

GAMES OF CHANCE AND PATHOLOGICAL GAMBLING

Basic findings (2014)

The report presents the main results of a survey on the presence of pathological gambling among third and fourth grade secondary school students in Zemun. The survey was conducted in November and December 2014, and the data were statistically processed in January 2015.

Survey objectives

The main objectives of the survey referred to:

- determining the popularity of playing games of chance (both classical games of chance such as *lotto*, *bingo*, *scratch cards*, etc., and specific games of chance such as sports betting, electronic games and online games) and determining main demographic characteristics of players of different games of chance types;
- determining the presence of pathological gambling and main demographic characteristics of persons showing pathological gambling symptoms in the population of third and fourth grade secondary school students in Zemun.

Methodology

A quantitative survey using a questionnaire with 27 questions, comprising a 12-question questionnaire on pathological gambling and questions referring to demographic characteristics and gambling habits

According to the Diagnostic and Statistical Manual of Mental Disorders, pathological gambling is indicated by demonstrating at least 6 (out of 12) pathological gambling diagnostic criteria. In this survey, the manifestation of 4-5 pathological gambling diagnostic criteria is treated as an indication of the evident risk of developing the pathological gambling disorder.

Sample structure

- A partially stratified sample of third and fourth grade secondary school students;
- Sample size:
 - **2,095** of the total of **3,180** third and fourth grade secondary school students in Zemun, which accounts for **65.88%** of the total population of students in those grades in Zemun.
 - **2,095** of the total of **30,084** third and fourth grade secondary school students in the city of Belgrade, which accounts for **6.96%** of the total population of students in those grades in Belgrade, based on which it can be stated that the sample is representative.

(data on the population of third and fourth grade secondary school students in the city of Belgrade and Zemun were taken from the website of the Statistical Office:

<http://webrzs.stat.gov.rs/WebSite/repository/documents/00/01/39/07/SB-579-Obrazovanje.pdf>)

- Age – third and fourth grade secondary school students;
 - Survey area – secondary schools in the territory of Zemun;
 - The survey sample of the total of 2,095 respondents included students of the following schools:
 - Zemun High School (517 students – 24.7% of the sample);
 - Traffic-Technical School (411 students – 19.6% of the sample);
 - Medical School "Nadežda Petrović" (388 students – 18.5% of the sample);
 - Economics School "Nada Dimić" (342 students – 16.3% of the sample);
 - Law and Administration School "Dimitrije Davidović" (265 students – 12.6% of the sample);
 - School of Electrical Engineering (172 students – 8.26% of the sample);
 - By gender, the total sample of 2,095 students comprised:
 - male students (1,036 students – 49.5% of the sample);
 - female students (1,059 students – 50.5% of the sample);
- This made the sample balanced when it comes to gender.

MAIN SURVEY RESULTS

- In the survey sample, the following **pathological gambling risk level distribution** was determined:
 - 1,959 respondents (93.5%) are at a **LOW** risk for becoming pathological gamblers,
 - 61 respondents (2.9%) are at an **EVIDENT** risk for becoming pathological gamblers,
 - 75 respondents (3.6%) show characteristics of **PATHOLOGICAL GAMBLERS**.
- When it comes to **the type of games of chance**, the following was determined:
 - In general, secondary school students playing games of chance (**1,417 - 67.6%**) represent a majority, and their number is more than twice higher than the number of secondary school students who do not play any types of games of chance (**678 respondents - 32.4%**);
 - When we **separate only the sample of respondents playing any of the games of chance**, the percentage of favorite games is distributed in the following manner:
 - classical games of chance are played by **43.5%** of players,
 - betting games of chance are played by **37.5%** players,
 - electronic games of chance are played by **15%** of players, and
 - online games of chance are played by **4%** of players.
- By the use of statistical analysis methods for finding connections and algorithms for determining the existence of statistically significant differences among the respondents and facts pertaining to them, the following regularities were found:
 - In **male student players**, **both forms of risk** are equally present (evident risk = **7%**; pathological gambling **7.8%**),
 - In **female student players**, pathological gambling is more pronounced in relation to the evident gambling risk (evident risk = **0.9%**; **pathological gambling 2.2%**)
- **Male students** play betting games almost five times more often than female students (442:90), they play electronic games of chance three times more often (159:52) and online games of chance by one third more often than female students (32:24);

- **Female students** play classical games of chance (lotto, bingo, lottery, etc.) three times more often than male students (468:150).

- Respondents - players also differ for the type of games of chance in relation to the determined gambling risk.
 - At a **low risk** - they mostly play classical games of chance (47.3%), and then betting games (36.8%)
 - At an **evident risk** – they mostly play betting games (52.5%), and then electronic games of chance (39.3%)
 - With **characteristics of pathological gamblers** - they mostly play electronic games of chance (50.7%), and then betting games (37.3%)
- Students – **pathological gamblers** are characterized by *poor results achieved at school*, and they are most frequent grade repeaters in relation to other categories of responders;
- Students – **pathological gamblers** have *drinking* experience more frequently than other categories of responders
- Students – **pathological gamblers** have experience taking *drugs* more frequently than other categories of responders.
- Students – **pathological gamblers** mostly have *a better standard of living* than other categories of responders.
- Students – **pathological gamblers** manifest *a state of distraction* more frequently than other categories of respondents.
- While half of players at a *low risk* declare that playing those games is *fun* for them, players at an *evident risk* most often (61%), similarly to *pathological gamblers* (57.3%), see primarily **possible earnings** in such an activity.
- Students – **pathological gamblers** more frequently (40%) declare that their *parents are not familiar* with such activities of theirs in relation to players at an evident risk (29.5%) and players at a low risk (22.7%).
- Students – **pathological gamblers** more frequently (**86.7%**) declare that they are *preoccupied with gambling* in relation to players at an evident risk (64%) and players at a low risk (6.6%).

- Students – **pathological gamblers** more often (**85.3%**) *express a need for gambling with higher stakes* than players at an evident risk (57.4%) and players at a low risk (3%).
- Students – **pathological gamblers** more often (**92%**) *spend an amount exceeding their pocket money* than players at an evident risk (82%) and players at a low risk (19%).
- Students – **pathological gamblers** more often (**92%**) *return to gambling upon suffering a considerable loss* to recover the lost money in relation to players at an evident risk (70%) and players at a low risk (3.6%).
- Students – **pathological gamblers** more often (73%) *feel empty and irritable* due to inability to gamble in relation to players at an evident risk (13%) and players at a low risk (0.2%).
- Students – **pathological gamblers** more often (65%) *experience various problems with the environment*, school and family due to their gambling in relation to players at an evident risk (6.6%) and players at a low risk (0.2%).
- Students – **pathological gamblers** more often (38.7%) *tried to cease* their gambling activities than players at an evident risk (31%) and players at a low risk (5.7%).
- Students – **pathological gamblers** more often (**83%**) *ran away from school* to gamble in relation to players at an evident risk (34.4%) and players at a low risk (1.4%).
- Students – **pathological gamblers** were more often (62.7%) *warned by others* about their gambling problems in relation to players at an evident risk (16.4%) and players at a low risk (0.4%).
- Students – **pathological gamblers** more often (**80%**) *borrowed money* for their gambling activities than players at an evident risk (30%) and players at a low risk (0.6%).
- Students – **pathological gamblers** more often (59%) *stole things and money from their home* to gamble in relation to players at an evident risk (6.6%) and players at a low risk (0.2%).
- Students – **pathological gamblers** more often (50.7%) *hid their gambling activities from their family and friends* in relation to players at an evident risk (21%) and players at a low risk (2.5%).

The said differences in characteristics of the observed subgroups in the survey sample have been determined by the chi-square method, and those differences are significant at a statistical significance level of **p<0.001**; which speaks of the fact that students - pathological gamblers are really different from both students who do not gamble and students who play various games of chance, but their activities are still at a low risk level, i.e. at an evident risk level for pathological gambling.

The profile of secondary school students – **pathological gamblers** can therefore be defined as a male person who most often plays electronic and betting games of chance, achieves poor results at school, gets drunk and takes drugs more often than his peers, whose (usually wealthy) parents most frequently do not know about his pathological gambling, while their children are preoccupied with that activity. A pathological gambler - secondary school student sees gambling as possible earning and thus returns to gambling with increasingly higher stakes, trying to recover the lost money and spending more of their pocket money, stealing things and money from home or borrowing money for gambling from others, and hiding their activities from the family and friends. Their gambling often causes problems in their relationship with the environment, school and family, for which they are often warned by others, and they thus repeatedly try (without success) to cease the compulsive need for gambling, due to which they often run away from classes. However, the feeling of irritability and emptiness when they are not able to gamble override their desire to cease and they return to that vicious circle.

Prof. Žarko Trebješanin, PhD
Assist. Prof. Goran Jovanić, PhD