



The Effect of Regular Aerobic Exercise on Stress and Anxiety Levels

By:
**Quentin Young,
Mcnair
Mentor. Dr. Okera
Nsombi**

Introduction: Stress and anxiety play a major role in one's mental health. Anxiety affects about 30% people in the United States while stress affects about 75% of people in the United States (America Psychiatric Association, 2022.) Key points of understanding include:

- Anxiety is described as an experience of fear but without a feared object. While the underlying trigger for stress is change. Stress begins when the changes we are experiencing demand more than we can deliver (David C. Edwards, Motivation and Emotion, 1999.)
- 41.6% of college students experience anxiety while 48% of college students report that they suffer from psychological stress. These circumstances stem from the workload and the pressures of school, and the pressures of maintaining a job and living alone for the first time (John Yang, PBS. Org, 2021.)
- 30 minutes of aerobic exercise at least 3-4 times a week can help fight off these diseases of anxiety and stress. Exercise improves your mood and protects your brain. The immediate effect of exercise is it releases dopamine, serotonin, and noradrenaline. This is important because the hippocampus and pre-frontal cortex are what is most susceptible to neurodegenerative diseases and cognitive decline in aging (Wendy Suzuki, The Brain changing benefits of exercise, 2018.)
- Exercise makes your hippocampus and pre-frontal cortex stronger. Meaning you will be able to fight of diseases longer into aging. 30 minutes of aerobic exercise improves decision making, focus, attention span, and long-term memory (Wendy Suzuki, The Brain changing benefits of exercise, 2018.)

Hypothesis

College students who engage in 30 minutes of aerobic exercise at least 3-4 times a week will have lower levels of anxiety and stress then college students who do not engage in no aerobic exercise.

Method

Data will be collected through Survey Monkey and secured through the EWU google drive.

This survey is a Within Subject's Design and has 5 progressive steps

Step 1: Consist of a chart. Fill out your anxiety levels at the beginning of week 1.

Step 2: Consists of a Chart. Fill out your stress levels at the beginning of week 1.

Step 3: Consist of a chart. Fill out the days a week you were physical active from week one to week three.

Step 4: Consist of the same chart as step 1. Fill out your anxiety levels at the end of week 3.

Step 5: Consist of the same chart as step 2. Fill out your stress levels at the end of week 3.

The method being used is progressive testing over time which should show a decrease of anxiety and stress.

Procedure

Respondents: Study will need 80 participants.

Materials: Access to the internet for Survey Monkey servers.

Discussion

- Will students have enough time to engage in physical activity?
- Will students have enough discipline to keep returning to exercise?

Projected Outcome

Consistent with the research, students who engage in more aerobic exercise weekly will have lower levels of anxiety and stress.