

# knowledge snapshot



## A review of the evidence for educational programs and responsible gambling measures

### What this article is about

Problem gambling can lead to many harmful consequences. Aside from people with problem gambling, those who gamble at a low-risk level can also experience some form of harm. Therefore, it is important to have preventive measures in place to decrease the likelihood of harm from gambling.

In this article, the authors reviewed past studies on educational programs and responsible gambling measures. Educational programs are examples of preventive measures that aim to reduce the demand for gambling activities. These interventions work to increase knowledge about the risk of gambling or change the social context in which gambling takes place. Responsible gambling measures are part of consumer protection measures. Common measures include setting limits on money and time spent gambling, personal feedback, and self-exclusion.

The first aim of this review was to assess the certainty of evidence of these preventive measures. The certainty of evidence tells us how confident we can be about the effects of different measures. The second aim was to discuss the shortcomings of current studies and possible directions for future studies.

### What was done?

The authors followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. First, they searched for relevant studies that were published from 2000 to 2018 in English, Danish, Norwegian, and Swedish. Studies must also meet a few other criteria. For example, educational programs must have at least 75% of participants over the age of 13. Responsible gambling measures must have at least 75% of participants over the age of 16.

### Why is this article important?

This article is a review of past studies on educational programs and responsible gambling measures to prevent problem gambling. Only studies with low and moderate risk of bias were reviewed. The authors assessed the certainty of evidence of each measure. Two measures, educational programs and personal feedback, appeared to have an impact on decreasing gambling frequency. However, the certainty of evidence was low. The certainty of evidence of other measures was very low. The authors pointed to the need for more high-quality research. They discussed the shortcomings of current studies and areas where future research could improve.

In total, there were 37 eligible studies. Two authors assessed the risk of bias for each study. They used the Rob 2.0 checklist to assess randomized and non-randomized controlled studies. These were studies that randomly or non-randomly assigned participants to receive the intervention or no intervention (control). Age and gender are well-known factors that influence gambling behaviours. Thus, if a study did not report how it handled age and gender, the authors deemed the study to have a critical risk of bias and excluded it from further review. For studies without a control group, the authors developed a checklist to assess the risk of bias. They excluded studies with a high risk because the results might be unreliable.

The authors then used the GRADE system to assess the certainty of evidence. They divided educational programs into short interventions with only one session or long interventions with several sessions.

## What you need to know

### *Educational programs*

The authors found 11 studies that investigated educational programs. Three studies were excluded because they had a critical or high risk of bias. Of the remaining eight studies, six studies were school-based interventions. Five of them had a long-term design with a follow-up period ranging from 2 to 12 months.

Overall, educational programs could reduce gambling frequency by reducing the number of days gambled. However, the certainty of evidence was low. In terms of reducing the amount of money spent on gambling, changing attitudes towards gambling or increasing knowledge, the certainty of evidence was very low.

### *Responsible gambling measures*

The authors found 26 studies that examined responsible gambling measures. Six studies were excluded because of a critical or high risk of bias. The authors could only perform meta-analysis for two measures: personal feedback and pop-up messaging. Overall, personal feedback could reduce gambling frequency at three months. But, the certainty of evidence was low and the long-term effects were unknown. For other kinds of responsible gambling measures, the certainty of evidence was very low.

### *Shortcomings in the reviewed studies*

Only seven studies had a low risk of bias. The most common shortcoming across the studies was missing outcome data. Some studies did not mention how many participants dropped out before they completed the study. Additional shortcomings included small numbers of participants, use of different methods to assess outcomes, and brief follow-up periods. Some randomized controlled studies did not describe how participants were assigned to the intervention and control groups.

The authors concluded that a lack of evidence for the preventive measures does not mean they do not have any positive impact. Rather, there is a need for more high-quality research studies.

## Who is it intended for?

This article is intended for program providers and researchers. It offers insights into the current state of knowledge regarding preventive measures. It also suggests directions for future research.

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### Citation

Forsström, D., Spångberg, J., Petterson, A., Brolund, A., & Odeberg, J. (2020). A systematic review of educational programs and consumer protection measures for gambling: An extension of previous reviews. *Addiction Research & Theory*. Advance online publication.

<https://doi.org/10.1080/16066359.2020.1729753>

### Study funding

No funding was declared for this research.

### 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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