallya, 2004; Shaffer, 1996; Volberg, 2000; Woodruff & Gregory, 2005). Most of the opinion papers suggest that Internet gambling is inherently harmful to individuals and society. Unlike other forms of gambling, which have benefited from a diversity of methodological approaches, including observational, experimental, and neuropsychological approaches (e.g., Anderson & Brown, 1984; Baboushkin, Hardoon, Derevensky, & Gupta, 2001; Breen & Frank, 1993; Ladouceur, Gaboury, Bujold, Lachance, & et al., 1991; Potenza et al., 2003; Shaffer, LaPlante et al., 2004), the available empirical findings are from studies that use variations of retrospective self-report methodology. Consequently, what we actually know about the effect of Internet gambling on individuals is limited, at best.

The limitations of retrospective self-report are well-known. In brief, some common biases associated with this type of methodology are memory-errors, self-presentation strategies, and simple miscomprehension. Subtle factors, such as the phrasing of survey questions, provoke additional biases. For example, in one study, researchers took a large group of gamblers and divided them randomly into groups that would be asked different “spending” questions (Williams & Wood, 2004). The questions ranged from asking respondents simply to report their total money won or lost, to asking for complicated monetary breakdowns by type of gambling activity, unit of play, and typical number of units of play. The range of responses to the spending questions was large. In brief, the question “Roughly how much money do you come out ahead or behind on gambling in a typical month?” resulted in a mean loss of $10 CAN. The most complicated framing of spending, a series of estimates of frequency and amount by type of gamble, produced an average loss of about $50 CAN.

One way to avoid these retrospective self-report problems is to use objective data. Many life sciences researchers rely, for example, on biological estimates of nicotine consumption to determine the accuracy of study participants' self-reports of tobacco smoking. Absent the possibility of easily obtainable biological estimates in the social sciences, researchers can examine individuals' actual behavior over time (e.g., the bets that people make or betting patterns that people adopt). Although this might seem like common sense, scientists have not had actual real-time Internet gambling behavior to examine, so their only option has been to study self-reports about gambling behavior.

Public policy makers, public health officials, researchers, and gaming-operators would gain numerous benefits from studies that measure actual Internet gambling behavior. First, this strategy avoids relying on data that might be compromised by poor recall. Second, it avoids utilizing data liable to self-presentation biases. Whereas adults notoriously underestimate negative behavior to put themselves in a good light, youth notoriously overestimate negative behavior to put themselves in a "good" light. Third, examining real-time gambling behavior avoids the perils of miscommunication and subsequent data ambiguity.

It is time to stop speculating about Internet gambling and actually see it for what it is. To do this, more researchers need to adopt multiple methodological approaches to the study of Internet gambling. Those approaches need to go beyond retrospective self-report and include objective measures, such as actual Internet gambling behavior. Until then, our knowledge about any harm Internet gambling exerts on individuals will remain limited.

Acknowledgments

The Division on Addictions receives funding for its studies of Internet sports gambling from bwin.com, Interactive Entertainment AG. The Division also receives funding from the National Center for Responsible Gaming, National Institute of Mental Health (NIMH), National Institute of Alcohol Abuse and Alcoholism (NIAAA), National Institute on Drug Abuse (NIDA), the Massachusetts Council on Compulsive Gambling, the State of Nevada Department of Public Health, the Massachusetts Family Institute, and others. The authors of this editorial take responsibility for its content and do not personally benefit (i.e., stocks, etc.) from gaming interests.

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