

Using Multiple Sources of Data to Predict Success in a High-Stakes Major

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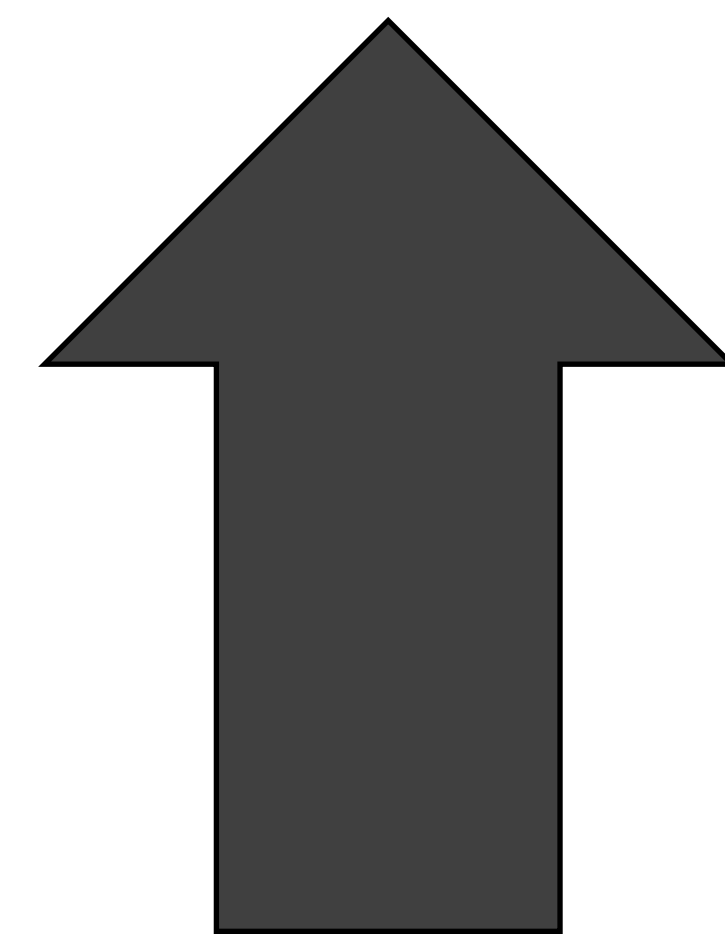
College of Health and Human Services

BACKGROUND

New Upper Division Transfer (NUDT) students in **Speech Language and Hearing Sciences**:



Two-thirds of UG students



1st term and 1st year academic probation (AP) rates as compared to HHS

SLHS is a high-stakes major; Graduate degrees are needed to practice in the field. For example, the average GPA of incoming MA students to SDSU is 3.8-3.9

Use of student engagement data, participation in the course, and demographic factors to determine which students are successful in one of the first upper-division SLHS courses taken by students (SLHS 321 Anatomy and Physiology of Speech)

RESEARCH QUESTIONS

What sociodemographic and academic-related factors (e.g., underrepresented minority, local area status, first generation, etc.) are related to student success in SLHS 321?

What behavioral data (e.g., attendance, time spent on Blackboard) are related to student success in SLHS 321?

What student engagement factors impact student success in SLHS 321?

METHODS

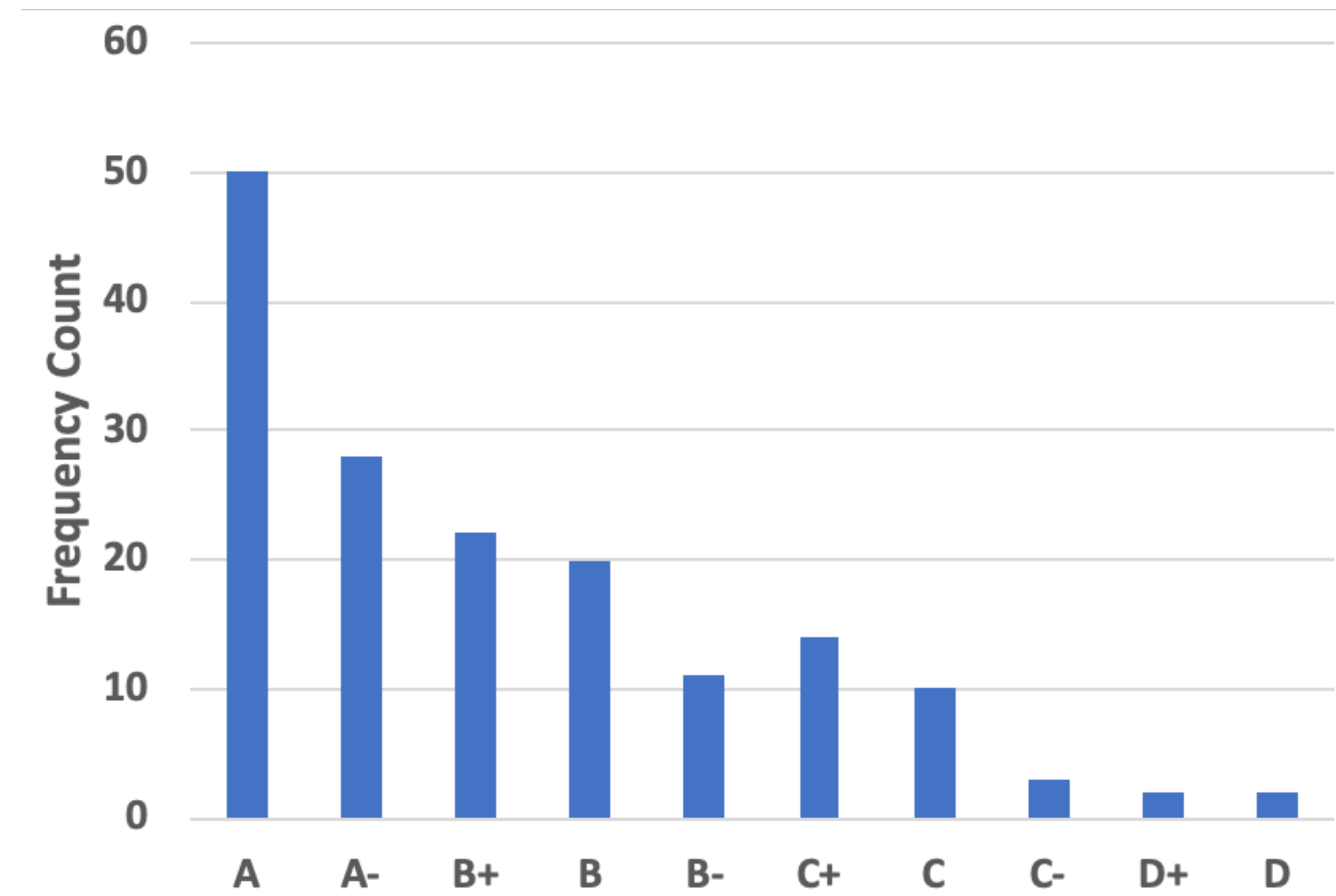
Data on all students enrolled in and completed SLHS 321 during Fall 2019 (n = 162)

Descriptive statistics to examine frequency count of students of different grades

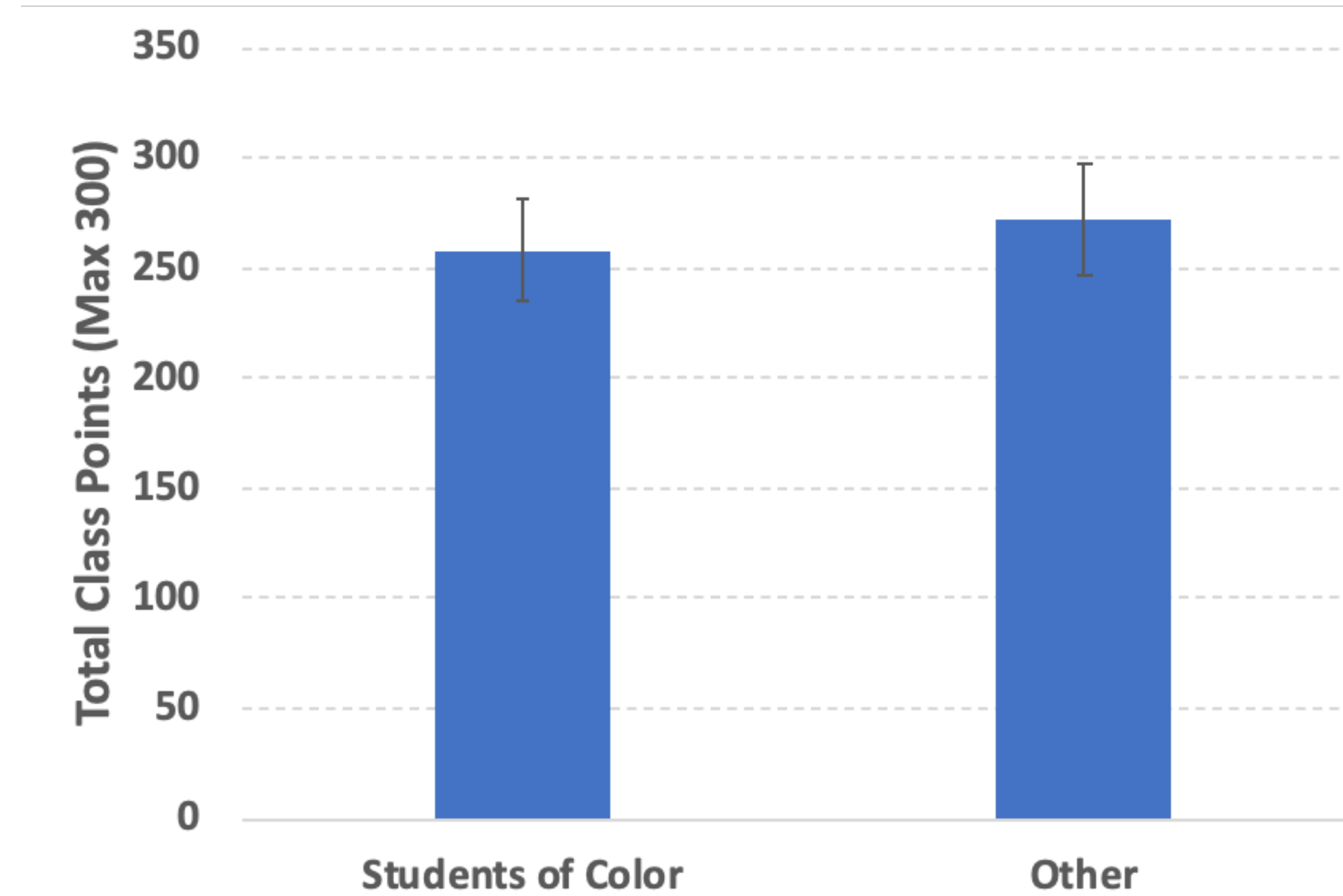
Separate models run to determine the impact of the following on total number of points in the course:

- 1) Attendance and time spent on Blackboard (n=162)
- 2) Age, if the student is one of color, first generation (CO definition), Service area, Incoming GPA, EOP, Number of University Advising visits, FTF/NUDT (n=162)
- 3) Answers to student engagement survey administered in early October and end of the semester (n=63)

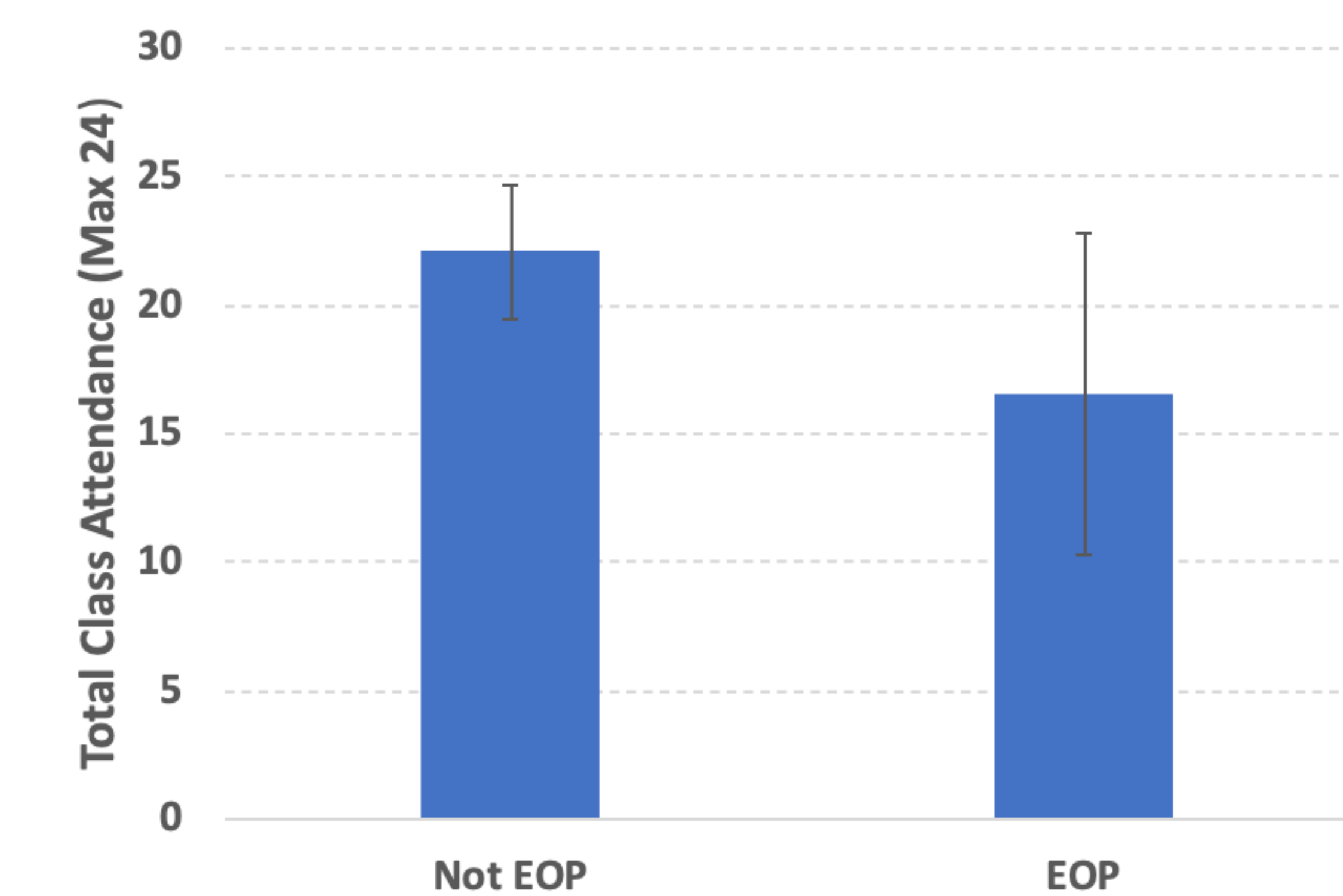
FINDINGS



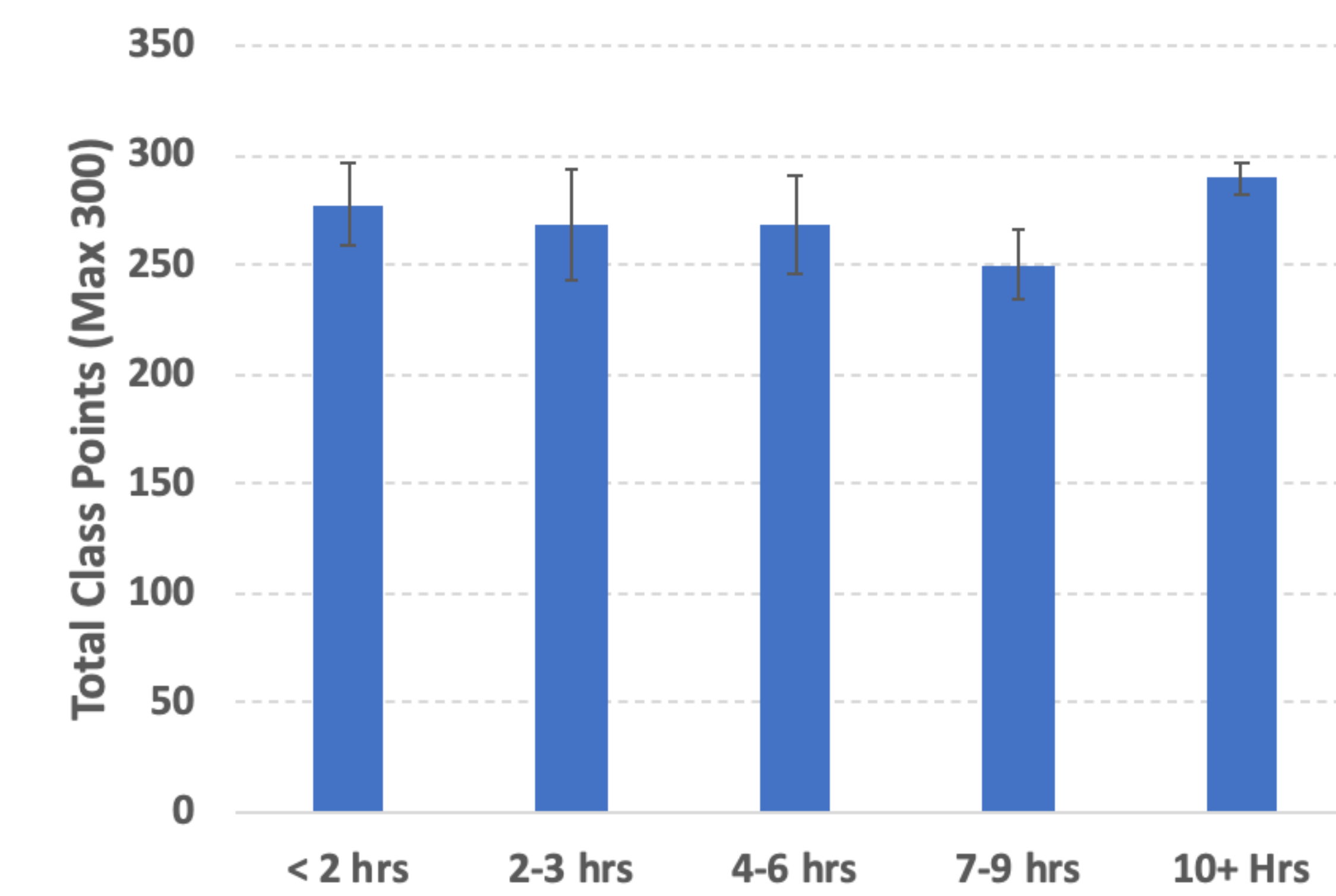
Both class attendance and amount of time spent in Blackboard were significant predictors of final grade



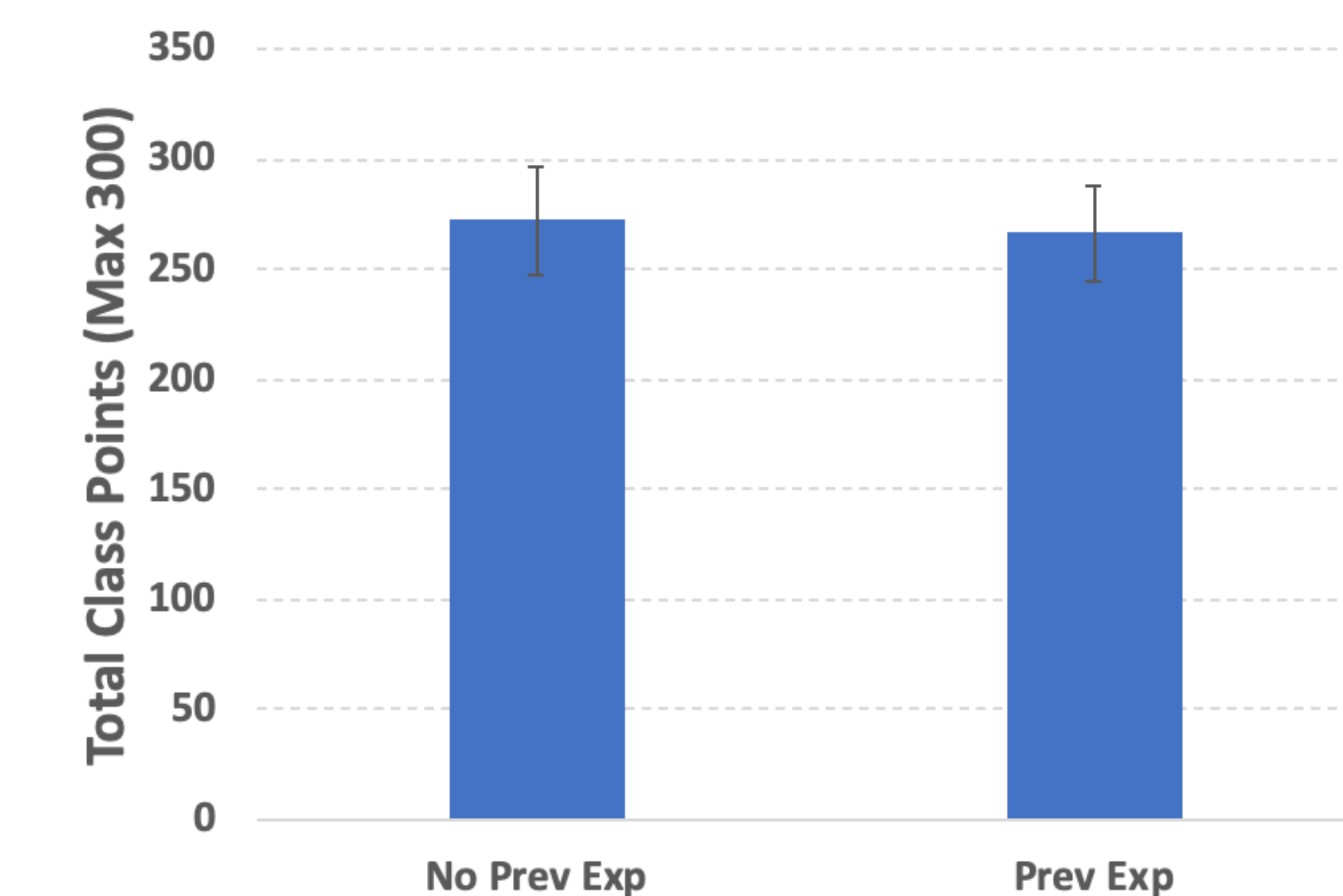
Students of color had statistically significant lower total class points (and final grades)



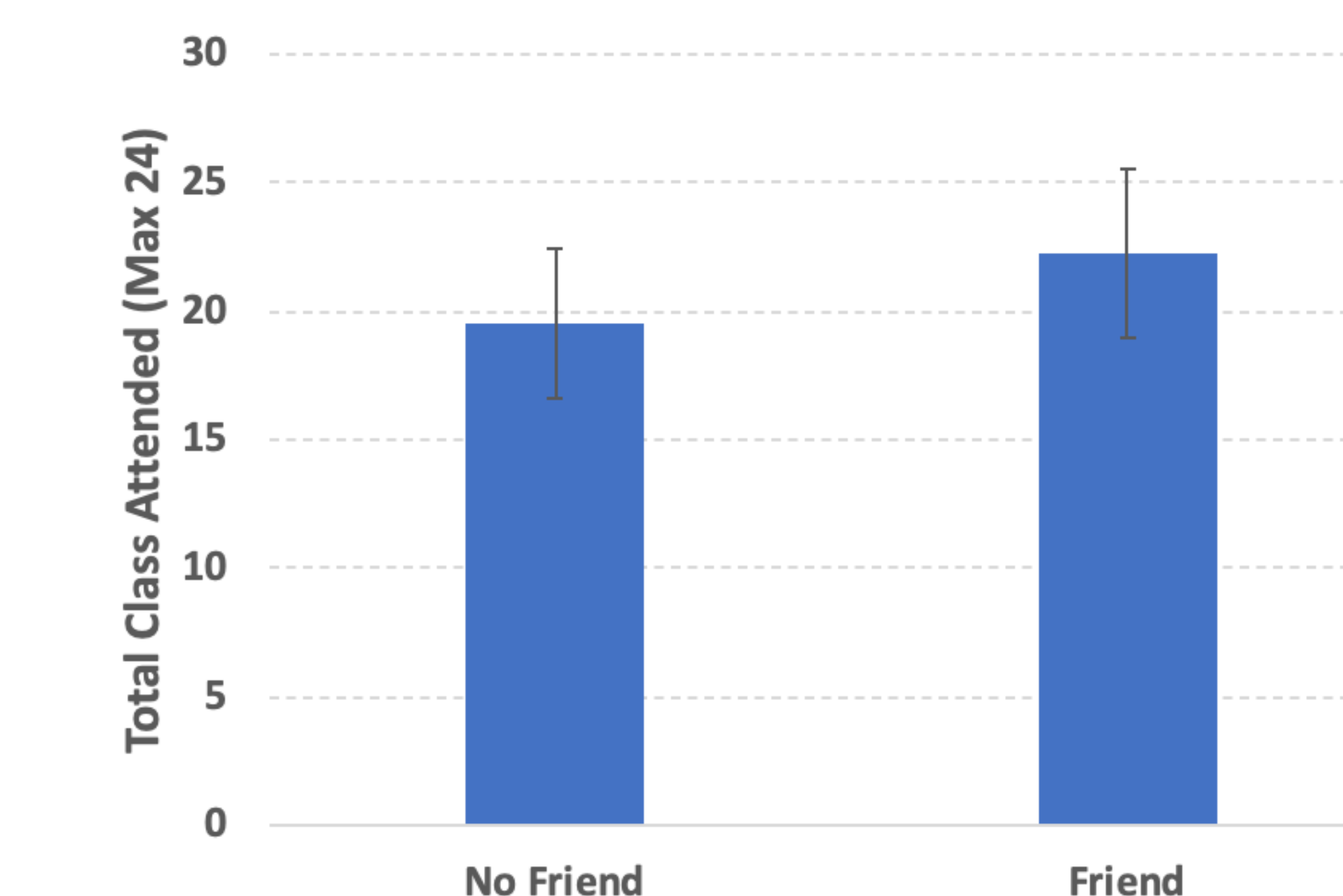
EOP students had lower rates of class attendance



Students who read 7-9 hrs/week had lower total points than students who read less than 2 hrs or more than 10 hrs per week



Students who had previous field experience had lower scores



Students with at least one friend in class had marginally higher class attendance

STUDENT SURVEY

Survey conducted via Qualtrics. Questions asked included:

- If they worked off campus
- Time spent reading for class
- Time spent reviewing for class
- Involvement in student groups
- Volunteer/shadowing experience in field
- If they have a friend in class

CONCLUSIONS & FUTURE DIRECTIONS

Students who have consistent attendance and more time on Blackboard had higher grades.

- Likely spending more time reviewing notes, reviewing lecture recordings

Students of color and EOP students are at higher risk of lower grades

- Other demographic data were not significant predictors

Students who read 7-9 hrs/week had lower total points than those who read < 2 hrs and > 10 hrs

- May reflect inefficient study skills
- Further questioning should examine how students are spending this time

Students with previous/current experience had lower scores, perhaps due to time spent away from studying

Having friends encourages class attendance