

# Does Poverty Affect Standardized Test Scores?

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Project 1 | Team Tesla

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# Background & Problem Statement

 The New York Times

## Why Is the SAT Falling Out of Favor?

Why Is the SAT Falling Out of Favor? The University of California will no longer use SAT and ACT scores in admissions decisions. Critics say the ...

23 May 2020



 The New York Times

## University of California Will End Use of SAT and ACT in Admissions

University of California Will End Use of SAT and ACT in Admissions. The change is expected to accelerate the momentum of American colleges ...

24 May 2020



The State of California has asked us to find out if **poverty rates** across California are correlated with **performance & participation** on the SATs and ACTs.

# Data



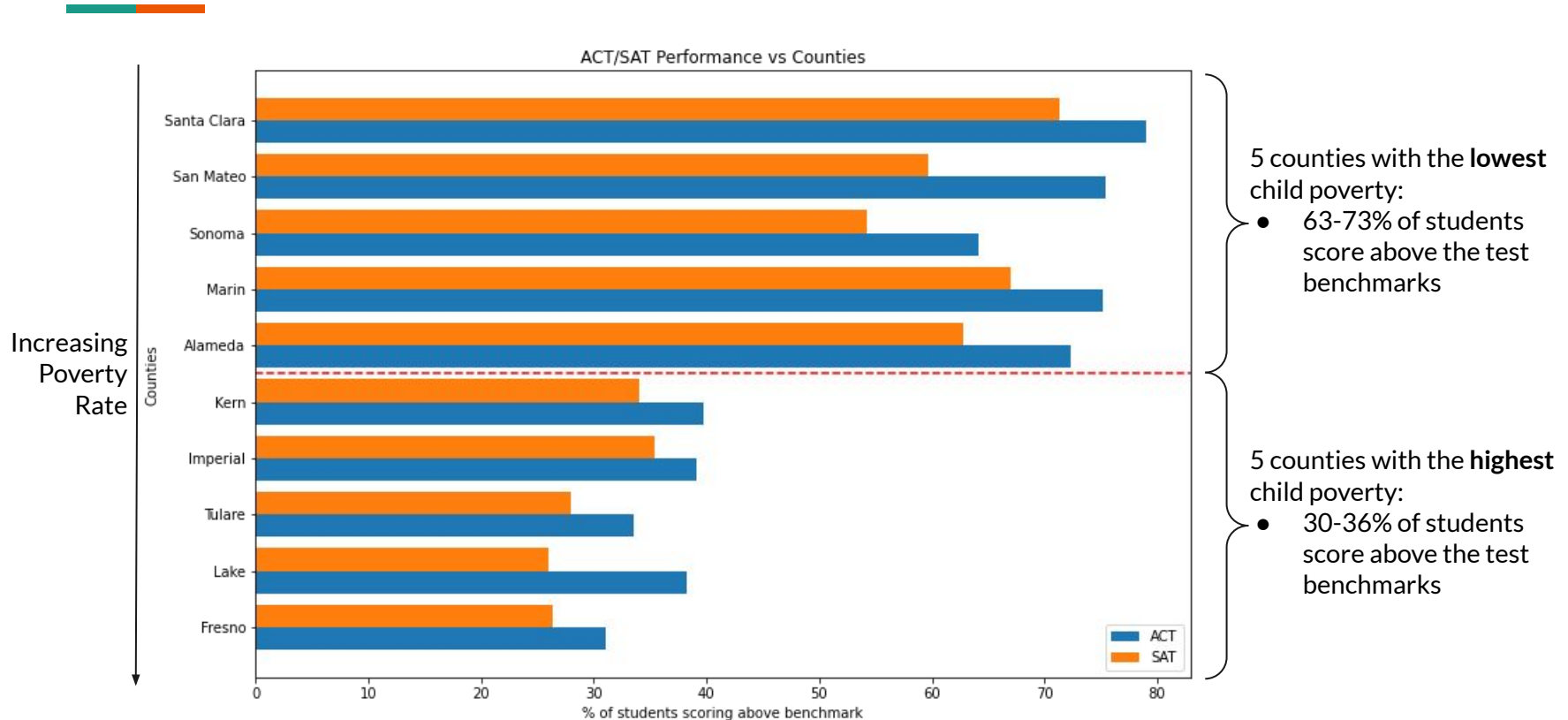
## 2019 SAT & ACT Performance of Schools in the State of California

- County
- District
- Participation rate
- % of students scoring above SAT benchmark
- % of students scoring above ACT benchmark

## 2019 Poverty Estimates for School Districts (California)

- Source: **U.S. Census Bureau, Small Area Income & Poverty Estimates (SAIPE)**
- Est. population aged 5-17 for each district & how many were living below the poverty line
- **Poverty rate** = % of age 5-17 population living below the poverty line

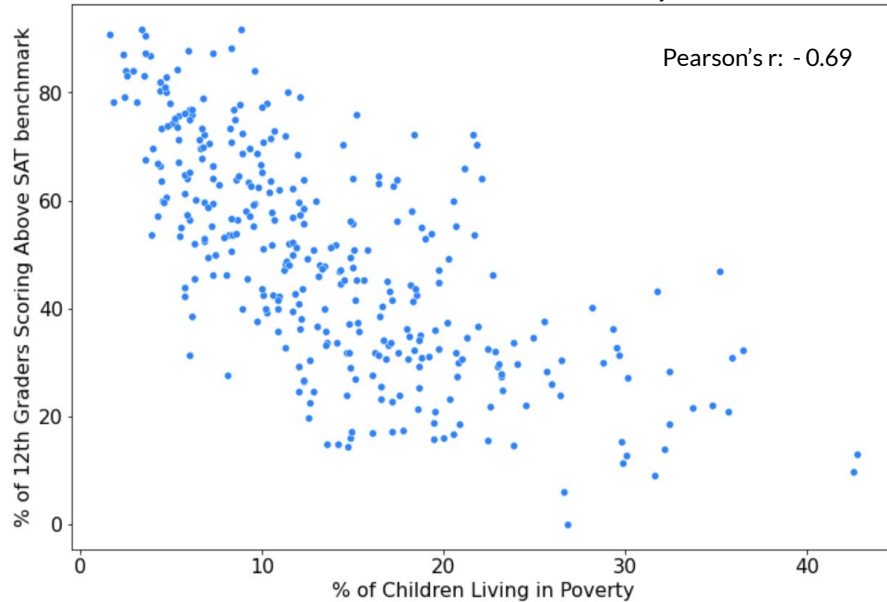
# Contrast in standardized test performance between the wealthiest & poorest counties



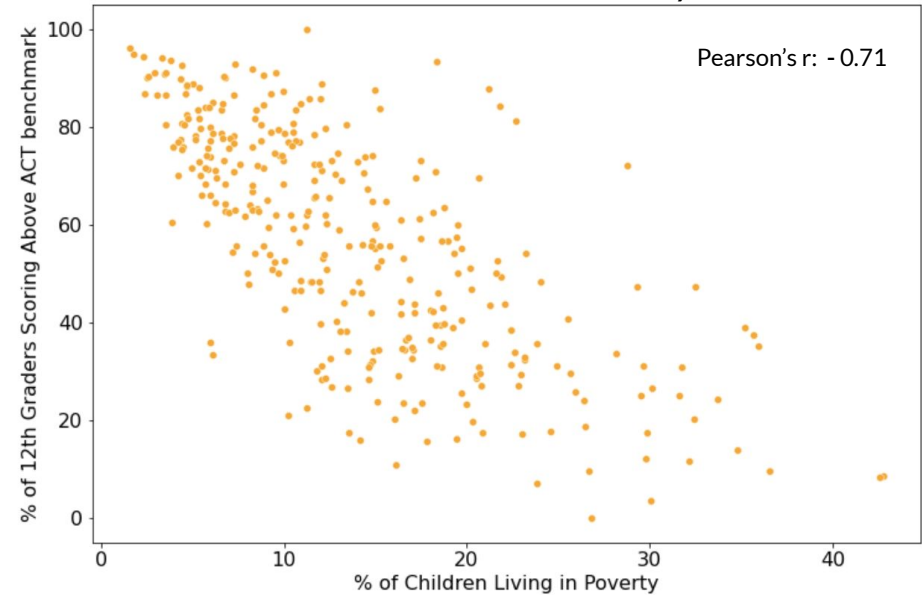
# As the % poverty in a school district increases, the performance levels for both SATs and ACTs decreases



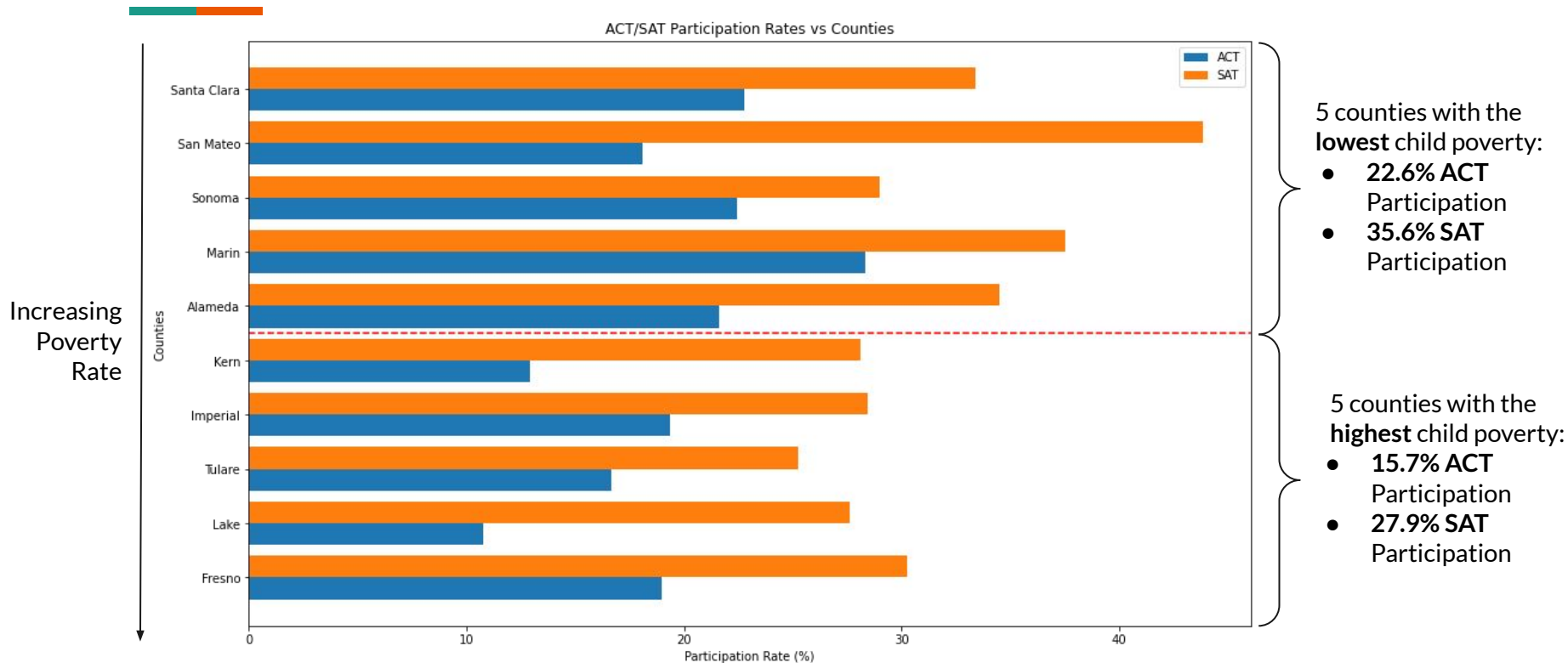
## SAT Performance vs Poverty Rate



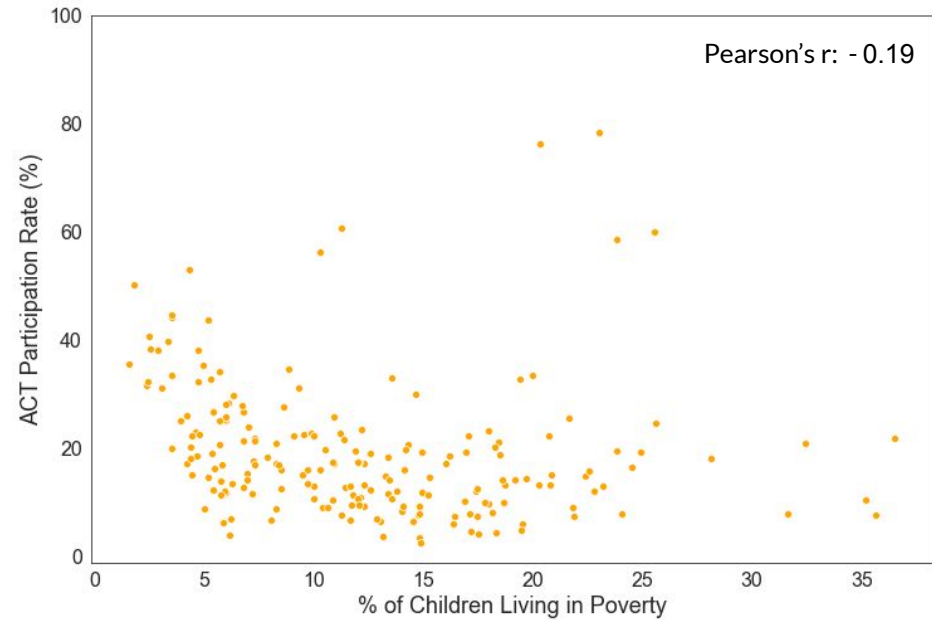
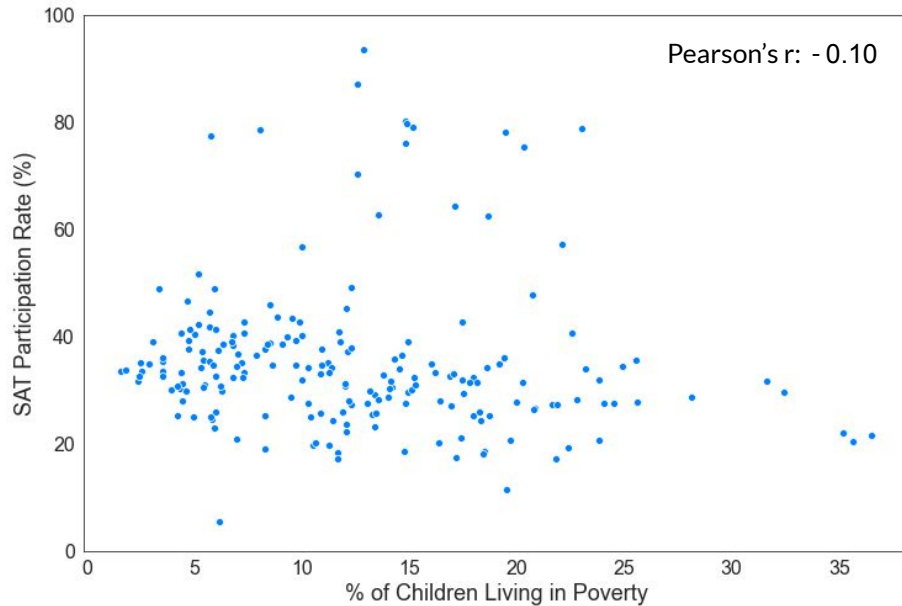
## ACT Performance vs Poverty Rate



# Contrast in participation rates between the wealthiest & poorest counties



# Participation Rates not significantly impacted by Poverty Rates



# Does Poverty Affect Standardized Test Performance & Participation?



There is a significant negative correlation between poverty rates in the districts of the state of California and the students performance in the SAT and ACT tests. Higher poverty rates negatively affect the number of students that score above benchmarks in these districts, even though participation rates are not significantly different.

**Further research shows that richer students do better because...**

- Access to better funded schools with more **AP classes** and **better support** for students
- Access to **private tutors** and **standardized test preparation** classes
- They can afford to take the tests **several times**, improving final scores



# Recommendations for the State of California



To reduce the impact of income levels as a factor on test scores...

- Provide funding to offer test counselling and test preparation classes
- Subsidies to make re-taking the tests affordable
- Allocate funding for schools in poorer districts to provide better support for students
- Encourage colleges to reduce the relative weightage given to standardised test scores for college admissions procedure

# Sources



## Internal Sources:

- act\_2019\_ca.csv: 2019 ACT Scores in California by School
- sat\_2019\_ca.csv: 2019 SAT Scores in California by School

## External Sources:

- Bureau, US Census. “SAIPE School District Estimates for 2019.” The United States Census Bureau, 2 Dec. 2020, [www.census.gov/data/datasets/2019/demo/saipe/2019-school-districts.html](http://www.census.gov/data/datasets/2019/demo/saipe/2019-school-districts.html).
- AbigailJHess. “Rich Students Get Better SAT Scores-Here's Why.” CNBC, CNBC, 3 Oct. 2019, [www.cnbc.com/amp/2019/10/03/rich-students-get-better-sat-scores-heres-why.html](http://www.cnbc.com/amp/2019/10/03/rich-students-get-better-sat-scores-heres-why.html).
- Hubler, Shawn. “Why Is the SAT Falling Out of Favor?” The New York Times, The New York Times, 23 May 2020, [www.nytimes.com/2020/05/23/us/SAT-ACT-abolish-debate-california.html](http://www.nytimes.com/2020/05/23/us/SAT-ACT-abolish-debate-california.html).
- Hubler, Shawn. “University of California Will End Use of SAT and ACT in Admissions.” The New York Times, The New York Times, 21 May 2020, [www.nytimes.com/2020/05/21/us/university-california-sat-act.html](http://www.nytimes.com/2020/05/21/us/university-california-sat-act.html).

# Q & A

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