

A Comparison of Student Achievement Across Pedagogical Modalities

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Introduction

Passive Learning

- Includes¹:
 - Lecturing via direct instruction
 - Reading textbook excerpts
- Not the most effective method for learning¹.

Active Learning

- Includes²:
 - Engaging in meaningful classroom debates
 - Exercises where students are asked to solve problems together
- Creates stronger connections, enabling deeper levels of information processing and learning³.
- Leads to reduced stress and anxiety before exams⁴.

Purpose of Current Study

- Investigate the effect of active vs passive learning on academic performance.
- Investigate the relationship between test anxiety, student characteristics, and academic performance.
- Hypothesis 1:** Students in the active learning group will have higher academic performance than students in the passive learning group.
- Hypothesis 2:** Students in the active group that report high test anxiety will have higher academic performance than students in the passive group that report high test anxiety.

Methods

Participants

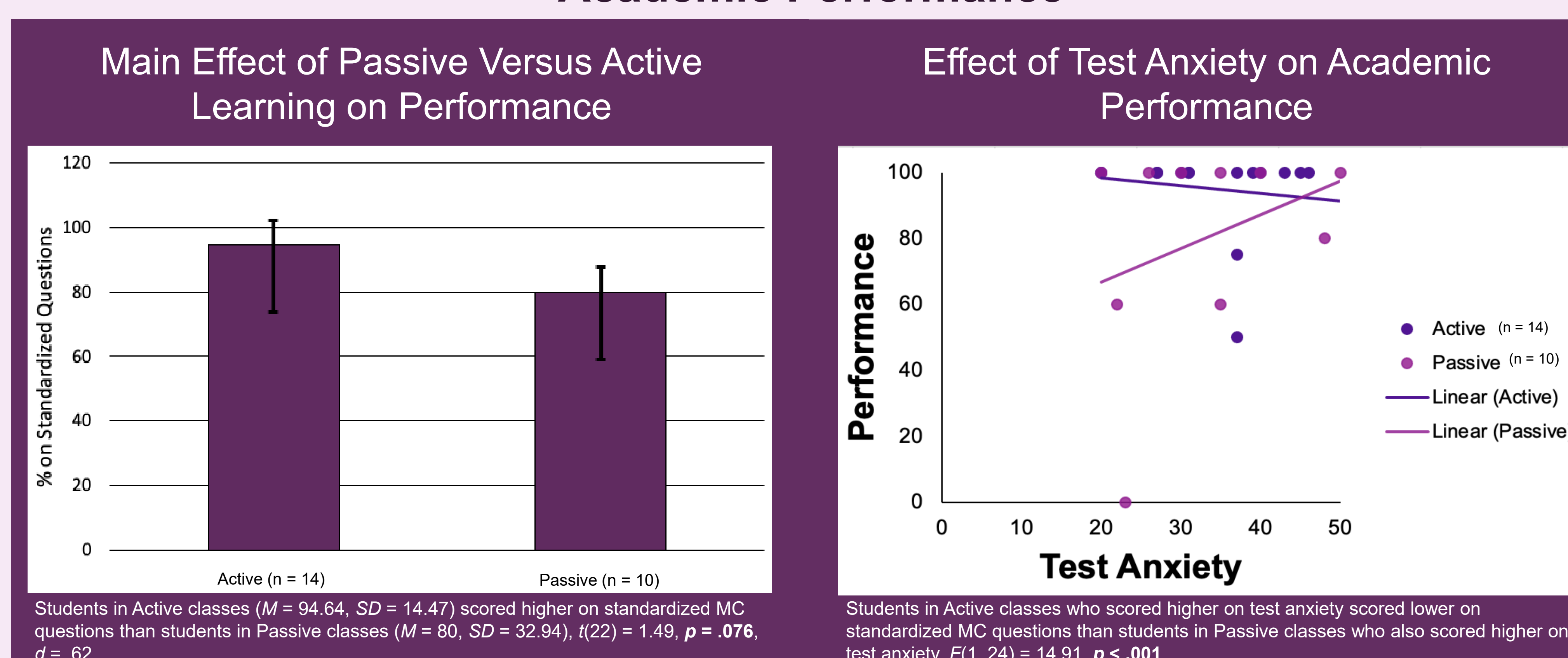
- 97 students enrolled in PSYC 105 courses at MacEwan University.

Procedure

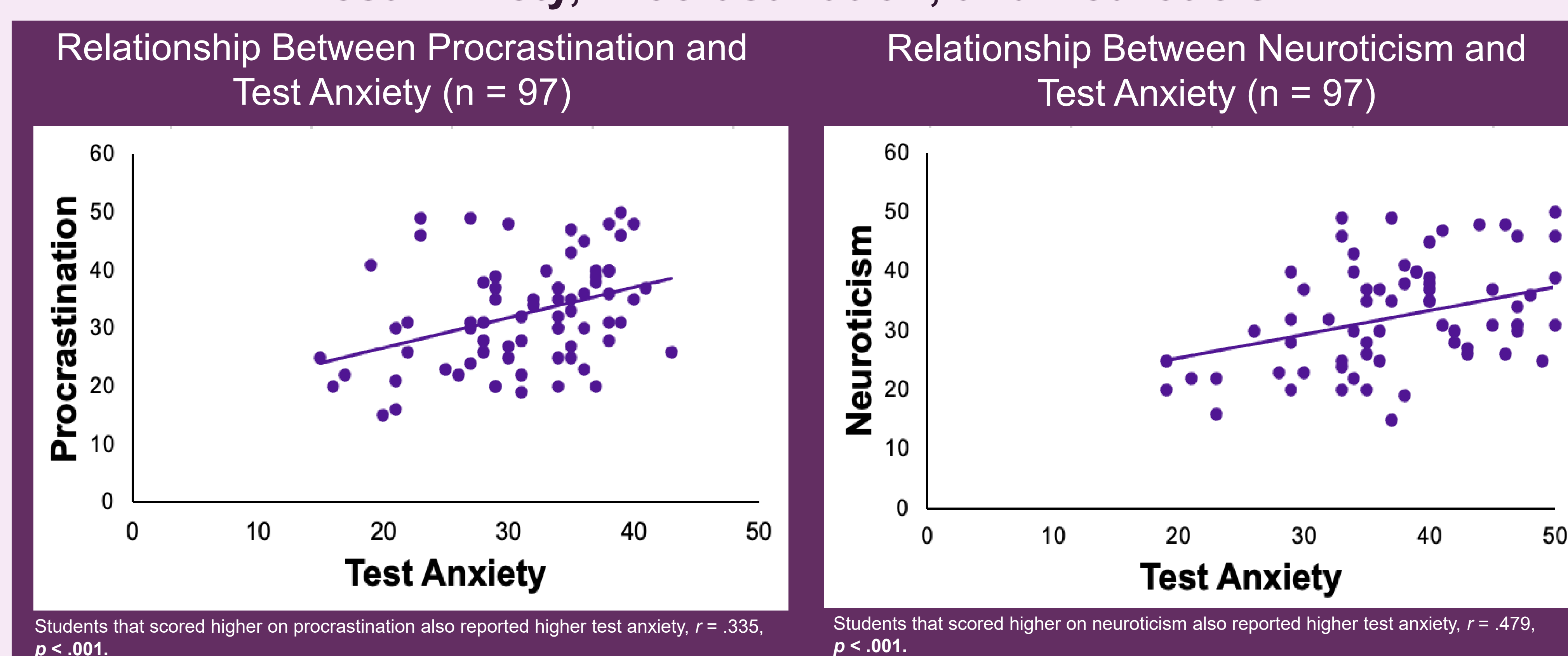
- 2 Conditions:**
 - Active/Hybrid
 - Passive/In-Person
- Questionnaires:**
 - Demographics
 - Personality (*Big Five Inventory*)
 - Self-regulation (*Self-Regulation Questionnaire*)
 - Procrastination (*Procrastination Quotient*)
 - Test anxiety (*Westside Test Anxiety Scale*)
 - Open-ended question on study strategies
- 8 standardized MC questions were inserted into exams in all participating course sections.

Results

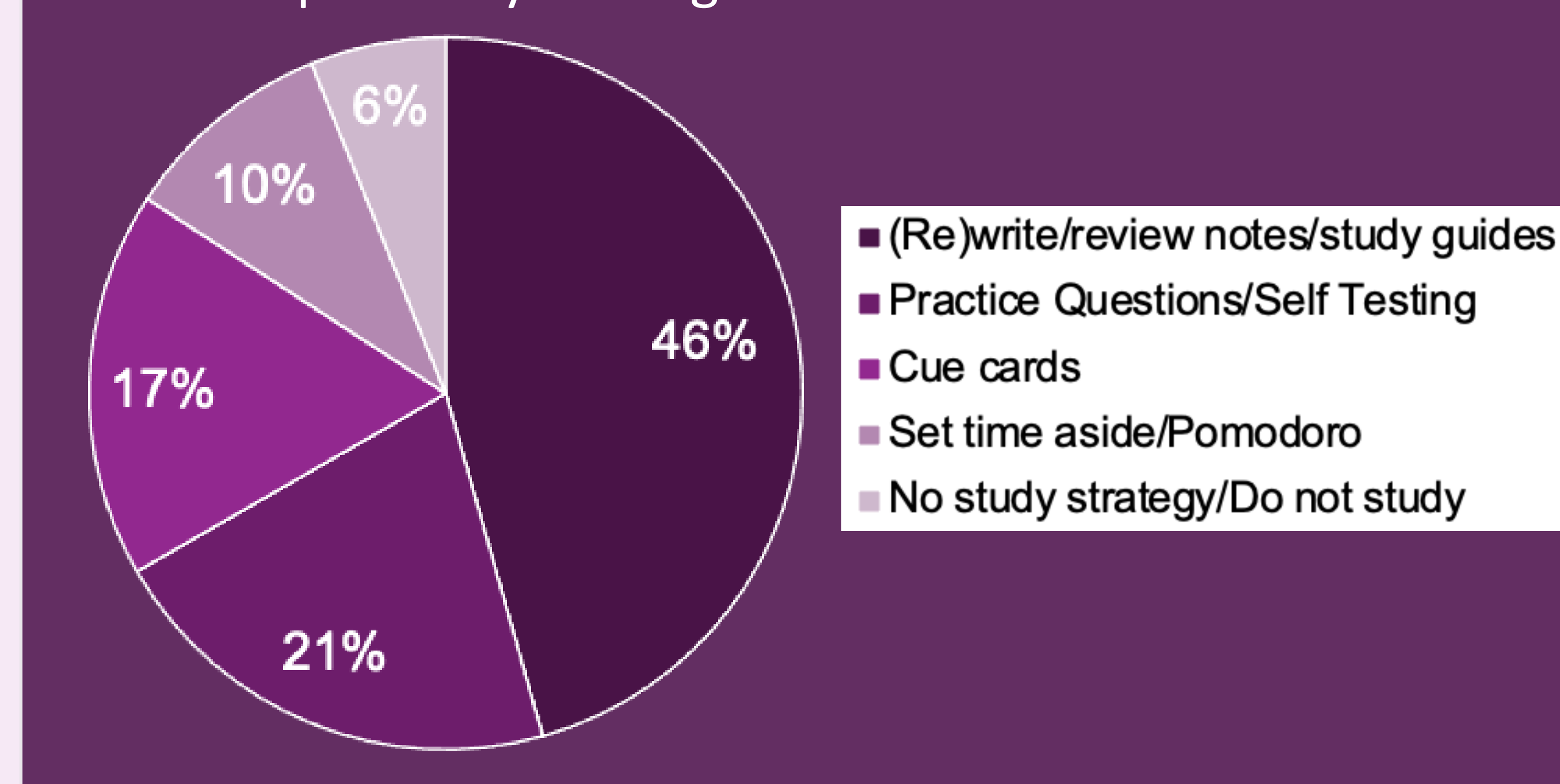
Academic Performance



Test Anxiety, Procrastination, and Neuroticism



Top 5 Study Strategies of Students in PSYC 105



Discussion

Results

- Students in the active learning condition scored higher on standardized MC questions than students in the passive learning condition.
- We found a moderately positive relationship between procrastination and test anxiety, as well as between neuroticism and test anxiety.
- Students are engaging more in passive study strategies than active study strategies.

Limitations

- Pilot study
 - Limited sample size
 - Underpowered
 - Cannot draw major conclusions

Conclusion

- Students may benefit from universities offering more opportunities for active learning.

Future Directions

- Further research is necessary to investigate the effects of active versus passive learning on academic performance, and how different student characteristics influence those relationships.
- Investigate the interaction between active and passive study strategies and active and passive learning strategies on academic performance and test anxiety.

References

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