



## **Memo 090623**

### **Results of SWELOGS – population survey on gambling and health**

This memo presents the background and the preliminary results of a new population survey on health and gambling - SWELOGS (Swedish Longitudinal Gambling Study). The study was conducted by the Swedish National Institute of Public Health during the period from November 2008 to April 2009. The study will be repeated several times until 2014. The focus of this report is on comparing the results of the new study with those of an earlier population study on gambling and pathological gambling in Sweden from 1997/98 SWEGS (Swedish Gambling Screen). The data will undergo further analysis and a final report will be presented in November 2009.

### **Background**

#### **SWELOGS Research Program**

SWELOGS, Swedish Longitudinal Gambling Studies, is a long-term research program on gambling and health in Sweden. It is conducted and financed by the Swedish National Institute of Public Health. The program will follow developments pertaining to the adverse effects of excessive gambling. One objective is to identify risk and protection factors of significance for the development of gambling problems. The goal is to generate knowledge to develop preventive measures against gambling problems in society. An international group of researchers is affiliated with the study, which is being conducted in collaboration with Mid-Sweden University and the Karolinska Institute.

The research program's research design contains three components:

1. EP: epidemiological study of 15,000 persons with a representative sample of the population aged 16-84 followed over time at intervals of one to three years.
2. ID: in-depth study of 1,750 persons with gambling problems of varying severity who agreed to participate in additional interviews. For the second portion (ii) of the in-depth study, young persons aged 16-24 were separately tracked and followed up at narrower intervals.
3. 578 panel: a small panel of 578 persons from the earlier Swedish population study on gambling and gambling addiction conducted in 1997/98 (SWEGS). These 578 persons agreed during the earlier study to be contacted again, and were later included in a follow-up study in 2001. Half of these persons had been defined as having gambling problems, and half were a control group matched based on gender, age and location.

The results presented here come from the epidemiological study (EP) above.

#### **SWEGS - an earlier population study on gambling and problem gambling from 1997/98**

The most recent scientific study on gambling and gambling addiction, the Swedish Gambling Screen (SWEGS) was conducted in 1997/98 under the leadership of Professor Sten Rönnerberg.



The study examined 10,000 persons aged 15-74. According to this study, approximately two percent of the population aged 15-74 had a gambling problem. The study was followed up by an in-depth interview study with 578 respondents which was published in the report entitled *Gambling Addiction in Sweden – the characteristics of problem gamblers*. SWELOGS provides an opportunity to follow up on changes over the past ten years. SWELOGS was partly conducted using the same measuring instruments used in SWELOGS, so that results from the two studies can be compared.

### **Definitions and measuring instruments for problem gambling**

Unless otherwise indicated, "gambling" in this report refers to "gambling for money". All use of the terms "gambling problems"/"problem gambling" and "pathological gambling" refers to varying degrees of problems arising as a result of gambling for money. Problem gambling is generally defined based on how many criteria a person meets on one of the approximately fifteen diagnostic instruments for gambling abuse. In the two studies whose results are compared below, the measuring instrument SOGS-R (South Oaks Gambling Screen – Revised) was used. The following criteria are measured:

- Respondent attempts to win back money lost through gambling
- Respondent claims to have won money gambling, but has in fact lost money
- Respondent feels that his/her gambling is problematic
- Respondent has more than once been unsuccessful in controlling, limiting or stopping gambling
- Respondent has been criticized about his/her gambling
- Respondent feels guilty about gambling
- Respondent feels unable to stop gambling, even if (s)he wanted to
- Respondent has hidden betting slips, lottery tickets, gambling money or other signs of gambling from his/her family or other important persons in his/her life
- Respondents has argued with persons (s)he is close to about how (s)he handles money in relation to gambling
- Respondents has lost time from work and/or school due to gambling
- Respondent has borrowed money to gamble

Problem gambling is defined here as meeting three or more of these criteria, and serious gambling problems (pathological gambling) are defined as meeting five or more criteria. The difference between problem gambling and a gambling addiction, therefore, is one of degree.

In this text, the terms "serious gambling problems" and "pathological gambling" are used to describe a subset of those with gambling problems.

### **SWELOGS - A population study on gambling and health**

The National Institute of Public Health recently completed the first data collection included in the SWELOGS population study on gambling and health. The study examined 15,000 persons aged 16-84, and will be repeated several times until 2014.



## **Study objectives, selection and methodology**

### Objectives

The study has the following objectives:

1. To measure the prevalence of problem gambling and pathological gambling in Sweden, both in the general population, in various demographic groups and in relation to the various forms of gambling.
2. To investigate how problem gambling and pathological gambling co-vary with gambling patterns and with social, economic and health factors, both in the general population and in various demographic groups with the purpose of identifying vulnerable groups in society.
3. To compare measurements from other countries with the earlier Swedish population study on gambling and pathological gambling from 1997/98.
4. To investigate how TV- and computer gambling co-vary with problem gambling and with economic, social and health factors.
5. To measure what proportion of the population is aware of existing initiatives for advice, support and treatment of gambling problems.
6. To measure the number of relatives, including children, who are affected by gambling problems in the population as a whole and in various segments of the population.  
7) To provide a baseline for future follow-up at the population level, which will cover both prevalence and incidence measurements.
7. To provide a base from which to recruit a panel for the in-depth study which will cover at least 1,750 persons with gambling problems of varying degrees of severity.  
9) To provide a knowledge base for developing improved measuring instruments for gambling abuse.
8. To validate FORS, the short instrument which was developed for use in the National Survey of Public Health conducted annually by the Swedish National Institute of Public Health to identify problem gambling

### Population and sample

The population consists of all persons aged 16-84 listed in the Swedish population register at the time of selection of the sample. The selection was performed on a representative sample of the population (probability selection) and was stratified based on gender, age and the probability of having gambling problems. The latter calculation was made based on an application of the results of calculations made from register variables associated with data from a pilot study on gambling and health conducted in the spring of 2008.

### Method of data collection

The primary method of data collection is computer-supported telephone interviews. The interviews were supported by professional interpreters. For non-response follow up, mail surveys were sent along with two reminders to the persons who could not be reached by telephone.



### Informational letter

All persons in the selection were given an informational folder about the study and a brochure about the National Institute of Public Health. A special parent/guardian letter was also sent to parents/guardians of the 16- and 17-year-olds in the selection. The information folders, brochures and parent/guardian letters were translated into Arabic, English, Farsi, Finnish, Meänkieli, Polish, Romani, Saami (Sydsamiska), Somalian, Thai, and Yiddish.

### Response frequency

Response frequency for the first SWELOGS data collection was 62 percent.

## **Results from SWELOGS 2008/2009**

Men participate in gambling more often than women. The new study shows that 74 percent of men and 67 percent of women had gambled for money during the past year. In total, 70 percent of the population had gambled over the past year. Among both women and men, fewer young people gamble. Only 42 percent of women and 61 percent of men aged 16-17 had gambled for money during the past twelve months, while the corresponding figure for men in all age groups over 18 years is around 75 percent.

The new study shows that approximately two percent of the population has gambling problems, and the just over one-third of those with gambling problems have a gambling pathological gambling. The results also show that problem gambling is more common among persons with a low income than among those with a high income, and that problem gambling is more common among men than women. Young men aged 18-24 are the group with the highest prevalence of gambling problems, while women over age 65 are the group with the lowest prevalence of problem gambling.

## **Comparison with earlier studies**

### **Gambling participation**

The results show that in total, the proportion of Swedes who gamble for money has declined. In the earlier study, 88 percent of the population had gambled for money during the past year. The corresponding figure in this year's study is 70 percent.

**Table 1:** Changes in gambling in the Swedish population

	SWELOGS 2008/2009	SWEGS 1997/98
Has gambled during the past 12 months	88%	70%



Gambling participation has declined in all age groups and for both women and men, see Table 2. The largest decline in gambling participation can be seen in the youngest age group (ages 16-17).

**Table 2:** Gambling by gender and age

Age	Men		Women	
	2008/2009	1997/1998	2008/2009	1997/1998
16-17	61%	87%	42%	68%
18-24	75%	92%	59%	82%
25-44	76%	91%	70%	88%
45-64	76%	89%	71%	89%
65-74	73%	86%	70%	83%

### Problem gambling and gambling addiction

In total, problem gambling in Sweden remains unchanged, meaning that approximately 2 percent of the population has gambling problems. Of these persons, one-fourth (0.5 percent of the population) had serious gambling problems or a gambling addiction. In the new study, almost one-third of those with gambling problems have a pathological gambling.

A comparison between the studies shows that in total, problem gambling has increased significantly among young men aged 18-24. In this group, the proportion of persons with gambling problems has increased from 5 percent 1997-98 to 9 percent in this year's study. Among women aged 45-64, the proportion of persons with gambling problems has doubled. Among younger women and older men, the proportion of persons with gambling problems has declined.

The results also show an increased proportion of young men with serious gambling problems. This is primarily true of men in the 18-24 and 24-44 age groups. In the 25-44 age group, the proportion of persons with serious gambled problems has doubled. Among the youngest men aged 16-17, both problem gambling and pathological gambling have declined.

**Table 3:** Problem gambling (including serious problem gambling) by gender and age

Age	Men		Women	
	2008/2009	1997/1998	2008/2009	1997/1998
16-17	7% (2%)	10% (4%)	3% (1%)	3% (1%)
18-24	9% (3%)	5% (2%)	2% (0,4%)	3% (1%)
25-44	4% (2%)	5% (1%)	0,5% (0,3%)	1% (0%)
45-64	1% (0,5%)	2% (1%)	0,6% (0%)	0,3% (0,1%)
65-74	1% (0,3%)	1% (0%)	0,4% (0%)	0%

### Contact:

**Marie Risbeck**, Project Manager, Gambling Prevention at the Swedish National Institute for Public Health, +46 63-19 97 24, marie.risbeck@fhi.se