

# Depression as a Predictor of Disordered Gambling Behavior

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**Mild Depression** 

**Moderate Depression** 

**Severe Depression** 

### INTRODUCTION

• Following national trends, legalized gambling has expanded significantly in Maryland in the last decade. Previous research has identified an association between disordered gambling and depression status but much of this research has been conducted with clinical populations that are racially and ethnically homogenous. <sup>1,2,3,4</sup>

### **OBJECTIVE**

• To examine the relationship between depression and gambling behavior in an adult sample.

### **METHODS**

- Participants (n=893) were recruited as part of the PEGASUS (Prevalence and Etiology of Gambling and Substance Use in the US) study, an on going longitudinal cohort study of gambling behavior in Maryland residents.
- Participants completed a battery of selfadministered questionnaires that included demographics, health behaviors, and gambling activity.
- Depression was measured by the Beck Depression Inventory<sup>®</sup>-II and participants categorized with:
  - Minimal depression
  - Mild depression
  - Moderate depression
  - Severe depression
- Gambling behavior was assessed with the Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS-IV).
  - Gambling disorder (lifetime) indicated by 4 or more DSM symptoms reported via the AUDADIS

## **RESULTS**

Table 1: Demographics			
	Range	M	SD
Age (years)	18-73	43.0	13.9
	n	%	
Gender	889		
Male	414	46.6	
Female	475	53.4	
Race	887		
White	<i>352</i>	39.7	
African-American	446	50.3	
Other or Mixed Race	89	10.0	
Level of Education	890		
High School or Less	259	29.1	
Some College	271	30.5	
Bachelor's Degree or Higher	360	40.5	
BDI-II Depression Category	893		
Minimal Depression	643	72.0	
Mild Depression	103	11.5	
Moderate Depression	84	9.4	
Severe Depression	63	7.1	
Disordered Gambling Status	893		
Non-Disordered Gambler	389	43.6	
Disordered Gambler	504	56.4	

#### **Bivariate Analyses**

- Depression was significantly associated with:
  - Gambling disorder
  - Race (African American)
  - Income (low-income)
  - Anxiety disorders
- Gambling disorder was significantly associated with:
  - Age
  - Race (African American)
  - Education (high school or less)
  - Income (less than \$25K per year)
  - Employment (unemployed)

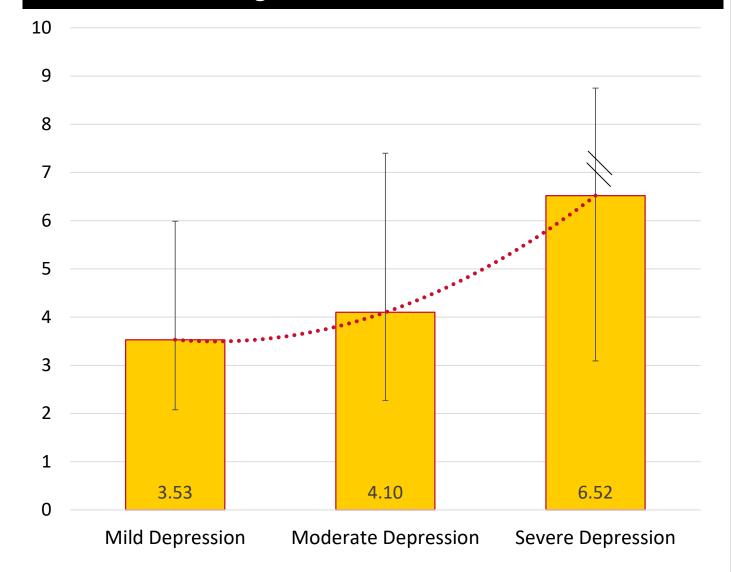
### Table 2: Adjusted Odds Ratios Predicting Disordered Gambling **Odds Ratio** p value [1.01 to 1.03] 0.001 Age Gender (Female) [1.66 to 3.18] < 0.001 Male Race (White) [3.58 to 7.23] < 0.001 African-American [1.19 to 3.44] 0.009 Mixed or other race Level of Education (High school diploma or less) [0.32 to 0.69] < 0.001 Some college education or more **BDI-II Category (Minimal Depression)**

## Adjusted Depression Categories Odds Ratios Predicting Disordered Gambling

[2.08 to 5.99] < 0.001

[2.27 to 7.40] < 0.001

[3.09 to 13.75] < 0.001



### RESULTS

### Multivariate regression analysis

- The relationship between disordered gambling and severe depression (OR: 6.52) remained significant after controlling for age, race, gender, and education.
- The relationship between depression category and disordered gambling behavior was significant and increased with higher levels of depression (*p*<0.001).

### CONCLUSIONS

- Results indicate a significant association between depression and disordered gambling.
- Findings are consistent with previous studies that have found a higher prevalence of depressive symptoms among disordered gamblers compared to the general population.
- These findings may help to inform screening and treatment practices in health care settings serving at-risk populations and contribute to efforts to reduce existing health disparities.

## REFERENCES

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