

# research snapshot

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## Evaluating a real-time intervention delivered through smartphone for managing gambling cravings

### What this research is about

Online interventions can reduce barriers associated with seeking face-to-face services. Smartphone can be used to deliver intervention to people at any time and in almost any location. GamblingLess: Curb Your Urge is the first ecological momentary intervention (EMI) delivered through smartphone for problem gambling. EMI aims to provide intervention to people in the moment that they need it. GamblingLess is designed to help people manage their gambling cravings. To identify when an EMI is needed, the app sends out ecological momentary assessments (EMAs) at certain times of the day. This study tested whether GamblingLess would be acceptable, feasible, and effective for people with gambling problems.

### What the researchers did

This study involved a five-week trial with a one-month follow-up. Participants were 36 Australian adults who were seeking help for their own gambling problems (61% men). Almost all of the participants (94%) met the criteria for problem gambling according to the Problem Gambling Severity Index (score of 8 or higher). The rest met the criteria for moderate-risk gambling (score of 3 to 7). After being enrolled in the study, participants were emailed an instruction manual on how to download and use the app.

During the first week (baseline), the app prompted participants to complete a brief EMA three times a day at certain periods (9 AM–noon, 1–4 PM, and 5–8 PM). The EMAs asked about gambling episodes since the last EMA, cravings at the current moment and since the last EMA, confidence in ability to limit or stop gambling (gambling self-efficacy), and confidence in ability to resist cravings (craving self-efficacy).

### What you need to know

GamblingLess: Curb Your Urge is the first ecological momentary intervention (EMI) delivered through smartphone for managing gambling cravings. It aims to provide intervention to people in the moment that they need it. This study tested whether GamblingLess would be acceptable, feasible, and effective for people with gambling problems. Participants were prompted to complete a brief ecological momentary assessment (EMA) three times daily. If they reported having gambling cravings, the app's EMI feature recommended they use the tips and activities. Overall, participants rated the intervention as acceptable and were satisfied with it. But, compliance rates for completing the EMAs and using the EMI were low. The intervention was able to reduce gambling episodes and cravings.

During the four weeks of intervention, participants completed the EMAs as before. If they reported that they currently had gambling cravings, the app's EMI feature recommended them to use any of the 12 tips and activities. In addition, participants could access the tips and activities at any time without needing to complete an EMA (i.e., on demand use). If participants used a tip or activity, they were asked to rate the intensity of their cravings before and after use.

The post-intervention survey asked participants to rate the acceptability of the intervention. This included helpfulness of the tips and activities, satisfaction with the intervention, and impact of the intervention. In both the post-intervention and one month follow-up surveys, participants completed the

Gambling-Symptom Assessment Scale (G-SAS), which assessed their gambling cravings and symptoms. They also reported number of days and amount of money spent gambling in the past month.

### What the researchers found

Of the 36 participants, 27 downloaded the app (82%), 22 participants (61%) completed the post-intervention survey, and 21 (58%) completed the follow-up survey.

#### Acceptability and feasibility

Participants rated all of the tips and activities as above average for helpfulness. They rated the EMAs as relevant although somewhat burdensome. Some suggestions for improvement were making the EMAs less frequent and targeting the EMAs to specific times for users (e.g., pay day). Participants were mostly satisfied with the intervention. They considered the intervention to meet their needs and improve their understanding of and ability to manage cravings. In terms of feasibility, compliance rate was low for the EMAs (51% overall). The EMI compliance rate was also low (15%), as participants only used the intervention 13 times out of the 87 times that they were recommended to do so. In total, there were 59 uses after completing an EMA (13 uses after it was recommended), and 107 on-demand uses.

#### Effectiveness

Compared to the baseline week, there was a 71% decrease in the number of gambling episodes during the intervention. There was a 72% decrease in the occurrences of gambling cravings. In terms of real-time cravings, there was a decrease of 5.4% in craving intensity after using the intervention compared to before use. It became a 10.5% decrease if participants used the intervention after it was recommended.

Overall, gambling symptoms, cravings, frequency, and spending reduced at post-intervention and follow-up. About one-quarter of participants were considered *recovered or improved* on their gambling symptoms and cravings. Most participants were considered *unchanged*. Over 80% of the participants were *unchanged* in their gambling frequency or spending. None had *deteriorated* on these aspects at follow-up.

### How you can use this research

This study can inform service providers and researchers about smartphone-delivered intervention. More research is needed to examine the effectiveness of GamblingLess.

### About the researchers

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### Citation

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### About Gambling Research Exchange (GREO)

Gambling Research Exchange (GREO) has partnered with the Knowledge Mobilization Unit at York University to produce Research Snapshots. GREO is an independent knowledge translation and exchange organization that aims to eliminate harm from gambling. Our goal is to support evidence-informed decision making in safer gambling policies, standards, and practices. The work we do is intended for researchers, policy makers, gambling regulators and operators, and treatment and prevention service providers.

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