Online gambling among 20-year-olds in Ireland

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Introduction

• Much media attention about gambling, both traditional and online, and its impact but nationally representative data is scarce

• Wave 4 of GUI now available, we can now explore these issues among Young Adults using longitudinal data for the first time in Ireland

• Access to gambling data is currently limited

• But online gambling data is available, so that we can look at prevalence and trajectory of the phenomenon

• Way-marker for further exploration using more detailed data
Background - Gambling

- International surveys tend to find around 60% gamble in some form, with much national variation
  - Finland 80% in the last year (Castren et al., 2018)
  - U.S. 77% in the last year (Welte et al., 2015)
  - Ireland 64% in the last year (NACDA, 2015)
  - U.K 54% in the last year (YouGov, 2020)
  - France 47% in the last year (ODJ, 2019)
- 1-3% of population develop gambling problem (Dunne et al., 2017)
- Problem gambling tends to peak around 30 years of age
- Costs associated with problem gambling
  - Range of negative consequences across psychological, interpersonal, familial, economic and legal domains (Blinn-Pike et al, 2010)
  - Economic burden >£1 billion per year for England (PHE, 2020)
Background – Online Gambling

What is online gambling?

• UK: Online gambling represented 40% total gambling 2020
  (Gambling Commission, 2020)

• EU: €26 billion online revenue 2020
  (2025 estimate €37 billion)
  (EGBA, 2020)

• Different characteristics from traditional gambling
  – Always available, fewer constraints
  – Method of payment (predominantly credit card)
  – Engaged in outside normal social context
  – Heavily advertised, immersive web design
• Typically measured using psychometric scales – PGSI, DSM IV / V

• Some evidence that prevalence of problem gambling is higher for online, but picture is mixed

• With rapid growth of online gambling, literature struggling to keep up with the phenomenon

• Risk factors for problem gambling among young people (PHE evidence summary, 2020):
  » Male
  » Impulsivity
  » Substance use (Alcohol, smoking, drugs)
  » Poor mental health
  » Frequency and range of gambling activities

• Other evidence, including longitudinal data, suggests:
  » High screentime
  » Stressful events
  » Poorer physical health
  » Earlier gambling age onset
Background – Data for Ireland

National Advisory Committee on Drugs and Alcohol: 2014/15 survey conducted by IPSOS

- 2019 NACDA survey data not available at this point

<table>
<thead>
<tr>
<th>Online/phone gambling by age group</th>
<th>All gambling by age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of respondents online/phone gambling</td>
<td>% of respondents all gambling</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>15-17</td>
<td>18-24</td>
</tr>
</tbody>
</table>
| [Bar chart showing percentage of respondents engaged in online/phone gambling and all gambling by age group.]
Background – Data for Ireland

Online/phone gambling: youngest two age groups

Source: NACDA 2014/15
Questions

• Prevalence of online gambling at Wave 3 and Wave 4

• Associations with sex and other sociodemographic variables

• Associations with concurrent and antecedent known risk factors in problem gambling
Methods – Data

Sample
Growing Up in Ireland ‘98 cohort
Wave 3 (17/18 years) n=6,216
Wave 4 (20 years) n = 5,190
Analytic sample for this study
4,393 (unweighted)

Analysis
→ Descriptive
→ Bivariate
→ Multivariate

<table>
<thead>
<tr>
<th>Sex</th>
<th>Wave 3</th>
<th>Wave 4</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>48.24%</td>
<td>48.65%</td>
<td>48.02%</td>
</tr>
<tr>
<td>Female</td>
<td>51.76%</td>
<td>51.35%</td>
<td>51.98%</td>
</tr>
</tbody>
</table>
Methods - Measures

Outcome measure:
- “Do you use the internet for... Virtual casinos/placing bets?” [extracted from a list of 16 activities] (Wave 4 self-completed questionnaire)

Wave 4 Socio-demographic variables
- Sex
- Socio-economic status [4 categories; prof/man to lower/other]
- Household type [Two parent/One parent]
- PCG highest education [4 categories; Degree to Lower second/other]
- Self-rated health [3 categories]

Wave 4 covariates
- Smoking frequency [2 categories; No/only ever once or twice to Daily/Occasional]
- Screentime [6 categories with 7 associated frequencies collapsed to dichotomous High /Low]
- Financial difficulties (6 ordinal categories collapsed to Easy/Difficult)

Wave 3 covariates
- Virtual casinos/placing bets
- Hyperactivity subscale (Normal/Borderline or abnormal) [Subscale scoring collapsed to 2 categories]
- Stressful event since 13 years [“Have you ever experienced any of the following since we last saw you when you were 13?” 10 of 20 selected on basis of greater stress]
Online gambling at 17/18 years and at 20 years, by sex

Results - Descriptive

<table>
<thead>
<tr>
<th>Wave</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 3</td>
<td>2.44</td>
<td>4.31</td>
<td>0.7</td>
</tr>
<tr>
<td>Wave 4</td>
<td>7.95</td>
<td>14.51</td>
<td>1.88</td>
</tr>
</tbody>
</table>
Results - Descriptive

20-year-olds online gambling by smoker type

- Smoker type:
  - No or Once or twice ever: 6.54
  - Daily or occasionally: 10.26

20-year-olds online gambling by Screen time

- Screen time:
  - Low screen time: 5.98
  - High screen time: 10.59
## Results - Multivariate

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>M1 (OR): Socio-demographic</th>
<th>M2 (OR): W4 behaviours</th>
<th>M3 (OR): W3 risk factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pseudo R²</strong></td>
<td></td>
<td>11.24%</td>
<td>12.20%</td>
<td>13.51%</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>Male</td>
<td><strong>8.89</strong>*</td>
<td><strong>8.33</strong>*</td>
<td><strong>7.78</strong>*</td>
</tr>
<tr>
<td><strong>SES</strong></td>
<td>NonM/Skilled</td>
<td>0.87</td>
<td>0.87</td>
<td>0.86</td>
</tr>
<tr>
<td><em>(ref: Prof/man)</em></td>
<td>Semi/Unskilled</td>
<td>1.29</td>
<td>1.29</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>Lower/Other</td>
<td>0.79</td>
<td>0.80</td>
<td>0.79</td>
</tr>
<tr>
<td><strong>Household type</strong></td>
<td>Two parent</td>
<td>1.23</td>
<td>1.28</td>
<td>1.35</td>
</tr>
<tr>
<td><strong>PCG Highest education</strong></td>
<td>Upper 2nd</td>
<td>0.88</td>
<td>0.91</td>
<td>0.96</td>
</tr>
<tr>
<td><em>(ref: Lower 2nd)</em></td>
<td>Diploma/Cert</td>
<td>0.78</td>
<td>0.79</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>0.67</td>
<td>0.67</td>
<td>0.71</td>
</tr>
<tr>
<td><strong>Self-rated health</strong></td>
<td>Excellent/VGood</td>
<td>1.01</td>
<td>1.11</td>
<td>1.14</td>
</tr>
<tr>
<td><em>(ref: Good)</em></td>
<td>Fair/Poor</td>
<td>0.95</td>
<td>0.88</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Smoking type</strong></td>
<td>Daily or Occasionally</td>
<td></td>
<td><strong>1.59</strong>*</td>
<td><strong>1.52</strong>*</td>
</tr>
<tr>
<td><strong>Screen time</strong></td>
<td>High screentime</td>
<td></td>
<td><strong>1.35</strong>*</td>
<td><strong>1.38</strong>*</td>
</tr>
<tr>
<td><strong>Financial difficulty</strong></td>
<td>Difficult</td>
<td></td>
<td>0.89</td>
<td>0.92</td>
</tr>
<tr>
<td><strong>W3: Online gambling</strong></td>
<td>Yes</td>
<td></td>
<td><strong>3.20</strong>*</td>
<td></td>
</tr>
<tr>
<td><strong>W3: Stress event</strong></td>
<td>Yes</td>
<td></td>
<td><strong>1.43</strong>*</td>
<td></td>
</tr>
<tr>
<td><strong>W3: Hyperactivity</strong></td>
<td>Borderline/abnormal</td>
<td></td>
<td>1.18</td>
<td></td>
</tr>
</tbody>
</table>

*** p<0.001; **p<0.01; p<0.05
Conclusion

• Males in this cohort far outweigh females in engagement in online gambling, adjusted and unadjusted

• Little evidence that online gambling has a social gradient

• Smoking and high screentime predictors of engagement in online gambling at 20 years of age

• Antecedent risk factors include online gambling at 17/18 years, and having reported a stressful event at the prior wave
What next

• Accessing further gambling data at Wave 4
  – Profile of higher frequency gamblers of who also engage in range of gambling activity
  – Relationship of higher frequency gambling to problem gambling
  – How do gamblers who use online differ from gamblers who do not

• Longitudinal analysis: Risk / protective factors and trajectory of high frequency gamblers

• Wave 5 (25 years of age): as the cohort moves to the age range of peak gambling activity, tracking patterns of gambling and relationship to problem gambling