

The effectiveness of an interactive and gamified intervention for preventing problem gambling in university and vocational training students

What this research is about

Online gambling has expanded rapidly around the globe. The growth of online gambling is concerning due to the increased risk for gambling-related harms. For some people, gambling can lead to gambling disorder (GD) and considerable harms.

Structural characteristics can affect the addictive potential of gambling products. Structural characteristics refer to design features such as the speed of play and bet size. These design features can distort beliefs about winning and lead to illusions of control. Gambling advertising and incentives also contribute to the risk for gambling harms.

Adolescents and young adults have been found to be at greater risk for gambling harms. Numerous brief gambling interventions programs have been developed for youth. Many of these programs provide education on the nature of gambling and the role of chance and randomness. Some programs also improve skills such as emotion regulation. However, the effectiveness of these programs is not clear. One promising approach is to design interventions that are interactive and use diverse methods, including interactive ones.

The researchers previously tested a brief, single-session gambling intervention that was delivered in a psychoeducational or interactive format. The intervention promoted critical thinking regarding gambling products and marketing. However, it was unclear which format was more effective. The aim of the present study was to further examine the effectiveness of this intervention. It was predicted

What you need to know

This study compared two brief prevention interventions for problem gambling. The interventions were designed to improve critical thinking skills regarding gambling products and marketing. The interventions had the same content, but one was delivered as a psychoeducation intervention involving a lecture, while the other was an interactive intervention with activities, games, and group discussions. A total of 395 university and vocational training students were randomly assigned to either one of the interventions.

Both interventions resulted in improvements, but the interactive intervention led to even larger decreases in gambling severity and harms at the one-month follow-up. While the interactive intervention might also lead to greater improvements in bet amount, gambling misbeliefs, and negative attitudes toward gambling, these results should be interpreted with caution.

that an interactive intervention would have a greater effect on gambling behaviours, attitudes, and beliefs.

What the researchers did

The researchers recruited 395 university and vocational training students in Madrid, Spain. Participants were randomly assigned to an experimental group or an active control group. The experimental group completed a gamified and

interactive intervention, with activities, games, and group discussions. The control group received a lecture where the speaker explained the material and answered questions.

Behavioural outcomes were assessed before and one month after the intervention. These outcomes included gambling frequency, bet amount, gambling severity (using the Problem Gambling Severity Index), and gambling harms (using the Short Gambling Harms Screen). Gambling attitudes, knowledge and misbeliefs, and intentions were assessed before, immediately after, and one month after the intervention.

What the researchers found

No differences were found between the two groups at baseline on gambling frequency, amount bet, gambling severity, and positive attitudes toward gambling. But the control group had lower gambling knowledge and higher levels of misbeliefs.

Both groups displayed improvements in behavioural outcomes at the one-month follow-up. The experimental group showed larger decreases in bet amount, gambling severity, and harms. Both groups also showed improvements in gambling knowledge and misbeliefs, attitudes, and intentions. The experimental group showed a larger decrease in gambling misbeliefs and a larger increase in negative attitudes toward gambling.

The researchers examined the possible influence of group differences that already existed at baseline. They found that despite these initial differences, the experimental groups still experienced greater improvements over time compared to the control group. Lastly, the researchers re-analyzed their data with a different statistical approach. While some findings remained the same, others became non-significant. Specifically, the experimental group still showed greater improvements in gambling severity and harms over time, but only a larger increase in negative attitudes from baseline to immediately after the intervention. The other findings became non-significant. Thus, the researchers recommended caution in interpreting the findings.

How you can use this research

This study provides insight into the design and effectiveness of brief gambling interventions. The findings can inform researchers, policy makers, and clinicians working to prevent gambling harms.

About the researchers

Cristina Martín-Pérez is affiliated with the Department of Psychology, University of Valladolid, Spain. **Miguel A. Vadillo** is affiliated with the Department of Basic Psychology, Autonomous University of Madrid, Spain. **Ruth J. van Holst** is affiliated with the Department of Psychiatry, Amsterdam UMC – University of Amsterdam, the Netherlands. **José C. Perales** is affiliated with the Department of Experimental Psychology, Mind, Brain and Behavior Research Center (CIMCYC), Universidad de Granada, Spain. **Juan F. Navas** is affiliated with the Department of Personality, Assessment, and Clinical Psychology, Complutense University of Madrid, Spain. For more information about this study, please contact Juan Navas at junavas@ucm.es.

Citation

Martín-Pérez, C., Vadillo, M. A., van Holst, R. J., Perales, J. C., & Navas, J. F. (2025). Evidence on the effectiveness of a gamified intervention for gambling prevention problems in vocational training and university students. *Acta Psychologica*, 267, 105825.

<https://doi.org/10.1016/j.actpsy.2025.105825>

Study Funding

Funding for this study was provided by Madrid Salud (Servicio de Prevención de Adicciones).

About Greo Evidence Insights

Greo Evidence Insights is an independent, non-profit organization specializing in research, knowledge mobilization, and evaluation in the health and well-being sectors. Greo transforms research and insights into actionable strategies to prevent and reduce harm related to gambling, gaming, technology use, and substance use. To learn more about funding for Research Snapshots visit [our website](#).

