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Cognitive characteristics could explain participation in strategic and non-strategic games

What this research is about

There are two different types of gambling games: strategic and non-strategic. In strategic games, winning is influenced both by chance and the skill of the gambler. Strategic games include poker, sports betting, horse-race betting, and blackjack. In non-strategic games, winning is influenced by chance only. Non-strategic games include scratch cards, lotteries, slot machines, bingo, and roulette. Research has shown that strategic and non-strategic games appeal to different gamblers. For instance, men tend to prefer strategic games while women tend to prefer non-strategic games.

Aside from gender, cognitive style and need for cognition might also be involved in gamblers' participation in strategic or non-strategic games. Cognitive style is the way people process information and make decisions. An individual may process information either automatically and quickly (intuitive), or thoughtfully and slowly (analytic). Need for cognition is the extent that a person prefers to engage in and enjoy thinking. Need for cognition is related to cognitive style. The more individuals have a high need for cognition, the more they use analytic cognitive style.

Cognitive style and need for cognition are known to direct the activities that people choose to take part in. Thus, the current study explored the effects of gender, cognitive style, and need for cognition on participation in strategic and non-strategic games.

What the researchers did

Participants were 149 gamblers in France, who completed an online survey. The survey asked participants about which gambling games they played.

What you need to know

This study examined why gamblers engaged in strategic or non-strategic games. It explored the effects of gender, cognitive style, and need for cognition. The results showed that all three factors could explain why gamblers engaged in one type of gambling games over the other. Strategic gamblers were more likely to be male than female. Strategic gamblers were also more likely to use analytic cognitive style (rather than intuitive cognitive style), and to have a high need for cognition.

The researchers grouped the participants by the types of games they played. Those who spent their money on poker, sports betting, horse-race betting, and blackjack were labelled strategic gamblers. Gamblers of scratch cards, lotteries, slot machines, bingo, and roulette were labelled non-strategic gamblers. Those who played both types of games were not included in the study.

The survey used the Cognitive Reflection Test to assess cognitive style. This test presented the participants with three problems to solve. For each problem, one answer would come quickly to mind but was wrong. The other answer required some thinking. The survey used the Need for Cognition Scale to assess the tendency to engage in a reflective task. The survey also captured the participants' sociodemographic information, including gender.

The researchers ran a model to examine the effects of gender, cognitive style, and need for cognition on participation in strategic and non-strategic games.

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What the researchers found

Of the 149 participants, 53 were strategic gamblers and 96 were non-strategic gamblers. Similar to the findings of previous research, men were over four times more likely than women to gamble on strategic games.

Aside from gender, cognitive characteristics also played a role. Participants who used analytic cognitive style were almost two times more likely to play strategic than non-strategic games. Participants who showed a higher need for cognition were also more likely to play strategic than non-strategic games.

How you can use this research

The results suggest that gender and cognitive characteristics could explain participation in strategic and non-strategic games. Public health could consider gender and cognitive characteristics when developing preventive campaigns. Other sociodemographic, individual, and clinical factors might also be involved. Treatment providers could consider the cognitive characteristics of gamblers when developing and providing treatments to fit the needs of different types of gamblers.

About the researchers

Aurélie Mouneyrac, Céline Lemercier and **Valérie Le Floch** are affiliated with Cognition, Langues, Langage, Ergonomie (CLLE) at the Université de Toulouse in France. **Gaëlle Challet-Bouju** is affiliated with the Addictology and Psychiatry Department at the Federative Institute of Behavioral Addictions, and the University of Nantes in France. **Axelle Moreau** is affiliated with the Laboratoire OCTOGONE at the Université de Toulouse in France. **Christian Jacques** and **Isabelle Giroux** are affiliated with the Université Laval in Quebec, Canada. For more information about this study, please contact Aurélie Mouneyrac at aurelie.mouneyrac@univ-tlse2.fr.

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Gambling Research Exchange Ontario (GREO)

Gambling Research Exchange Ontario (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 responsible 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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