## The Wager, 8(20) - Problem Gambling in Norway

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As legalized gambling has continued to expand into new regions, there has been an increased emphasis in the international community to determine pathological gambling prevalence rates (e.g., Abbott, 2001; Bondolfi, Osiek, & Ferrero, 2000; Sproston, Erens, & Orford, 2000). Götestam and Johansson (2003) conducted the first survey of gambling habits and pathological gambling prevalence in Norway. This week's WAGER presents the results of their study. Götestam and Johansson (2003) conducted a random-digit dialing survey of 4820 Norwegian households. The authors required respondents to be at least 18 years of age; of 4213 eligible respondents, 2014 (948 male) completed the interview for an overall response rate of 47.8%. Trained interviewers asked questions regarding current gambling frequency, money spent, type of play and the ten DSM criteria for pathological gambling (American Psychiatric Association, 1994). DSM questions were not asked with a specific time reference (e.g., ever, in the last year), though in response to an inquiry from The WAGER, the authors stated that they worded the questions in the present tense and considered their wording to yield a "point" prevalence (i.e., pathology at the time of the interview). The authors classified respondents who met five or more of the DSM-IV criteria as "pathological" gamblers, three or four criteria as "at-risk" gamblers, and all gamblers who satisfied three or more criteria as "problematic" gamblers.

The study revealed that 68% of the sample gambled at least "sometimes."\*\* Of those who engaged in gambling activities, 0.15% classified as pathological gamblers, and an additional 0.45% qualified as "at-risk" gamblers (see Table 1). They also noted that being young (p<.05), male (p<.01), and having a low education level (p<.05) were positively correlated with increased gambling, and that gamblers in their study were more likely to smoke (c2 = 41.01, p<.001). The most popular game among studied gamblers was "Lotto," played by 76.0% of the sample. Nearly all included gamblers spent less than 50,000 krones (roughly 16.6% or less of the Norwegian average annual household income\*\*; approximately U.S. \$5000) on gambling per year. Only 0.05% of the sample spent greater amounts per year on gambling activities.

Table 1. Number and percent of pathological, at-risk, and problematic gambling (Götestam & Johansson, 2003)

Type of Gambling	Total (n=2014)		
	N	%	
Pathological Gambling	3	0.15	
At-risk Gambling	9	0.45	
Problematic Gambling	12	0.60	

These results are consistent with other studies of international gambling activities (Table 2). Norway has the lowest occurrence of levels 2 and 3 (i.e., "problematic") gambling. This could be attributable to a variety of factors, including different methods of estimate calculation between studies, and the fact that widespread legalized gambling in Norway has only been available for a short time.

Table 2. Past year international prevalence estimates\*\*\*

Adults <sup>4</sup>	U.S. 1979*	U.S. 2000**	Sweden 2001***	Switzer- land 2000*	New Zealand 2001®	Britain 2000."	South Africa 2001 <sup>8</sup>	Norway 2003
LEVEL	97.1	96.8	98.0	97.0	98.7	99.3		99.4
LEVEL	2.2	2.2	1.4	2.2	0.8	_		0.45
LEVEL	0.7	1.1	0.6	0.8	0.5	0.7	1.1/1.47	0.15
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In a personal communication with The WAGER, the corresponding author notes, "DSM is basically diagnosing the present state. The more sensitive items, however (e.g., stealing), are usually assessed in the lifetime perspective. The diagnosis is still considered mainly as point prevalence, although the borders are somewhat diffuse." Hence, although the authors suggest the results should be interpreted with a point prevalence timeframe, the timeframe is not consistent for all criteria. This ambiguity makes it difficult to understand the prevalence rates and to compare the rates to other international studies that utilize more traditional timeframes. A further limitation is that telephone surveys exclude those who do not have a telephone. This could include a considerable number of pathological gamblers who lost everything—including their telephone. The telephone methodology coupled with the low response rate compromises the representation of the study.

Despite these concerns, this study is important because it represents the first comprehensive effort to study the habits of gamblers within Norway, and contributes more generally to an increased global awareness of the need to monitor the effects of gambling on exposed populations. Continued study of gambling habits within Norway and other nations throughout the world will be a

necessary component of unraveling the comparative effects of gambling across societies and cultures.

Comments on this article can be addressed to Tony Donato.

## **Notes**

\* The authors defined "sometimes" as less than weekly.

\*\* The average after-tax household income for Norway in 2000 was 301,900 krones (Statistics Norway, 2002).

\*\*\* "Past year" estimates are shown for all countries except Norway, where a "Current," or point prevalence estimate is shown.

\*\*\*\* Level 1 = non-problematic gambling

Level 2 = problem or "at-risk" gambling

Level 3 = pathological gambling

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