

research snapshot

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Predicting the risk of gambling problems over a five-year period using low-risk gambling limits

What this research is about

Efforts have been made in Canada, United States, and Australia to identify low-risk gambling limits. Evidence suggests that people who gamble above those limits are more likely to experience gambling problems in the future. Longitudinal studies follow participants over a number of years and assess them at multiple time points. These studies provide insights into how behavioural and clinical factors influence the risk of future problems. In a recent study, the researchers developed a set of low-risk gambling limits using data from two Canadian longitudinal studies. The low-risk gambling limits included: (1) gambling less than eight times per month; (2) spending less than \$75 CAD per month; and (3) spending less than 1.7% of household income on gambling. In this study, the researchers assessed the risk of gambling problems within the next five years if people gambled above these limits.

What the researchers did

The researchers used data from the Quinte Longitudinal Study (QLS) and the Leisure, Lifestyle, and Lifecycle Project (LLLPP). Both studies followed participants over a five-year period from 2006 to 2011. The QLS recruited 4123 adults from the Quinte Region in Southeastern Ontario and surveyed them every 12 months. The LLLPP recruited 1808 adolescents and adults from Alberta and surveyed them every 14 months. The researchers examined data from 4212 adults who gambled but did not have problem gambling at time 1 (the first year of the studies).

At each time point, participants were asked about their gambling habits. These included how frequently they played and how much they spent in a typical month on various gambling activities. They also

What you need to know

In a previous study, the researchers developed a set of low-risk gambling limits for the Canadian population. The low-risk gambling limits included: (1) gambling less than eight times per month; (2) spending less than \$75 CAD per month; and (3) spending less than 1.7% of household income on gambling. In this study, they assessed the risks of experiencing moderate level of harm and developing problem gambling within the next five years if people exceeded the gambling limits. The results supported that exceeding the gambling limits increased the risks of moderate harm and problem gambling. Other factors that increased the risks included having a mental illness, stressful life events, false gambling beliefs, and playing electronic gaming machines or casino table games.

completed the Problem Gambling Severity Index (PGSI). The researchers defined a moderate level of harm as endorsing two or more negative consequences on the PGSI. They defined problem gambling as scoring five or higher on the PGSI.

The researchers also looked at several factors that could influence the risk of future gambling problems. They selected factors that could be modified, such as a behaviour that could be changed or a health condition that could be treated. The factors included:

- Presence of a co-occurring mental illness or a substance use disorder, based on DSM criteria.
- Number of stressful life events in the past year, assessed using the Life Events Questionnaire.
- Number of false beliefs about gambling, assessed using the Gambling Fallacies Measure.

- Participation in electronic gaming machines (EGMs) and casino table games. These types of gambling are known to have high risk.

The researchers used survival analysis to determine the time until an outcome occurred. There were two outcomes of interest. The first was experience of moderate level of harm. The second was onset of problem gambling.

What the researchers found

Moderate level of harm

Among the QLS participants, those who exceeded the low-risk gambling limits at time 1 were at higher risk of moderate harm in the next five years. For each gambling limit exceeded, the risk increased by 24%. The survival rate for people who exceeded all three limits was 83%. That is, 83% of people who exceeded the limits would not experience moderate harm and 17% would. This was compared to a survival rate of 95% for people who gambled within the limits. Other factors that increased the risk of moderate harm were having a mental illness at time 1 (depression or anxiety disorder), more stressful life events, more false gambling beliefs, playing more gambling activities, and playing EGMs or casino table games.

Similar results were found for the LLLP participants. For this group, the chance of moderate harm increased by 27% for each gambling limit exceeded. The survival rates were 85% for people who exceeded all limits, and 96% for people who gambled within the limits. Other risk factors were having a mental illness, stressful life events, and false gambling beliefs.

Problem gambling

For the QLS participants, the chance of developing problem gambling within the next five years increased by 40% for each gambling limit exceeded. The survival rates were 93% for exceeding all three limits and 96% for gambling within the limits. Having a mental illness, more false gambling beliefs, and playing more gambling activities also increased the risk. For the LLLP participants, having a mental illness, more false gambling beliefs, and playing EGMs or casino table games increased the risk.

How you can use this research

This research can be used to inform responsible gambling initiatives. For example, public health could develop campaigns to let people know about the risks of gambling above certain limits.

About the researchers

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Citation

Currie, S. R., Hodgins, D. C., Williams, R. J., & Fiest, K. (2021). Predicting future harm from gambling over a five-year period in a general population sample: A survival analysis. *BMC Psychiatry*, 21, 15. <https://doi.org/10.1186/s12888-020-03016-x>

Study funding

Data collection for this research was funded by the Alberta Gambling Research Institute (AGRI) and the Gambling Research Exchange Ontario (GREO).

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.

Learn more about GREO by visiting greo.ca or emailing info@greo.ca.

