



# Standardized test participation rates and income



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A decorative graphic on the left side of the slide featuring two horizontal wavy lines, one white and one yellow.

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What you came here  
for



**01**

# **THE OVERVIEW**




# THE OVERVIEW

The following analyses were done:

1. Identify trends between SAT and ACT
2. Examine if income affects the participation rates of SAT and ACT
3. Identify the correlation between income (FRPM) and test performance

With these relevant findings, we can then suggest possible actions to help non-technical executives of the College Board maintain SAT's competitive edge over ACT (i.e. higher participation rate).



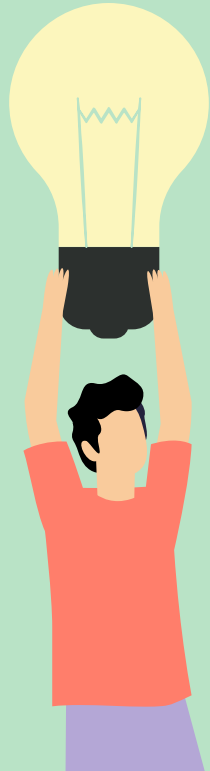


**02**

## **THE FINDINGS**



# DATA ANALYSED



## Exploratory Data Analysis



SAT & ACT  
participation rates from  
2017-2020



SAT & ACT  
scores from 2017-2020



Income statistics from  
2015 -2019



# KEY FINDINGS

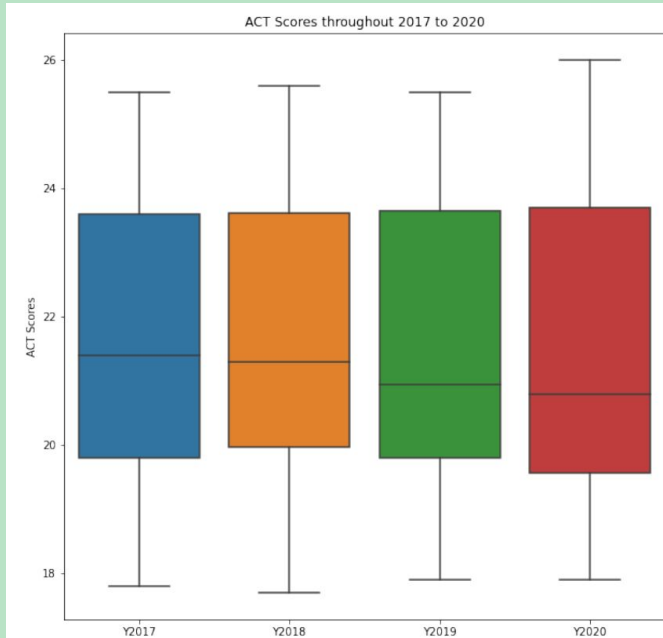
**Negative correlation between  
ACT and SAT participation rate**

**Positive correlation between  
SAT participation rate and  
income**

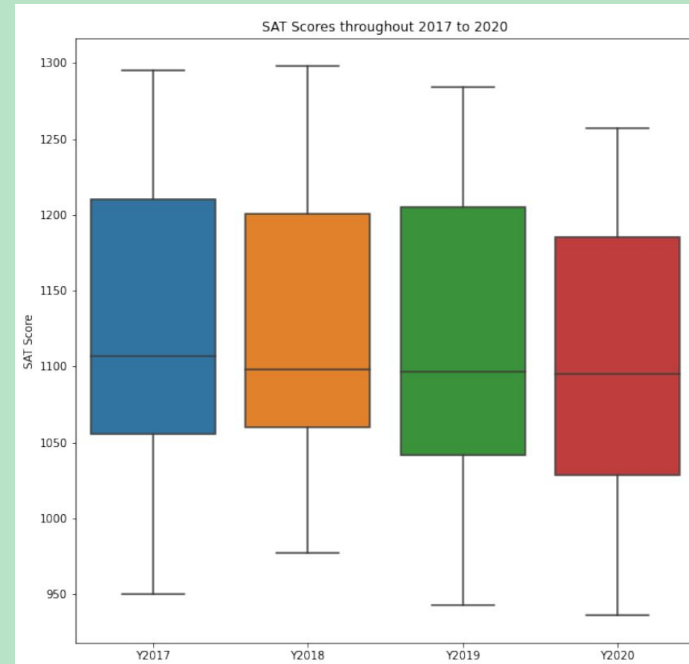
**Positive correlation between  
income and test performance**



# STATISTICS



- ACT seems to be moving uptrend whereas SAT is moving downwards

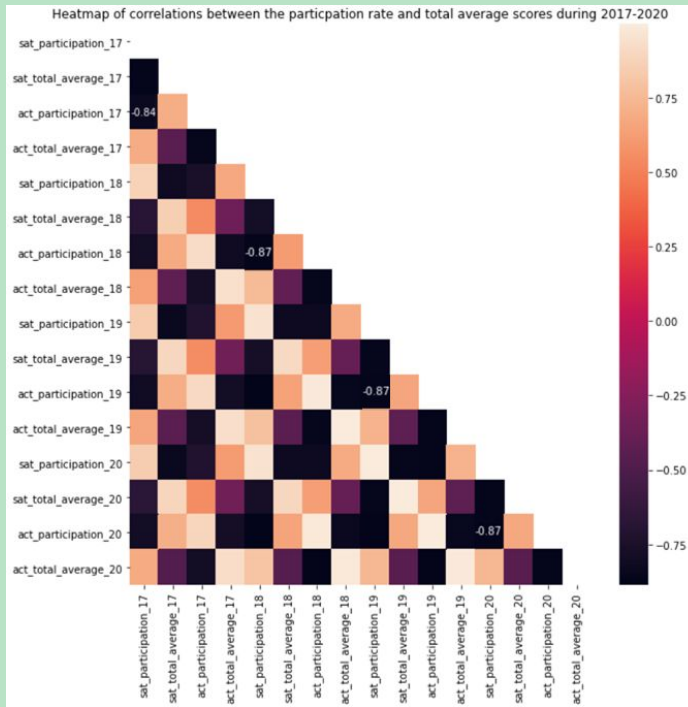




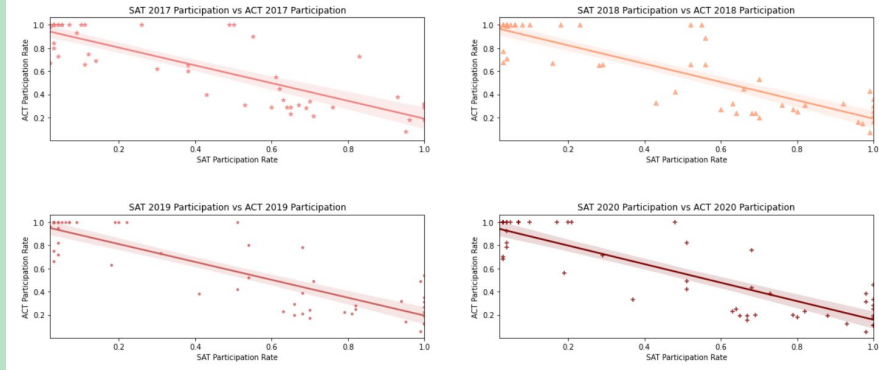
# STATISTICS



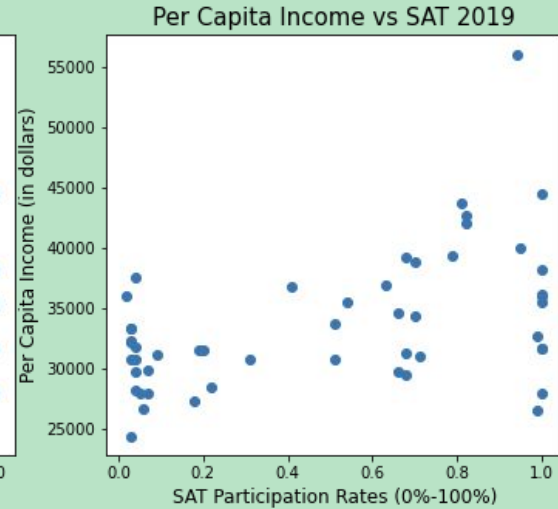
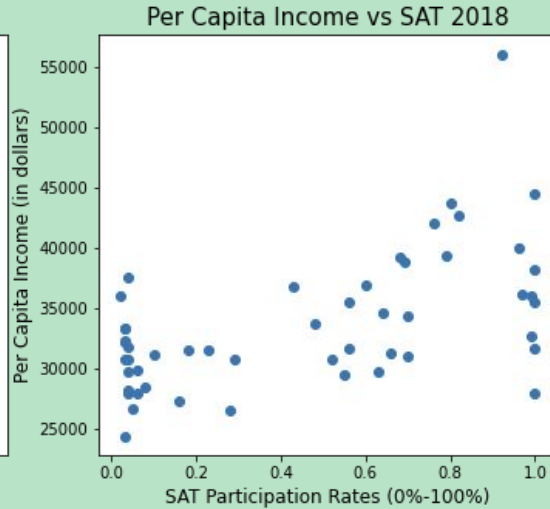
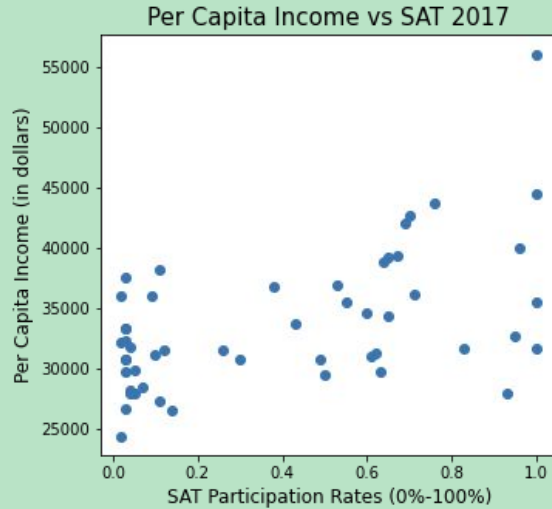
- ACT & SAT participation rates are highly negatively correlated



## SAT Participation correlation against ACT Participation

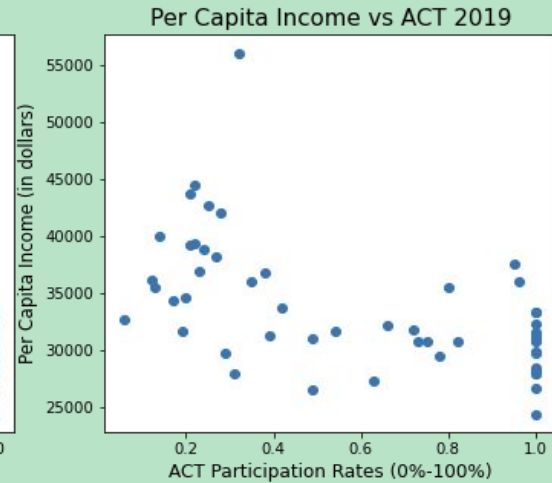
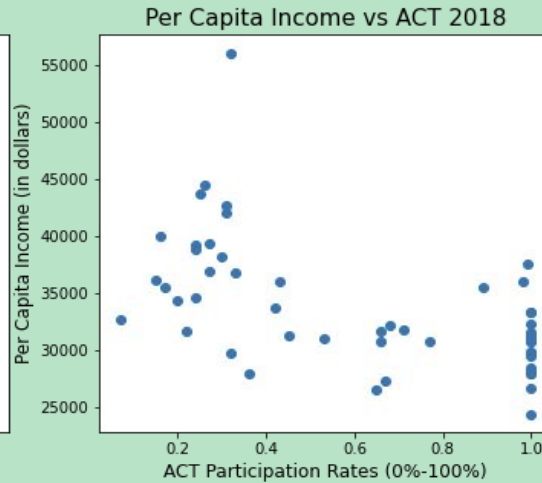
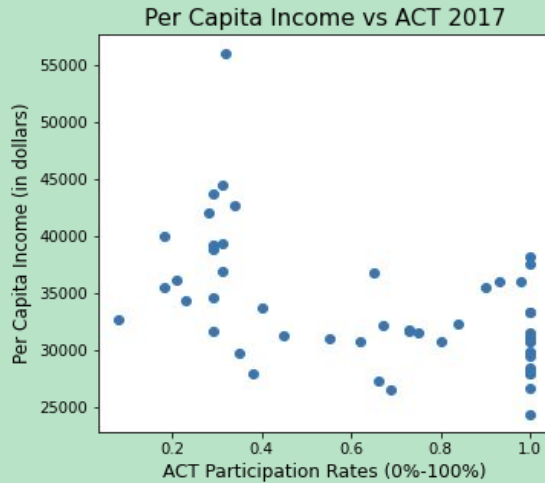


# STATISTICS



- SAT participation rate and per capita income are positively correlated

# STATISTICS



- Conversely, ACT participation rate and per capita income are negatively correlated

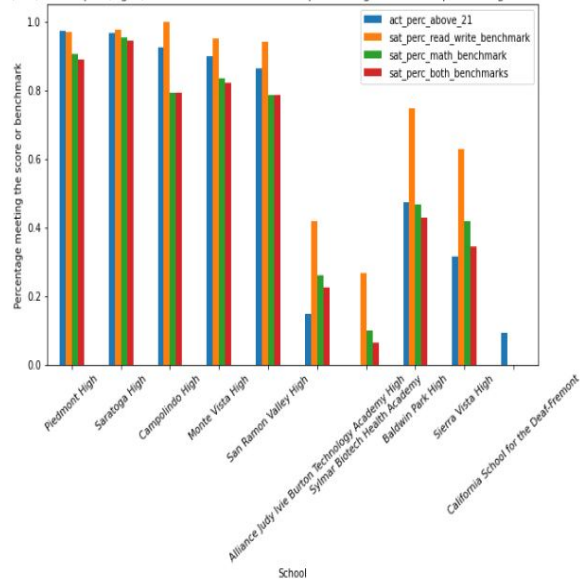
# The Free or Reduced Priced Meals program



- Part of the National School Breakfast and Lunch Program for California
- Funded by the Department of Agriculture and other non-profit agencies
- Targeted to help low-income children in schools



Bar chart showing Bottom 5 (left) and top 5 (right) schools in terms of FRPM percentage and their percentages of students meeting the benchmarks

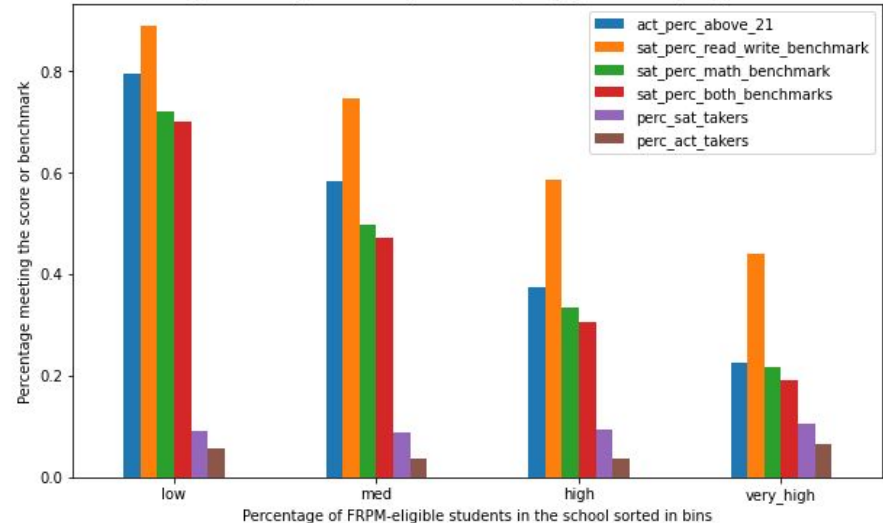


- The 5 schools with the lowest percentage of FRPM eligible students also had the highest test performances
- Hence: Lower income led to lower test performance

# STATISTICS

- Classified the schools by quartiles based on FRPM percentage
- As FRPM percentage increased, test performance decreased

Bar chart of percentages for low, medium, high, and very high FRPM schools



03

# THE CONCLUSION



# THE CONCLUSION



- Lower participation rate = higher test performance
- Higher income = higher SAT participation rate
- Higher income = higher test performance

## Recommendation:

- Target states with higher income to increase SAT participation rates
- Devote more resources to better preparation materials





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# THANKS!

Do you have any questions?



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