

# Comorbid Conditions in Individuals Seeking Treatment for Problem Gambling in Brazil: An Exploratory Analysis



Matthew A. Budd<sup>1</sup>, Daniel S. McGrath<sup>1</sup>, Hyoun S. (Andrew) Kim<sup>1</sup>, David C. Hodgins<sup>1</sup>, Hermano Tavares<sup>2</sup>



1. University of Calgary, Department of Psychology, Calgary, AB, Canada, 2. University of São Paulo, Faculty of Medicine, São Paulo, Brazil

## Introduction

- Individuals with problem gambling (PG) are at risk for many psychiatric and substance use disorders compared to general population (Lorains et al, 2010)
- Comorbid disorders can affect access to and compliance to treatment (Winters & Kushner, 2003), and may help guide treatment for PG (Blaszczynski & Nower, 2002)
- Comorbidity profiles that account for PG severity may differentiate treatment

## Objective and Hypothesis

**Objective:** To evaluate and compare the prevalence of comorbid psychological conditions in individuals with a diagnosis of gambling disorder characterized as either mild/moderate, or severe/extreme.

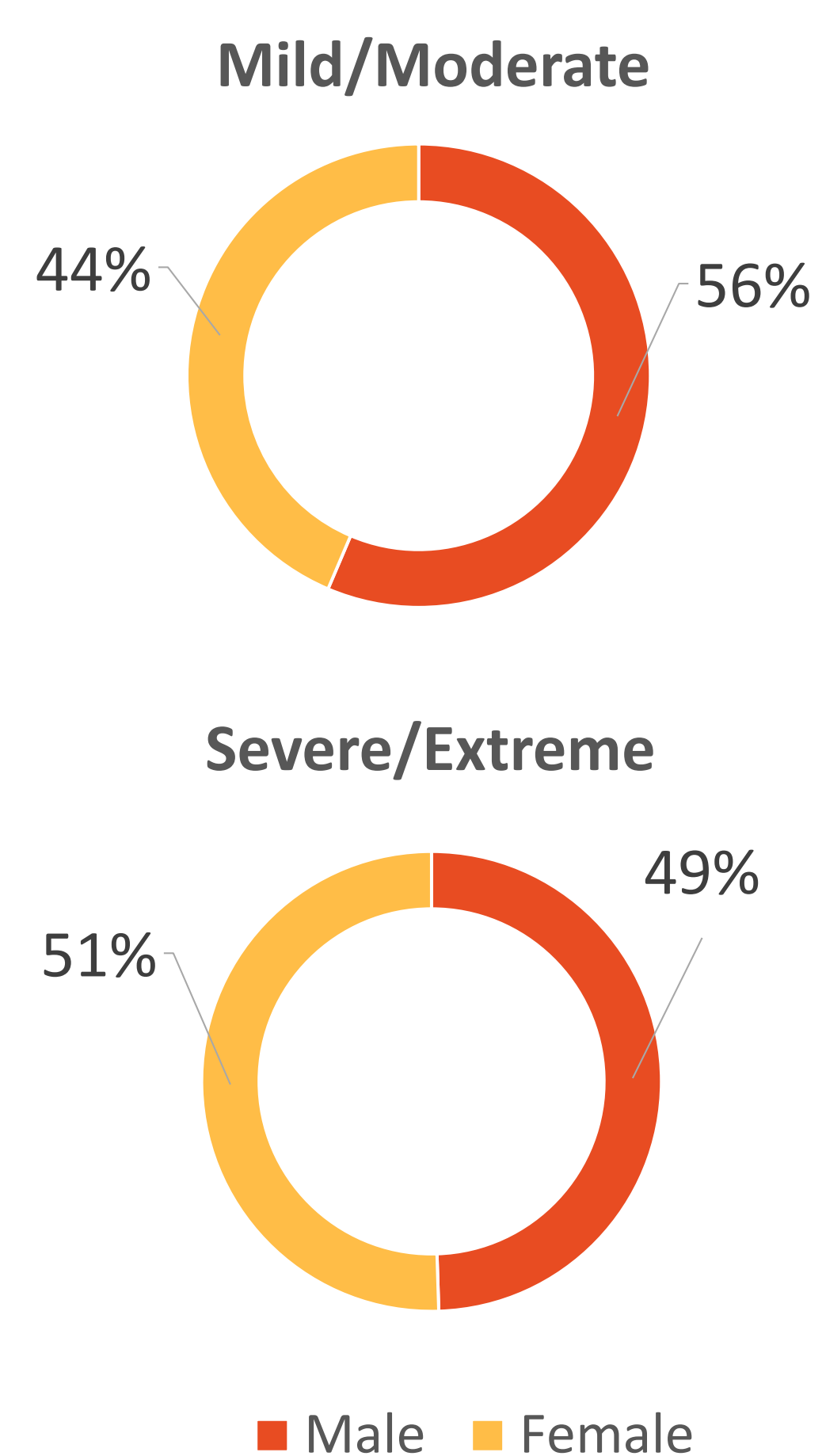
**Hypothesis:** Individuals with more severe gambling symptoms will experience higher rates of comorbid conditions.

## Methods

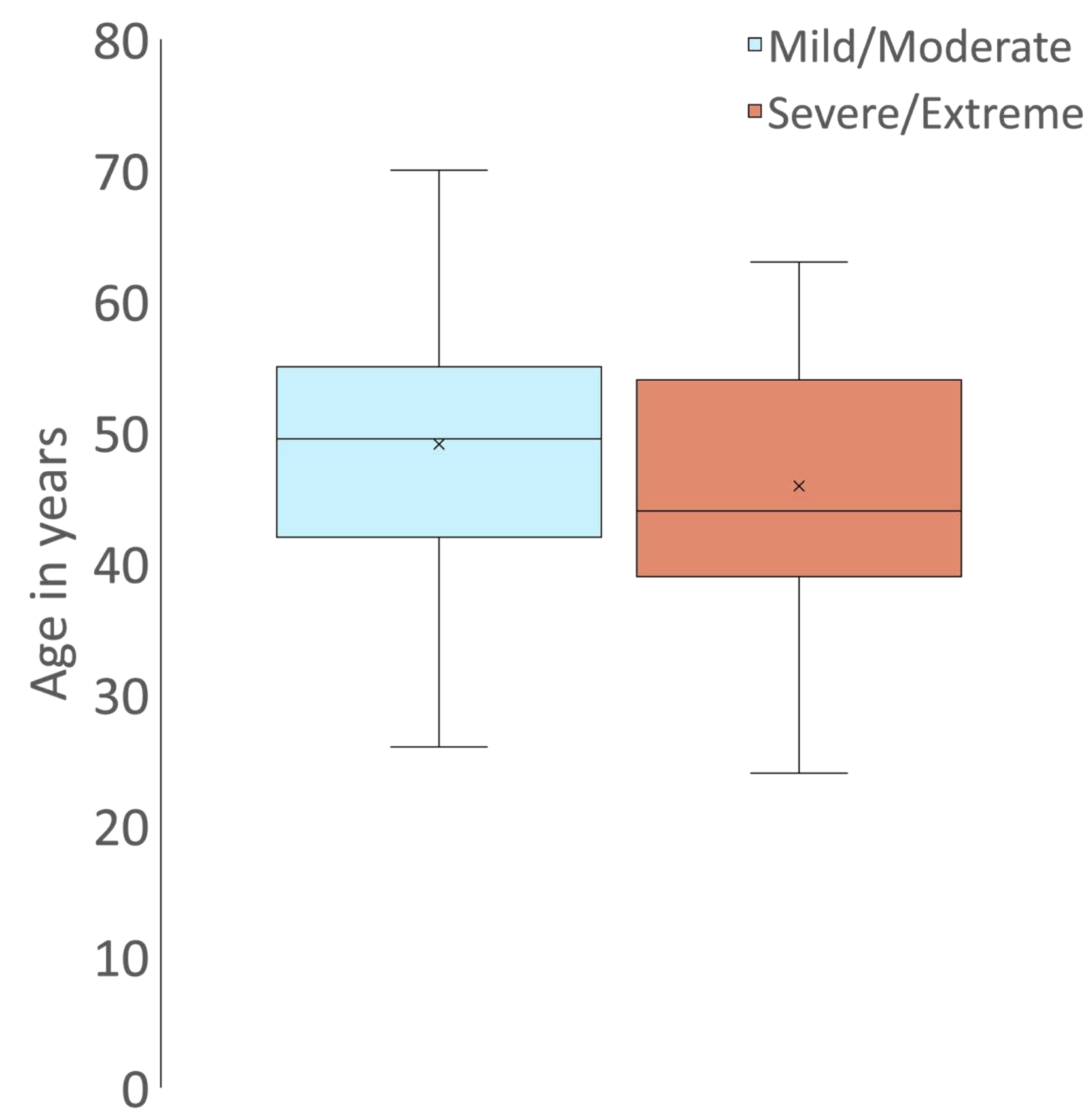
- N=250 participants recruited from individuals seeking treatment for gambling at the University of São Paulo Hospital
- Gambling severity quantified via Gambling Severity Assessment Scale (GSAS, Kim et al, 2009), on a 0-to-48 numeric scale
- Severity ratings binned as mild (total GSAS score between 8 and 20), moderate (21-30), severe (31-40), and extreme (41-48)
- Comorbidities assessed via Mini International Neuropsychiatric Interview (M.I.N.I. version 5.0.0, Sheehan et al., 2006)

## Participant characteristics

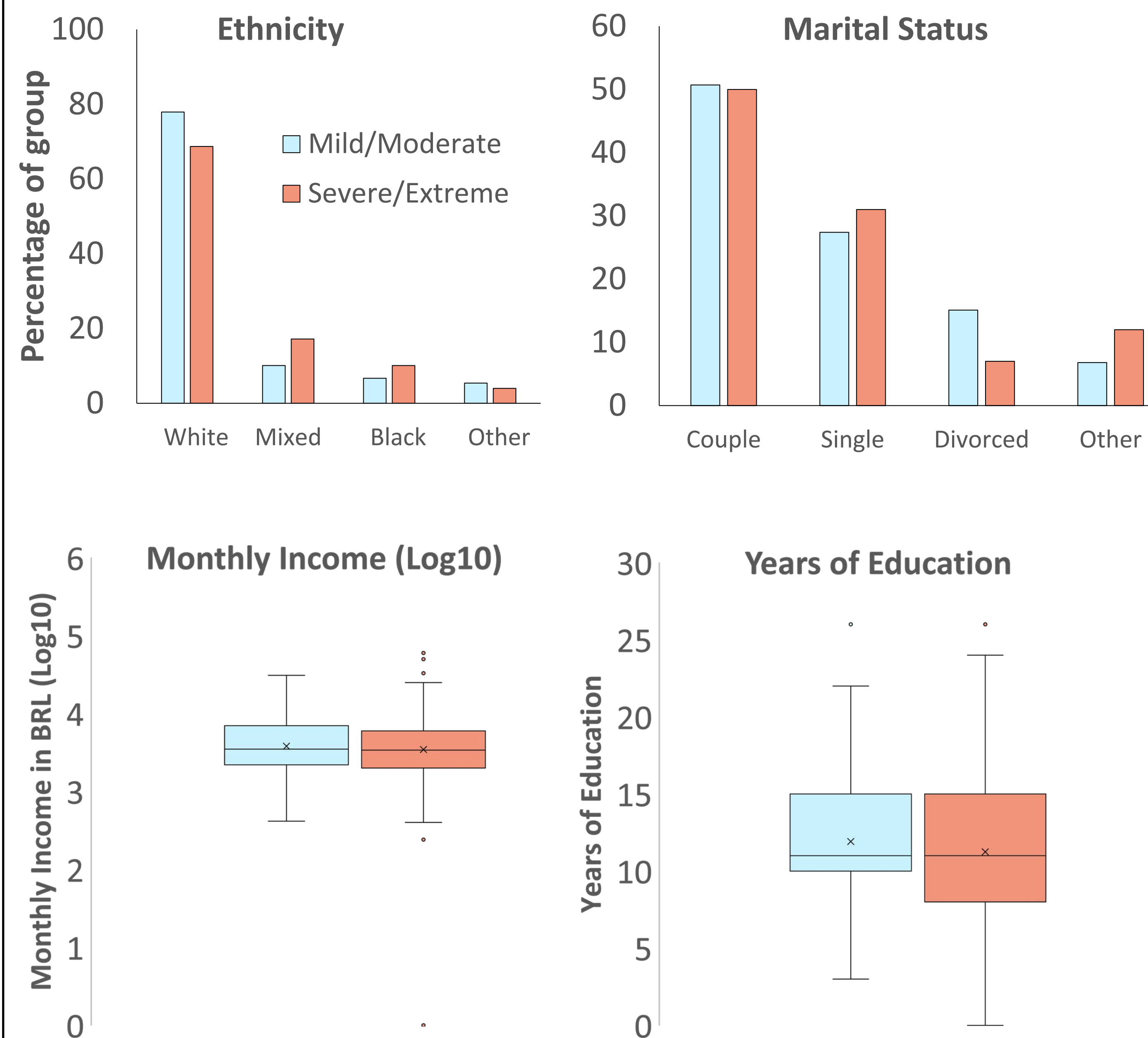
### Sex distribution



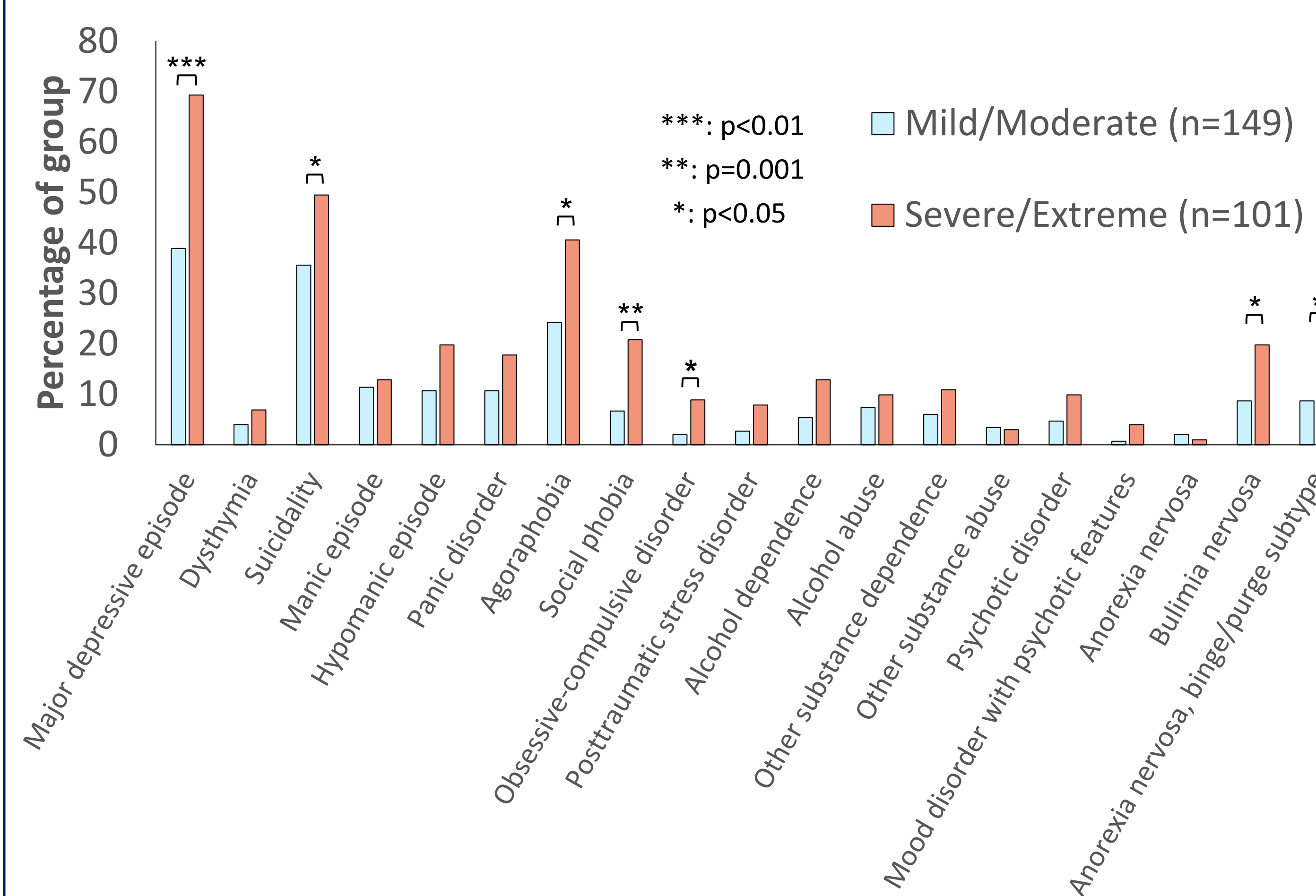
### Age Distribution



## Participant characteristics

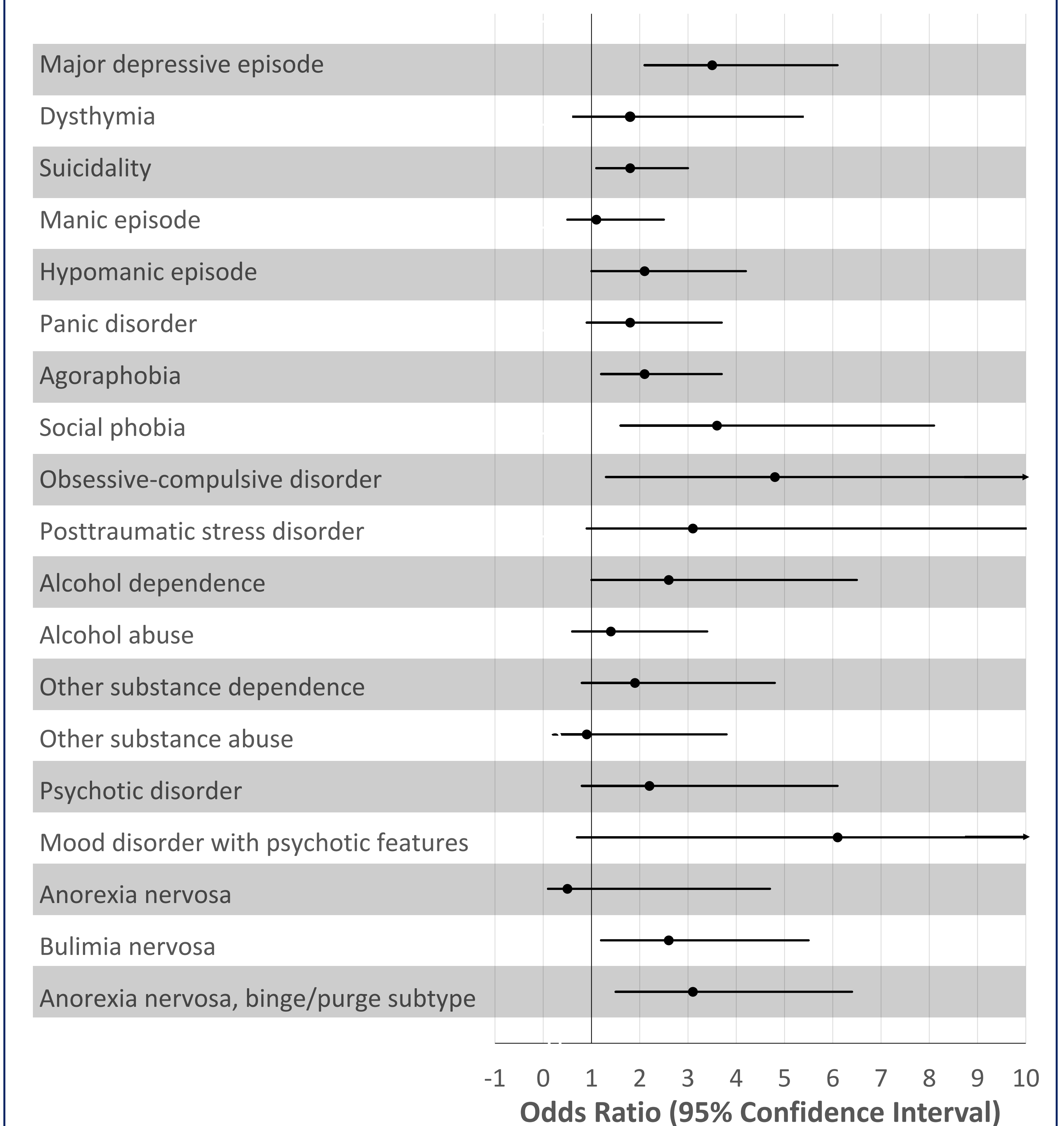


## Results



**Figure 1:** Percentage of participants with PG who met conditions for other psychological conditions (DSM-IV). Individual significance values calculated via Fisher's exact test. Value of  $\alpha=0.003$  via Bonferroni correction.

## Results



**Figure 2:** Odds ratios(severe/extreme : mild/moderate) for comorbid disorders among participants with PG. Individual significance values calculated via Fisher's exact test. Value of  $\alpha=0.003$  via Bonferroni correction.

## Conclusions/Discussion

- Individuals with more severe PG experience a greater proportion of several mood-, anxiety-, and eating-related disorders
- Further evaluation of types and patterns of past & present gambling engagement, duration of problems, and demographic & personality correlates may help inform risk factor assessments during treatment and highlight causative pathways leading to severe PG



Matthew Budd  
University of Calgary, Dept of Psychology  
matthew.budd@ucalgary.ca, 403-220-3118