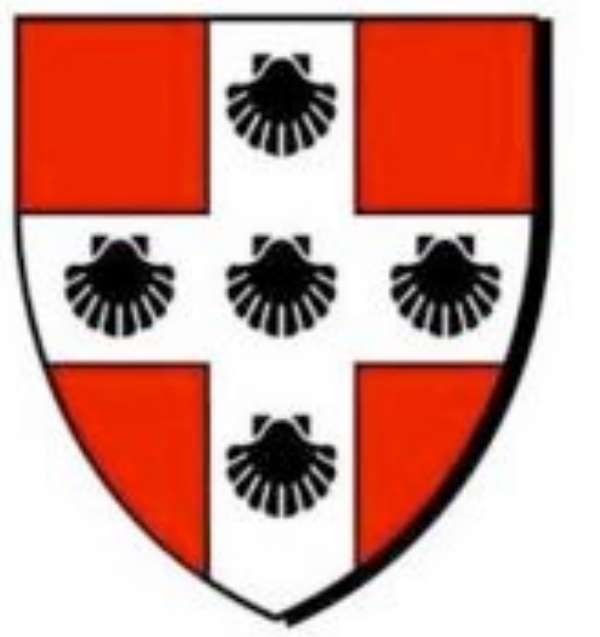




# The Association Between Diagnosed Anxiety Disorder, Panic Disorder and Optimism



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## Introduction

- The association between the "Big Five" personality traits of conscientiousness and neuroticism and diagnosed anxiety disorder (generalized anxiety disorder) and panic disorder is well established in the literature (Kotov et. Al. 2010).
- The "Big Five" personality assessment provides a score in the five areas of openness, agreeableness, conscientiousness, extraversion and neuroticism to measure someone's personality
- Most previous research has focused on associations relating to more general personality traits such as the "Big Five" personality traits.
- Optimism seems to be a composite personality trait associated with four of the "Big Five" traits of extraversion, agreeableness, neuroticism and conscientiousness (J. Patrick et. Al. 2011).
- The present study attempts to recreate these associations and see if they tend to apply for the more specific personality trait of optimism as well.

## Research Questions

- Is there an association between the presence of diagnosed anxiety and panic disorder and how optimistic people are?
- If there is an association between diagnosed anxiety and panic disorder and how optimistic people are does it still hold when accounting for diagnosed major depressive disorder and demographic information?

## Methods

### Sample

- Respondents (n=4,084) were drawn from Wave V (2017-2018) of the AddHealth dataset, a nationally representative longitudinal study following a population of 20,000 youth between the age of 7<sup>th</sup>-12<sup>th</sup> grade from the 1994-1995 schoolyear to the 2017-2018 schoolyear.

### Measures

- Diagnosed Anxiety and panic disorder prevalence was measured with the question "Has a doctor, nurse, or other health care provider ever told you that you have or had anxiety or panic disorder?"
- Optimism was measured through using a Likert scale to ask participants about their attitudes and perceptions of the future and their outlook on good and bad events occurring in their lives.

## Results

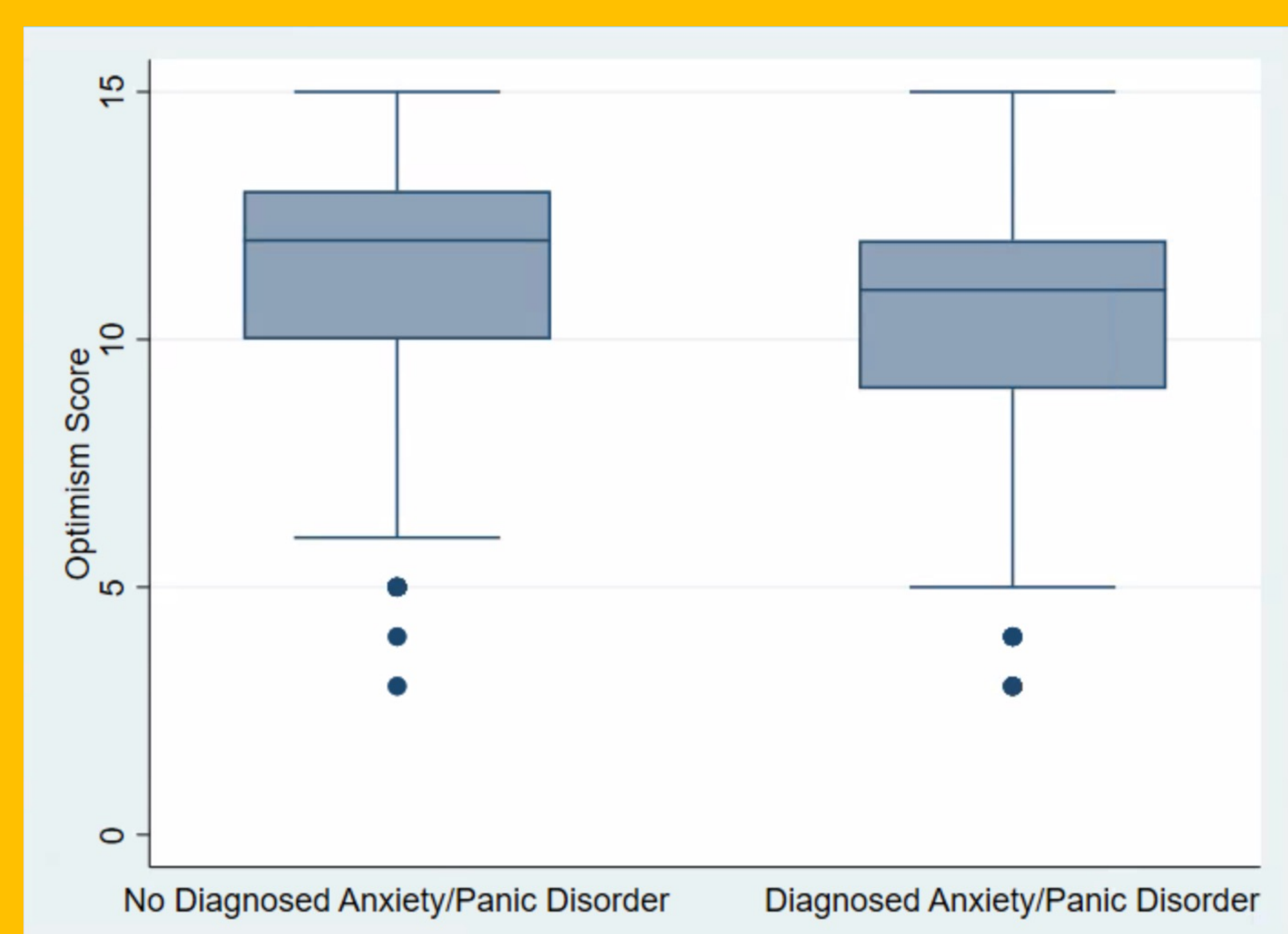
### Univariate

- 22.99% of respondents had diagnosed anxiety or panic disorder
- There was a mean optimism score of 11.4 and a standard deviation of 2.06 with the lowest possible score being 3 and highest possible score being 15

### Bivariate

- An ANOVA test revealed that **diagnosed Anxiety/Panic disorder** and **optimism** is significantly associated where people without diagnosed Anxiety/panic disorder had a significantly higher optimism score (Mean=11.66, s.d.  $\pm$  1.94) compared to those with diagnosed Anxiety/Panic disorder (Mean=10.53, s.d.  $\pm$  2.25),  $F(1, 4084)=226.81$ ,  $p<0.00$

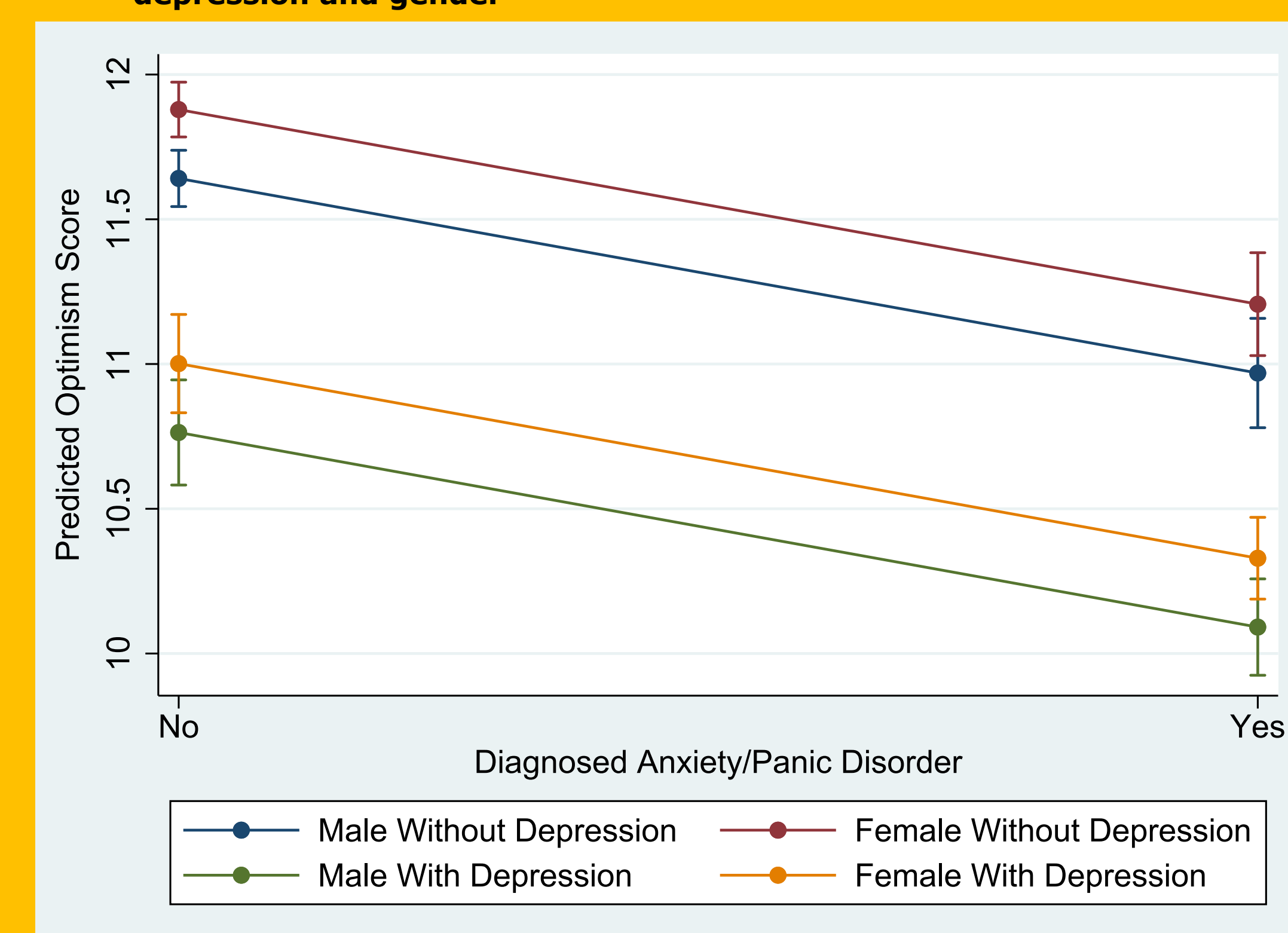
Figure 1. Relating Diagnosed Anxiety/Panic Disorder with Optimism Scores



### Multivariate

- After controlling for diagnosed major depressive disorder, age and gender, diagnosed anxiety/panic disorder is still significantly negatively associated optimism score ( $B=-0.672$ ,  $p<0.00$ ).
- Gender ( $B=0.238$ ,  $p<0.00$ ) and diagnosed major depressive disorder ( $B=-0.878$ ,  $p<0.00$ ) are also significantly associated with someone's optimism score
- Diagnosed major depressive disorder is an even stronger predictor of optimism score than diagnosed anxiety/panic disorder

Figure 2. Regression Results: Predicted optimism score accounting for depression and gender



## Discussion

- People with diagnosed anxiety or panic disorder tend to be less optimistic compared to people who do not have diagnosed anxiety and panic disorder regardless of age, gender or diagnosed major depressive disorder.
- A limitation of this study is that it only takes into account individuals who were diagnosed with Anxiety/Panic disorder by health care providers.
- Another limitation of this study is more specific personality assessment questions.
- Future research is needed in order to specify optimism amongst specific anxiety disorders and to differentiate between anxiety and panic disorder.
- Although there is an influence of diagnosed anxiety/panic disorder, diagnosed major depressive disorder and gender on how optimistic someone is it is negligible in practical usage.