

The impact of grade visualization on college students' academic stress



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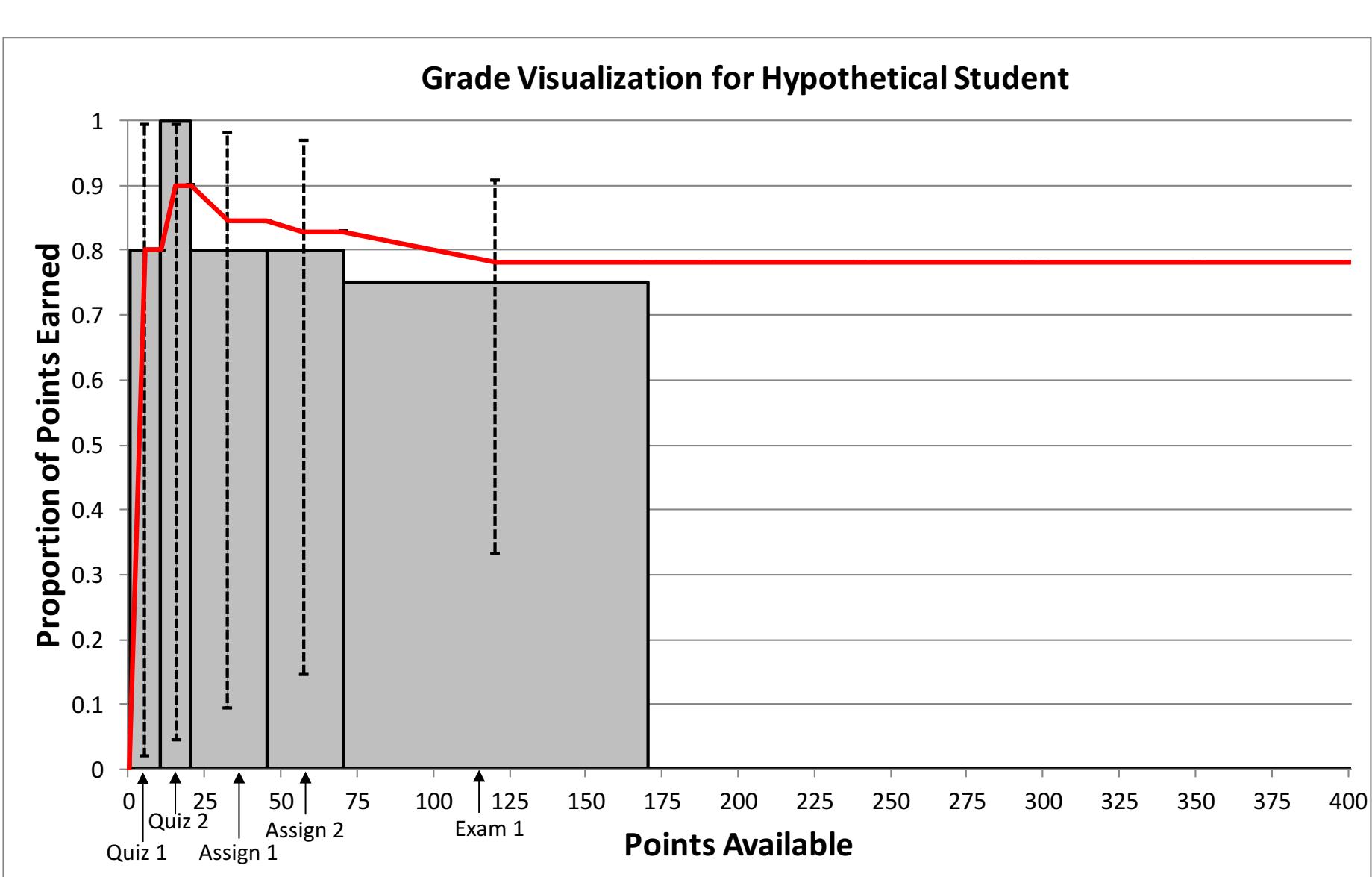
Grades in the College Classroom

Grades are a common cause of stress among students (Leonard et al., 2015). However, transparent grading and keeping students informed about their grade over the course of the semester may serve to reduce grade-related stress and anxiety (Svinivki & McKeachie, 2011).

To date, little research has looked at how the way in which course grades are displayed impacts student's experience of in the college classroom.

In the current study, we provided students with customized grade visualizations which included their current grade and the range of grades they could attain. We assessed the extent to which this visualization impacted students perceptions of academic stress (Struthers, Perry, & Menec, 2000).

Grade Visualization and Study Design



24 students enrolled in Introduction to Psychology participated in the current study

All data were collected on the day students received their Exam 1 grades.

Students receive Exam 1 Grades

Measure Academic Stress (Time 1)

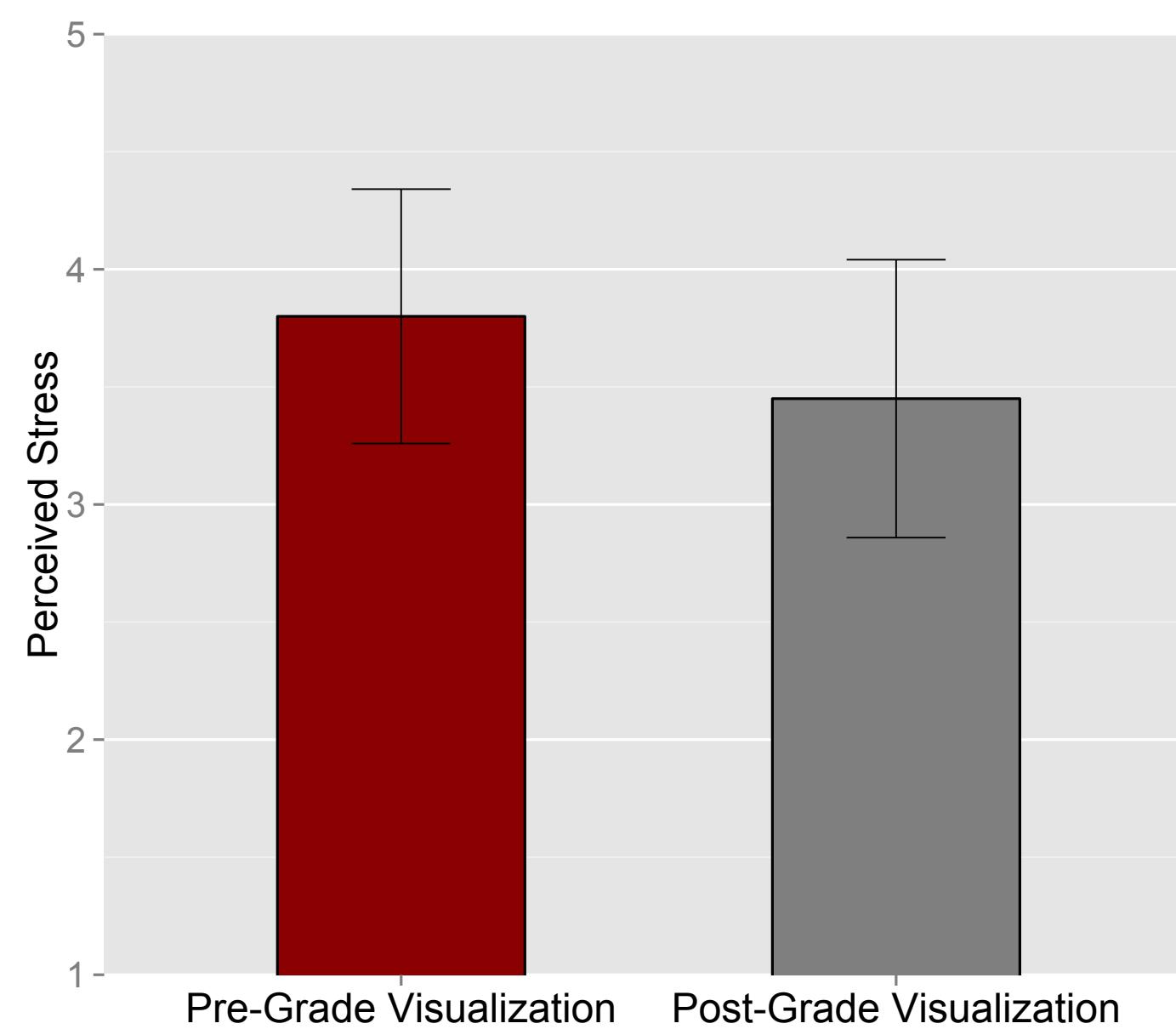
Students receive Grade Visualization

Measure Academic Stress (Time 2)

Measure attitudes toward Grade Visualization

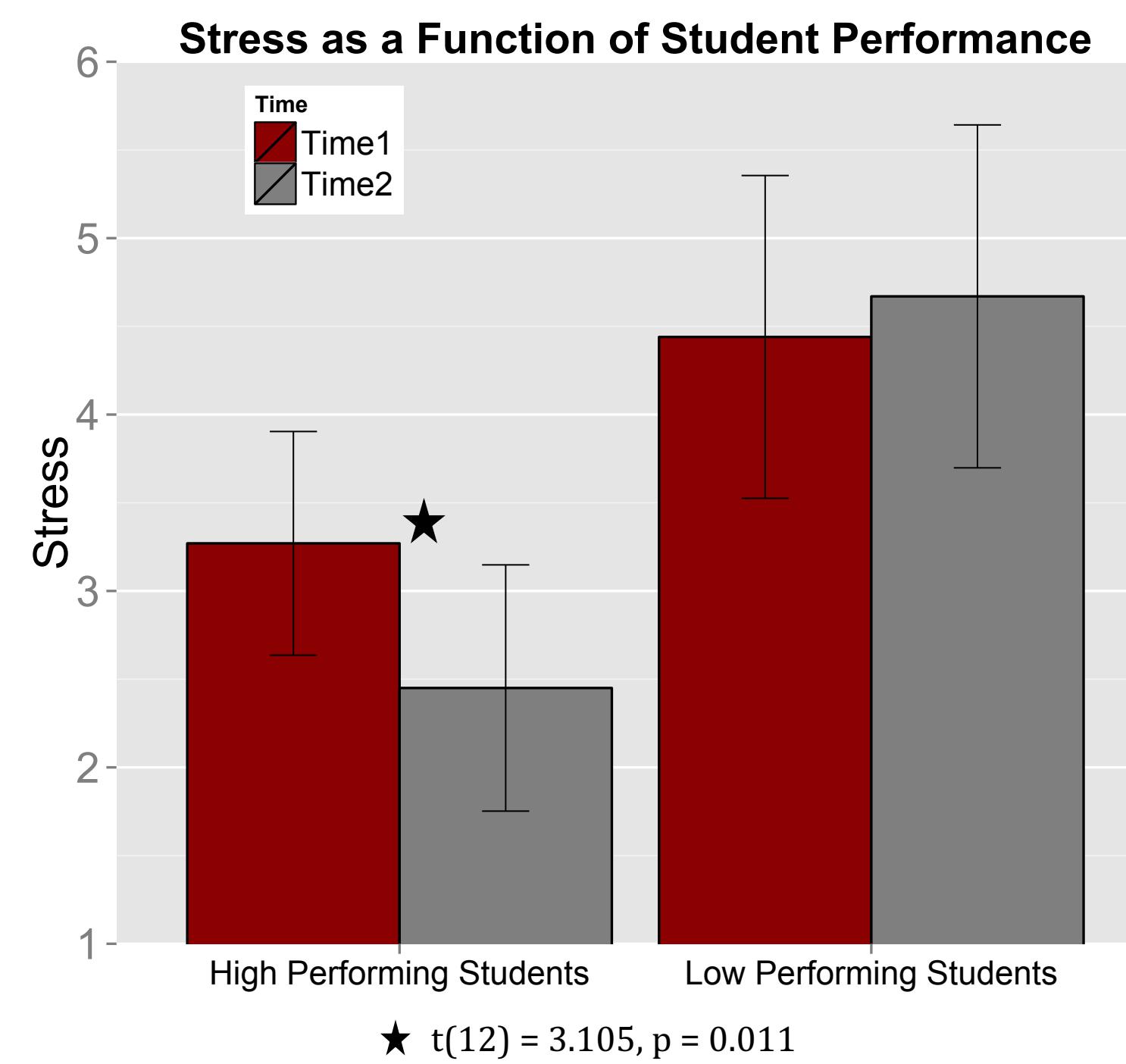
Grade Visualization and Stress

Perceived stress ratings could range from 1 (not at all stressed) to 9 (completely stressed)



Overall, a numerical but not statistically significant reduction in stress was observed following the grade visualization.

To test if the effect of grade visualization differed based on student performance in the class, we separated students based on their course grade into **"high performers"** and **"low performers"** using a median-split.



We found that **high-performing** students experienced lower levels of stress compared to **low-performing** students.

Moreover, the impact of grade visualization led to a statistically significant reduction in perceived stress for **high-performing** students. In contrast, grade visualization did not significantly impact perceived stress in **low-performing** students.

Attitudes Towards Grade Visualization

73% of the students in our sample reported that they would like more detailed grade feedback in a typical class.

85% of the students in our sample found the grade visualization to be "helpful".

60% of the students in our sample reported that they would be likely to use the grade visualization throughout the semester if made available.

Conclusions

Providing students with a detailed visualization of their course grade was associated with reductions in perceptions of academic stress and this reduction was particularly pronounced for students who were doing well in the course.

In general, students viewed the grade visualization favorably suggesting that they might be willing to adopt this as part of their classroom experience.

Together, we take these results as preliminary support for the importance and feasibility of implementing a more detailed form of grade visualization in the college classroom.

Future work will include larger samples and assess students perceptions of stress at multiple time points over the course of the semester. In addition, we plan to investigate the impact of grade visualization on various parts of the classroom experience including engagement, professor-student rapport, and course performance.

References

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Struthers, C. W., Perry, R. P., & Menec, V. H. (2000). An examination of the relationship among academic stress, coping, motivation, and performance in college. *Research in Higher Education*, 41, 581-592.

Svinivki, M., & McKeachie, W. J. (2011). *McKeachie's Teaching Tips: Strategies, research and theory for college and university teachers*. Belmont, CA: Wadsworth.

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