Testing the Association between **Contrast Avoidance Tendencies and** Sleep Difficulties within GAD Severity



Whitney S. Shepherd, Amy L. Nyary, Mary J. Schadegg, & Laura J. Dixon



## **INTRO**

- Generalized Anxiety Disorder (GAD) is characterized by extreme worry and physiological symptoms, including sleep disturbances (SD), which can lead to daytime sleepiness and cognitive deficits (Choueiry et al., 2016; Locke et al., 2015).
- The Contrast Avoidance (CA) Model posits that those with GAD maintain worry to avoid emotional shifts by engaging in CA tendencies (Llera & Newman, 2011).
  - CA tendencies are attempts to regulate emotional experiences.
- To date, CA tendencies have yet to explored in SD among individuals with anxiety; thus, the current study aims to investigate the relationship between CA tendencies and SD among individuals with GAD symptoms.
- Hypothesis 1: There will be a positive correlation between GAD severity, CA tendencies, and SD.
- Hypothesis 2: Controlling for GAD severity, CA tendencies will predict greater SD.

### **METHODS**

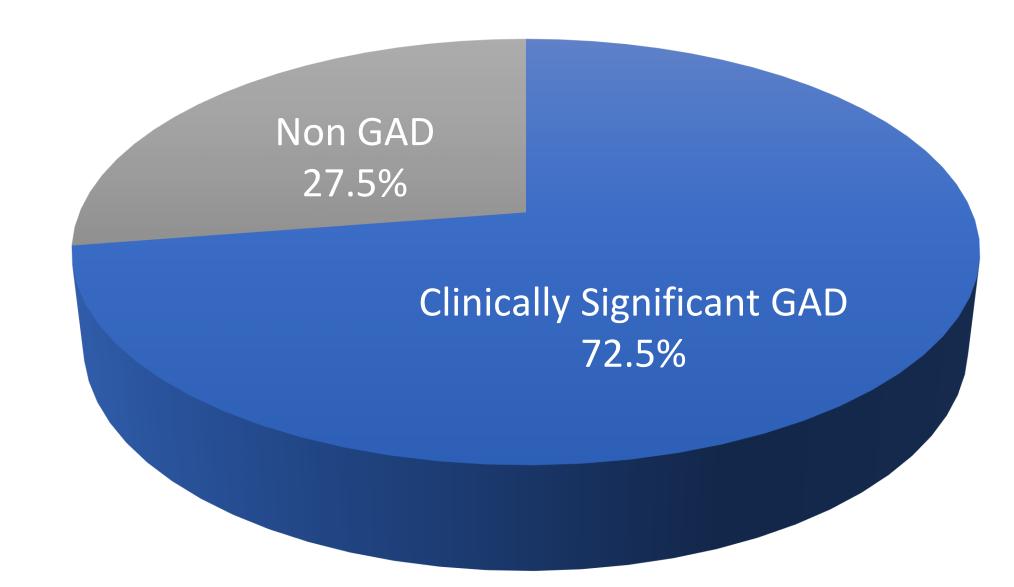
- Individuals with anxiety (N = 255; 70.6% female; 88.2% White) were recruited through MTurk and participated in this online study for financial compensation.
- Participants were between the ages of 19-74 years old ( $M_{age}$  = 38.33; SD = 10.86).
- Participants completed self-report measures of GAD severity, CA tendencies, and SD.

## **RESULTS**

- Correlation analyses revealed significant correlations between all study variables (r = .43- .60, *p* < .010).
- A multiple regression analysis revealed that when controlling for GAD severity, CA tendencies significantly predicted SD, accounting for an additional 2% of the variance, F(1, 250) = 6.70, p = .010.

# Contrast Avoidance Helps Explain Sleep Disturbances in Individuals with Anxiety

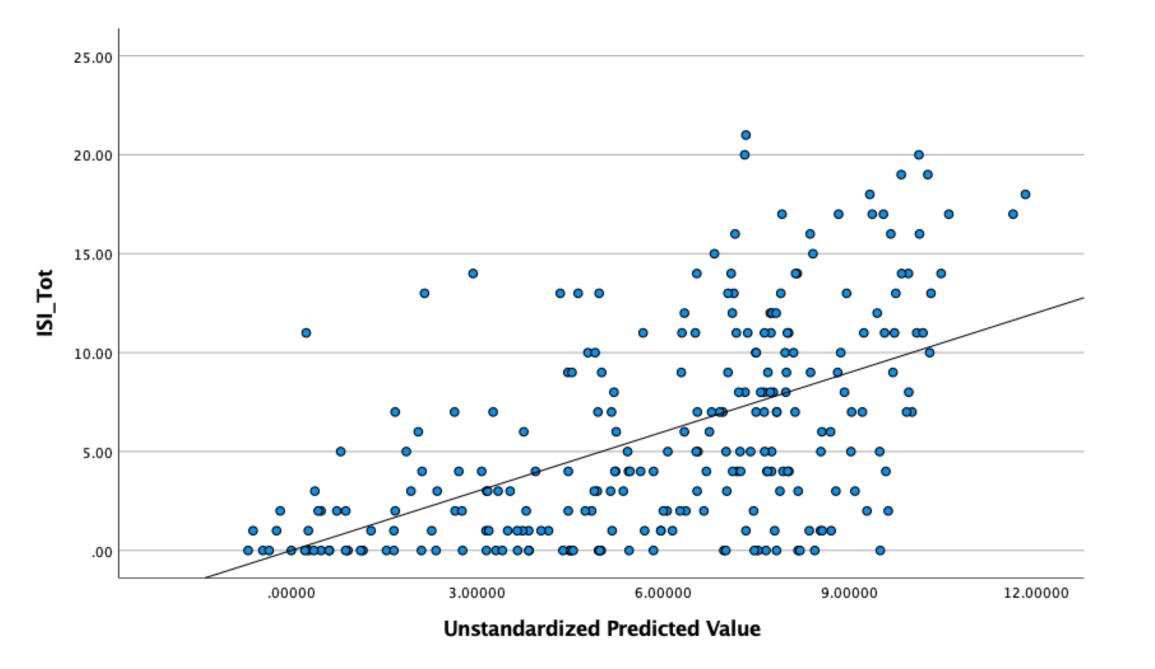
Fig. 1. Portion of sample that met clinical levels of GAD on the Generalized Anxiety Disorder Questionnaire (GAD-Q-IV)



# Descriptive Statistics and Correlations for GAD Severity, CA tendencies, and Sleep Difficulties

|                       | M     | SD    | 1    | 2    | 3 |
|-----------------------|-------|-------|------|------|---|
| 1. GAD Severity       | 8.05  | 3.48  |      |      |   |
| 2. CA Tendencies      | 64.18 | 22.86 | .60* |      |   |
| 3. Sleep Difficulties | 5.92  | 5.32  | .53* | .43* |   |

Fig. 2. Multiple Hierarchical Regression for CA predicting SD, controlling for GAD Severity



# **DISCUSSION**

- Consistent with prior work, GAD was significantly associated with SD and CA tendencies. As predicted, the presence of CA tendencies was uniquely associated with the presence of elevated sleep difficulties in individuals who endorse anxiety.
- These findings suggest that the avoidance of shifts in emotions contributes to sleep difficulties among individuals with GAD.

# **IMPLICATIONS**

 Findings suggest that targeting CA difficulties in treatments for GAD may yield reduction in symptoms of sleep difficulties, particularly insomnia.

