

research snapshot

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The relationship between sleep, alcohol, and gambling

What this research is about

Many people who gamble may experience gambling-related harms. However, some factors can make it even worse. For instance, alcohol and tiredness can contribute to poorer decision-making abilities. In turn, this can impact gambling behaviours. Yet, there is not enough research on how alcohol and fatigue do this.

With regard to alcohol, past experimental studies found that those who drank more alcohol were more likely to gamble intensely. They were more likely to place higher bets, lose all their money quickly, and make other poorer choices. However, there were many inconsistencies across these findings. For example, some studies reported an increase in bet size but not time spent gambling. Other studies found the opposite results. Moreover, there is a need to understand the relationship between alcohol and gambling in a real-world situation, outside of experimental studies. Finally, there is also a need to examine whether a “third variable” can impact this relationship, such as personality (e.g., impulsivity).

With respect to sleep, past research suggested that lack of sleep or poorer quality of sleep was related to more severe gambling. Lack of sleep could be related to making poorer decisions in gambling. However, there needs to be more studies to establish this link. Taken together, the present study aimed to fill in these research gaps by examining the relationship between gambling, sleep quality, and alcohol use.

What the researchers did

The researchers recruited 132 adults through Amazon’s Mechanical Turk (MTurk). MTurk is a crowdsourcing internet marketplace based in the

What you need to know

This research examined the relationship between gambling, alcohol consumption, and sleep quality. The researchers recruited 132 adults who gambled and drank alcohol regularly. Participants completed an online diary for six days. Results revealed that people who gambled more also drank more alcohol and slept less. On days they gambled, there was more drinking and less sleeping. Yet, drinking and sleeping patterns on one day did not predict gambling behaviour on the next day. Engaging in one behaviour was associated with a decrease in the same behaviour on the next day, though. That is, participants who gambled more on one day would gamble less in the following day. The same pattern was found for drinking and sleeping. Together, these results suggested that certain individuals are more prone to engage in all three behaviours.

United States. All participants reported that they gambled and drank alcohol regularly. About 70% of participants were male. Slightly over half gambled two to three times per week. Almost half gambled four or more times per week. All participants reported that they drank alcohol two or more times per week.

The researchers used an ecological momentary assessment (EMA) design. EMA is a method that collects data from participants as close in time to their experiences as possible. This method minimizes error or bias in recall. First, the participants completed a screening questionnaire. The survey included questions about demographics, gambling, sleep, and

alcohol consumption. To measure gambling, the researchers used the Consumption Screen for Problem Gambling (CSPG). To measure drinking, they used the AUDIT-C measure of hazardous drinking. To measure sleep quality, they used the Pittsburgh Sleep Quality Index (PSQI).

After the survey, the participants filled out an online daily diary for six days. The researchers asked them about what they did in the previous day. Participants also recorded the time of the day and how long they slept, drank, and gambled.

What the researchers found

The results revealed that there was a relationship between drinking, sleeping, and gambling. Overall, participants who gambled more also drank more and slept less overnight. However, they did not sleep less, drink more, or gamble more over the weekends compared to weekdays. There were differences between days they gambled versus days they did not gamble. On days when they gambled, there was more drinking and less sleeping. On days they did not gamble, there was more sleeping and less drinking. Overall, these results suggested that certain individuals are more prone to engaging in these three behaviours.

The results also revealed that participants who gambled more on one day would gamble less on the next day. The same pattern was also found for drinking and sleeping. Participants who drank more alcohol or slept more hours on one day would engage less in the same behaviour on the next day. Yet, their drinking and sleeping patterns on one day did not predict gambling on the next day.

How you can use this research

This research could be used by clinicians, service providers, and researchers. Clinicians could use this information to target problematic behaviours that tend to co-occur with gambling in certain people. Service providers and intervention workers could use this information to inform programs that target sleeping quality, alcohol consumption, and gambling-related harms. Future studies could explore the relationship by using a longer time frame to see

whether chronic sleep loss and drinking may predict gambling.

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.

Learn more about GREO by visiting greo.ca or emailing info@greo.ca.

