THE EFFECTIVENESS OF ONLINE RESPONSIBLE GAMBLING TOOLS

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OVERVIEW

- Types of RG Tools
- Pop-up messaging studies
- Personalized feedback studies
- Next steps and further thoughts

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Abstract The increasing sophistication of gambling products afforded by electronic technologies facilitates increased accessibility to gambling, as well as encouraging rapid and continuous play. This poses several challenges from a responsible gambling perspective, in terms of facilitating player self-awareness and self-control. The same technological advancements in gambling that may facilitate a loss of control may also be used to provide responsible gambling tools and solutions to reduce gambling-related harm. Indeed, several harm-minimisation strategies have been devised that aim to facilitate self-awareness and self-control within a gambling session. Such strategies include the use of breaks in play, ‘pop-up’ messaging, limit setting, and behavioural tracking. The present paper reviews the theoretical argument underpinning the application of specific harm-minimisation tools, as well as providing one of the first critical reviews of the empirical research assessing their efficacy, in terms of influencing gambling cognitions and behaviour.
TYPES OF ONLINE RG TOOLS (Harris & Griffiths, 2016)

• Breaks in play
• Limit setting
• Messaging (static vs dynamic)
• Pop-up messaging
• Personalized messaging
• Behavioural tracking tools
• (Temporary self–exclusion)
This study investigated the effects of a slot machine pop-up message in a real gambling environment. Compared the behavioural tracking data of two representative random samples of 400,000 gambling sessions before and after the pop-up message was introduced. Pop-up appeared after 1000 consecutive plays.
SLOTS POP-UP EMPIRICAL STUDY 1

- (Comprising around 50,000 gamblers in total; approx. 10,000 sessions reached 1,000 consecutive plays)

- The results indicated that demonstrably more gamblers ceased their gambling session following the viewing of a pop-up message after 1000 consecutive gambles on an online slot machine game compared to those who had not viewed a pop-up message.
The data suggest that pop-up messages can influence a small number of gamblers to cease their playing session.

The industry claims that “one problem gambler is one problem gambler too many.”

Therefore, pop-ups appear to be another potentially helpful social responsibility tool in reducing excessive play within session.
SLOTS POP–UP EMPIRICAL STUDY 2
(Auer & Griffiths, 2015)

• Self-appraisal feedback, normative feedback, and cognitive belief feedback, have never been empirically examined in any real-world online gambling setting.

• A second study investigated the effects of a normative and self-appraisal pop-up message among online slot machine players on a real online gambling site (i.e., win2day)
SLOTS POP-UP EMPIRICAL STUDY 2

• In September 2013, content of win2day pop-up message changed
• New pop-up addressed self-appraisal, provided normative feedback, and addressed cognitive beliefs commonly found among gamblers.
• The new pop-up message read:
• “We would like to inform you, that you have just played 1,000 slot games. Only a few people play more than 1,000 slot games. The chance of winning does not increase with the duration of the session. Taking a break often helps, and you can choose the duration of the break”
**SLOTS POP-UP EMPIRICAL STUDY 2**

- “**We would like to inform you, that you have just played 1,000 slot games**”: This objectively informs players about the behavior they engaged in.
- “**Only a few people play more than 1,000 slot games**”: This provides normative feedback. Only 1.5% of playing sessions exceeds 1,000 consecutive slot games
- “**The chance of winning does not increase with the duration of the session**”: This addresses a common misbelief among gamblers (i.e., the gamblers’ fallacy).
- “**Taking a break often helps, and you can choose the duration of the break**”: This provides advice and leaves the decision up to the player and is in line with the techniques of motivational interviewing (*Millner & Rollnick, 1991*)
SLOTS POP-UP EMPIRICAL STUDY 2

• Accessed two representative random samples of 800,000 sessions before and after the pop-up message was changed.
• The total dataset comprised 1,600,000 game sessions that contained at least one slot game (70,000 gamblers).
• We hypothesized that changed message content would lead to an increase in gamblers terminating their gambling session compared to the previous message (i.e., Auer et al, 2014).
SLOTS POP-UP EMPIRICAL STUDY 2

- Of the 11,232 sessions that lasted at least 1,000 games prior to the pop-up message change, 75 sessions immediately terminated after the simple pop-up message was shown (0.67%).
- After the new pop-up was introduced, 169 sessions (of 11,878) immediately terminated when the pop-up message was shown at 1,000 consecutive slot games (1.39%).
**SLOTS POP-UP EMPIRICAL STUDY 2**

- Number of sessions ended between 990 and 1,010 slot games comparing simple pop-up message (pre-condition) and enhanced pop-up message (post-condition)
BEHAVIOURAL FEEDBACK

• Examples of gambling behavioural feedback systems
PERSONALISED FEEDBACK STUDY
(Auer & Griffiths, 2015)

- Study evaluated the effectiveness of *mentor* (a responsible gambling tool) among 1,015 online gamblers at a European online gambling site.
- Compared their behavior with matched controls (n=15,216) on the basis of age, gender, playing duration, and theoretical loss.
Time Played

In the last month you played 25.75 hours
In the last six months you played 62.12 hours
PERSONALISED FEEDBACK STUDY

• Results showed that online gamblers receiving personalized feedback spent significantly less time and money compared to controls.
• Results suggest that responsible gambling tools providing personalized feedback may help the clientele of gambling companies gamble more responsibly.
• May be of help those who gamble excessively to stay within their personal time and money spending limits.
Feedback is a central aspect of behavioural change

Feedback has shown to effectively change gambling behaviour

Feedback has shown to effectively change behaviour in many areas (smoking, alcohol, sports, etc.)

Feedback has to be provided in a specific way (self-appraisal, self-efficacy)

No real world experiment has ever been conducted with real gamblers and objective gambling behaviour
**EXPERIMENTAL SETTING**

### Timeline

- **May**
  - **Personal message:** Gambling wins/losses
- **June**
  - **Survey:** Perceptions about gambling expenditures

### Three conditions

- **Personal information** about wins/losses last six months, Question: In line with, more or less than you expected
- **Normative information:** Information about the average players loss
- **Recommendation:** Tools and Resources to control your gambling/spending

### Six groups

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<th>Normative information</th>
<th>Recommendation</th>
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<td>6</td>
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<td>Control group</td>
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### Data:

8 months behavioural data
Survey data (perceptions)
Combining **objective** and **subjective data**

### Selection of participants

- **Online-customers (playing high risk-games)**
- **Net loss all games last month**

- **Random, but weighted selection:**
  - 20 % from the 1-79 percentile*
  - 40 % from the 80-100 percentile*

**Norsk Tipping AS**

*Loss last month

- **17 552 customers**
  - Randomly distributed to the six groups (20/40)

28.10.2016

Norsk Tipping AS
Players were provided with their actual losses over the last 6 months (Nov–Apr 2015)
Various recommendations were provided
MESSAGE ACCESS

Message centre (web and mobile)

Invitation to participate
HYPOTHESES

• Behavioural feedback will have a positive effect on playing behaviour and attitude
• Normative feedback will have a positive effect on playing behaviour and attitude
• RG recommendations will have a positive effect on playing behaviour and attitude
• Behavioural or normative feedback will have more of an effect on playing behaviour and attitude than a recommendation only
Out of 17,752 players 5,528 responded. Most of the players responded during the first 9 days of May 2015.
The response frequency and behaviour is equal across the 5 different conditions.
Players who respond to the message are more involved in gambling than those who ignored it.
Players were asked their opinion regarding the actual involvement

- The number of players who think that they actually spent more was higher than the number of players who actually think they spent less.
- Most players thought that this was what they had expected.
SUBJECTIVE RESPONSES

- Most players response when asked about the feedback was in line with their spending
- Involved, young and recent casino players said they lost more than expected
- Low involved female scratch players said they lost more than expected
- A group of high spending casino players said they lost as much as expected
MESSAGE EFFECT

Do the different groups change their gambling behaviour differently in the week after the message was read?
MESSAGE EFFECT

(7 days after - 7 days before)/7 days before
Hypothesis: Do the different groups change differently in the week after the message was read? (narrow to responders during 1st week of May)

- Group 2’s expenditure decreases by 45%
- Group 5’s expenditure decreases by 40%
- The CG’s expenditure decreases by 36%
MESSAGE EFFECT

- Behavioural feedback changes behaviour significantly
- Additional normative feedback does not change behaviour significantly more than pure behavioural feedback
- Patterns of behaviour connected with the message effect can be derived
KEY FINDINGS (1)

• Messages are most likely read during the first week
• Male and older players are more likely to read the message
• Lottery players are more likely to read the message than casino players
• Personalized feedback changes playing expenditure more than a pure recommendation or no message at all
KEY FINDINGS (2)

- Lottery players (low and high spending) benefit from personalized feedback
- Female scratchcard players benefit from personalized feedback
- Normative feedback is not beneficial for Sports Bettors
- High spending casino players do not benefit from personalized feedback
- Most players response when asked about the feedback was in line with their spending
KEY FINDINGS (3)

- Involved, young and recent casino players say they have lost more than expected
- Low involved female scratchcard players say they have lost more than expected
- A group of high spending casino players say they have lost as much as expected
- Feedback appears to be misplaced for players who have just had a win
KEY FINDINGS (4)

• Analysis of voluntary limits and self-exclusion suggests they are more likely to be used if it is exclusively offered.

• Players should be informed about one aspect only if only one aspect of their behaviour needs changing.

• The survey showed that players regarded the information as personalized feedback.
KEY FINDINGS (5)

- Players who received feedback also claim to be more aware of their gambling
- Players underestimate their losses
- Casino players underestimate their losses more than lottery players
NEXT STEPS AND FURTHER THOUGHTS (1)

- Effects of recent wins on playing behaviour
- Personalized playing report retrieval analysis
- Evaluation of global limit analysis (20,000 NOK Loss per month), limits and play breaks down to single games
- Regular player survey analysis (attitudes towards RG measures and tools)
The Case for Using Personally Relevant and Emotionally Stimulating Gambling Messages as a Gambling Harm-Minimisation Strategy

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Abstract Emotions typically exert powerful, enduring, and often predictable influences over decision-making. However, emotion-based decision-making is seen as a mediator of impulsive and reckless gambling behaviour, where emotion may be seen as the antithesis of controlled and rational decision-making, a proposition supported by recent neuroimaging evidence. The present paper argues that the same emotional mechanisms can be used to influence a gambler to cease gambling, by focusing their emotional decision-making on positive external and personally relevant factors, such as familial impact or longer term financial factors. Emotionally stimulating messages may also have the advantage of capturing attention above and beyond traditionally responsible gambling messaging. This is important given the highly emotionally aroused states often experienced by both gamblers and problem gamblers, where attentional activation thresholds for external stimuli such as messages may be increased.
• Variation of the message content (emotional, warning, informative)
• Addressing specific behaviour (binge, high losses, high wins)
• Effects of regular feedback compared to one-time feedback (weekly vs. monthly)
• Analysing long-term behaviour of the sample