Adolescent slot machines players: experiences, motivation and cognitive distortions

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Social context

- Expansion of places registered for gambling
- Gambling is illegal for minors (< 18 years of age)
Social context

Statistics on December 31st 2011:

- 24 casinos
- 223 slot machine clubs
- 3,472 places registered for gambling

+ bars/coffee shops that have sports betting machines
+ bars/coffee shops that have slot machines
Project “Youth Gambling in Croatia”

I. 2010: Gambling of High-Schools Students in the City of Zagreb

II. 2011: Gambling of High-School Students in Croatian Urban Areas

III. 2012: Gambling of Students at University of Zagreb

IV. 2013: Gambling of High-School Students in Smaller Towns

National Study

“Gambling of High-School Students in Croatian Urban Areas”

Supported by:
University of Zagreb
Ministry of Science, Education and Sport
National Teacher Training Agency
Croatian Lottery
N=1,952 high school students
- from March to May, 2011
- 88 classes, 24 schools
- representative sample
Life-time prevalence
Gambled at least once in their lives
(N=1.952)

- Gambled at least once in lifetime: 83%
- Never gambled: 17%
## Frequency of REGULAR gambling

>= 1x 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</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 play slot machines
2. to explore how often adolescent slot machine players play **other games** of chance
3. to explore their main **motivation** and **beliefs** related with gambling
4. to explore their **gambling experiences** and **behavioral patterns**
played slot machines at least once in their lifetime

N = 1.952

N = 491 (25.15%)

1x per week or more often

REGULAR
N = 123
25.9%

OCCASIONAL
N = 368
74.9%
Sample - cities

\[ \chi^2 = 3.021; \ p > .050 \]
Sample - age & gender

M = 16.76
SD = 1.197

MALE
FEMALE

71.30%
28.70%
Sample - frequency & gender

χ² = 24.09
p < .001
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gambling Activity Scale (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>Canadian Adolescent Gambling Inventory - CAGI (Tremblay, Wiebe, Stinchfield &amp; Wynne, 2010)</td>
<td>Gambling Problem Severity Subscale (GPSS) Score</td>
</tr>
<tr>
<td>Motivation for Gambling Scale (Ricijaš, Dodig, Huić, Kranželić, 2011)</td>
<td>10 Different Motives for Gambling</td>
</tr>
</tbody>
</table>
| Gambling Cognitive Distortions Scale (Ricijaš, Dodig, Huić, Kranželić, 2011) | Cognitive distortions:  
1. Illusion of control  
2. Erroneous beliefs/Incorrect understanding of probability |
| Specific questions about gambling behavior and experiences | - won a large sum of money?  
- when win, encouraged to continue  
- behavior patterns |
<table>
<thead>
<tr>
<th>Other games of chance</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports betting</td>
<td>.430</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Lottery</td>
<td>.273</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Scratch tickets</td>
<td>.333</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Electronic roulette</td>
<td>.576</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Card games in casino</td>
<td>.499</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Virtual races betting</td>
<td>.520</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
Canadian Adolescent Gambling Inventory (CAGI) Gambling Problem Severity Subscale (GPSS)

“RED LIGHT”  
High severity  
(6+ points)

“YELLOW LIGHT”  
Low-to-moderate severity  
(2-5 points)

“GREEN LIGHT”  
No problem  
(0-1 points)
### 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

### SLOT MACHINE PLAYERS

N = 491

- **32.8%**  
  “RED LIGHT”  
  High severity

- **27.5%**  
  “YELLOW LIGHT”  
  Low-to-moderate severity

- **32.8%**  
  “GREEN LIGHT”  
  No problem
GPSS & intensity of playing slot machines

Χ²=66.653; p<,001
Motivation for gambling

- For fun & excitement: Regular 3, Occasional 2.5
- To relax: Regular 1.5, Occasional 2
- To feel better: Regular 2, Occasional 2.5
- To earn money: Regular 3.5, Occasional 3
- To be a better gambler: Regular 1, Occasional 1.5

Statistical results:
- For fun & excitement: t=0.126; p>.050
- To relax: t=5.389; p<.001
- To feel better: t=3.283; p<.001
- To earn money: t=6.241; p<.001
- To be a better gambler: t=4.326; p<.001
Cognitive distortions

- Illusion of Control
- Erroneous Beliefs/Incorrect Understanding of Probability

Statistical signification:
- t = 2.417
- p < .050
Experiences while gambling

How often have you won a large sum of money?

OCCASIONAL
- 34.30% NEVER
- 18.80% ONCE
- 39.00% FEW TIMES
- 7.90% MANY TIMES

REGULAR
- 34.30% NEVER
- 52.80% ONCE
- 33.30% FEW TIMES
- 7.90% MANY TIMES
<table>
<thead>
<tr>
<th>How often have you...</th>
<th>OCCASIONAL</th>
<th>REGULAR</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>...gone back another day to try to win back money?</td>
<td>1.50 0.83</td>
<td>2.25 1.16</td>
<td>6.64***</td>
</tr>
<tr>
<td>....gambled with more money than you intended to?</td>
<td>1.51 0.74</td>
<td>2.41 1.09</td>
<td>8.49***</td>
</tr>
<tr>
<td>...sold your personal property to have money for gambling/betting?</td>
<td>1.07 0.33</td>
<td>1.47 1.00</td>
<td>4.33***</td>
</tr>
<tr>
<td>...stolen money in order to gamble or to pay off debts?</td>
<td>1.06 0.29</td>
<td>1.44 0.92</td>
<td>4.55***</td>
</tr>
</tbody>
</table>
Winning money while gambling encourages me to continue gambling.

- Occasional = 25.2% say its true
- Regular = 46.4% say its true
Conclusion - profile

**Male**

**Plays other games of chance more frequently**

**Has won a large sum of money gambling (subjective perception!**

**Shows risk behavioral patterns related to gambling:**
- going back
- more money
- selling property
- stealing money

**ADOLESCENT WHO PLAYS SLOT MACHINES REGULARLY**

**Has developed psychosocial consequences regarding to gambling**

**Has multiple motivation, but especially motivated by earning money, to solve negative emotions and to become a better gambler**

**Has more illusion of control in gambling activities**
Conclusion - what needs to be done

Further research

Improving policy (accessibility)

Implementation of interventions
Thank you for your attention! ☺️

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