The Relationship of Student Attendance and Student Proficiency in English, Language, and Arts

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Abstract

Introduction

We use data from the Oregon Department of Education (ODE) to examine the following research questions:

((I love your questions! Can you explain what you mean by relationship?)

(It is so cool that you can use data from Oregon and from the most recent year. Was there anything on the site discussing how rates from this year compare to pre-pandemic numbers or pandemic numbers?)

Methods

In this research, we run a regression model on attendance data and proficiency data of schools in Oregon. We obtain two different data sets from the ODE: attendance rate by school and student group, and proficiency in English, Language, and Arts by student group.

Data description and preparation

The first data set is student performance in English Language and Arts (ELA) from all schools in the state. The data set provides the number and percentage of students that are proficient in each of the four levels of ELA proficiency, stratified by school, race and ethnicity, and grade level. This data set has 20046 rows and 20 columns.

The second data set is student attendance data from all the schools in Oregon. This data set provides the number and percentage of regular attenders as well as those of chronically absent students, stratified by school and either race and ethnicity or grade level. This data set has 42295 rows and 11 columns.

(I appreciate how clearly you detail what you are doing and where the data come from. It is easy to understand the process this way)

After cleaning, we merge the two data sets by matching schools' IDs and student race and ethnicity. Rows with attendance data only or proficiency data only will be removed.
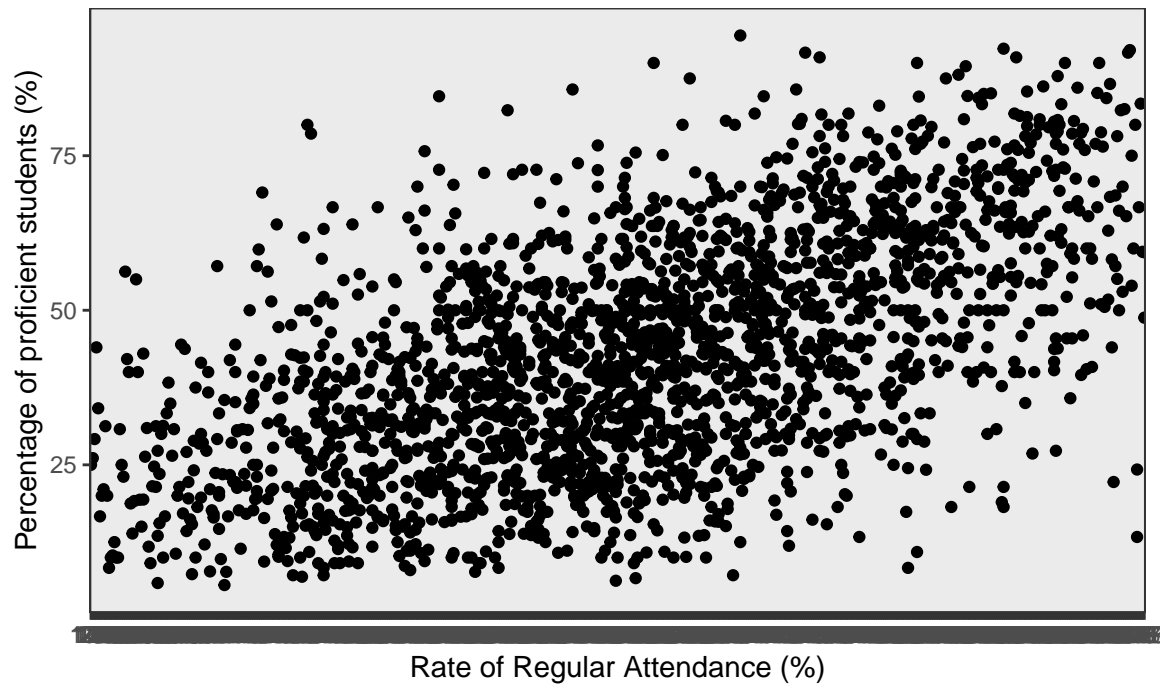
Methods

Results

Table 1: Student Proficiency Rate by Race and Institution types

Institution type	Asian	Black African American	Hispanic/Latino	Multi racial	Pacific Islander	White
High School	63.16	16.27	33.39	52.18	16.95	51.50
School	64.33	19.90	25.01	51.45	15.77	50.88

Plot 1

Student Attendance and Proficiency Rate
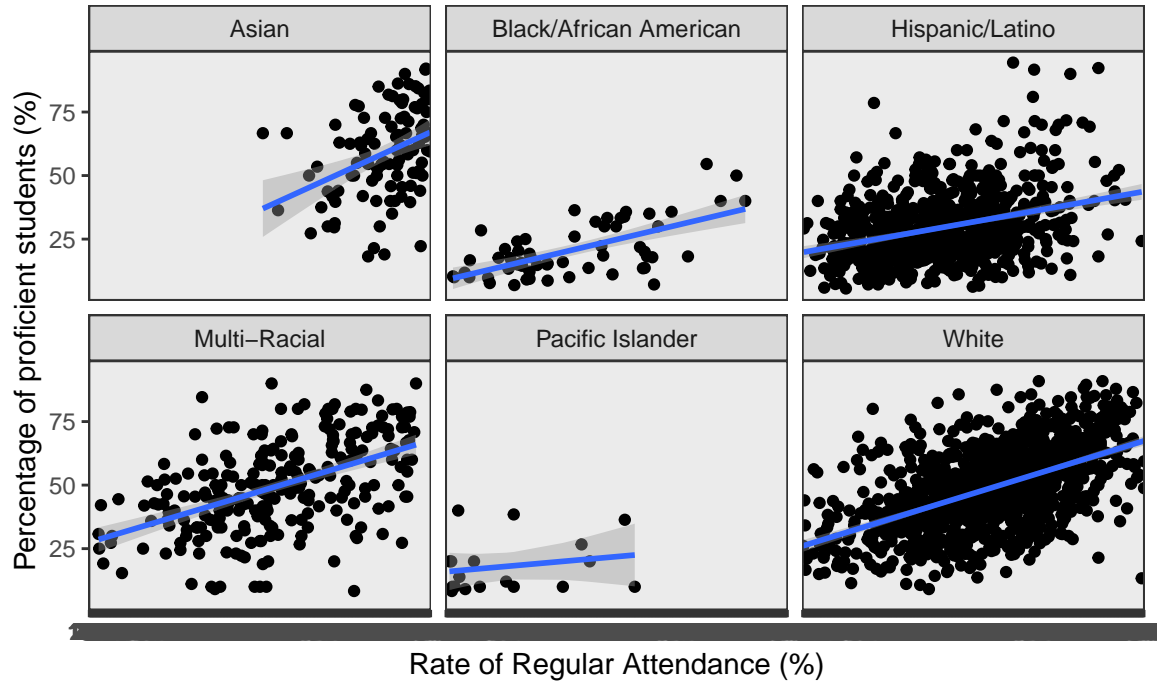in English, Language, and Arts

Data from Oregon Education Department

Plot 2

Student Attendance and Proficiency Rate
 in English, Language, and Arts by Different Races
Data from Oregon Education Department

Rate of Regular Attendance (%)

Discussions

References