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Exploring zoned-in or zoned-out immersion during slot machine gambling

What this research is about

Immersion is the feeling of being completely focused on a task at hand. People who experience immersion while gambling often compare the experience to a trance-like state. Gambling researchers have proposed at least two potential explanations for immersion in gambling: being 'zoned in' and being 'zoned out'. Being 'zoned in' suggests that a person is trying to maintain their focus gambling and is actively trying to win. This has also been compared to a flow state. Being 'zoned out' suggests that a person is primarily interested in using gambling as an escape from stress and negative events in real life. For them, its more about being immersed in gambling to feel a sense of relief or escape from reality, rather than about winning.

The main goal of this research was to examine whether immersion in slot machine gambling has more of a 'zoned in' or a 'zoned out' quality. Using eye-movement tracking, the researchers wanted to see where on the slot machine screen that experienced gamblers spend most of their attention. For instance, it could be that those who are 'zoned in' pay more attention to financial information, because it lets them know how they are performing. Those who are 'zoned out' may pay more attention to the spinning reels which are the most stimulating part of the screen, while not paying much attention to the credit window. Finally, the researchers also assessed whether gambling immersion is related to false gambling beliefs, depression, anxiety, stress, and adult Attention Deficit Hyperactivity Disorder (ADHD).

What the researchers did

What you need to know

This research examined gambling immersion in people who used slot machines. It used eye movement tracking to explore if immersion was more characteristic of 'zoning in' or 'zoning out'. The researchers recruited 53 adults who gambled on slot machines. Results showed that immersed participants had more severe gambling problems and higher illusions of control. They spent relatively more time looking at the device's credit display (which showed financial information), and less time on the reels which were more visually stimulating. Immersed participants were also more thorough in inspecting different parts of the device screen. This study concluded that slot machine gambling immersion was more consistent with the 'zoned in' explanation.

The researchers recruited 53 adults who gambled on slot machines. They screened the participants with the Problem Gambling Severity Index (PGSI) to ensure they did not have severe problematic gambling levels. People who scored 8 or higher on the PGSI were excluded from the study.

First, the researchers asked the participants to complete four questionnaires. They used the Short-Form Adult ADHD Self-Report Scale to measure symptoms of ADHD. They assessed false gambling beliefs by using the Gambling-Related Cognitions Scale (GRCS). They assessed mood and stress disorder symptoms via the Depression, Anxiety, and Stress Scale.

After completing the questionnaires, the participants played a slot machine for 20 minutes. During the slot machine task, the researchers tracked the participants' eye movements. After the task, the participants completed an immersion questionnaire. To measure immersion, the researchers combined questions from the Jacobs Dissociation Questionnaire and the flow subscale of the Game Experience Questionnaire.

What the researchers found

The results revealed that immersion was related to gambling severity and false gambling beliefs. Specifically, immersion was related to higher illusory and predictive control. In other words, participants who were more immersed reported more gambling problems and were more likely to think they could control or predict gambling results.

Moreover, results indicated that immersed participants were more likely to look at the credit window rather than the reels. In other words, immersed participants placed greater importance on the device's financial elements, and less importance on its visual aspects. They were also more thorough in inspecting different parts of the slot machine screen. Overall, results appeared to support the 'zoned in' characteristics of gambling immersion, rather than 'zoned out'.

How you can use this research

This research could be used by responsible gambling initiatives, service providers, and researchers. Responsible gambling initiatives with pop-up messaging could use this information to know exactly where and when to place the messages to gain more engagement. Service providers could use this information in their prevention and treatment programs for people with gambling problems. They could assess for gambling immersion and find ways to decrease it. Future studies could explore immersion and its relations to gambling behaviours.

About the researchers

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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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