Sports betting of adolescents in Croatia: from favorable environment to psychosocial consequences

Dora Dodig, M.A.
Neven Ricijaš, Ph.D.
Valentina Kranželić, Ph.D.
Aleksandra Huić, Ph.D.
Social context

- Expansion of places registered for gambling, especially sports betting
- Croatian Law on Games of Chance (2009.)
  - Sports betting is illegal for minors (<18)
  - Minimum 200 meters from schools

Everyday experience and clinical practice imply that legislation is not being implemented properly.
# Frequency of REGULAR gambling

\[ \geq 1x \text{ per week} \]

<table>
<thead>
<tr>
<th></th>
<th>Whole sample (N=1.952)</th>
<th>Sample &lt;=17 years (N=1.457)</th>
<th>Boys in sample (N=915)</th>
<th>Boys &lt;=17 years (N=663)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports betting</td>
<td>19.0%</td>
<td>18.2%</td>
<td>37.4%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Slot machines</td>
<td>6.2%</td>
<td>5.8%</td>
<td>11.8%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Virtual races betting</td>
<td>6.1%</td>
<td>6.2%</td>
<td>11.7%</td>
<td>11.8%</td>
</tr>
</tbody>
</table>
Aims of this research

1. to explore **how often** high-schools students bet on sports results
2. to explore how often adolescents who participate in sports betting play **other games** of chance
3. to explore how many high-school students report that **their parents and friends** play games of chance
4. to explore **the acceptability of gambling** by family members
5. to explore **their severity of psychosocial consequences**
Sample

- **N = 1,952**

Participated in sports betting at least once in their lifetime
- **N = 807**
  - **41,3%**

- **1x per week or more often**
  - **REGULAR**
    - **N=369**
      - **45,7%**
  - **OCCASIONAL**
    - **N=438**
      - **54,3%**
Sample - age & gender

M = 16.73
SD = 1.142
Sample - frequency & gender

\[ \chi^2 = 87.02 \quad p < .001 \]
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Construct</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gambling Activity Scale</strong> (Ricijaš, Dodig, Huić, Kranželić, 2011)</td>
<td>Intensity of Gambling on 15 Games of Chance (yes or no; if yes - how often?)</td>
</tr>
<tr>
<td><strong>Canadian Adolescent Gambling Inventory - CAGI</strong> (Tremblay, Wiebe, Stinchfield &amp; Wynne, 2010)</td>
<td>Gambling Problem Severity Subscale (GPSS) Score</td>
</tr>
</tbody>
</table>
| **Specific questions about gambling activities of close friends and family members** | - According to your findings, how often at least one of your friends play games of chance?  
- Do your family members play these games of chance at least once a month?  
- Do your parents know that you gamble/bet?  
- Do you sometimes play one of these games with your parents? |
RESULTS
<table>
<thead>
<tr>
<th>Other games of chance</th>
<th>Sports betting</th>
<th>Mean Rank</th>
<th>M-W U</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Occasional</td>
<td>345.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>473.02</td>
</tr>
<tr>
<td>Slot machines</td>
<td></td>
<td>Occasional</td>
<td>403.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>404.09</td>
</tr>
<tr>
<td>Lottery</td>
<td></td>
<td>Occasional</td>
<td>395.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>414.42</td>
</tr>
<tr>
<td>Scratch cards</td>
<td></td>
<td>Occasional</td>
<td>355.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>461.62</td>
</tr>
<tr>
<td>Electronic roulette</td>
<td></td>
<td>Occasional</td>
<td>333.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>488.27</td>
</tr>
<tr>
<td>Virtual races betting</td>
<td></td>
<td>Occasional</td>
<td>356.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>459.84</td>
</tr>
<tr>
<td>On-line gambling</td>
<td></td>
<td>Occasional</td>
<td>356.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>459.84</td>
</tr>
</tbody>
</table>
Canadian Adolescent Gambling Inventory (CAGI) Gambling Problem Severity Subscale (GPSS)

**NATIONAL PREVALENCE**

N=1,952

- **12,3%** “RED LIGHT” High severity
- **16,9%** “YELLOW LIGHT” Low-to-moderate severity
- **70,9%** “GREEN LIGHT” No problem

**SPORTS BETTING**

N=807

- **27,1%** “RED LIGHT” High severity
- **31,5%** “YELLOW LIGHT” Low-to-moderate severity
- **41,4%** “GREEN LIGHT” No problem
GPSS & intensity of sports betting

\[ \chi^2 = 190.579; \ p < 0.001 \]
Psychosocial consequences (CAGI)

Psychological consequences
- REGULAR: 0.1
- OCCASIONAL: 0.5

Social consequences
- REGULAR: 0.2
- OCCASIONAL: 0.3

Financial consequences
- REGULAR: 0.2
- OCCASIONAL: 0.4

Loss of control
- REGULAR: 1.0
- OCCASIONAL: 0.8

Significance levels:
- t = 10.257***
- t = 11.259***
- t = 11.732***
- t = 17.090***
Parents’ and peers’ gambling activities
Fathers’ gambling activities

- **Scratch cards**: $X^2 = .461$
- **Lottery**: $X^2 = .007$
- **On-line gambling**: $X^2 = 3.894^*$
- **Roulette**: $X^2 = .930$
- **Slot machines**: $X^2 = 1.082$
- **Sports betting**: $X^2 = 11.757^{***}$

**Note:** $X^2$ values indicate the significance of the differences between regular and occasional gambling activities.
Do your parents know that you gamble?

\[ X^2 = 15.948 \]

\[ p < 0.001 \]
Do you sometimes gamble with your parents?

- Scratch cards
  - Regular: 20,000%
  - Occasional: 30,000%
  - $X^2 = 7.014^*$

- Lottery
  - Regular: 20,000%
  - Occasional: 33,000%
  - $X^2 = 7.985^*$

- On-line gambling
  - Regular: 5,000%
  - Occasional: 10,000%
  - $X^2 = 2.659$

- Roulette
  - Regular: 1,000%
  - Occasional: 3,000%
  - $X^2 = 0.357$

- Slot machines
  - Regular: 5,000%
  - Occasional: 10,000%
  - $X^2 = 1.105$

- Sports betting
  - Regular: 50,000%
  - Occasional: 60,000%
  - $X^2 = 15.174^{***}$
<table>
<thead>
<tr>
<th>Peers’ gambling frequency</th>
<th>Sports betting</th>
<th>Mean Rank</th>
<th>M-W U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports betting</td>
<td>Occasional</td>
<td>342.47</td>
<td>54050.00***</td>
</tr>
<tr>
<td></td>
<td>Regular</td>
<td>473.63</td>
<td></td>
</tr>
<tr>
<td>Slot machines</td>
<td>Occasional</td>
<td>368.94</td>
<td>65659.50***</td>
</tr>
<tr>
<td></td>
<td>Regular</td>
<td>440.09</td>
<td></td>
</tr>
<tr>
<td>Roulette</td>
<td>Occasional</td>
<td>359.13</td>
<td>61468.50***</td>
</tr>
<tr>
<td></td>
<td>Regular</td>
<td>450.51</td>
<td></td>
</tr>
<tr>
<td>On-line gambling</td>
<td>Occasional</td>
<td>374.79</td>
<td>67970.50***</td>
</tr>
<tr>
<td></td>
<td>Regular</td>
<td>433.79</td>
<td></td>
</tr>
</tbody>
</table>
Adolescent who regularly bets on sports results

Male

Greater risk for developing severe psychosocial consequences

Father – sports betting & on-line gambling

Parents know about gambling

Has friends who frequently participate in games of chance

Other risky gambling activities

More often bets on sports together with parents
Research in practice

**What we know?**

- Gambling is available and accessible in Croatia
- Social acceptability of gambling
- Sports betting is the most popular gambling activity
- It is correlated with other risky gambling activities
- Possible influence of family factors
- Important role of peers

**What we did?**

- Prevention program “Who really wins?”
- Pilot - 2 high-schools in Zagreb (N=120)
- *Evidence based* on research results and principles of successful gambling prevention practice
- Evaluation in progress
- Dissemination planned for school year 2013./14.
Thank you for your attention!

😊

doradodig@gmail.com

neven.ricijas@gmail.com