

Anxiety & Environmental Stressors

State anxiety has been shown to decrease academic performance while trait anxiety has been shown to increase performance (Macher et al., 2012; Vitasari et al., 2010). Additionally, epidemics and their stressors have large scale impacts on undergraduate academic performance and psychological wellbeing (Hawryluck et al., 2004; Main et al. 2011).

The present study sought to examine the relationship between COVID-19 stressors and their various impacts on undergraduate academic performance.

It was hypothesized that those with higher state anxiety would be negatively affected by COVID stressors more, resulting in lower academic achievement.

Methods

To test this, an online survey was administered to students. This survey included psychological inventories; the STAI, BDI, a neuroticism measure, and a PTSD measure.

Other questions included self-reporting grades from Fall 2019 through Fall 2020 to compare pre-COVID and post-COVID data.

The COVID specific stressors focused on worry people felt in specified locations on campus.

Perceived Anxiety Toward Campus Locations



This figure shows the places that students were asked to rate their worry for and the average ratings on a scale from 1-10 (10 being the most stressful)

Results & Explanations

The quarantines may be preventing distractions from socialization and extracurriculars.

Students may be trying much harder to compensate for stress with the severity of the situation.

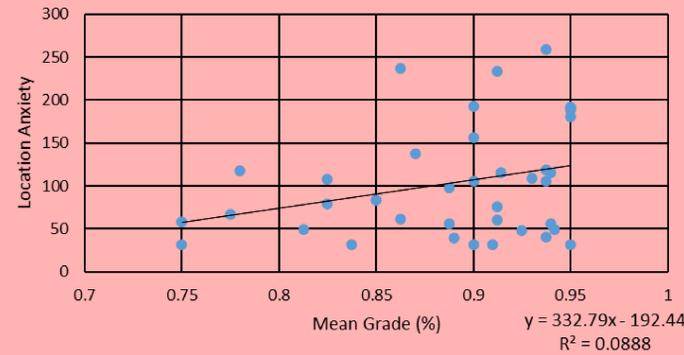
Given how long COVID has remained, one cannot accurately report on stress before COVID, or retrospective stress in general.

General stress is enhanced during COVID, resulting in lower grades. This would not be shown pre-COVID.

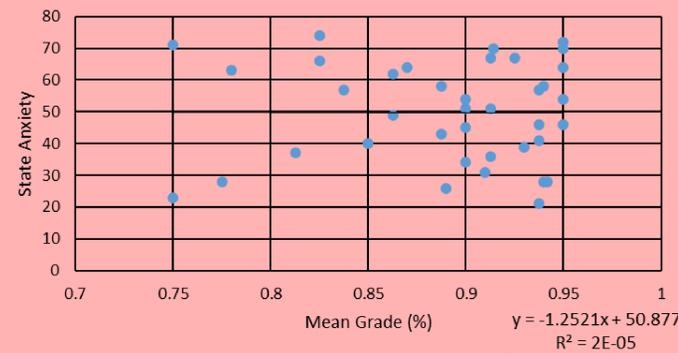
It is extremely difficult to reflect on trait anxiety while state anxiety is exacerbated.

Normal coping that results from trait anxiety fails due to said extreme state anxiety.

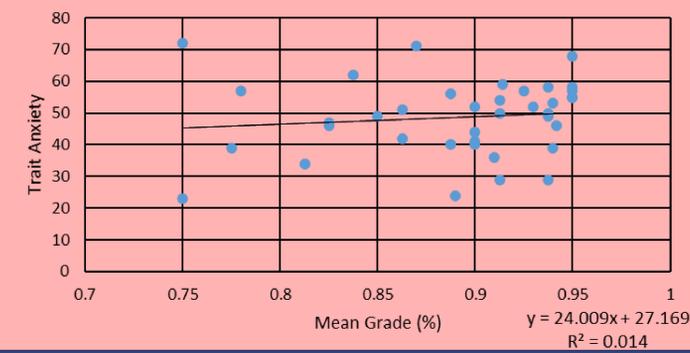
Pre-COVID Location vs. Grades



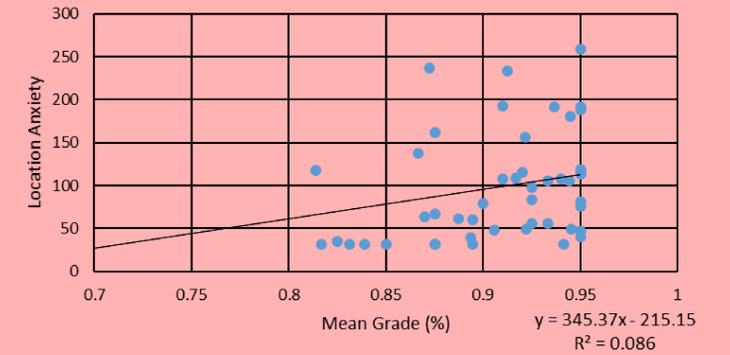
Pre-COVID State Anxiety vs. Grades



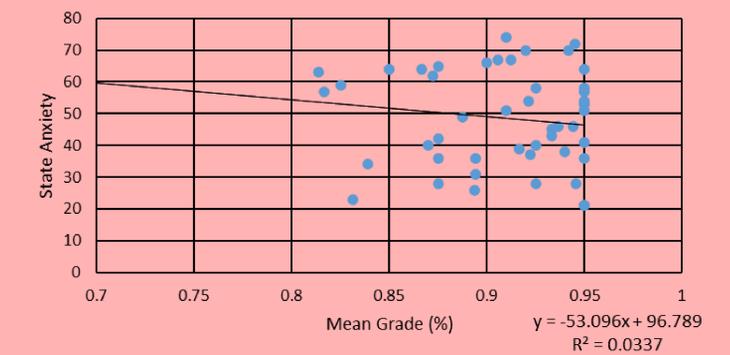
Pre-COVID Trait Anxiety vs. Grades



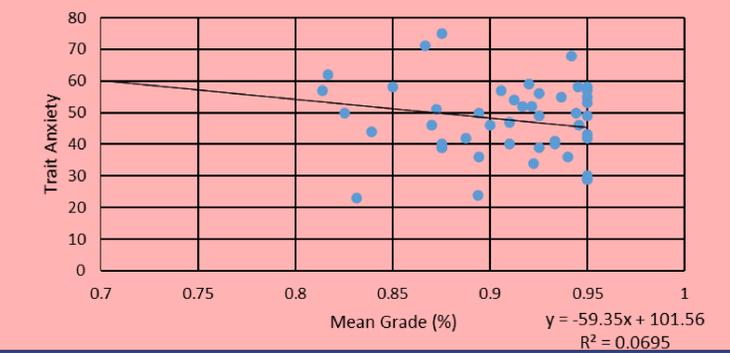
Post-COVID Location vs. Grades



Post-COVID State Anxiety vs. Grades



Post-COVID Trait Anxiety vs. Grades



Conclusions

Based on the figure to the left, the research hypothesis is supported. Those with higher state anxiety did indeed have lower academic achievement.

The data shows that COVID stressors do not act like anxiety, but rather like their own novel stressor.

This information is of vital importance for college administrations in the implementation of mental health resources & safety measures. The data can help determine which measures to roll out first and where.

Not only does anxiety play a role with academic achievement and COVID-19, but so does neuroticism and genetics predisposition to neuroticism itself.

