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# Is physical activity related to impulsivity, anxiety, and depression in gambling disorder?

## What this research is about

Gambling disorder (GD) is associated with various negative emotional, financial, and social consequences. It often co-occurs with mood, anxiety, and substance use disorders. A core psychological factor that increases the risk of developing GD is impulsivity, which is a stable personality trait involving a tendency to act rashly.

Increasing attention is being paid to physical activity in GD interventions. A previous physical activity program has been reported to reduce anxiety and gambling cravings. However, findings remain ambiguous, as athletes and people who are highly involved sports are more likely to engage in gambling. The current study aims to understand the relationship between anxiety, depression, impulsivity, and physical activity in people seeking treatment for GD in a clinical setting.

## What the researchers did

The researchers recruited adults seeking treatment for GD from the Association of Players in Rehabilitation (AJUPAREVA) in Spain. All 156 patients at AJUPAREVA were invited to participate. A total of 62 patients provided complete data and were included in the analysis.

All participants were diagnosed with GD according to the DSM-5 criteria. Sociodemographic information and clinical history were collected at admission. Participants also completed the following measures:

- The CEPER-III (Cuestionario Exploratorio de la Personalidad-III or Exploratory Personality Questionnaire-II III) to assess personality traits.
- The Plutchik impulsivity scale and Barratt Impulsiveness Scale to assess impulsivity.
- The Hamilton Anxiety Rating Scale (HAM-A) to assess anxiety.
- The Hamilton Depression Rating Scale (HAM-D) to assess depression.
- The International Physical Activity Questionnaire (IPAQ) to assess physical activity levels.

## What you need to know

Impulsivity refers to a tendency to rash rashly and is a common trait in people with gambling disorder (GD). People with GD often also experience anxiety, depression, and substance use disorders. Increasing attention is being paid to physical activity as an intervention for GD. In this study, 62 adults who were seeking treatment for GD reported their anxiety, depression, impulsivity, and physical activity levels.

Anxiety and depressive symptoms were common in the participants, and impulsivity was high. But there were no differences in impulsivity across physical activity levels. Physical activity was also unrelated to anxiety and depression. The findings suggest that physical activity on its own may not be an effective intervention for GD. Instead, physical activity should be considered as part of a comprehensive treatment approach.

## What the researchers found

The majority (91.9%) of participants were men, with an average age of 40 years. About half the

participants (48.5%) had a co-occurring mental health disorder, and half (48.5%) had a substance use disorder. Most participants had depressive and anxiety symptoms.

Compared to the general population, participants in this study were more likely to present with certain personality traits. In particular, men tended to present higher levels of paranoid, histrionic, narcissistic, and sadistic traits. Women tended to present higher levels of histrionic and narcissistic traits.

High levels of impulsivity were reported by many participants. Across different levels of physical activity (low, moderate, and high), there were no differences in impulsivity. However, participants with high physical activity levels were more likely to present with motor impulsivity (i.e., showing a tendency to act rashly without forethought). Those with low physical activity levels were more likely to present with non-planned impulsivity (i.e., having little regard for future consequences). There were no relationships between anxiety, depression, and physical activity levels.

## How you can use this research

These findings suggest that physical activity on its own may not be an effective intervention for GD. Instead, physical activity should be considered as part of a comprehensive treatment. This study can inform intervention for GD as well as research and public health policies.

## About the researchers

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## About Greo Evidence Insights

Greo Evidence Insights is an independent, non-profit organization specializing in research, knowledge mobilization, and evaluation in the health and well-being sectors. Greo transforms research and insights into actionable strategies to prevent and reduce harm related to gambling, gaming, technology use, and substance use. To learn more about funding for Research Snapshots visit our website.