EXPLORING YOUTH GAMBLING IN CROATIA
- pilot research results -

Dora Dodig, M.A.
Neven Ricijaš, Ph.D.
Department of Behavior Disorders
Faculty of Education and Rehabilitation Sciences
University of Zagreb

8th European Conference on Gambling Studies and Policy Issues
Wien, 14th – 17th of September 2010
Background

- no systematic research about youth gambling in Croatia

- other research, as well as clinical work with youth problem behaviors indicate that it is a growing and present issue
About our research...

- **PILOT STUDY** – March 2010 on a sample of N=261 high-school students in the City of Zagreb

- **MAIN STUDY**
  - planned for academic year 2010/2011
  - Faculty of Education and Rehabilitation Sciences, Department of Behavior Disorders
  - financially supported by Croatian Lottery
  - organizationally supported by Croatian Education and Teacher Training Agency
  - planned sample
    - N=2,000 students
    - 4 main urban areas, all Croatian regions
    - age: 14 – 18 years
METHODOLOGY
SAMPLE

• N=261
  ▫ Male = 58.2%
  ▫ Female = 41.8%

• $M_{age}=16.51$ (SD$_{age}=1.15$)

• TYPE OF SCHOOL:
  • 38% - gymnasium high school program
  • 37% - 4 year vocational program (economists)
  • 25% - 3 year vocational program (drivers)
INSTRUMENTS

- Sociodemographic Characteristics Questionnaire,
- **Gambling Habits Questionnaire** (Ricijaš, Dodig & Huić)
- **South Oaks Gambling Scale (SOGS-RA);** Winters, Stinchfield i Fulkerson, 1993.,
- **DSM-IV-J** (Fisher, 1992) pathology gambling criteria,
- **Gambling Attitudes Scale** (Ricijaš, Dodig – constructed for this research),
- **Youth Psychopathic Traits Inventory – YPI** (Andershed, Kerr, Stattin i Levander, 2002),
- **Youth Self-Reported Delinquent and Risk Behavior Questionnaire** (Ajduković, Ručević, Šincek, 2007).
RESULTS
Gambling habits

Games of chance

- Roulette
- Slot Machines
- Bingo
- Lottery
- Scratch tickets
- Betting on virtual races etc.
- Betting on contests

Games of skill

- Poker
- Sports betting
- Card games
- Pool and/or pin-ball

➢ “No” and “Yes”
➢ If “yes” – how often
➢ average amount of money (per month)
The most frequent games:

- Sports betting
- Scratch tickets
- Lottery
- Pool and/or pin-ball (for money)
## Gender differences in gambling habits

<table>
<thead>
<tr>
<th>Activity</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contest Betting</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Internet</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Virtual Races</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td>Poker</td>
<td>47</td>
<td>10</td>
</tr>
<tr>
<td>Blackjack</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>Roulette</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Electronic Roulette</td>
<td>34</td>
<td>6</td>
</tr>
<tr>
<td>Slot Machines</td>
<td>59</td>
<td>15</td>
</tr>
<tr>
<td>Scratch Tickets</td>
<td>59</td>
<td>48</td>
</tr>
<tr>
<td>Bingo Casino</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>TV Bingo</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Lottery</td>
<td>49</td>
<td>42</td>
</tr>
<tr>
<td>Sports Betting</td>
<td>102</td>
<td>21</td>
</tr>
<tr>
<td>Pool</td>
<td>63</td>
<td>22</td>
</tr>
<tr>
<td>Card Games</td>
<td>62</td>
<td>22</td>
</tr>
</tbody>
</table>

\[ \chi^2 = *** p < .001 \]
• There are differences in gambling habits regarding gender in:
  - Card games,
  - Pool and/or pin-ball for money,
  - Sports betting,
  - Slot-machines,
  - Roulette and electronic roulette,
  - Black jack,
  - Poker,
  - Betting on virtual races.

• Boys play them more often.

• Gambling games specific for population of problem/pathological gamblers

• According to foreign researches, these games are often an “entrance” to pathological gambling.
Type of school differences in gambling frequency; Kruskal-Wallis Test

<table>
<thead>
<tr>
<th>Activity</th>
<th>χ² Value</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pool</td>
<td>9.744</td>
<td>&lt;.010</td>
</tr>
<tr>
<td>Lottery</td>
<td>9.678</td>
<td>&lt;.010</td>
</tr>
<tr>
<td>TV Bingo</td>
<td>16.458</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Slot Machines</td>
<td>6.787</td>
<td>&lt;.050</td>
</tr>
</tbody>
</table>

The graph shows the frequency of gambling activities among students in different types of schools. The chi-square values and their associated p-values indicate statistically significant differences among the groups.
## Gambling Risk Assessment

<table>
<thead>
<tr>
<th><strong>SOGS-RA</strong> (Winters Stinchfield, &amp; Fulkerson, 1993)</th>
<th><strong>DSM-IV-J</strong> (Fisher, 1992)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- self-report measure (12 items)</td>
<td>- assessment measure (10 items)</td>
</tr>
<tr>
<td>- instrument constructed for gambling risk assessment</td>
<td>- criteria for DSM-IV PG dg. transformed into claims</td>
</tr>
<tr>
<td>- YES - 1/NO - 0</td>
<td>- YES - 1/NO – 0</td>
</tr>
<tr>
<td>- focused on psychosocial consequences of gambling</td>
<td>- focused on symptoms of gambling addiction</td>
</tr>
</tbody>
</table>
| **SOGS-RA**  
(Winters Stinchfield, & Fulkerson, 1993) | **DSM-IV-J**  
(Fisher, 1992) |
|---|---|
| • example:  
*I had problems with parents, friends and in school because of gambling.* | • example:  
*Gambling is my way of running away from problems and dealing with guilt, depression and anxiety.* |

| **CRITERIA:**  
SOCIAL – 0 to 1,5 points  
RISK – 2 to 4,5 points  
PROBLEM – 5 to 10/12 points | **SCORES:**  
never= 0  
rarely= 0,5  
sometimes= 1  
often= 1 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• for research purpose variables were modified into continuous variables</td>
<td></td>
</tr>
</tbody>
</table>
Risk Categorization (N=261)

- DSM-IV
  - Social G.: 77.4%
  - Risk G.: 16.5%
  - Problem G.: 6.1%

- SOGS
  - Social G.: 69.9%
  - Risk G.: 20.8%
  - Problem G.: 9.3%
Risk Categorization (N=196)

- DSM-IV:
  - Social Group: 72.6%
  - Risk Group: 17.9%
  - Problem Group: 9.4%

- SOGS:
  - Social Group: 62.9%
  - Risk Group: 25.7%
  - Problem Group: 11.4%
Gender differences in risk categorization (SOGS)

\[ \chi^2 = 25,790 \]
\[ \text{df} = 2 \]
\[ p < 0.001 \]
Differences in type of school in risk categorization (SOGS)

\[ \chi^2 = 2,852 \]
\[ \text{df} = 4 \]
\[ p > .050 \]
Age differences in risk categorization (SOGS)

ANOVA
\[ F (2,209) = .914 \]
\[ p > .050 \]
Differences in gambling frequency between risk categories (SOGS), Kruskal-Wallis Test
• Adolescents who satisfy criteria for problem gambling are prone to:

- Card games,
- Pool and/or pin-ball for money,
- Sports betting,
- Scratch tickets,
- Poker,
- Betting on virtual races,
- Internet gambling.
Conclusion

• High prevalence of risk and problem gamblers.
  a) Need for preventive and treatment interventions
  b) Development of responsible society
  c) Need for further research
THANK YOU FOR YOUR ATTENTION!