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

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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 >= 1x per week

<table>
<thead>
<tr>
<th>Activity</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

N = 807
41,3%

Participated in sports betting at least once in their lifetime

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

χ² = 87.02
p < .001

<table>
<thead>
<tr>
<th></th>
<th>MALE</th>
<th>FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCCASIONAL</td>
<td>286</td>
<td>152</td>
</tr>
<tr>
<td>REGULAR</td>
<td>342</td>
<td>27</td>
</tr>
<tr>
<td>Instrument</td>
<td>Construct</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| **Gambling Activity Scale**
(Ricijaš, Dodig, Huić, Kranželić, 2011)     | Intensity of Gambling on 15 Games of Chance (yes or no; if yes - how often?) |
| **Canadian Adolescent Gambling Inventory - CAGI**
(Tremblay, Wiebe, Stinchfield & Wynne, 2010) | Gambling Problem Severity Subscale (GPSS) Score                            |
| **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>Occasional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slot machines</td>
<td>345.85</td>
<td></td>
<td>55341.00**</td>
</tr>
<tr>
<td></td>
<td>473.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lottery</td>
<td>403.92</td>
<td></td>
<td>80778.00</td>
</tr>
<tr>
<td></td>
<td>404.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scratch cards</td>
<td>395.22</td>
<td></td>
<td>76967.00</td>
</tr>
<tr>
<td></td>
<td>414.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic roulette</td>
<td>355.45</td>
<td></td>
<td>59547.50**</td>
</tr>
<tr>
<td></td>
<td>461.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virtual races betting</td>
<td>333.01</td>
<td></td>
<td>49716.00**</td>
</tr>
<tr>
<td></td>
<td>488.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-line gambling</td>
<td>356.96</td>
<td></td>
<td>60206.00**</td>
</tr>
<tr>
<td></td>
<td>459.84</td>
<td></td>
<td></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

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

- Psychological consequences: $t=10.257^{***}$
- Social consequences: $t=11.259^{***}$
- Financial consequences: $t=11.732^{***}$
- Loss of control: $t=17.090^{***}$

Legend:
- RED: REGULAR
- BLUE: OCCASIONAL
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: $X^2 = 11.757^{***}$
Do your parents know that you gamble?

\[ X^2 = 15.948 \]
\[ p < 0.001 \]
Do you sometimes gamble with your parents?

- Scratch cards: \(X^2=7.014^*\)
- Lottery: \(X^2=7.985^*\)
- On-line gambling: \(X^2=2.659\)
- Roulette: \(X^2=.357\)
- Slot machines: \(X^2=1.105\)
- Sports betting: \(X^2=15.174^{***}\)

Legend:
- Red: Regular
- Blue: Occasional
## Intensity of sports betting & peers’ gambling frequency, Mann-Whitney Test

<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

GREATER RISK FOR DEVELOPING SEVERE PSYCHOSOCIAL CONSEQUENCES

FATHER – SPORTS BETTING & ON-LINE GAMBLING

OTHER RISKY GAMBLING ACTIVITIES

PARENTS KNOW ABOUT GAMBLING

MALE

HAS FRIENDS WHO FREQUENTLY PARTICIPATE IN GAMES OF CHANCE

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!

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