

Norcal vs Socal

Who does it smarter?

Problem Statement

Who is smarter, Norcal or Socal?

Caveats

ACT and SAT are outdated

Not true measures of intelligence

The difference could be due to demographics or geography

ACT and SAT are selective, not indicative of the average intelligence

Dataset

2019 ACT and SAT Scores

List of counties by region

Methodology

Clean the data

- Remove unnecessary columns
- Remove N/A values
- Remove unnecessary rows

Split the data

- Divide between Norcal and Socal

Analyze the data

- Compare Norcal and Socal scores
- Make data visualizations

Summary Statistics

Total number of test takers:

ACT = 80,411

SAT = 167,395

Total number of tests taken by region:

ACT Norcal = 25,356

Socal = 55,055

SAT Norcal = 56,798

Socal = 110,597

Counties in Norcal = 48

Counties in Socal = 10

Avg ACT takers per county in Norcal = 528

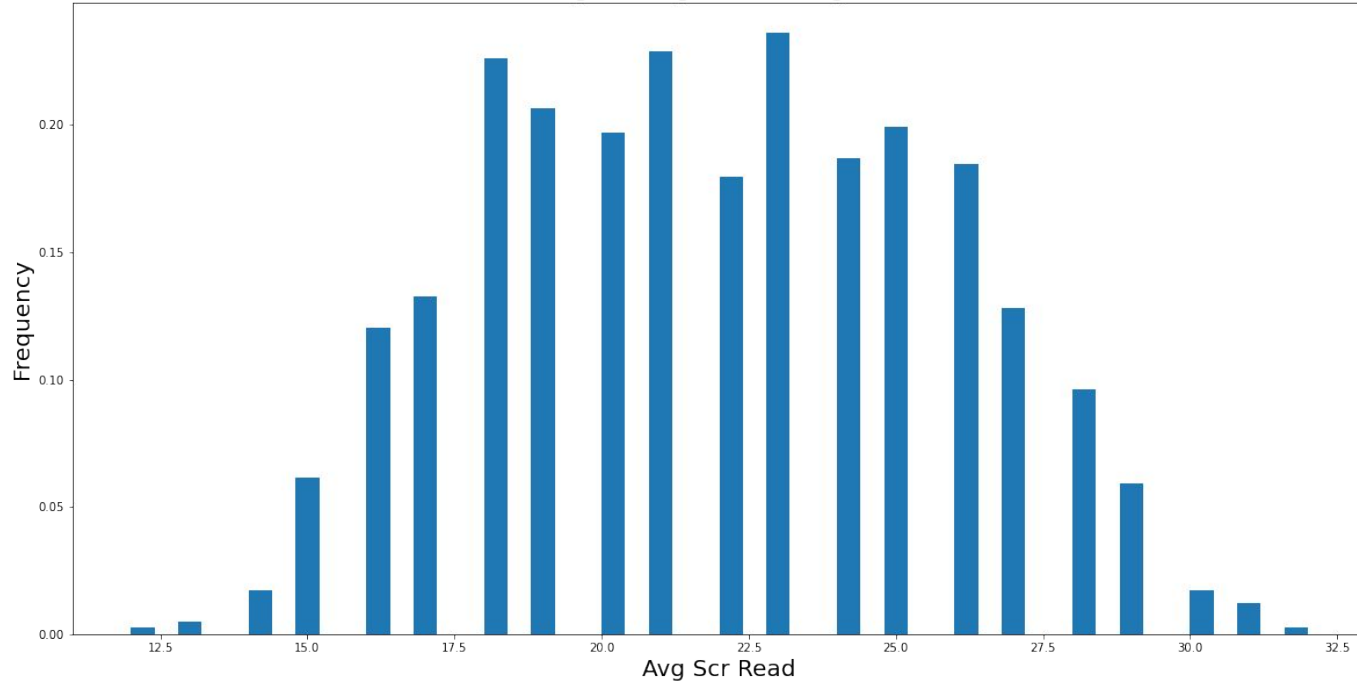
Avg ACT takers per county in Socal = 5,505

Avg SAT takers per county in Norcal = 1183

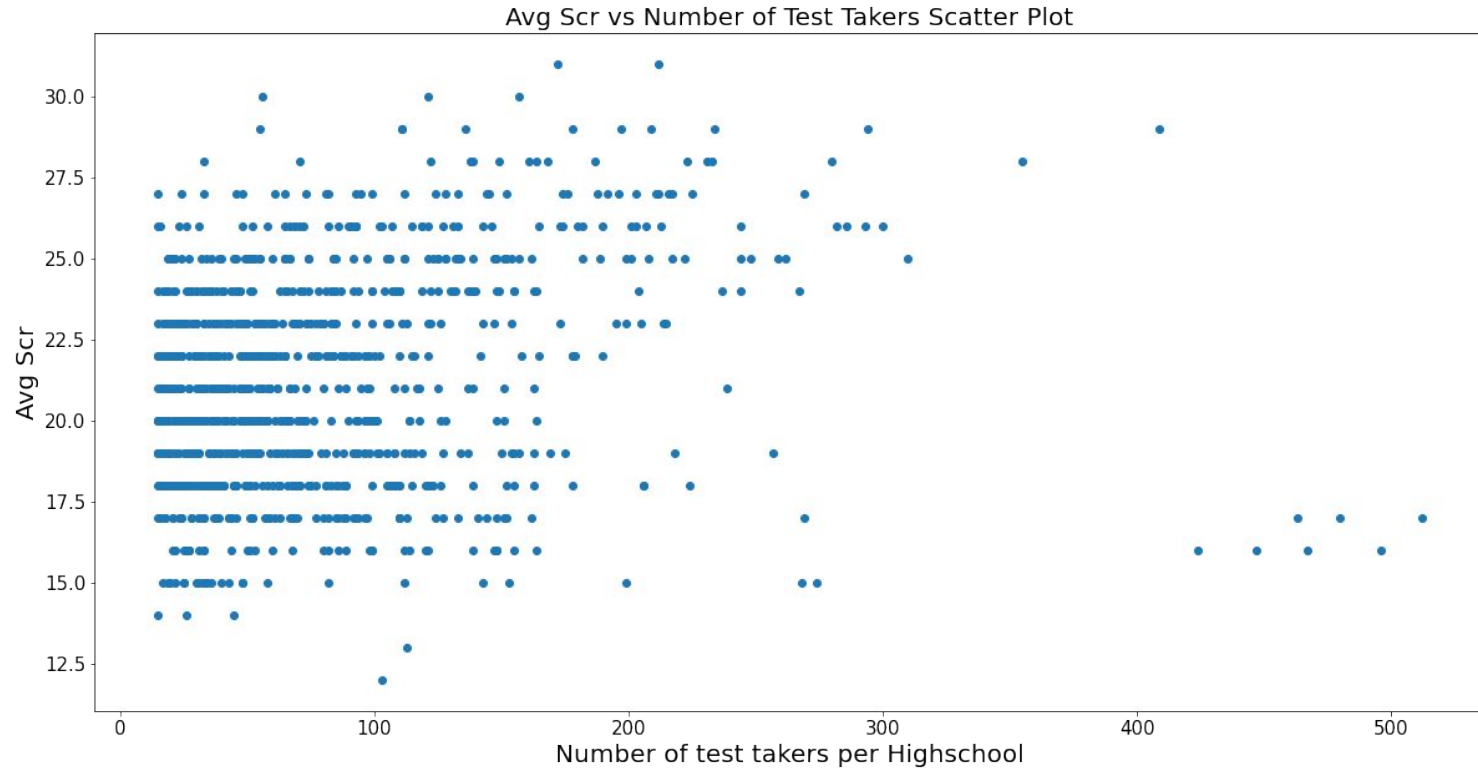
Avg SAT takers per county in Socal = 11,597

Overall Statistics

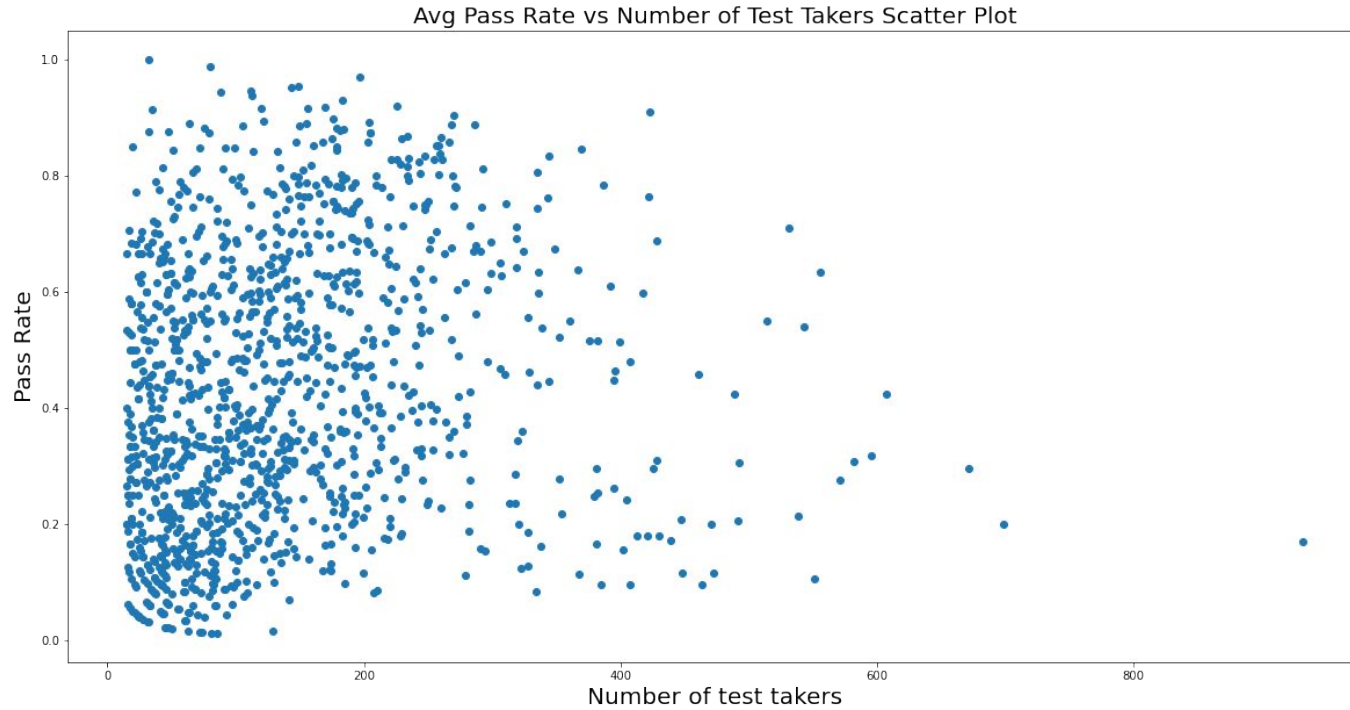
Avg Reading Score Histogram



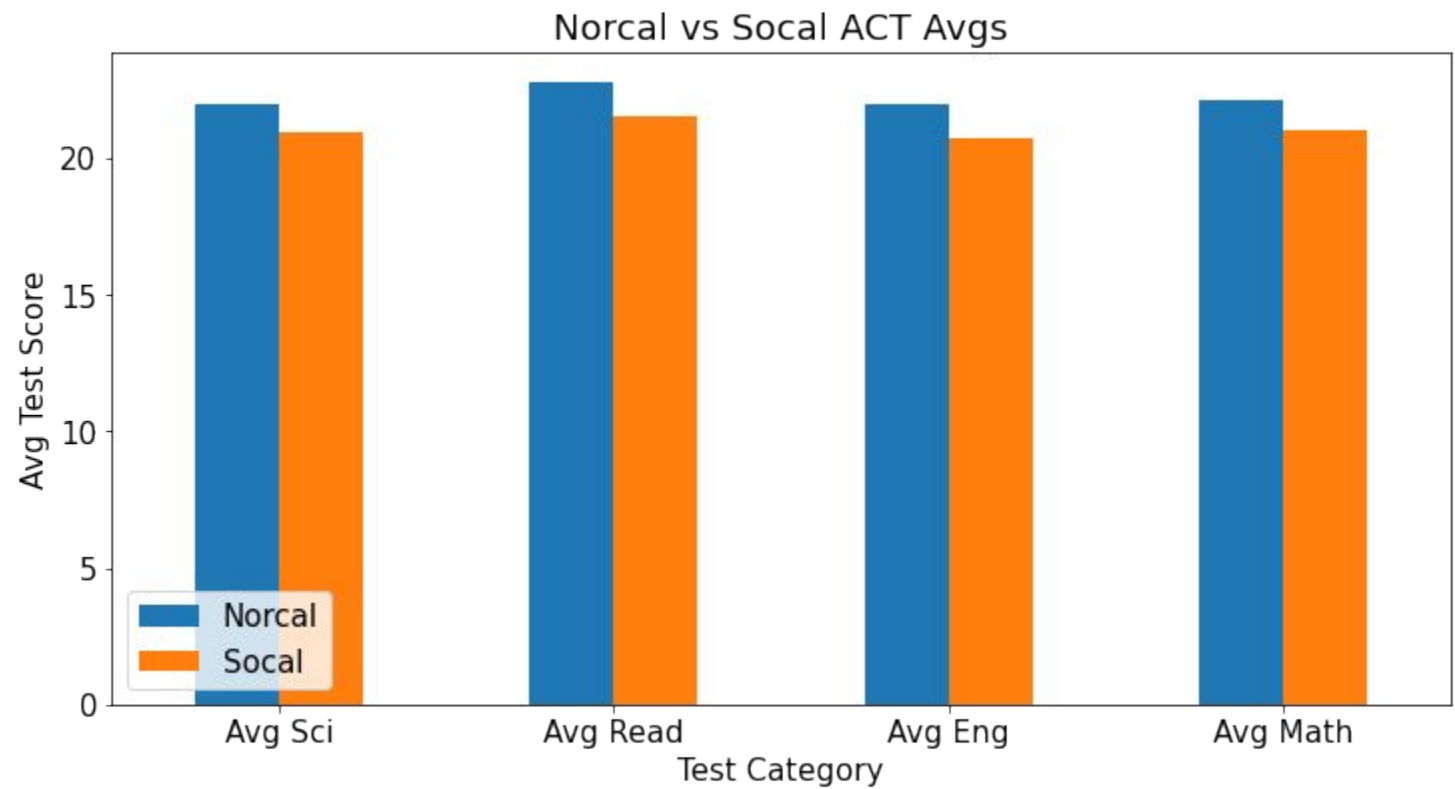
Overall Statistics



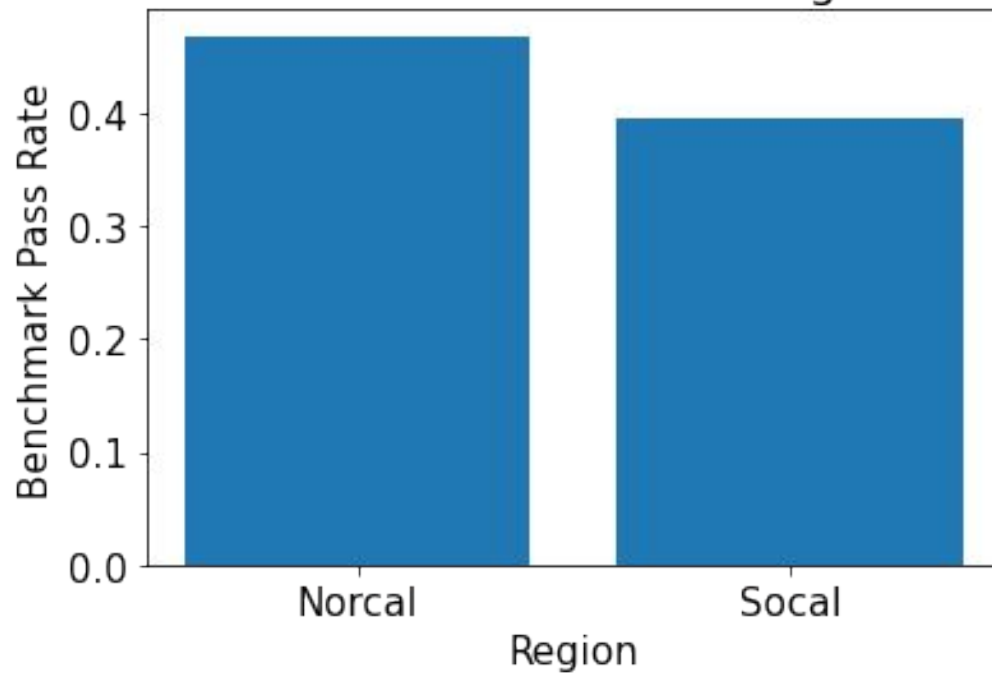
Overall Statistics



The Answer



Norcal vs Socal SAT Avgs



Recommendations

For Socal I would recommend each county focuses on more SAT and ACT funding, as SAT and ACT disparity is more due to wealth inequality than intelligence

This is much harder as Socal has twice the population of Norcal, and therefore more resources are necessary

Changes might be easier to implement across the board due the small amount of counties

Conclusion

As seen from the data, Norcal is “smarter” than Socal

I do not have any strong reasonings why this is the case

Future Studies

It would be interesting to look at the demographics of each county individually and see what are the strongest indicators of performance

Compare rural vs city counties