

research snapshot

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Does caffeine influence gambling behaviour and other types of impulsivity?

What this research is about

Many children and adults in the United States regularly use caffeine. Past research has found that caffeine improves mood, attention, wakefulness, and energy. Many gamblers report using caffeine to increase their attention and ability to stay awake and continue gambling.

Young adulthood is an important period of development. Young adults typically engage in impulsive behaviours, such as gambling. Little is known about the role of caffeine in the development and maintenance of impulsive behaviours. The current study explored whether caffeine use influences gambling behaviour and other types of impulsivity in young adults who already display impulsive behaviours (i.e., problem gambling behaviours).

What the researchers did

Participants were 61 young adults, aged 18-29 years, in the United States. Participants had at least some degree of gambling problems but were not in treatment for them.

Participants reported basic demographic information such as age, gender, and education level. They also reported weekly caffeine intake over the past month. Participants indicated their gambling symptoms during the past year, age at first gambling, and amount lost to gambling in the past year. They also reported their alcohol and nicotine intake.

Participants were assessed if they had other psychiatric disorders (e.g., ADHD). They completed a questionnaire that measured their personality-related impulsivity. They also completed several cognitive

What you need to know

Little is known about the effects of caffeine in young adults who display impulsive behaviours, such as problem gambling. This study found that higher caffeine use in young adult gamblers was related to higher personality-related impulsivity, more impulsive decision-making, and more nicotine consumption. Higher caffeine use was also linked with earlier age at first gambling.

tasks. These included tasks that measured their ability to inhibit a response as needed and their ability to learn new rule and adapt. A gambling task was used to measure their decision-making and risk-taking.

The researchers used the statistical technique of partial least squares (PLS) to determine the relationships between caffeine use and demographic, clinical and cognitive characteristics.

What the researchers found

On average, the young adult gamblers reported high level of weekly caffeine intake (1218.5 mg). Gamblers with higher caffeine use were older and reported earlier age at first gambling. Also, gamblers with higher caffeine use had higher personality-related impulsivity and more impulsive decision-making. Specifically, they made more risky decisions and were less able to adjust the amount of points they were gambling on the gambling task. These individuals also reported more nicotine consumption.

How you can use this research

Future research should examine the relationship between caffeine use and gambling behaviour over time. It is important to determine if impulsivity is the

underlying cause of excessive caffeine use and gambling. Alternatively, gamblers may use caffeine to continue gambling for longer. If research determines it is the first explanation, then treatment providers should address impulsivity and impaired decision-making in problem gamblers. If research determines it is the second explanation, then treatment providers should include strategies to reduce caffeine intake as part of problem gambling treatment.

About the researchers

Jon E. Grant and **Samuel R. Chamberlain** are affiliated with the Department of Psychiatry & Behavioral Neuroscience at the University of Chicago in the United States, the Department of Psychiatry at the University of Cambridge in the United Kingdom, and the Cambridge and Peterborough NHS Foundation Trust in the United Kingdom. For more information about this study, please contact Jon E. Grant at jongrant@uchicago.edu.

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Gambling, caffeine, impulsivity, decision-making

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