research snapshot
summarize | mobilize

Evaluating the Gambling Attitudes and Beliefs Survey (GABS) as a measure with more than one dimension

What this research is about

People who gamble may have irrational beliefs about gambling. For example, the illusion of control is the belief that one has the ability or skill to affect the outcomes of games of chance. Past research has suggested an important role of irrational beliefs in the development of gambling problems. Moreover, irrational beliefs increase the chance that people relapse into problematic gambling behaviour.

The Gambling Attitudes and Beliefs Survey (GABS) was developed to assess irrational beliefs and positive attitudes towards gambling. The GABS has 35 items. Each item is responded on a Likert scale ranging from "1 = strongly disagree" to "4 = strongly agree". People who score higher on the GABS have more positive attitudes and are more prone to irrational beliefs. The developers of the GABS found that it has one dimension capturing an overall "gambling affinity".

There has been debate among researchers about whether the GABS has more than one dimension. A shot version of the GABS with 15 items has also been proposed. The 15-item version has been reported to be as robust a measure as the original version. The aim of this study was to re-examine the dimensional structure of the GABS using the 15-item version.

What the researchers did

The researchers used data from the baseline assessments of two randomised controlled trials (RCTs). These clinical trials randomly assigned participants to receive a self-guided online intervention for gambling problems or no intervention. The RCTs recruited participants via gambling and addiction-related Internet forums, Facebook groups, and information websites. A Google

What you need to know

The Gambling Attitudes and Beliefs Survey (GABS) is a measure of irrational beliefs and positive attitudes towards gambling. There has been debate among researchers whether the GABS has more than one dimension. This study re-examined the dimensional structure of the GABS using its short 15-item version. Data came from the baseline assessments of two clinical trials examining an online intervention for gambling problems. The researchers found the GABS to have three dimensions. These were labelled "sensation seeking/illusion of control", "luck/gambler's fallacy", and "attitude/emotions". Higher scores on these dimensions were associated with more severe gambling problems. Also, people who played both chance-based and skill-based games scored higher on sensation seeking/illusion of control than those who played chance-based games only.

AdWords campaign was also run in German-speaking countries. Participants in both RCTs were adults who speak German. All self-reported to have gambling problems and emotional distress. None had suicidal behaviour or a mental disorder over their lifetime.

Participants completed the 15-item GABS as part of the baseline assessments. The Pathological Gambling Adaptation of the Yale-Brown Obsessive–Compulsive Scale (PG-YBOCS) was used to assess how severe their gambling problems were in the previous week. The South Oaks Gambling Screen (SOGS) was used to assess their severity of gambling problems in the past six months. The Patient Health Questionnaire-9

research impact
turning research into action

greo

Depression Module (PHQ-9) was used to assess symptoms of depression in the past two weeks. Participants were also asked about their gambling habits, such as age when they first started gambling, and sociodemographic information.

What the researchers found

There were 415 participants with an average age of 35 years. Almost three-quarters of participants were men (73%). Participants on average had moderate gambling problems and moderate depressive symptoms at baseline.

The researchers analysed participants' responses to determine the dimensional structure of the GABS. They found that the items of the GABS loaded onto three dimensions. The first dimension was labelled "sensation seeking/illusion of control". The second dimension was labelled "luck/gambler's fallacy". The third dimension was labelled "attitude/emotions". The model with three dimensions was superior to the model with one dimension. However, none provided an ideal fit for the data.

Scores on the three dimensions were related to scores on the SOGS. That is, people who scored higher on sensation seeking/illusion of control reported more severe gambling problems on the SOGS. The same was observed for the other dimensions. Scores on the PG-YBOCS were related to sensation seeking/illusion of control and luck/gambler's fallacy, but not attitude/emotions. Scores on the three dimensions were also related to depressive symptoms.

In terms of gambling habits, scores on the three dimensions were not related to amount of monthly loss or debts. Only sensation seeking/illusion of control was related to age at first gambling, age at frequent gambling, and number of games played. In other words, people who scored higher on sensation seeking/illusion of control started gambling and started frequent gambling at an earlier age. These people also played more types of games.

Most participants played chance-based games (52.3%) or both chance-based and skill-based games (44.1%). Those who played both chance-based and skill-based games had higher scores on sensation seeking/illusion of control than those who played chance-based games only. No group differences were found for the other two dimensions.

How you can use this research

This study suggests that a multidimensional approach to gambling-related beliefs and attitudes may be useful in guiding treatment. Further research is needed to confirm the multidimensional structure of the GABS.

About the researchers

Josefine Gehlenborg, Steffen Moritz, and **Lara Bücker** are affiliated with the University Medical Centre Hamburg-Eppendorf in Hamburg, Germany. For more information about this study, please contact Josefine Gehlenborg at j.gehlenborg@uke.de.

Citation

Gehlenborg, J., Moritz, S., & Bücker, L. (2022). The dimensional structure of the Gambling Attitudes and Beliefs Survey: Challenging the assumption of the unidimensionality of gambling-specific cognitive distortions. *Journal of Gambling Studies.* Advance online publication. https://doi.org/10.1007/s10899-022-10133-7

Study funding

Open Access funding enabled and organized by Projekt DEAL.

About Greo

Greo has partnered with the Knowledge Mobilization Unit at York University to produce Research Snapshots. Greo is an independent knowledge translation and exchange organization with almost two decades of international experience in generating, synthesizing, and mobilizing research into action across the health and wellbeing sectors. Greo helps organizations improve their strategies, policies, and practices by harnessing the power of evidence and stakeholder insight.

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