



Grind & GPA: Determining the Relationship Between Consistent Exercise and Academic Stress and Performance

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Background

- 76% of students feel overwhelmed by academics, leading to degraded self-care, nutrition, exercise, and increased substance use.
- Physical exercise reduces anxiety and improves academic performance; engaging in 150 minutes of physical activity per week lowers psychological distress.
- Habit formation through consistent exercise (30-60 minutes, 5 days a week) improves stress coping and overall well-being.

Objective

To examine the relationship between a consistent routine of exercise and academic stress and performance amongst undergraduate students at UC San Diego.

Methodology

- A cross-sectional study was conducted using an anonymous online questionnaire for undergraduate UCSD students and was distributed on social media platforms and through word of mouth.
- Participants (n=100) reported their exercise frequency, intensity, and duration. Participants self-rated their academic performance and stress levels on a scale of 1 - 10.
- Participants were categorized into 4 exercise score categories, with Category 1 indicating the least consistent and intense routine.

Results

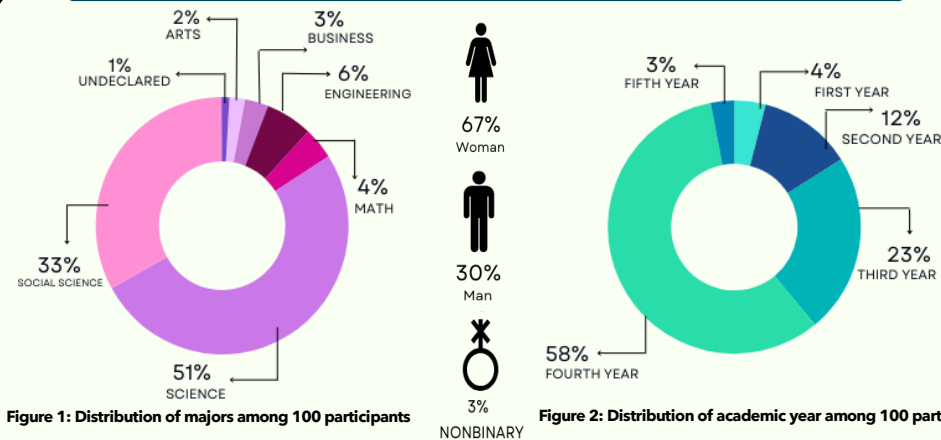


Figure 1: Distribution of majors among 100 participants

Figure 2: Distribution of academic year among 100 participants



2.84
Avg Comp Score



6.68
Avg Performance



6.55
Avg Stress Score

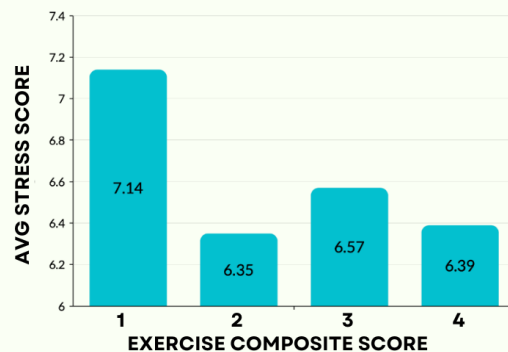


Figure 3: Average Stress Levels By Exercise Category. This bar graph illustrates the mean stress levels for participants across 4 categories of exercise consistency, frequency, and intensity, with Category 1 indicating the least frequency, duration, and intensity of exercise. Higher scores for average stress levels indicate higher stress levels.

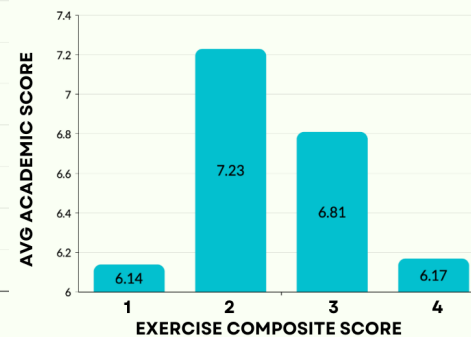


Figure 4: Average Academic Performance By Exercise Category. This bar graph illustrates the mean academic performance for participants across 4 categories of exercise consistency. Higher scores for average performance indicate better academic performance.

Conclusion

- There is no association between a consistent routine of exercise and academic stress and performance amongst undergraduate students at UCSD.
- Potential limitations include bias in self-reported responses and the cross-sectional design of the study.
- Further research is needed to explore under what conditions, and for whom, exercise might impact academic stress and performance.

Policy Implications

While literature shows that a consistent exercise routine can help aid in stress reduction, universities should:

- Research coping mechanisms for academic stress
- Improve access to on-campus physical activity centers, events, and educational resources.

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References

