### Bilaga 4 Tabellverk över inkluderade studier/Characteristics of included studies

#### Educations

<table>
<thead>
<tr>
<th>Author</th>
<th>Canale et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2016</td>
</tr>
<tr>
<td>Country</td>
<td>Italy</td>
</tr>
<tr>
<td>Ref n</td>
<td>[1]</td>
</tr>
<tr>
<td>Study design</td>
<td>Cluster-RCT</td>
</tr>
<tr>
<td>Setting</td>
<td>School, 9th grade, 12 school classes, 6 classes/group</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Unclear how schools were selected. All students at the school participated.</td>
</tr>
<tr>
<td>Population</td>
<td>N=223 students out of 223 eligible</td>
</tr>
<tr>
<td></td>
<td>Mean ±SD age: 15.01 ± 0.6 years, range 14–18 years</td>
</tr>
<tr>
<td></td>
<td>Gender: 58% boys</td>
</tr>
<tr>
<td></td>
<td>Frequent gamblers: n=54 (32%)</td>
</tr>
<tr>
<td></td>
<td>Gambling problems: n=123 (73.2%)</td>
</tr>
<tr>
<td></td>
<td>Gambling problems (SOGS-RA) (mean±SD): I: 0.61 ± 0.61, C: 0.56 ± 0.61</td>
</tr>
<tr>
<td></td>
<td>9th grade students</td>
</tr>
<tr>
<td>Inclusion criteria</td>
<td>No information</td>
</tr>
<tr>
<td>Follow up time</td>
<td>2 months</td>
</tr>
<tr>
<td>Intervention</td>
<td>Theory-driven web-based intervention (WBI) based on CBT and MI. Feedback messages focused on knowledge, attitudes and individual abilities. The program included three sections: (1) online screening, (2) personalized feedback (PF), and (3) online training (interactive activities). Immediately following the assessment, PF for the respondents was generated on the computer screen. Components of PF: 1. Gambling profile, 2. Consequences of gambling, 3. Tips for safe gambling. Referral information for online training was provided. Following the PF, students were invited to complete online training for three weeks. Participants logged onto the website and were routed to the online activities of the week, which can be completed either immediately or at any other time of the same week. The online activities are designed as a ‘question and-answer’ game to be played individually. Students were assigned a unique pin number and the URL for participation.</td>
</tr>
<tr>
<td>Participants</td>
<td>N=95 at follow up</td>
</tr>
<tr>
<td>Drop-out</td>
<td>N=55 in total, no information about number of drop-out/group</td>
</tr>
<tr>
<td>Comparison</td>
<td>Only PF based on online assessment</td>
</tr>
<tr>
<td>Participant</td>
<td>N=73 students at follow up</td>
</tr>
<tr>
<td><strong>Drop-out rate</strong></td>
<td>N=55 in total, no information about number of drop-out/group</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Gambling behaviour (SOGS-RA)</td>
</tr>
<tr>
<td></td>
<td>Gambling frequency</td>
</tr>
<tr>
<td></td>
<td>Gambling expenditure</td>
</tr>
<tr>
<td></td>
<td>Attitudes (gambling attitudes scale (GAS), Italian version)</td>
</tr>
<tr>
<td><strong>Implemented by</strong></td>
<td>NA, On-line</td>
</tr>
<tr>
<td><strong>Comments</strong></td>
<td>Some concern regarding missing outcome data</td>
</tr>
</tbody>
</table>

| **Author** | Doiron et al |
| **Year**   | 2007         |
| **Country**| Canada       |
| **Ref nr** | [2]          |
| **Study design** | Block-randomisation, not blinded          |
| **Setting** | Natural environment                           |
| **Recruitment** | Advertisements in local print media and VLT venues.  |
| **Population** | General population. N=40 out of 65 eligible, 20 in each group |
|                   | Mean (±SD) age: 38 years                       |
|                   | Gender: 62.5% male                             |
|                   | Gambling: gambling last month at VLT’s         |
|                   | Gambling modality: VLT                         |
| **Inclusion criteria** | Participants that played VLT’s during the last month and scored as “at-risk” gamblers on the CPGI |
| **Follow up time** | 1 month                                    |
| **Intervention** | The study was carried out in small (5–7 person) groups. |
|                   | Stop & Think! Program, 2 sessions. Participants were oriented to the program and watched a 20-minute automated presentation, providing information on gambling and problem gambling, including a self-assessment for PG. Thereafter (session 1) participants were given manuals consisting of a review of the automated presentation; cognitive restructuring rehearsal using video-taped vignettes; problem-solving rehearsal using a text vignette; and homework assignments involving imaginal cognitive restructuring using an audiotape, and in vivo problem solving. Session 2: homework was reviewed, and questions about the homework were answered. A brief review of the role of problem solving and faulty thinking in the onset and maintenance of PG was provided, including a review of problem solving and cognitive restructuring. A plan for the future was discussed. |
| **Participants** | N=20, no statistically significant differences between the groups in relation to gender, age, education, employment, or marital status |
| **Drop-out rate** | 0                                      |
| **Comparison** | No program. The group completed the study separately from experimental group. In session 1, session 2, and the follow-up, they completed the same pre-, post-, and follow-up measures. They |
Participants received an abbreviated version of the Stop & Think! program at the end of the follow-up session.

<table>
<thead>
<tr>
<th>Drop-out rate</th>
<th>N=20</th>
</tr>
</thead>
</table>

Outcome

<table>
<thead>
<tr>
<th>Video Lottery Terminal Screen (VLTS): change in dollars spent in gambling and number of gambling sessions in last month Gambling behaviour (Canadian Problem Gambling Index – 1 Month (CPGI – 1M))</th>
</tr>
</thead>
</table>

Implemented by

| Not applicable |

Comments

| Small study |

Author

| Donati et al |

Year

| 2014 |

Country

| Italy |

Ref n

| [3] |

Study design

| RCT, block (school) |

Setting

| 2 public high schools |

Recruitment

| Partly not reported |

Population

| N=181 high school students out of 181 eligible Mean (±SD) age: 15.95 ± 0.51, range 15–18 years Gender: 64% male Gambling modality: all/not specified |

Inclusion criteria

| All students who consented or whom parents gave consent |

Follow up time

| 6 months |

Intervention

| Training conditions: Integration of different training techniques for the delivery of the educational contents: activities with random events generators (coins, dice, card decks), Power-Point slides, a video, and collective discussions. Comprised of 2 didactic units of 2 h (one per week) implemented in each class, during the normal school time. Implementation: A treatment protocol to act in the training situation to facilitate the achievement of each proposed objective. |

Participants

| N=145 |

Drop-out rate

| N=26 (17.9%) |

Comparison

| No Training conditions = no intervention i.e. usual school activity |

Participant

| N=36 |

Drop-out rate

| N=8 (22%) |

Outcome

<p>| Gambling behaviour (SOGS-RA) Correct knowledge (questionnaire of attitudes and knowledge about gambling Gamblers fallacy task (GFT) Attitudes/misconceptions (GAS) |</p>
<table>
<thead>
<tr>
<th>Implemented by</th>
<th>A developmental psychologist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td></td>
</tr>
<tr>
<td><strong>Author</strong></td>
<td>Lupu et al</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td>2013</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td>Romania</td>
</tr>
<tr>
<td><strong>Ref nr</strong></td>
<td>[4]</td>
</tr>
<tr>
<td><strong>Study design</strong></td>
<td>RCT</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td>3 6th grade classes</td>
</tr>
<tr>
<td><strong>Recruitment</strong></td>
<td>Not reported</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>N=75 out of 75 eligible</td>
</tr>
<tr>
<td></td>
<td>Mean (±SD) age: range 12–13 years</td>
</tr>
<tr>
<td></td>
<td>Gender: 48% male</td>
</tr>
<tr>
<td><strong>Inclusion criteria</strong></td>
<td>Be part of the class from the beginning of the school year, age 12–13 years, no previous psychiatric diagnosis, speak fluent English</td>
</tr>
<tr>
<td><strong>Follow up time</strong></td>
<td>3, 6, 9, and 12 months</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Rational emotive education program: AC + REE: information using the software designed for elementary school children - “Amazing Chateau” + they were explained the cognitive and behavioural ABC model. Rational emotive education plus specific primary prevention (REE): Learn about cognitive and behavioural ABC models. Both groups: 10 weekly meetings of 50 minutes with 2 specialists in gambling – a psychologist and a psychiatrist.</td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td>AC + REE n=24, REE n=28</td>
</tr>
<tr>
<td><strong>Drop-out rate</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Comparison</strong></td>
<td>Neither shown the software, nor presented the principles for rational emotive education. Discussions were led so that no topic on gambling to be reached. 10 weekly meetings of 50 minutes each.</td>
</tr>
<tr>
<td><strong>Participant</strong></td>
<td>N=23</td>
</tr>
<tr>
<td><strong>Drop-out rate</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Knowledge referring to misconceptions, illusion of control and cognitive errors</td>
</tr>
<tr>
<td><strong>Implemented by</strong></td>
<td>3 psychology students and the class tutor assisted the intervention activities, meetings held by 2 specialists in gambling – a psychologist and a psychiatrist</td>
</tr>
<tr>
<td><strong>Comments</strong></td>
<td>Some concern regarding randomisation and deviations from intended intervention</td>
</tr>
<tr>
<td><strong>Author</strong></td>
<td>St-Pierre et al</td>
</tr>
<tr>
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<td>--------------------------</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td>2017</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td>Canada</td>
</tr>
<tr>
<td><strong>Ref n</strong></td>
<td>[5]</td>
</tr>
</tbody>
</table>

| **Study design** | RCT, random number table |
| **Setting**      | High school, grade 9–11  |
| **Recruitment**  | All English-speaking schools in the area were asked to participate |
| **Population**   | N=387 students, unclear how many that were eligible, 280 at follow up |
|                  | Mean (±SD) age: 15.11 ± 0.94; range 13–17 years |
|                  | Gender: 50% male |
|                  | Gambling activity past 3 months: 40% |
|                  | Gambling modality: no information |
| **Inclusion criteria** | Specific grades |
| **Follow up time** | 3 months |
| **Drop-out rate** | 36% |

**Intervention**
Prevention video for modifying gambling beliefs, intentions and behaviours based on the theory of planned behaviour (TPB) and the concept of negative anticipated emotions (NAEs). A 25-min prevention video, 1 week later: booster discussion session for 20-25 min.

**Participants**
N=141 at follow up

**Comparison**
Control condition: regular academic activities

<table>
<thead>
<tr>
<th><strong>Participant</strong></th>
<th>N=139 at follow up</th>
</tr>
</thead>
</table>

**Outcome**
Gambling Attitudes, intentions
Gambling frequency

**Implemented by**
Not applicable

**Comments**
Concern regarding missing outcome data

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<table>
<thead>
<tr>
<th><strong>Author</strong></th>
<th>Turner et al</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td>2008</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td>Canada</td>
</tr>
<tr>
<td><strong>Ref n</strong></td>
<td>[6]</td>
</tr>
</tbody>
</table>

<p>| <strong>Study design</strong> | RCT, block (school) |
| <strong>Setting</strong>      | High school, grades 10–12 |
| <strong>Recruitment</strong>  | Randomly selected schools in the Simcoe Country District School Board randomly assigned to either the control or experimental group |
| <strong>Population</strong>   | N=201                 |</p>
<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Mean (±SD) age: range 15–18 years</th>
<th>Gender: 31.4% females</th>
<th>Gambling related problem: 83.5%</th>
<th>Gambling modality: no information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow up time</td>
<td>Not reported</td>
<td></td>
<td></td>
<td>2 months</td>
</tr>
<tr>
<td>Intervention</td>
<td>School-based problem gambling prevention curriculum. A curriculum package consisted of a series of lesson plans, overheads, a text and CD-ROM developed for the study, discussion questions, and some other demonstration materials. Each lesson was ≈ 70 min. 6 lessons and a summary lesson over 6-7 weeks.</td>
<td></td>
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</tr>
<tr>
<td>Participants</td>
<td>N=100</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Drop-out rate</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Control condition: regular school activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>N=101</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome,</td>
<td>Gambling problem knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implemented by</td>
<td>The teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<p>| Author             | Williams et al                    |
| Year               | 2006                              |
| Country            | Canada                            |
| Ref nr             | [7]                               |
| Study design       | NRS, prospective                  |
| Setting            | University                        |
| Recruitment        | Not reported                      |
| Population         | N=332 (95% of students registered at these courses) | Mean (±SD) age: 20.8 ± 3.6 | Gender: 55% female | Gambling past 6 months: 71% | Gambling activity: lotteries and instant-win tickets (44%), games of skill against other people (34%), gaming machines (29%), casino table games (26%) |
| Drop-out rate      | N=32 (7%)                         |
| Inclusion criteria | Not reported                      |
| Follow up time     | 6 months                          |
| Intervention       | Introduction to Probability and Statistics related to gambling for students from introductory probability and statistic class: 39 lectures (50 min) and 13 labs (50 min). |
| Participants       | N=198                             |</p>
<table>
<thead>
<tr>
<th>Drop-out rate</th>
<th>Unclear</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparison</strong></td>
<td>Math control group. Students from introductory probability and statistics class. Ordinary class.</td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td>N=134</td>
</tr>
<tr>
<td><strong>Drop-out rate</strong></td>
<td>Unclear</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Percentage problem gamblers (CPGI) Percentage gamblers Attitudes Time spent gambling Money spent gambling</td>
</tr>
<tr>
<td><strong>Implemented by</strong></td>
<td>Names of the persons are given but unclear in what role</td>
</tr>
<tr>
<td><strong>Comments</strong></td>
<td>Some concern regarding bias and missing outcome data</td>
</tr>
</tbody>
</table>

<p>| <strong>Author</strong> | Williams et al |
| <strong>Year</strong> | 2010 |
| <strong>Country</strong> | USA |
| <strong>Ref nr</strong> | [8] |
| <strong>Study design</strong> | RCT |
| <strong>Setting</strong> | 14 school, grade 9–12 students, 3 urban centers and 4 rural communities |
| <strong>Recruitment</strong> | Partly reported, unclear how the schools were selected |
| <strong>Population</strong> | N=1,686 out of 1,686 eligible Mean (±SD) age: 16.0 ± 1.0 Gender: 53% male Problem gamblers (DSM-IV-MR-J): 3.2% Self-reported problem gamblers: 5.2% Gambling once a week: 45% Main gambling modality: betting on games of skill against other people, 56% |
| <strong>Inclusion criteria</strong> | Drop out, n (%): 446 (26.5%) |
| <strong>Follow up time</strong> | 3-7 months (due to summer vacations, average 4 month) |
| <strong>Intervention 1</strong> | Stacked Deck program, 5 interactive lesion á 100 minutes |
| <strong>Participants</strong> | N=911 |
| <strong>Drop-out rate</strong> | N=229 (25.1%) |
| <strong>Intervention 2</strong> | Booster program- Stacked Deck program, 6 interactive lesion á 100 minutes |
| <strong>Participants</strong> | N=342 |
| <strong>Drop-out rate</strong> | N=85 (21.9%) |
| <strong>Comparison</strong> | No program |
| <strong>Participant</strong> | N=433 |</p>
<table>
<thead>
<tr>
<th>Drop-out rate</th>
<th>N=142 (32.8%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gambling attitudes</td>
</tr>
<tr>
<td></td>
<td>Gambling knowledge</td>
</tr>
<tr>
<td></td>
<td>Gamblers (past 3 months)</td>
</tr>
<tr>
<td></td>
<td>Gambling frequency</td>
</tr>
<tr>
<td></td>
<td>Money lost gambling</td>
</tr>
<tr>
<td></td>
<td>Problem gamblers DSM-IV-MR-J</td>
</tr>
<tr>
<td></td>
<td>Problem gamblers self-reported (past 12 months)</td>
</tr>
<tr>
<td><strong>Implemented by</strong></td>
<td>Teachers</td>
</tr>
<tr>
<td><strong>Comments</strong></td>
<td>Issues with randomisation</td>
</tr>
</tbody>
</table>

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**Personalized normative feedback/ personalized feedback**

| **Author** | Auer et al |
| **Year** | 2015 |
| **Country** | UK |
| **Ref nr** | [9] |

| **Study design** | Cohort |
| **Setting** | Online, real world |
| **Recruitment** | Dataset from a commercial online gambling operator |
| **Population** | N=1.6 million sessions |
|               | Mean (±SD) age: no information |
|               | Gender: no information |
|               | Gambling: no information |
|               | Gambling modality: no information |
| **Inclusion criteria** | Playing 1,000 consecutive games |
| **Follow up time** | After enhanced message was introduced |
| **Intervention** | Enhanced pop-up message: Normative and self-appraisal feedback in a slot machine. Pop-up message is triggered if customers play 1,000 consecutive games. |
| **Participants** | N=11,878 sessions |
| **Drop-out rate** | Not applicable |
| **Comparison** | Simple (non-enhanced) pop-up message triggered if customers play 1,000 consecutive games |
| **Participant** | N=11,232 sessions |
| **Drop-out rate** | Not applicable |
| **Outcome** | Ceased or continued to play |
| **Implemented by** | Online gambling operator |
| **Comments** | Some concern regarding confounding and some concerns with data presentation |
| **Author**  | Auer et al  |
| **Year**    | 2016        |
| **Country** | UK          |
| **Ref n**   | [10]        |

| **Study design** | RCT         |
| **Setting**      | Online players, the Norsk Tipping online platform (Instaspill) |
| **Recruitment**  | Different levels of risk according to Playscan |
| **Population**   | N=17,442 out of 69,631 eligible  
Mean (±SD) age: 40.52 ± 13.19 years, 29% <30 years and 22% >50 years  
Gender: 12,261 males (69.1%)  
Gambling: no information  
Gambling modality: online casino, sports, betting, lottery  
Participants had been playing with Norsk Tipping for an average of 94 ± 38.31 months |
| **Inclusion criteria** | Players with a net loss across all games the past month (i.e. winners excluded. Self-excluders were excluded. There was an oversampling of high intensity gamblers. |
| **Follow up time** | 1 week |

| **Intervention** | 3 types of message: personalized feedback (PFN), normative feedback, and/or a recommendation. In total 5 groups. |
| **PFN:** A simple personalized message sent to players (Groups 1–4): In addition, players were presented with a line chart containing the monthly values for their personal losses over the previous 6-month period. Players could retrieve the information any time during the following month.  
**Normative Feedback:** A simple message with normative feedback was sent to players (Groups 3 and 4). The normative feedback about other players' losses was provided after the personalized feedback. Additionally, a line chart displaying their own losses compared with those of other players was also provided.  
**Recommendation:** Received a helpful recommendation about responsible gambling tools and services that players could access via a hyperlink on the screen (Groups 2, 3, and 5). Players could access tools provided by Norsk Tipping that helped players (i) manage their personal spending limits, (ii) activate a play break, (iii) take a diagnostic self-test about their gambling behavior, and (iv) see an overview of their recent spending. Players were also informed about the national gambling helpline if they wanted to speak to anyone about their gambling |

| **Participants** | ≈ 2,957 in each group |
| **Drop-out rate** | 0 |

| **Comparison** | Received no information (group 6) |
| **Participants** | N=2,958 |
| **Drop-out rate** | 0 |
| **Outcome** | Gambling behaviour: Theoretical loss (TL) Amount of money wagered, Gross gaming revenue (GGR) (i.e., net win/loss) |
| **Implemented by** | Norsk Tipping online platform |
| **Comments** | Unclear randomisation |

| **Author** | Celio et al |
| **Year** | 2014 |
| **Country** | USA |
| **Ref nr** | [11] |

| **Study design** | RCT |
| **Setting** | College, 2 consecutive semesters, laboratory setting |
| **Recruitment** | From introductory psychology courses at a university (recruited between September 2011 and March 2012) |
| **Population** | N=144 out of 200 eligible Gender: 55% male Mean age (±SD): 19 ± 1.35, range 18–30 Gambling frequency (self-reported, 11-point scale) mean (±SD): 4.51 ± 2.23, vs. 4.79 ± 2.16 Gambling modality: card gambling, skill games, sports gambling |
| **Inclusion criteria** | Undergraduate students, gambled the past 30 days |
| **Follow up time** | 1 week |

| **Intervention** | PFN: Modelled after Brief Alcohol Screening and Intervention of College Students program (BASICS). Including a summary of the participant’s perceived descriptive norms regarding gambling frequency, amount of money lost per year, and maximum amount of money lost in 1 day, compared with actual norms from a sample of student gamblers and a summary of the participant’s own gambling. They were informed of their percentile rank comparing their gambling with other students’ gambling. Actual descriptive norms were generated from data that our laboratory had collected from 284 completed surveys during the previous year. In sum, the feedback communicated the following messages: (1) this is how much you gamble, (2) this is how much you think the “typical student who gambles” gambles, and (3) this is how much the “typical student who gambles” actually gambles. |
| **Participants** | N=68 |
| **Drop-out rate** | Unclear, 8 in total |

<p>| <strong>Comparison</strong> | Presented with facts about students at the university. The format mirrored the text-based and graphic content of the PFN, but the information was neither directly related to gambling, nor did it involve personalized content. |
| <strong>Participant</strong> | N=68 |</p>
<table>
<thead>
<tr>
<th>Drop-out rate</th>
<th>Unclear, 8 in total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Self-report Measures</td>
</tr>
<tr>
<td></td>
<td>Gambling frequency</td>
</tr>
<tr>
<td></td>
<td>Annual expenditure</td>
</tr>
<tr>
<td></td>
<td>Maximum single day loss</td>
</tr>
<tr>
<td>Implemented by</td>
<td>Researcher</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author</th>
<th>Cunningham et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2012</td>
</tr>
<tr>
<td>Country</td>
<td>Canada</td>
</tr>
<tr>
<td>Ref n/</td>
<td>[12]</td>
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</tbody>
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<thead>
<tr>
<th>Study design</th>
<th>RCT, block randomisation (random number list)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>General population in Canada</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Random digit dialling telephone screener of the Ontario population.</td>
</tr>
<tr>
<td>Population</td>
<td>N=242 out of 8,015 that spent over $100 on gambling the year before the survey was conducted</td>
</tr>
<tr>
<td></td>
<td>Mean (±SD) age: 46.6 ± 13.9 years</td>
</tr>
<tr>
<td></td>
<td>Gender: 52.6% male</td>
</tr>
<tr>
<td></td>
<td>Gambling (PGSI score), mean±SD: 7.2 ± 4.8</td>
</tr>
<tr>
<td></td>
<td>Gambling modality: no information</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>33 in total, no information about drop-out per group</td>
</tr>
<tr>
<td>Inclusion criteria</td>
<td>≥18 years, problem gamblers, moderate problem gambling to gambling dependence as defined, PGSI, interested in self-help materials</td>
</tr>
<tr>
<td>Follow up time</td>
<td>3, 6 and 12 months</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Intervention 1: Full PFN.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention 2: Partial feedback condition. Contained all the feedback information provided full PFN without the normative feedback.</td>
</tr>
<tr>
<td>Participants</td>
<td>N=70 in each group</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>Unclear</td>
</tr>
<tr>
<td>Comparison</td>
<td>Waiting list. Received the full PFN after completion of the 6-month follow-up.</td>
</tr>
<tr>
<td>Participant</td>
<td>N=69</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>Unclear</td>
</tr>
<tr>
<td>Outcome</td>
<td>Total dollars spent on betting past 30 days</td>
</tr>
<tr>
<td></td>
<td>Number of days gambled in past 30 days</td>
</tr>
<tr>
<td></td>
<td>Largest amount spent on gambling on any day</td>
</tr>
<tr>
<td>Implemented by</td>
<td>Researcher</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
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</table>


<table>
<thead>
<tr>
<th>Author</th>
<th>Martens et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2015</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Ref n/</td>
<td>[13]</td>
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</table>

<table>
<thead>
<tr>
<th>Study design</th>
<th>RCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>College, campus laboratory</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Email announcements and the university’s mass communication system</td>
</tr>
</tbody>
</table>
| Population   | N=333 out of 435 eligible  
Mean (±SD) age: 22 years  
Gender: 60% male  
Gambling (SOGS)mean(±SD): 4.77 ± 2.51  
Gambling modality: no information |
| Inclusion criteria | At-risk college student gamblers, reported gambling at least once in the past 60 days or had a score of 3+ on SOGS |
| Follow up time | 3 months |

### Intervention 1

**Participants**

N=111

**Drop-out rate**

N=1 (0.9%)

**Intervention**  
**Personalized feedback (PFB):** Feedback via a paper printout.

### Intervention 2

**Participants**

N=113

**Drop-out rate**

N=3 (2.7%)

**Education (EDU):** Reviewed general information about gambling tailored to college students, including: (a) percentage of college students meeting problem or pathological gambling classifications; (b) risk factors for compulsive gambling; and (c) strategies for reducing gambling problems.

### Comparison

**Participant**

N=109

**Drop-out rate**

N=2 (1.8%)

### Outcome

**Gambling days**

**Dollars risked**

**CPGI scores**

### Implemented by

**Researcher**

### Comments

Intervention fidelity: to ensure that participants read and retained the information provided in the printouts (PFN and EDU). Participants completed two questions that asked about information included in the intervention printout immediately postintervention.
| **Author** | Neighbors et al |
| **Year** | 2015 |
| **Country** | USA |
| **Ref nr** | [14] |

| **Study design** | RCT, URN randomization, stratified by gender and gambling severity (SOGS 4 vs. SOGS 5+) |
| **Setting** | University, laboratory setting |
| **Recruitment** | A brief online screening survey were sent to 2 cohorts (15,000 student/cohort) |
| **Population** | N=252 out of 559 eligible  
Mean (±SD) age: 23.11 ± 5.34 years  
Gender: 40.5% female  
Gambling: 2 or higher on SOGS  
Gambling modality: playing cards 87.3%, lotteries 81.3%, bingo 71.0%, casino gambling 66.9%, slots, poker, or gambling machines 66.7% |
| **Inclusion criteria** | College student, ≥18 years, score ≥2 on SOGS |
| **Follow up time** | 3 and 6 months |

| **Intervention** | PFN: Gender-specific normative feedback, included 4 components:  
(a) participants’ own frequency, expenditure, and time spent gambling;  
(b) participants’ perceptions of other same-sex students’ frequency, expenditure, and time spent gambling;  
(c) actual norms of other same sex students’ frequency, expenditure, and time spent gambling; and (d) a percentile ranking of participants’ gambling frequency relative to same-sex peers. |
| **Participants** | N=124 |
| **Drop-out rate** | 3 months: n=11 (8.9%), 6 months: n=12 (9%) |

| **Comparison** | Attention-control feedback: gender-specific feedback such as the number of hours students spent studying for class, watching TV, and exercising; the amount of money students spent on fast food; the number of students who lived on-campus; the number of students who had a part-time job; and the number of times per day students check Facebook. |
| **Participant** | N=128 |
| **Drop-out rate** | 3 and 6 months: n=14 (10.9%) |

| **Outcome** | Gambling-related behaviours (SOGS)  
Gambling frequency  
Quantity loss/ won  
Gambling Problems Index (20-item measure). |
| **Implemented by** | Researcher |
| **Comments** | ITT analysis |

| **Author** | Wood et al |
| **Year** | 2015 |
| **Country** | Canada |
| **Ref nr** | [15] |

<p>| <strong>Study design</strong> | NRS |</p>
<table>
<thead>
<tr>
<th>Setting</th>
<th>Internet players, online with Svenska Spel (the Swedish gambling operator)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment</td>
<td>Not reported</td>
</tr>
</tbody>
</table>
| Population | N=1,558 out of 65,000 eligible  
Mean (±SD) age: no information  
Gender: 89% male  
Gambling: no information  
Gambling modality: bingo 7%, lottery 57%, sport betting 54%, poker 15% |
| Inclusion criteria | Not reported |
| Follow up time | 1 and 24 weeks after enrolment |
| Intervention | Behavioural feedback (FB) via a responsible gambling tool (Playscan): a proprietary algorithm calculates a risk score based on the intensity of play over a 10-week span. The risk score is sorted into one of 3 colour categories (Green, Yellow, Red) corresponding to the intensity of the gambling behaviour in relation to previously observed playing behaviours. Green light = low intensity engagement, yellow = moderately intense or risky play, red light = very intense engagement or risky play. Where a player played more than one game type, the riskiest category was recorded; this is because the BF tool assesses individual games rather than cumulatively across several games. |
| Participants | N=779 x 2 (matched pairs) |
| Drop-out rate | 0 |
| Comparison | Matched sample on age, sex, colour (i.e. risk) category at time of the BF player’s enrolment, types of games played, the average amount deposited during the 10 weeks prior to the week of enrolment for the BF player, and the average amount wagered during the 10 weeks prior to the week of enrolment for the BF player. |
| Participants | N=779 x 2 (matched pairs) |
| Drop-out rate | 0 |
| Outcome | Amount deposited  
Amount wagered |
| Implemented by | Svenska Spel |
| Comments | Some concerns about confounding |

**Pop-up message**

| Author | Broussard et al |
| Year | 2017 |
| Country | USA |
| Ref no | [16] |
| Study design | RCT |
| Setting | College |
## Recruitment
From introductory psychology classes and flyers posted on campus.

## Population
College students  
- N=90, no information about how many eligible  
- Mean (±SD) age: 19.6 years  
- Gender: 50% female  
- Gambling (SOGS): 69% no risk, 30% possible risk, 1% probable pathological gambling  
- Gambling modality  
- Main gambling g modality

## Drop out rate
N=4

## Inclusion criteria
No information

## Follow up time
Instantly after experiment

## Intervention
**Digital Slot Machine Accelerator:** Spin × 1 or spin × 50.  
The accelerator was programmed so that all participants were exposed to an identical sequence of wins and losses.

**Educational Handouts:** detailed handout describing probabilities and concepts related to slot machine gambling; Included were two multiple-choice questions to assess participants’ understanding of the information provided. Participants who answered questions incorrectly were asked to re-read relevant passages and provide the correct answer or answers before moving on.

## Participants
Unclear, n=90 in total

## Drop-out rate
Unclear, n=4 in total

## Comparison
**Control Handouts:** Equal length as education handout; discussed visual form, shape, and space. Included were two multiple-choice questions to assess participants’ understanding of the information provided. Participants who answered questions incorrectly were asked to re-read relevant passages and provide the correct answer or answers before moving on.

## Participant
Unclear, n=90 in total

## Drop-out rate
Unclear, n=4 in total

## Outcome
Self-Report Measures; Gambling behaviour (SOGS)

## Implemented by
Researchers

## Comments
Lack of information about how the study was carried out

<table>
<thead>
<tr>
<th>Author</th>
<th>Floyd et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2006</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Ref nr</td>
<td>[17]</td>
</tr>
<tr>
<td>Study design</td>
<td>RCT</td>
</tr>
<tr>
<td>Setting</td>
<td>Laboratory setting, virtual casino room, computerized roulette game with imaginary money</td>
</tr>
<tr>
<td>Recruitment</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>Psychology classes at university that had a variety of legal gambling options within a 30-min drive</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>N=122 undergraduate students</td>
</tr>
<tr>
<td></td>
<td>Mean (±SD) age: 24.6 ± 7.34 years</td>
</tr>
<tr>
<td></td>
<td>Gender: 42.6% male</td>
</tr>
<tr>
<td></td>
<td>Number of times gambling last year, mean±SD: 8.38 ± 13.15</td>
</tr>
<tr>
<td></td>
<td>Gambling modality: roulette 24.2%, slots 63.3%, card games 57.6%, lottery 45.3%, bingo 41.4%, card games 57.6%, lottery 45.3%, bingo 41.4%, sports 28.7%, dice 28.7%, horses 15.7%, internet 3.5%</td>
</tr>
<tr>
<td>Inclusion criteria</td>
<td>Individuals who had gambled previously and reported understanding English text were eligible to participate</td>
</tr>
<tr>
<td>Follow up time</td>
<td>Instantly after experiment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Warning-message condition. Before gambling they watched an educational film about irrational beliefs commonly associated with loss of control while gambling. Periodic warning messages were displayed on the screen. Written at a fourth-grade reading level, each message addressed a different gambling-related irrational belief. The first warning message appeared after the 3rd spin; remaining messages appeared after a randomly determined number of spins, not exceeding six.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>N=61</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>N=1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Control condition viewed a film on the history of roulette. No warning messages were displayed during play.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>N=61</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>N=1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Money spent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of spins</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implemented by</th>
<th>Researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td>Some concern regarding randomization and missing data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author</th>
<th>Ginley et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2016</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Ref nr</td>
<td>[18]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study design</th>
<th>RCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>Laboratory setting, slot machine games, soundtrack of casino sounds was played in the background</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Public university, participants received course credit as compensation</td>
</tr>
<tr>
<td>Population</td>
<td>N=154 undergraduate students, no information about how many eligible</td>
</tr>
<tr>
<td></td>
<td>Mean (±SD) age: 22.7 ± 7.78</td>
</tr>
<tr>
<td></td>
<td>Gender: 60% female (n=92)</td>
</tr>
</tbody>
</table>
### Inclusion criteria
- Gambling: 67%, had gambled during the past year: 98%, participants gambled at a social level (SOGS): 1.9%
- Gambling modality: lottery ticket 44.2%, sports betting 30.5%, games of skill 31.8%
- Not reported

### Follow up time
- 1 week

### Intervention
- The win/loss pattern of the game was set prior to the session: a winning or losing slot machine. Periodic warning messages were displayed on the slot machine screen in the manner of an Internet browser pop-up message. Written at a fourth-grade reading level, each message addressed a different gambling related irrational belief.
- 2 groups: warning message-win condition, warning message-loss condition. Participants were required to play for at least 20 min in all conditions.

### Participants
- Winning condition, n=42
- Losing condition, n=37

### Drop-out rate (n)
- Winning condition: n=3
- Losing condition: n=1

### Comparison
- 2 groups: control-win condition, and control-loss condition. Did not receive any pop-up message.

### Participants
- Winning condition
- Losing condition

### Drop-out
- Winning condition: n=1
- Losing condition: n=2

### Outcome
- Money wagered
- Total spins
- Time spent placing bet

### Implemented by
- Researcher

### Comments
- Some concern regarding randomisation

### Author
- Jardin et al

### Year
- 2012

### Country
- USA

### Ref
- [19]

### Study design
- RCT

### Setting
- Laboratory setting, Lucky Wheel game

### Recruitment
- Recruited from the community

### Population
- N=80, no information about how many eligible
- Mean (±SD) age: 44 years, range 19–79 years
- Gender: 75% male
- Gambling (SOGS): 31% normal range, 19% possible problem gamblers, and 50% probable pathological gamblers
- Gambling days past month (mean±SD): 14.46 ± 9.97
<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Gambling modality: no information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow up time</td>
<td>Instantly after experiment</td>
</tr>
<tr>
<td>Intervention</td>
<td>Participants continued playing until they decided to stop or had lost all of their money. The game was programmed in nine seamless phases with set reinforcement probabilities. 3 message groups:</td>
</tr>
<tr>
<td></td>
<td><strong>Accurate</strong>: correctly described the prevailing contingencies of a computerized gambling task governed by chance</td>
</tr>
<tr>
<td></td>
<td><strong>Inaccurate</strong>: designed to instil an illusion of control by mimicking erroneous beliefs that many gamblers hold</td>
</tr>
<tr>
<td></td>
<td><strong>Neutral</strong>: to control for the disrupting effects of messages, a no-message control condition</td>
</tr>
<tr>
<td></td>
<td>A total of 8 pop-up messages were programmed to appear after every five trials during the first eight phases of the game but were discontinued during extinction in Phase 9.</td>
</tr>
<tr>
<td>Participants</td>
<td>N=20</td>
</tr>
<tr>
<td>Drop-out, n (%)</td>
<td>0</td>
</tr>
<tr>
<td>Comparison</td>
<td>A no-message control condition</td>
</tr>
<tr>
<td>Participant</td>
<td>N=20 x 3</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>0</td>
</tr>
<tr>
<td>Outcome,</td>
<td>Amount of bet</td>
</tr>
<tr>
<td></td>
<td>Number of trials</td>
</tr>
<tr>
<td></td>
<td>Money left</td>
</tr>
<tr>
<td>Implemented by</td>
<td>Researcher</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

<p>| Author            | Rockloff et al |
| Year              | 2015 |
| Country           | Australia |
| Ref n/            | [20] |
| Study design      | RCT, block randomisation, factorial design |
| Setting           | Laboratory setting; laptop simulated EGM created in Visual Basic |
| Recruitment       | Newspaper flyers |
| Population        | N=130 volunteers |
|                   | Mean (±SD) age: no information |
|                   | Gender: 57% male |
|                   | Problem gambling status (PGSI): 55.1% no risk, 21.5% low risk, 18.6% moderate risk, and 4.6% problem gamblers |
| Drop out rate     | N=23, quit the EGM before reaching the 21st trial |</p>
<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Not reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow up time</td>
<td>Instantly after experiment</td>
</tr>
<tr>
<td>Intervention</td>
<td>A warning message informing shown on the 21st trial. 2 different messages: “relevant” message on the 21st trial saying that the jackpot had expired and could no longer be won, (2) an “irrelevant” pop-up message that simply said “click OK to continue”. Subjects played a 3 reel laptop simulated EGM. The EGM was programmed with a fixed sequence of wins on trials 2, 6, 8, 13, and 20, and infinite losses thereafter.</td>
</tr>
<tr>
<td>Participants</td>
<td>Unclear, n=130 in total</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>Unclear, n=23 in total</td>
</tr>
<tr>
<td>Comparison</td>
<td>No pop-up message</td>
</tr>
<tr>
<td>Participant</td>
<td>Unclear, n=130 in total</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>Unclear, n=23 in total</td>
</tr>
<tr>
<td>Outcome,</td>
<td>Average bet size</td>
</tr>
<tr>
<td></td>
<td>Speed of betting (bets per minute)</td>
</tr>
<tr>
<td></td>
<td>Trials played</td>
</tr>
<tr>
<td>Implemented by</td>
<td>Researcher</td>
</tr>
<tr>
<td>Comments</td>
<td>Some concerns regarding missing data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author</th>
<th>Steenbergh et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2004</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Ref n</td>
<td>[21]</td>
</tr>
<tr>
<td>Study design</td>
<td>RCT</td>
</tr>
<tr>
<td>Setting</td>
<td>Laboratory setting, university</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Introductory psychology classes</td>
</tr>
<tr>
<td>Population</td>
<td>N=101, no information about how many eligible</td>
</tr>
<tr>
<td></td>
<td>Mean (±SD) age: 20.5 ± 4.57 years</td>
</tr>
<tr>
<td></td>
<td>Gender: 64.4% female</td>
</tr>
<tr>
<td></td>
<td>Gambling last month: 50%</td>
</tr>
<tr>
<td></td>
<td>Gambling modality: casino gambling: 32.7%, sports wagering 32.7%</td>
</tr>
<tr>
<td>Inclusion criteria</td>
<td>Undergraduate students who had gambled ≥1 and could read and understand English</td>
</tr>
<tr>
<td>Follow up time</td>
<td>Instantly after experiment</td>
</tr>
<tr>
<td>Intervention</td>
<td><strong>Warning condition:</strong> A 22-second computer delivered audio-visual message that explained the odds of winning at roulette and warned viewers of the risks associated with gambling. Then viewed the ten-minute gambling history video.</td>
</tr>
</tbody>
</table>
|                    | **Warning Plus Brief Intervention (WBI):** Received the warning message as well as limit-setting and belief-modification components designed to produce incremental effects on gamblers' beliefs and wagering behaviour. All components of the
Participants | The intervention were delivered in audio-visual format via a multimedia computer program.
--- | ---
Drop-out rate | Warning n=35
--- | ---
Comparison | WBI n=33
--- | ---
| Control condition viewed a 10-minute video: descriptive history of gambling growth and opportunity in USA since the colonial period. The video presented a neutral perspective on gambling and did not mention problem gambling, or the benefits or risks associated with gambling.
--- | ---
Participants | N=33
--- | ---
Drop-out rate | 0
--- | ---
Outcome | Gambling behaviour
--- | ---
| Time gambling
--- | ---
 Implemented by | Researcher
--- | ---
Comments | Some concern regarding randomisation

### Pop up message - limits

<table>
<thead>
<tr>
<th>Author</th>
<th>Kim et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2014</td>
</tr>
<tr>
<td>Country</td>
<td>Canada</td>
</tr>
<tr>
<td>Ref nr</td>
<td>[22]</td>
</tr>
<tr>
<td>Study design</td>
<td>RCT</td>
</tr>
<tr>
<td>Setting</td>
<td>Laboratory setting, virtual Reality casino, all spins on EGM pre-determined</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Unclear</td>
</tr>
<tr>
<td>Population</td>
<td>Non-problem and low-risk EGM gamblers recruited from university N=43, no information about how many eligible Mean (±SD) age: 21.4 ± 6.1 years, range 17–53 years Gender: 39.5% male Gambling: no information Gambling modality: no information</td>
</tr>
<tr>
<td>Inclusion criteria</td>
<td>No information</td>
</tr>
<tr>
<td>Follow up time</td>
<td>Instantly after experiment</td>
</tr>
<tr>
<td>Intervention</td>
<td>Time limit pop-up message condition: Each participate set a time limit on their play (in minutes). They were free to choose any time limit (including setting no limit at all) and could stop gambling at any time, irrespective of the time limit they set. Participants were instructed to indicate their chosen time limit in a text box provided in the pop-up message. Participants were neither reminded when they reached their limit nor led to believe that such a reminder would be given.</td>
</tr>
<tr>
<td>Participants</td>
<td>N=20</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>0</td>
</tr>
<tr>
<td>---------------</td>
<td>---</td>
</tr>
<tr>
<td>Comparison</td>
<td>No pop-up message, free to gamble as long as they wanted</td>
</tr>
<tr>
<td>Participant</td>
<td>N=23</td>
</tr>
<tr>
<td>Drop-out</td>
<td>0</td>
</tr>
<tr>
<td>Outcome,</td>
<td>Time spent on gambling</td>
</tr>
<tr>
<td>Implemented by</td>
<td>Researchers</td>
</tr>
<tr>
<td>Comments</td>
<td>All participants were compensated $30 for their participation. No information about randomization process or concealment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author</th>
<th>Wohl et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Canada</td>
</tr>
<tr>
<td>Country</td>
<td>2014</td>
</tr>
<tr>
<td>Ref n/</td>
<td>[23]</td>
</tr>
<tr>
<td>Study design</td>
<td>RCT</td>
</tr>
<tr>
<td>Setting</td>
<td>Laboratory setting</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Psychology students at university participated in a mass-testing session e.g. they completed the PGSI. EGM gamblers classified as being non-problem or low-risk gambler, were randomly selected from this sample.</td>
</tr>
<tr>
<td>Population</td>
<td>N=56, no information about how many eligible</td>
</tr>
<tr>
<td></td>
<td>Mean (±SD) age: 20.38 ± 4.27 years, range 18–39 years</td>
</tr>
<tr>
<td></td>
<td>Gender: 34% male</td>
</tr>
<tr>
<td></td>
<td>Gambling: no information</td>
</tr>
<tr>
<td></td>
<td>Gambling modality: no information</td>
</tr>
<tr>
<td>Inclusion criteria</td>
<td>Users engaged in EGM gambling activities and classified as non-problem or low-risk gamblers</td>
</tr>
<tr>
<td>Follow up time</td>
<td>Instantly after experiment</td>
</tr>
<tr>
<td>Intervention</td>
<td>Monetary limit tool that incorporated EGM players’ desired functionality coupled with design fundamentals of Human Computer Interaction (HCI) and Persuasive Systems Design (PSD: The traffic light system, indicating how close they were to their limit. Participants were exposed to 2 pop-up messages. The first appeared when 10% of their allocated credits remaining, if they would like to continue gambling after a 5 s delay. Participants who reached their pre-set limit were presented with a second pop-up message, indicating that they had reached their preset limit and asked if they wished to continue gambling.</td>
</tr>
<tr>
<td>Participants</td>
<td>N=29</td>
</tr>
<tr>
<td>Drop-out</td>
<td>0</td>
</tr>
<tr>
<td>Comparison</td>
<td>Standard pop-up message tool: When the participant hit their limit, a text box appeared and asked if they would like to continue gambling</td>
</tr>
<tr>
<td>Participants</td>
<td>N=27</td>
</tr>
<tr>
<td>Drop-out</td>
<td>0</td>
</tr>
<tr>
<td>Outcome</td>
<td>Adherence to the pre-set limit</td>
</tr>
<tr>
<td>Implemented by</td>
<td>Not reported</td>
</tr>
<tr>
<td>Comments</td>
<td>Concern regarding randomization and deviations from intended intervention. They were given a total of $20 dollars (80 credits) to gamble for. They were allowed to leave anytime they desired and keep any winnings and or remaining money that they had.</td>
</tr>
</tbody>
</table>

<p>| Author | Auer et al |
| Year | 2013 |
| Country | UK |
| Ref nr | [24] |
| Study design | Cohort |
| Setting | Online |
| Recruitment | From a representative random sample of who gambled on the win2day gambling website during a 3-month test period |
| Population | Intense online gamblers N=5,000 out of 100,000 eligible, the 10% most intense players were further investigated Mean (±SD) age: no information Gender: no information Gambling: no information Gambling modality: lottery players 65%, casino players 47%, poker players 15% |
| Inclusion criteria | Not reported |
| Follow up time | 30 days |
| Intervention | Voluntary time and/or money limit setting |
| Participants | N=500 |
| Drop-out rate | 0 |
| Comparison | Not applicable |
| Participants | Not applicable |
| Drop-out rate | Not applicable |
| Outcome | Monetary spending (theoretical loss) |
| Implemented by | Win2day gambling website |
| Comments | Concern regarding data presentation |</p>
<table>
<thead>
<tr>
<th>Author</th>
<th>Nelson et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2008</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Ref n/</td>
<td>[25]</td>
</tr>
</tbody>
</table>

**Study design**
Cohort

**Setting**
Online

**Recruitment**
Internet gamblers subscribed to Bwin during February 2005 and placed bets on that site between February 2005 and September 2006 (n=47,478)

**Population**
N=593 (all of those who used self-limit settings, 1.2% of the final sample)
Mean (±SD) age: 29.3 years
Gender: 95.9% male
Gambling
Gambling modality: fixed-odds bets 99.1%, live-action bets 81.7%, poker 5%

**Inclusion criteria**
Those who imposed self-limits on their accounts

**Follow up time**
6 months

**Intervention**
Self-limit

**Participants**
N=593

**Drop-out rate**
0

**Outcome**
Frequency
Bets/day
Stakes/bet
Wagered/duration
Netloss/duration
% loss

**Implemented by**
Bwin

**Comments**
Some concern with confounding and regarding data presentation

<table>
<thead>
<tr>
<th>Author</th>
<th>Sharpe et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2005</td>
</tr>
<tr>
<td>Country</td>
<td>Australia</td>
</tr>
<tr>
<td>Ref n/</td>
<td>[26]</td>
</tr>
</tbody>
</table>

**Study design**
NRS

**Setting**
7 hotels and 4 club venues

**Recruitment**
Players attending these hotels and club venues

**Population**
N=210 out of 634 eligible
Mean (±SD) age: 46.1 ±17.9 years
Gender: no information
Gambling (SOGS, mean): 2.43 ± 3.43 (n=634)
Gambling modality: no information

**Inclusion criteria**
Played at least on 2 machines and scored SOGS points
<table>
<thead>
<tr>
<th>Follow up time</th>
<th>Instantly after experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Modified 7 EGM machine, to one or more of the independent variables to cover all possible combinations:</td>
</tr>
<tr>
<td></td>
<td>A. Maximum bet $1, Reel spin 3.5 seconds, all denomination notes accepted.</td>
</tr>
<tr>
<td></td>
<td>B. Maximum bet $1, Reel spin 5 seconds, all denomination notes accepted</td>
</tr>
<tr>
<td></td>
<td>C. Maximum bet $1, Reel spin 3.5 seconds, $20 maximum note accepted</td>
</tr>
<tr>
<td></td>
<td>D. Maximum bet $1, Reel spin 5 seconds, $20 maximum note accepted</td>
</tr>
<tr>
<td></td>
<td>E. Maximum bet $10, Reel spin 5 seconds, all denomination notes accepted</td>
</tr>
<tr>
<td></td>
<td>F. Maximum bet $10, Reel spin 3.5 seconds, $20 maximum note accepted</td>
</tr>
<tr>
<td></td>
<td>G. Maximum bet $10, Reel spin 5 seconds, $20 maximum note accepted</td>
</tr>
<tr>
<td>Participants</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Comparison</td>
<td>7 control EGM machines: Standard configuration one-cent Aristocrat Leisure Technologies ‘Pirates’ machines, maximum bet of $10, a wager cycle speed set at 3.5 seconds, continuous play capability and accepted notes of denominations to the value of $100.</td>
</tr>
<tr>
<td>Participants</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Outcome</td>
<td>Gambling (SOGS)</td>
</tr>
<tr>
<td></td>
<td>Losses</td>
</tr>
<tr>
<td></td>
<td>Time played</td>
</tr>
<tr>
<td>Implemented by</td>
<td>Two machines (one control and one machine) were placed adjacent to each other. Participants were observed by a research assistant while playing machines of their own choice and with their own funds. Data collection in hotels was conducted over five hours per day over seven consecutive days. No baseline data, unclear how many that played the different machines. Concerns regarding confounding.</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>
### Self-exclusions

<table>
<thead>
<tr>
<th>Author</th>
<th>McCormick et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2018</td>
</tr>
<tr>
<td>Country</td>
<td>Canada</td>
</tr>
<tr>
<td>Ref no</td>
<td>[28]</td>
</tr>
</tbody>
</table>

**Study design**  
Cohort, prospective

**Setting**  
Casinos, commercial bingo halls, and venues with slot machines

**Recruitment**  
From British Columbia’s VSE program, as enrolling in the program.

**Population**  
N=326 out of 472 eligible  
Mean (±SD) age: 48 years, range 19–88 years  
Gender: 53% female  
Gambling ≥1/week: 74%

**Inclusion criteria**  
Voluntary self-excluders

**Intervention**  
Not applicable

**Outcome,**  
Gambling problems (PGSI)  
Money wagered  
Time spent gambling assessed

**Comments**  
Some concern regarding randomisation and missing data

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<table>
<thead>
<tr>
<th>Author</th>
<th>Caillon et al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2018</td>
</tr>
<tr>
<td>Country</td>
<td>France</td>
</tr>
<tr>
<td>Ref no</td>
<td>[27]</td>
</tr>
</tbody>
</table>

**Study design**  
RCT

**Setting**  
Online gamblers

**Recruitment**  
Media announcements

**Population**  
N=60  
Mean (±SD) age: 35.2 years, range 18–65 years  
Gender: male 73.3%  
Gambling ≥1/week: 68.3%  
Gambling every day/almost every day: 21.7%

**Inclusion criteria**  
At-risk gamblers (score 3–7, PGSI), ≥18 year, gambling ≥1 during the past month on a website authorized licensed by ARJEL, and agreeing to give access to the gambling account data.

**Follow up time**  
15 days and 2 months

**Intervention**  
A 7-day temporary non-reducible and voluntary self-exclusion

**Drop-out rate**  
Not reported

**Comparison**  
No program

**Participant**  
N=30

**Drop-out rate**  
Not reported

**Outcome,**  
Gambling problems (PGSI)

**Implemented by**  
Not applicable

**Comments**  
Some concern regarding randomisation and missing data
<table>
<thead>
<tr>
<th>Follow up time</th>
<th>6 and 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Voluntary self-exclusion (VSE) program for 6 months, 1–3 years</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>6 months: n=57 (17.5%), 12 months: n=91 (27.9)</td>
</tr>
</tbody>
</table>
| Outcome       | Problem gambling (PGSI)  
Program violator and abstainer |
| Implemented by| Personnel at gambling venues |
| Comments      | Recruitment from multiple venues. Large drop out. |
Referenser