Safeguarding Internet Gambling

Heather Gray, PhD
Division on Addiction, Cambridge Health Alliance
Harvard Medical School

May 30, 2013
## Acknowledgements

<table>
<thead>
<tr>
<th>Colleagues</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah Nelson</td>
<td>bwin.party digital entertainment</td>
</tr>
<tr>
<td>Debi LaPlante</td>
<td>Century Council</td>
</tr>
<tr>
<td>Julia Braverman</td>
<td>Substance Abuse and Mental Health Services Administration via Duffy Health Center</td>
</tr>
<tr>
<td>Matthew Tom</td>
<td>St. Francis House</td>
</tr>
<tr>
<td>Howard Shaffer</td>
<td>National Institute on Alcohol Abuse &amp; Alcoholism</td>
</tr>
<tr>
<td>Richard LaBrie</td>
<td>National Center for Responsible Gaming</td>
</tr>
<tr>
<td>Tasha Chandler</td>
<td>State of Florida via Spectrum Gaming</td>
</tr>
</tbody>
</table>
Public Health View of Gambling Disorder

Range of Gambling Problems

- none
- mild
- moderate
- severe

Range of Behaviors

- Non Gambling
- Healthy Gambling
- Unhealthy

Range of Interventions

- Primary prevention
- Secondary prevention
- Tertiary prevention
- Brief Treatment
- Intensive Treatment
- Harm Reduction

Healthy Gambling

Range of Gambling Problems

- none
- mild
- moderate
- severe

Non Gambling

Range of Behaviors

- None
- Mild
- Moderate
- Severe

Healthy Gambling

Range of Interventions

- Primary prevention
- Secondary prevention
- Tertiary prevention
- Brief Treatment
- Intensive Treatment
- Harm Reduction
Consequences of Gambling Disorder

- Broader society
- Acquaintances
- Family and friends
- Gambler
Systematic Evaluation of Public Health Policies

Step 1: Demonstrate risk

Step 2: Demonstrate intervention’s effectiveness

Step 3: Access economic costs

Step 4: Access burdens on individuals

Step 5: Assess fairness of policy

Gostin, 2000
Systematic Evaluation of Public Health Policies

Step 1: Demonstrate risk

Step 2: Demonstrate intervention’s effectiveness

Step 3: Access economic costs

Step 4: Access burdens on individuals

Step 5: Assess fairness of policy

Gostin, 2000
Possible Consequences of Internet Gambling Regulations

- Decrease gambling-related problems
- Increase gambling-related problems
- Have no effect on gambling-related problems
- Influence gambling-related problems indirectly through other factors
  - e.g., communicating danger vs. safety

Bernhard & Preston, 2004
Potential Consequences of Harm Reduction Techniques

- **Self-limits**
  - Help gamblers regulate, but not stop, their gambling behavior?

- **Corporate Deposit Limits**
  - Potential safeguard against spending too much money gambling?

- **Responsible Gambling “flags”**
  - Use customer service communications to identify subscribers who have gambling problems?
  - Deliver effective interventions when appropriate?
Self-limitation of Deposits

- Default limit on deposits
  - €1000/day
  - €5000/30 day period
- bwin.party allows subscribers to reduce their deposit limits
- Attempts to exceed self-imposed deposit limits are blocked by the company software system

Nelson, LaPlante, Peller, Schumann, LaBrie, & Shaffer, 2008
Expectations

- Users who make use of the self-limit feature will constitute a group of extremely engaged gamblers

- Self-limitation will promote reduced gambling behavior
  - Decreased stakes, fewer bets, less frequent betting
Sample Description

- Of bwin.party subscribers who subscribed during February 2005 (N ~ 47,000)...
- 567 (1.2%) of the sample self-limited their maximum deposit amounts (Limiters)
  - 7% placed these limits before they made their first bet
  - 11% ceased betting completely after they self-imposed limits
Limiters vs. Non-Limiters

Before imposing limits, Limiters

- Played more types of games (2.5 vs. 2.1)
- Played more frequently (days/duration)
  - Fixed odds: 33% vs. 27% of days
- Place more bets per betting day
  - Fixed odds: 5 vs. 4 bets per betting day
- Wagered less per bet
  - Fixed odds: €6.15 vs. €11.46
- Did not differ on percent lost, net loss, or amount wagered
What Happened after Limiters set Limits?

Frequency of betting activity:
- Pre-limit
- Post-limit
- Non-limiters

Bets per betting day:
- Pre-limit
- Post-limit
- Non-limiters

Stakes per bet:
- Pre-limit
- Post-limit
- Non-limiters

Wagered/duration:
- Pre-limit
- Post-limit
- Non-limiters

* Indicates significance.
Summary

■ Before placing limits, Limiters were more active bettors than others
  - Played more types of games, higher frequency of betting days, placed more bets per day BUT wagered less per bet

■ Multi-dimensional view of gambling involvement
  - Frequency of betting vs. expenditure

■ Self-limitation mainly reduced time spent gambling
  - Wagered less over time, but driven by fewer bets
Potential Consequences of Harm Reduction Techniques

- **Self-limits**
  - Reduced frequency of betting
  - Not used by many subscribers
  - Not used for self-exclusion

- **Responsible Gambling “flags”**

- **Corporate Deposit Limits**
Deposit Limits

Corporate deposit limits
- €1000/day
- €5000/30 day period

When subscribers try to deposit more, bwin.party:
- Sent email notification
- Rejected the attempted deposit

Broda, LaPlante, Nelson, LaBrie, Bosworth, & Shaffer, 2008
Expectations

- Subscribers who receive a notification will constitute a group of extremely engaged gamblers
  - Money spent, time spent, both?

- Receiving a notification acts as a warning sign
  - Gambling behavior would attenuate after such notification
Sample Description

- Of bwin.party subscribers who subscribed during February 2005 (N ~ 47,000)...
- Most did not come close to exceeding corporate limits
  - Mean deposited per 24 hours = €111
- 160 (0.3%) of the sample received at least one notification about exceeding deposit limits (Exceeders)
  - 3.1% stopped depositing money after receiving the notification
Exceeders vs. Non-Exceeders

Across 2 years of activity, compared to non-Exceeders, Exceeders

- Bet with similar frequency (betting days/duration)
- Placed more bets per betting day
  - Fixed odds: 7 vs. 4 bets per betting day
- Wagered more per bet
- Lost a smaller proportion of what they wagered
- Lost more overall
  - Fixed odds: €1135 vs. €185
- More likely to engage in live-action sportsbetting
Gambling Behavior
Before & After Notification

After receiving notification, Exceeders:

- Did not reduce their number of active betting days
- Decreased the average number of bets per active betting day
- Increased their average size of bet

Exceeders made fewer, larger bets per active betting day after notification
Summary

- Exceeding established limits can serve as an indicator of excessive betting behavior
  - More bets per day, bigger wagers, greater losses overall

- Notification systems do not completely curtail betting behavior, but are associated with changes in betting strategy
  - Fewer, bigger bets
Potential Consequences of Harm Reduction Techniques

- **Self-limits**
  - Help gamblers reduce gambling involvement
  - Not used by many subscribers
  - Not used for self-exclusion

- **Corporate Deposit Limits**
  - Affects a minority
  - Healthier gambling patterns?
  - Mere existence might serve as a harm reduction device

- **Responsible Gambling “flags”**
Expectations

- bwin.party has an internal system for identifying subscribers on the basis of communications with customer service

- Subscribers who trigger responsible gambling “flags” might show excessive gambling behavior compared to those who have similar exposure but do not trigger such flags

Gray, LaPlante & Shaffer, 2012
Sample

- Subscribers who experienced at least one responsible gambling event (RG cases)
  - n = 2,066

- Subscribers who made an initial bwin.party deposit on the same day as a case, but did not experience a responsible gambling event (Controls)
  - n = 2,066

- Betting transaction data covered August, 2000 to November, 2010
<table>
<thead>
<tr>
<th>Description</th>
<th>Proportion within RG cases</th>
<th>Most common bwin.party response</th>
</tr>
</thead>
<tbody>
<tr>
<td>The subscriber asks to have account closed due to problem gambling OR reopened after a closure</td>
<td>45.1%</td>
<td>Account is reopened OR account remains closed</td>
</tr>
<tr>
<td>The subscriber reports a problem (e.g., technology, payment issue) and email correspondence suggests gambling problems</td>
<td>16.2%</td>
<td>Account blocked/closed OR bwin.party gives RG advice</td>
</tr>
<tr>
<td>The subscriber requests to change the personal deposit limit</td>
<td>14.9%</td>
<td>Deposit limit changed</td>
</tr>
<tr>
<td>The subscriber wants product(s) blocked due to problem gambling</td>
<td>13.3%</td>
<td>Account is partially blocked</td>
</tr>
</tbody>
</table>
Game Choices

<table>
<thead>
<tr>
<th>Percent Playing</th>
<th>Fixed Odds</th>
<th>Live Action</th>
<th>Casino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RG cases</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Predicting Group Membership

- Number of bets
- Total wagered
- Net loss
- Duration
- Active betting days
- Frequency
- Bets per betting day
- Euros per bet
- Percent lost

- Fixed-odds sportsbetting
- Live-action sportsbetting
- Casino-style games
# Classification Table

<table>
<thead>
<tr>
<th>Actual group membership</th>
<th>Predicted group membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Responsible gambling case</td>
</tr>
<tr>
<td>Control</td>
<td>83.7%</td>
</tr>
<tr>
<td>Responsible gambling case</td>
<td>26.3%</td>
</tr>
</tbody>
</table>

Correctly classified 78.7% of subscribers
Wilks’s lambda = 0.63, $X^2(27) = 188.98$, $p < .001$
RG cases vs. Controls

- **Frequency**
- **Bets per betting day**
- **Stakes per bet**
- **Wagered/duration**

*Significant differences indicated by asterisk (*)
Correlated with Discriminant Function ≥.50

- Number of bets
- Total wagered
- Net loss
- Duration
- Active betting days
- Bets per betting day
- Euros per bet

Live-action sportsbetting
Correlated with Discriminant Function ≥.50

- Total wagered
- Active betting days

Fixed-odds sportsbetting
Summary

- Discriminant function correctly classified 79% of subscribers
  - Live action patterns particularly revealing
- Subscribers “flagged” by Customer Service gambled more intensely than subscribers not flagged
- Change in gambling behavior after RG event/response… ?
The Transparency Project

Division on Addiction, The Cambridge Health Alliance, a teaching affiliate of Harvard Medical School

The Transparency Project: A Data Repository for Privately-Funded Research

Welcome from the Curators

On behalf of the Division on Addiction, we welcome you to the Transparency Project! We are excited to launch this new and defining initiative. We intend this website to become an active and important source of information for researchers and others who are interested in advancing addiction-related research and the public health.
Potential Consequences of Harm Reduction Techniques

- **Self-limits**
  - Help gamblers reduce gambling involvement
  - Not used by many subscribers
  - Not used for self-exclusion

- **Responsible Gambling “flags”**
  - Consumer service interactions can provide a basis for identifying subscribers with potentially unhealthy gambling patterns

- **Corporate Deposit Limits**
  - Affects a minority
  - Healthier gambling patterns?
  - Mere existence might serve as a harm reduction device
## Cross-Study Comparison

<table>
<thead>
<tr>
<th></th>
<th>Self-limiters</th>
<th>Exceeders</th>
<th>RG Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Games played</td>
<td>↑</td>
<td>?</td>
<td>↑</td>
</tr>
<tr>
<td>Frequency of betting days</td>
<td>↑</td>
<td>=</td>
<td>↓</td>
</tr>
<tr>
<td>Bets per day</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>Average wager size</td>
<td>↓</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>% lost</td>
<td>=</td>
<td>↓</td>
<td>↓</td>
</tr>
</tbody>
</table>
Limitations to Effectiveness of Harm Reduction Strategies
A Broader View

Safeguarding Internet gambling

- Gambling disorder
- Gambling by minors
- Breaches of data confidentiality
- Cheating
- Defrauding of consumers
- Stringent data privacy laws
- Large fines
- Credit cards, PINs, Biometrics
- Third party: Independent monitoring, Handling complaints, Analytics
- Strong oversight, Lodging complaints, Random audits

Sparrow, Bazelon, & Jackson (2009)
Take Home Messages

- Possible and scientifically advantageous to study actual gambling behavior
- Initial evidence of the effectiveness of harm reduction strategies
  - Could be selection effect
- Many additional questions
  - Interventions for people with more severe problems
  - Effects of interventions on players who are not having problems (reasonable burdens?)
  - Economic costs associated with harm reduction strategies
Thank you!

hgray@challiance.org
http://www.divisiononaddiction.org/