**INTRODUCTION**

- Depression, anxiety, and quality of sleep has become a prevalent issue in college students, making it difficult for students to go through their daily lives and accomplish what they need to be successful.
- Quality of sleep is oftentimes what suffers the most, little sleep has been shown to negatively affect mental health over a long period of time (Vera, et al. 2009).
- Yoga has shown to decrease depressive symptoms in depressed adults (Manicor et al. 2016).

**RESEARCH PURPOSE**

- The aim of this study was to determine the effects of mind-body exercises (yoga) on students at a large public university in China, monitoring their yoga activity impact on their depression, anxiety, and sleep quality in comparison to a control, Latin Dance group of students.

**METHODS**

**PARTICIPANTS:**
- 135 College Students (Males: n=28; Females: n=136) at a large public university in China.

**RESEARCH DESIGN**

- Experimental (yoga, n=107) or Control (Latin Dance, n=57).
- One 90-minute class per week for 12 weeks as a university course.
- Participants instructed to run 68 kilometers, over the semester, outside of class.

**MEASURES:**

- Anxiety – Generalized Anxiety Disorder (GAD-7)
- Sleep Quality – Pittsburgh Sleep Quality Assessment (PSQI)
- Depression Screening (created by the Center for Epidemiologic Studies Depression (CES-D))

Scores were collected through an online STAR questionnaire app, where students self-assessed their levels of anxiety, sleep quality, and depression.

**RESULTS**

**Sleep Quality:**

Image 1: Average PSQI Sum Scores Pre and Post Intervention

Scores ABOVE black line indicate mean PSQI sum scores that are indicative of poor sleep (>5)

**Depression:**

Image 2: Average CES-D Scores Pre and Post Intervention

Scores BELOW the line indicate mean CES-D scores considered depressed (>16)

**Anxiety:**

Image 3: Average GAD-7 Scores Pre and Post Intervention

Scores ABOVE the line indicate mean GAD-7 scores indicative of mild anxiety (5-10)

**CONCLUSIONS & FURTHER DIRECTIONS**

- ANXIETY — The interventions of both Yoga and Latin Dance did not have significant impact on anxiety score post-intervention, and did not have significantly different impact in their.
- SLEEP QUALITY — Both interventions had a positive impact on sleep quality, but there was no significant difference in how the interventions impacted PSQI scores.
- DEPRESSION — Both interventions, Yoga and Latin Dance, had a significant positive impact on depression scores in college students. There was no significant difference in how the interventions impacted depression scores.

Confounding Variables: Considering that the intervention was conducted during the university semester, final exams played a role in the worsening of mean scores due to increased stress.

Future directions for this studies include (but are not limited to):
- Yoga interventions with a focus on certain poses that alleviate depression
- Yoga courses with an emphasis on the importance of meditation.