

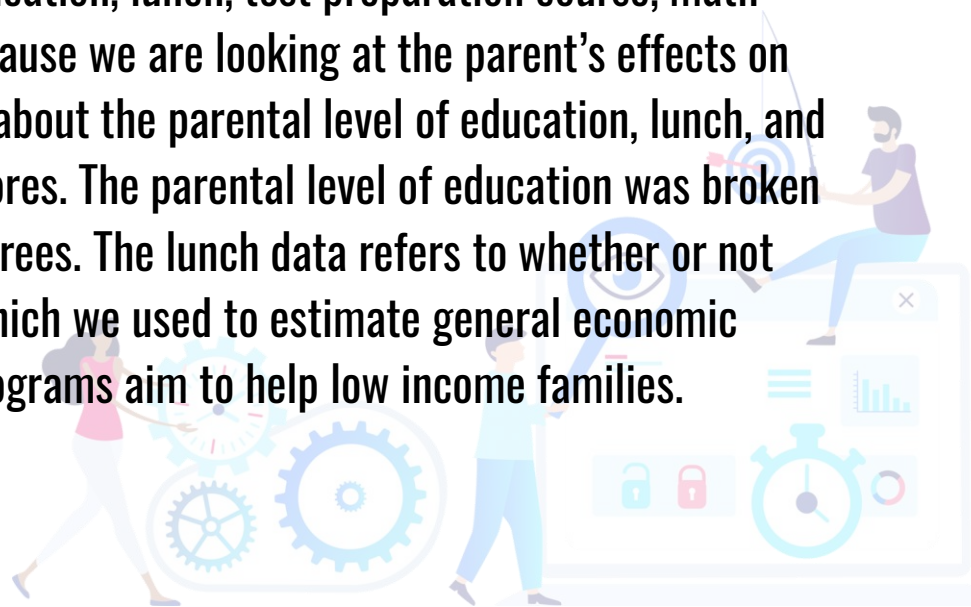
A blurred background of a classroom with rows of desks and chairs. A white rounded rectangle is overlaid in the center, containing the title and authors' names. The text is in a bold, black, sans-serif font.

Student Academic Performance in Relation to Parental Education

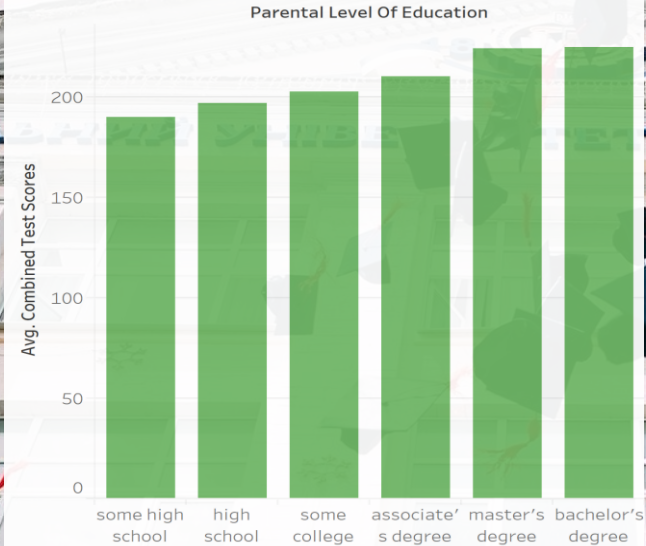
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The Data

The data set, titled Students Performance in Exams, looks at test scores from public high school students in the United States. The data set included information about each student's gender, race/ethnicity, parental level of education, lunch, test preparation course, math score, reading score, and writing score. Because we are looking at the parent's effects on the child's test performance, we used data about the parental level of education, lunch, and the student's math, reading, and writing scores. The parental level of education was broken down into 6 different levels of obtained degrees. The lunch data refers to whether or not the student eats a free or reduced lunch, which we used to estimate general economic status of parents, as free/reduced lunch programs aim to help low income families.

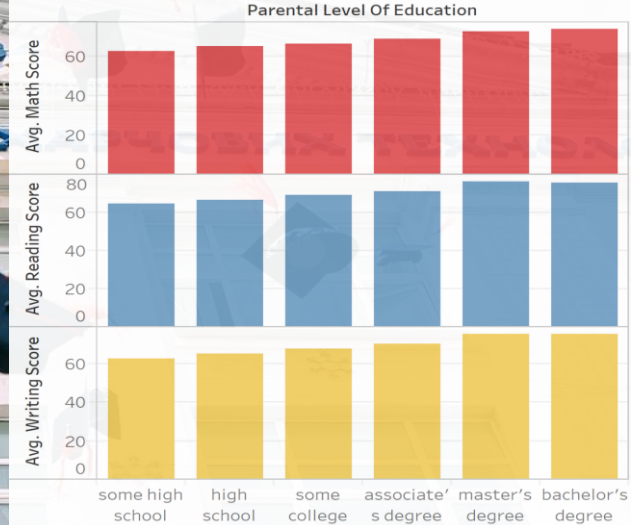


Combined Test Scores & Parent's Education



Average of Combined Test Scores for each Parental Level Of Education.

Subject Scores & Parent's Education

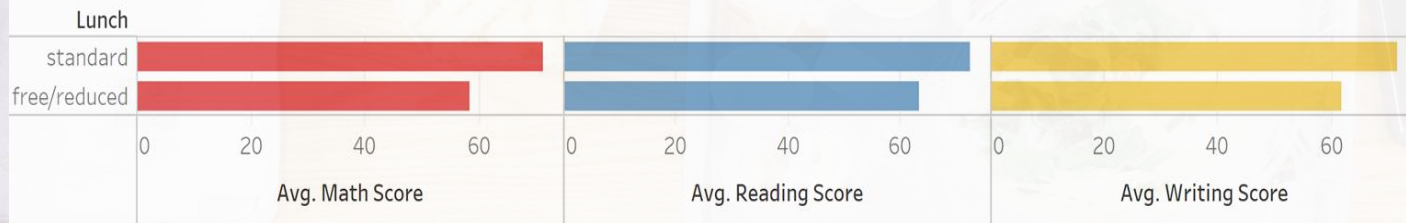


Average of Math Score, average of Reading Score and average of Writing Score for each Parental Level Of Education.

On average, students who have parents with bachelor's and master's degrees have a combined exam score 224.71 and 223.96 respectively. In contrast, students who have parents with high school and some high school have an average combined exam score of 196.45 and 189.99 respectively. There is a typical positive trend between additional degrees earned and students' exam scores.

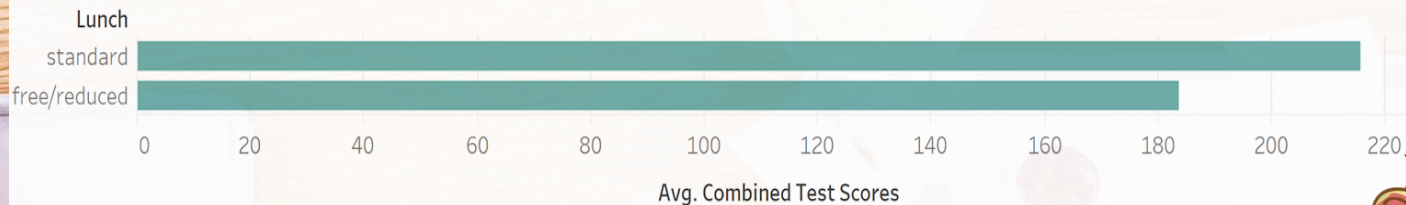


Subject Scores & Lunch Status



Average of Math Score, average of Reading Score and average of Writing Score for each Lunch.

Combined Test Scores & Lunch Status



Average of Combined Test Scores for each Lunch.

On average, students who have standard lunch (or parents with higher incomes) have a combined exam score of 215.64. While students who have free/reduced lunch (or parents with lower incomes) have an average combined of 183.69



Conclusion

When examining the impact of parent's educational and economic backgrounds on students, there is evidence that with higher parental education and income status, students will typically perform better on exams. This is shown by an approximately positive trend between additional degrees earned and exam scores. Similarly, students typically will score better on exams if they have standard lunches rather than free/reduced (215.64 vs 183.69)



Reference

Jakki. "Students Performance in Exams." Kaggle, Kaggle, 9 Nov. 2018,
www.kaggle.com/spscientist/students-performance-in-exams.