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Teachers, Student Stress, and Academic Performance

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Abstract

Academic achievement for adolescents has been related to several positive outcomes in adulthood including economic and health outcomes. Undoubtedly, the COVID-19 pandemic has put additional stress on academic achievement. Research has shown several factors that predict academic outcomes. We are interested in investigating the associations between teacher-student relationship and a student's perceived level of stress on academic achievement. We used a multiple regression analysis to determine if students' teacher relationships significantly predict grades, as well as if stress predicts grades. Results of this regression showed that both student-teacher relationship and stress significantly predict grades ($R^2=.010$, $F(4,4375)=11.044$, $P < .001$). It was found that student-teacher relationship significantly predicted grades ($B=.013$, $P < .001$), as did gender ($B = .154$, $P < .001$), and stress ($B = .067$, $P<.001$). The implication of these results should encourage teachers to develop stronger relationships with students to help improve grades. Additionally, stress levels must be managed both inside and outside of school for students to have their highest academic success. School administrators should foster the growth of student-teacher relationships while focusing on environments with reduced stressors in order to boost academic achievement.

Teachers, Student Stress, and Academic Performance



BOISE STATE UNIVERSITY

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Do teacher relationship and student perceived stress significantly contribute to academic performance?

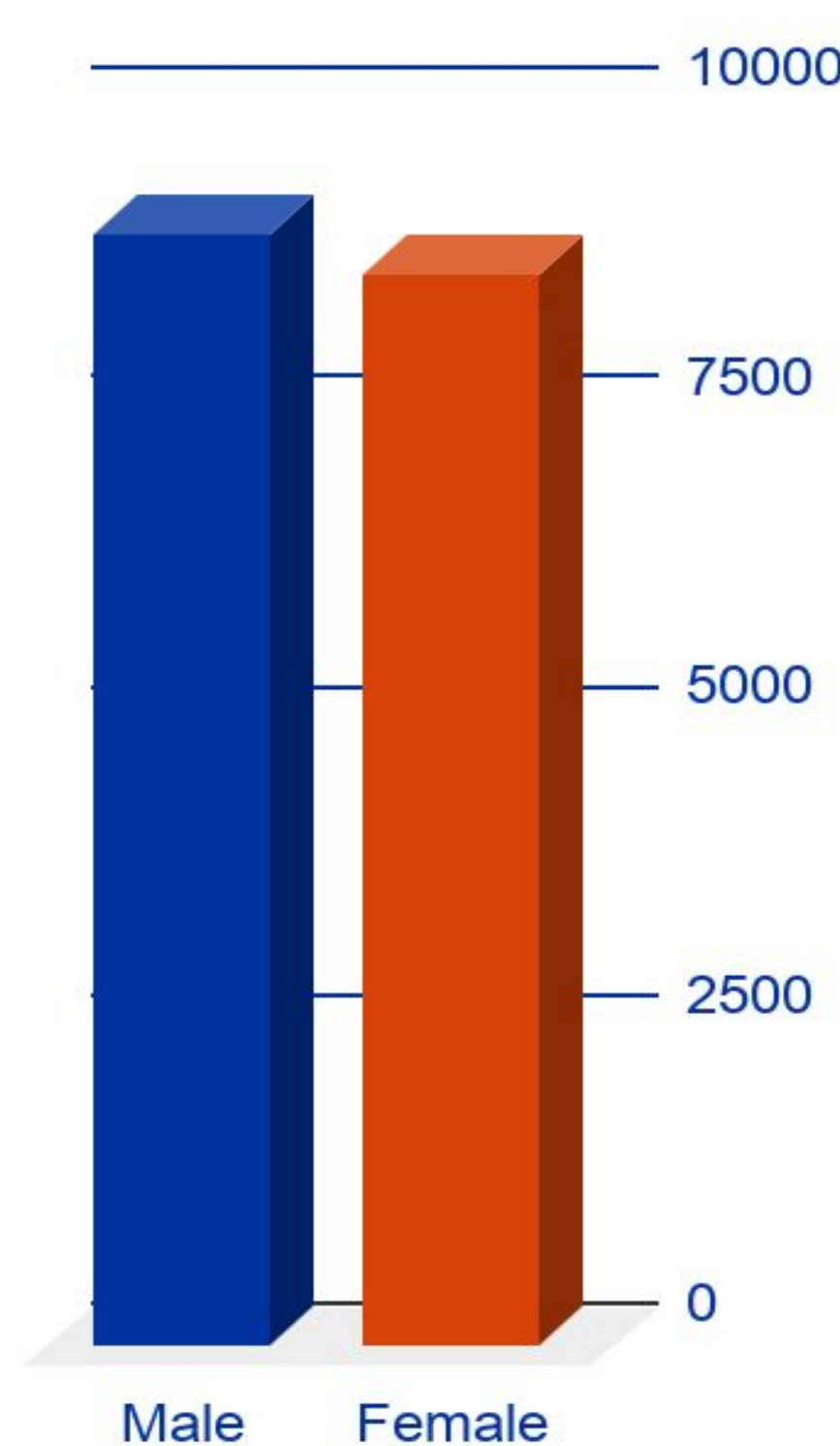
INTRODUCTION

Students are surrounded by a number of people that influence their lives. One of the people that students are constantly surrounded by are their teachers. Studies have shown that having a good relationship between teachers and students fosters learning. As students we have experienced unimaginable stress during the COVID-19 pandemic. Classes where we felt we had a trusting relationship with our teachers yielded higher grades because we were able to come to them when the stresses of pandemic and school life became too much for us. Furthermore, developing trusting relationships with teachers can reduce the high school dropout rate which is beneficial to individuals and communities alike.

HYPOTHESIS

We predict that there are a multitude of factors that play a role in the overall grades of a student and the amount of stress they experience which may include teacher relationships, gender, race and other variables.

Gender

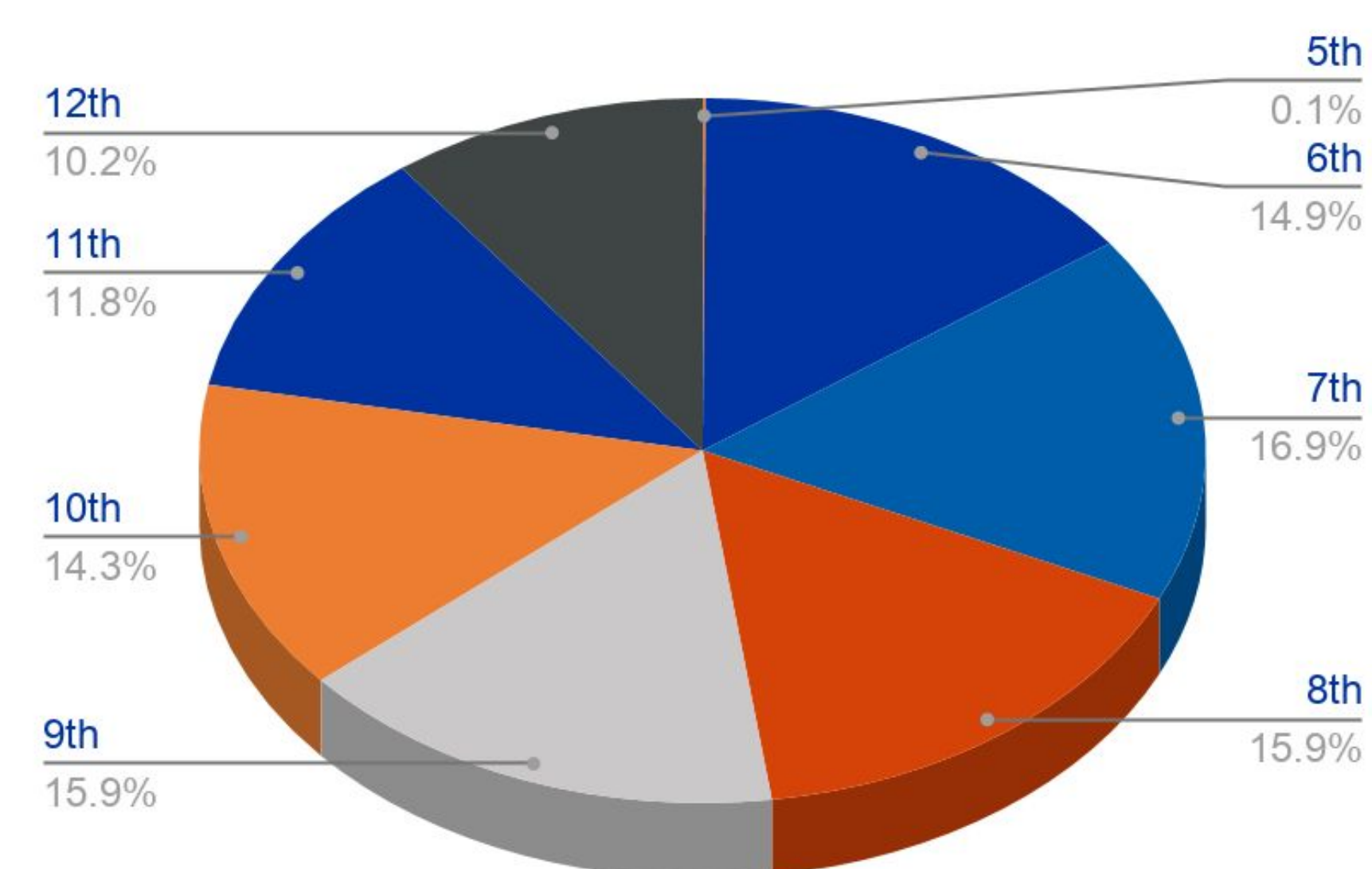


Ethnicity

Participants were able to select multiple ethnicities that they identified with. Options to choose from included:

- White, 82.7%
- Black or African American, non hispanic, 7.3%
- Hispanic or Latino, 6.1%
- Asian, 2.4 %
- Native Hawaiian or Other Pacific Islander, 1.1%
- American Indian or Native American, 5.5%

Grade in School



METHODS

Participants were 17,618 (8974 male and 8644 female) students in middle and high school in West Virginia. Of this group, 10,262 identified themselves as white and 7,356 identified themselves as something other than just white. All students in grades 5-12 in three mid-Atlantic middle and high schools participated in the study (N = 4380). Participation in this study was voluntary. Eligibility was restricted to native English speakers. Students were not provided compensation. Other relevant demographic information includes household living situation, broken up into 18 sections, and the highest level of schooling a child's parents completed.

MEASURES

Perceived Stress

- Measured with 10 items; Cronbach's alpha: .81
- Sample Item: "How often have you felt difficulties were piling so high that you could not overcome them?"
- "Perceived Stress Scale" Cohen, Kamarck, & Mermelstein (1994)

Teacher Relationships

- Measured with 8 items; Cronbach's alpha: .94
- Sample Item: "Teachers understand my problems"
- "School Climate Scale" Zullig et al, (2005)

Grades

Grades were measured by averaging participants' self-reported letter grades for Math and English.

RESULTS

A multiple regression test was used to determine the significance of the relationships, our results show: $R^2 = 0.010$, $F(4,4379) = 11.04$, degrees of freedom = 11.044, $p < .001$.

Variables	B	Std. Error	Beta	Sig.
(Constants)	2.868	.116		.000
Gender	.154	.045	.052	.001
Race	.060	.045	.020	.180
TeacherRelT2	.013	.003	.067	.000
Stress17	.067	.029	.036	.020

CONCLUSION

- There is a significant relationship between each gender, a positive teacher relationship, stress on a student's grades.
- Race does not significantly predict grades in this model.
- This study does not account for all possible variables that can influence a student's grades and academic performance.

Implications

- School administration should be fostering healthy student teacher relationships and reduction of stressors in school.
- Other factors that can affect grades should be studied by future researchers.

