

STATISTICS ANXIETY AND UNGRADING IN PSYCHOLOGY GRADUATE STUDENTS

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INTRODUCTION

Ungrading is an assessment practice whereby students receive detailed constructive feedback without a numerical grade attached to their individual work. Given that one component of statistics anxiety relates to testing and evaluation, I sought to examine how incorporating ungrading into a graduate level statistics course impacts psychology students' statistics anxiety.

METHOD

Participants included students taking a graduate level elective multilevel modeling course through the psychology department in the Fall 2022 semester at a large, urban Canadian institution. Of the 17 students enrolled in the course, all but three were PhD students. However, not all students participated in the study. Specifically, 10 completed an anonymous, mid-semester survey, 5 completed an anonymous end-of-semester survey, and 6 participated in a focus group.

RESULTS

In the first survey, participants reported their pre-course statistics anxiety as follows: 20% reported no statistics anxiety or low statistics anxiety, 30% reported moderate anxiety, 30% reported a great deal of anxiety, and 20% reported extreme anxiety. At mid-semester, 20% reported no or low statistics anxiety, 60% reported moderate levels, and 20% reported a great deal of anxiety. In the final survey, 4/5 students reported beginning with a great deal or extreme amount of statistics anxiety before taking the course but only moderate levels of statistics anxiety after taking the course. In the focus group, 2/6 students explicitly commented that ungrading reduced their statistics anxiety within the context of the course, but they were unsure about the lasting effects in their research more broadly or in future statistics courses.

CONCLUSION

The study provides some preliminary evidence that an ungrading format can reduce statistics anxiety in psychology students with moderate to high statistics anxiety. Given the importance of statistics for social science graduate students, focusing on statistical learning in the absence of numerical grades may represent an avenue for reducing statistics anxiety and allowing students to focus on crucial statistical skills.