

A pilot study exploring board games for adolescent gambling prevention

What this research is about

Adolescents who gamble may have cognitive distortions and positive expectancies related to gambling. Cognitive distortions are irrational patterns of thinking such as misunderstanding of the random nature of chance-based games and the illusion of control. Positive expectancies refer to anticipating that gambling will bring positive outcomes (e.g., pleasure, gaining money). Schools can be a particularly useful setting for preventing gambling among adolescents. Further, interactive approaches may be effective in promoting health-related knowledge and behaviour change.

Board games can create an engaging learning environment that supports interaction and reflection among peers. But research on the use of board games in gambling intervention is limited. The Game in Lab project is an intervention that uses board games and guided debriefing discussion to prevent gambling in adolescents. It aims to enhance adolescents' awareness and critical thinking about gambling risk, randomness, and self-regulation. This pilot study evaluated Game in Lab in reducing gambling-related cognitive distortions and positive expectancies in adolescents.

What the researchers did

A total of 12 classes from Italian secondary schools were enrolled in the study. Students who returned parental consent form and provided assent themselves were included. Six of the classes were assigned to the intervention condition, while the other six were assigned to the control condition. A total of 210 students were initially enrolled, but only

What you need to know

The Game in Lab project is an intervention that uses board games and guided debriefing discussion to prevent gambling among adolescents. This pilot study evaluated the effectiveness of Game in Lab. A total of 210 Italian secondary school students were initially enrolled in the study. Students from six classes were randomly assigned to the intervention condition, where they participated in Game in Lab. The other six classes were assigned to a control condition. Of the 210 students, 129 completed the assessments at baseline (T0) and immediately after the intervention (T1). A total of 25 students also participated in three focus groups after the intervention.

Students in both groups held lower gambling-related cognitive distortions and positive expectancies at T1. The intervention did not seem to make a difference, and students in the intervention group reported slightly higher gambling-related cognitive distortions at T1 than the control group. However, in the focus groups, students discussed having increased critical thinking, greater emotional awareness, and a better understanding of gambling risks.

183 completed the baseline assessment (T0), and 160 completed the post-intervention assessment (T1). In total, 129 students completed both assessments.

Students the intervention condition took part in the Game in Lab training over three weekly classroom sessions delivered by trained facilitators. The sessions included board game play and a debriefing

discussion. The board game activities were designed to have students reflect on ideas such as chance, randomness, decision making under uncertainty, and self-regulation. The debriefing discussion linked game dynamics to gambling-related cognitions and expectations.

Participants provided quantitative data at baseline (T0) and right after the training (T1) through self-reported questionnaires. The data collected included sociodemographic information, gambling outcome expectations (assessed using the Gambling Expectancy Questionnaire–Modified), and cognitive distortions (assessed using the Gambling Related Cognitions Scale). A total of 25 participants also took part in three focus groups after the training.

What the researchers found

Survey data: Students in both groups held lower gambling-related expectancies and cognitive distortions at T1 (after the intervention). Students in the intervention group had slightly higher scores on gambling-related cognitive distortions at T1 compared to the control group. The researchers discussed possible explanations for this finding. One explanation is that the training might have increased students' awareness of gambling-related mechanisms, allowing them to be better able to recognize and report cognitive distortions at T1. Another explanation is that the timing of the assessment might have affected the results.

Focus groups: The researchers identified three main themes from the focus group discussions.

- (1) *Critical thinking:* During the focus groups, students discussed becoming more aware that gambling outcomes are generally not predictable and cannot be influenced by personal strategies or skills.
- (2) *Emotional regulation:* Students discussed their emotional states during gameplay (e.g., excitement, frustration, and disappointment). They talked about how they felt they could manage these emotions better after the training. Students also noted that playing the games as a group helped to create an environment of mutual encouragement and team spirit.

- (3) *Awareness of risk:* Students mentioned that the training had given them a better understanding of gambling-related risks. Several also noted that gambling risks are not experienced by only older people, but also young people of their age.

How you can use this research

This research can inform gambling prevention programs that encourage critical thinking and emotional awareness among adolescents.

About the researchers

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About Greo Evidence Insights

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