

The Association Between Problem Gambling and Major Depression



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Introduction

- Evidence derived from various studies suggest problem gamblers are more likely to experience comorbidity with additional mental disorders, suggesting nearly 96% of problem gamblers are diagnosed with an additional mental disorder, including major depression (Bücker et al., 2018).
- Problem gamblers exhibit higher rates of low mood and depression in comparison to non-gamblers, with 37% of problem gamblers experiencing lifelong depression (Moodie & Finnigan, 2006). Additionally, amongst problem gamblers, certain studies suggest between 22-81% experience suicidal thoughts along with low mood. Despite this, 90% of problem gamblers do not seek treatment (Källmén et al., 2008).
- Although gambling is more common amongst males, various studies have suggested that female gamblers are more likely to experience suicidal thoughts (Marionneau et al.,2022).

Research Questions

- Is there an association between problem gambling and major depression?
- How may major depression vary based on the severity of an individual's problem gambling?
- Does this relationship differ amongst males and females?

Methods

Sample

- Respondents were drawn from the U.S National Epidemiologic Survey on Alcohol and Related Conditions (NESARC).
- The NESARC data is a representative sample of the adult, non-institutionalized, civilian population of the United States and includes the oversampling of young adults (18-24).

Measures

- To measure problem gambling, a quantitative variable was developed through ten questions that revolved around respondents life habits and their relationship with gambling. The response options were "yes (1)" or "no(0)." The scores were combined to create a total problem gambling score with lower numbers indicating less severe gambling tendencies, and higher scores indicating more severe gambling tendencies.
- Major depression was measured utilizing the "yes(1)" or "no(0)" question derived from NESARC's DSM-IV diagnostic section, "Major Depression in a Lifetime," indicating whether a participant had been diagnosed with major depression in their lifetime or whether they had not.

Results

Bivariate

- Analysis of Variance (ANOVA) revealed that total problem gambling scores were significantly and positively associated with the presence of major depression (P-value<0.05).
- Post hoc ANOVA tests reveal statistical significance between total problem gambling and major depression.

After controlling for gender, simple

gambling remains significantly and

Furthermore, the relationship between

depression varies slightly by gender

total problem gambling scores than

male problem gamblers however this

variation is found to not be significant

(Beta= -0.05997, P-value=0.138).

with female gamblers diagnosed with

major depression exhibiting less severe

total problem gambling score and major

positively associated to major

depression (P-value<0.0001).

regression analyses reveal total problem

Multivariate

Mean Problem Gambling by Lifetime Depression 0.5 0.4 Depression 0.2 Present Lifetime Major Depression

Figure 1: The Presence/Absence of Major Depression and Problem Gambling

Figure 2: Problem Gambling and Major Depression based on

count

igure 2: Problem Gambling and Major Depression based on Gender

Discussion

- As illustrated in Figure 1, there is a strong association between problem gambling and major depression.
- The greater an individual's total problem gambling score, the more frequent the presence of major depression.
- When considering gender, Figure 2 reveals that there is a strong, positive association between problem gamblers and major depression across both genders.
- These findings help to identify problem gamblers as a critical risk group for major depression and future research may enhance these findings through an exploration of treatment options such as intervention methods.
- Furthermore, future research should examine whether additional covariates such as age, race, or socioeconomic status may impact the likelihood of problem gamblers being diagnosed with major depression.

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