



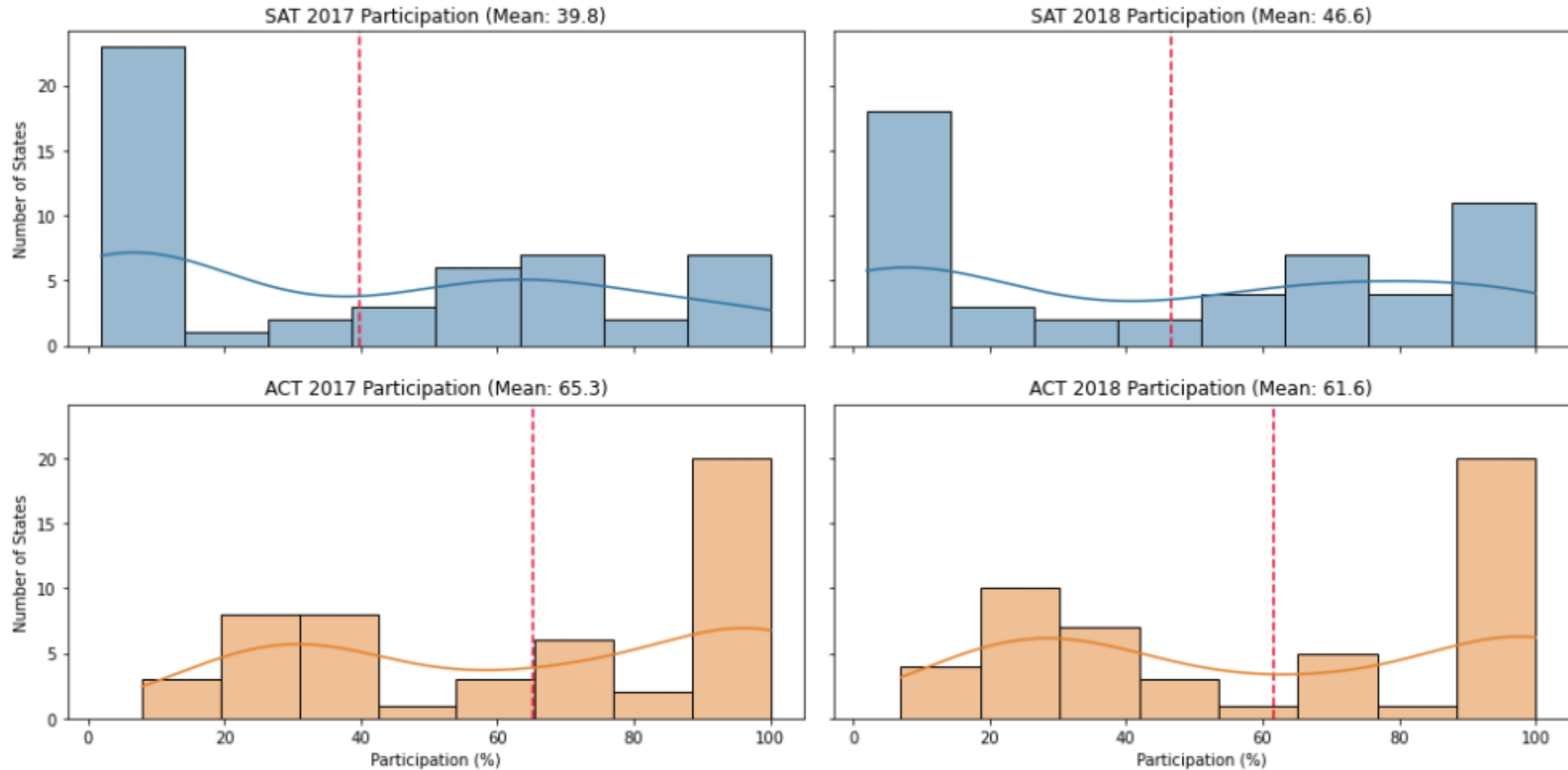
## Analyzing SAT & ACT Test Results

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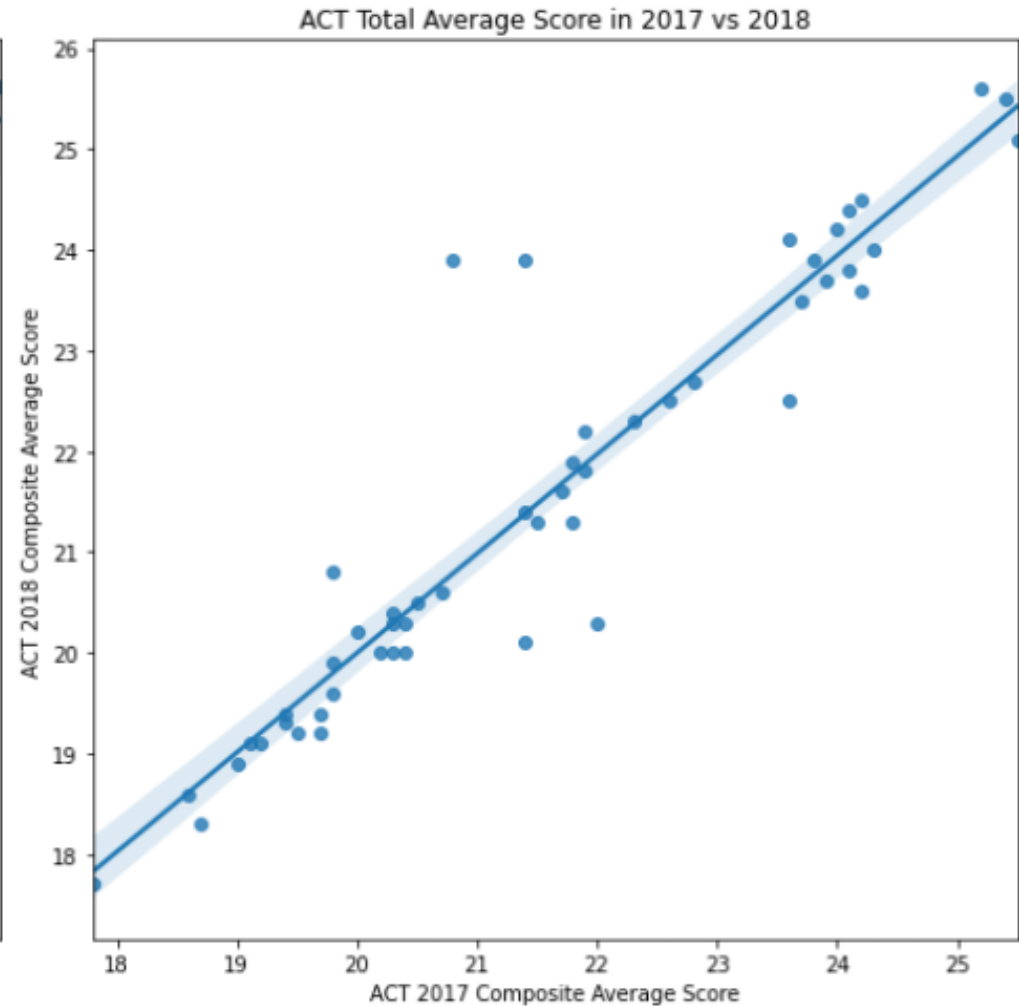
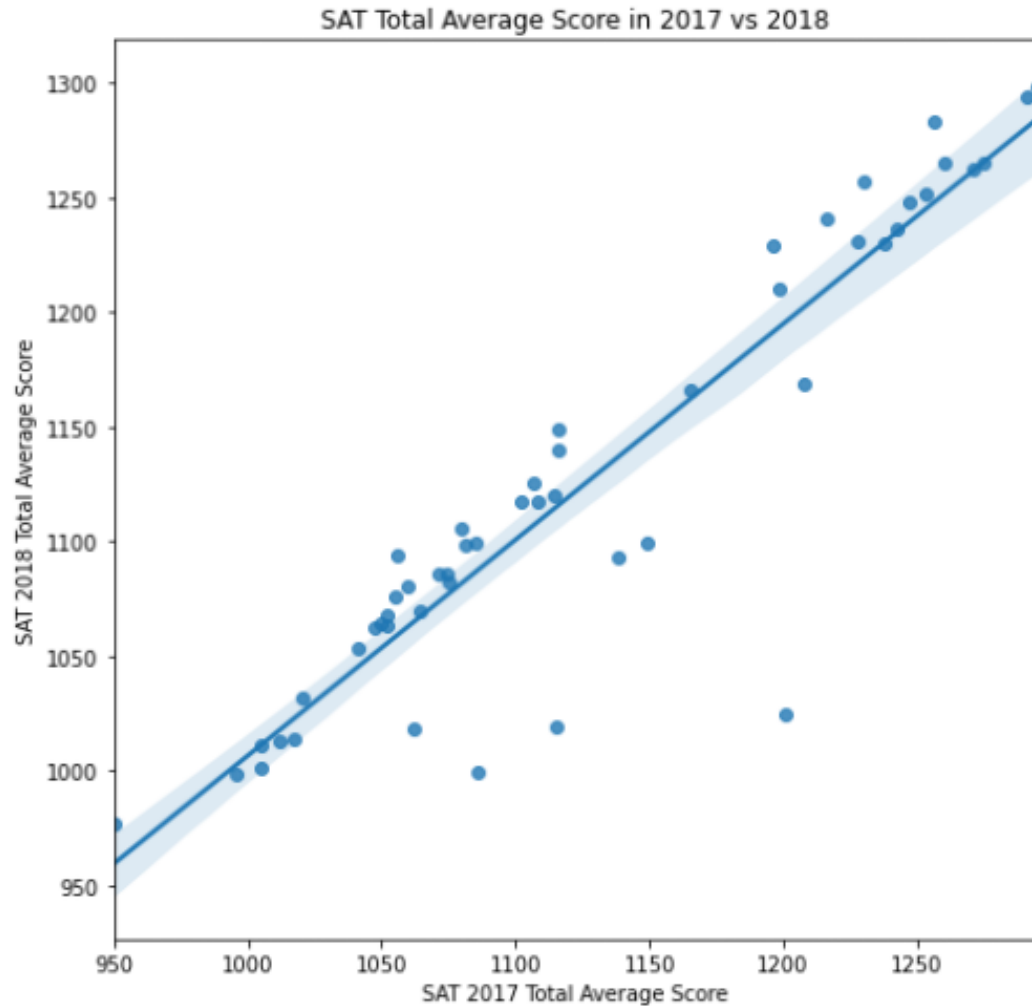


ACT vs SAT:  
Which test is more popular?

# Clearly, the SAT is more popular than the ACT



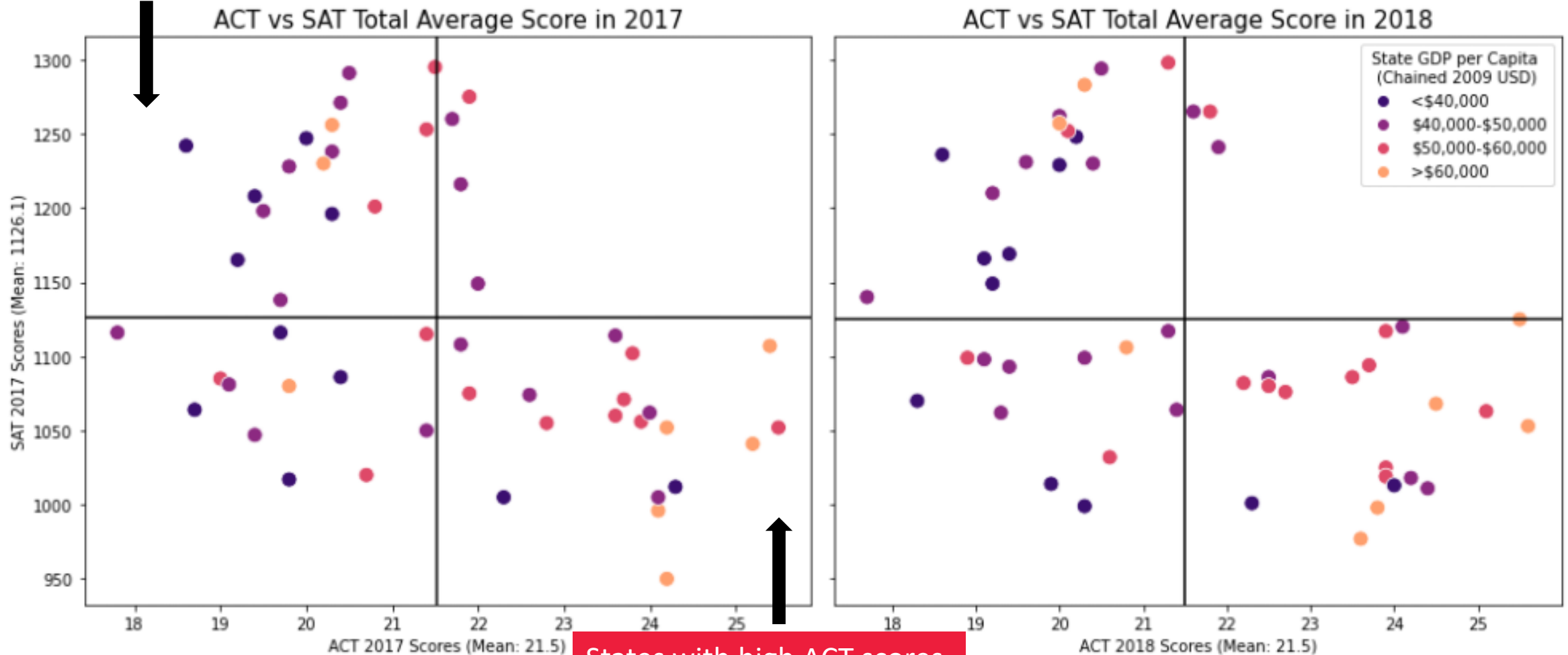
But why? Correlation of scores year-over-year is better for the ACT.



So is the ACT better than the SAT?

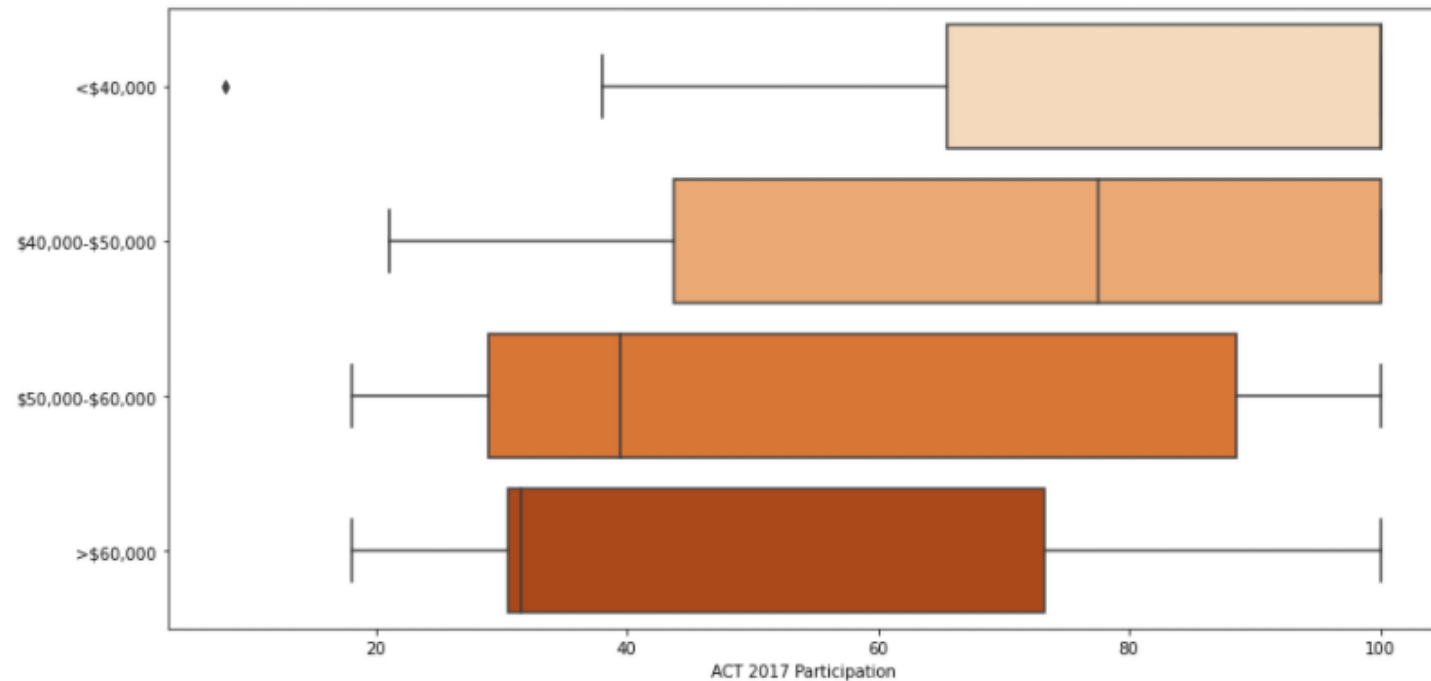
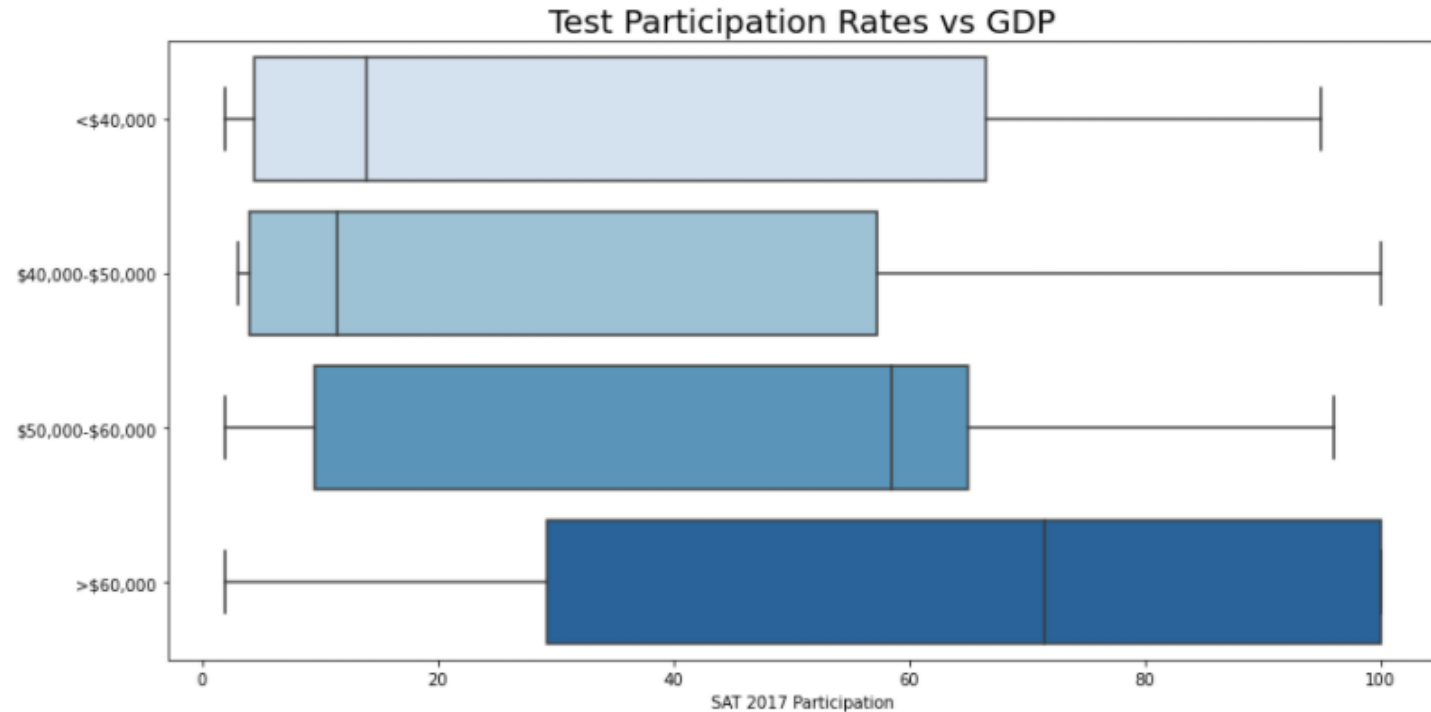
Not necessarily. Turns out that poor states have low ACT scores.

States with high SAT scores

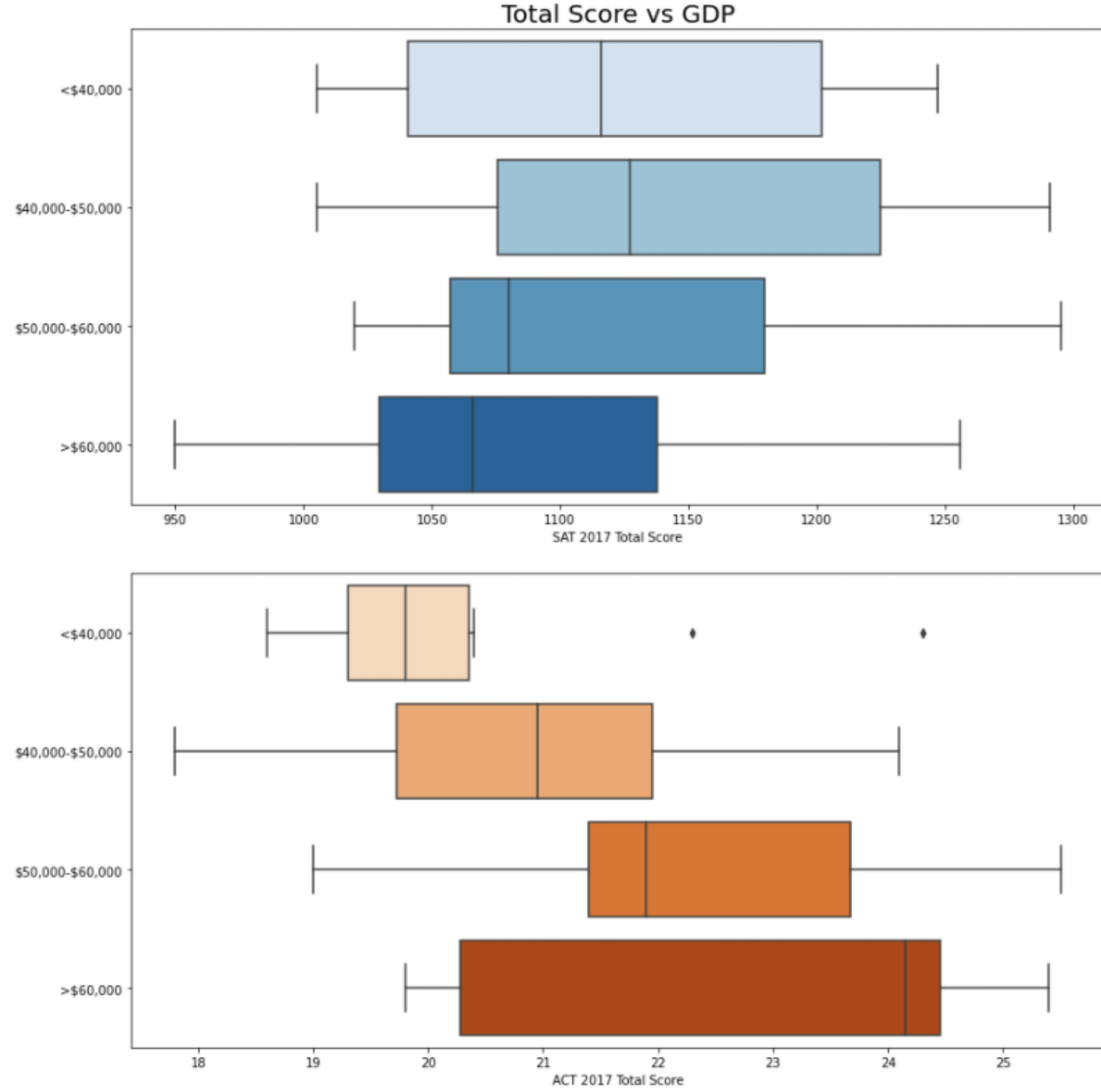


States with high ACT scores

- States with a low GDP capita tend to go for the ACT instead of the SAT.
- 19 states with ACT rates above 50% and GDP below \$50,000, with below average total scores.
- Only 8 states with SAT rates above 50% and GDP below \$40,000, with below average total scores.

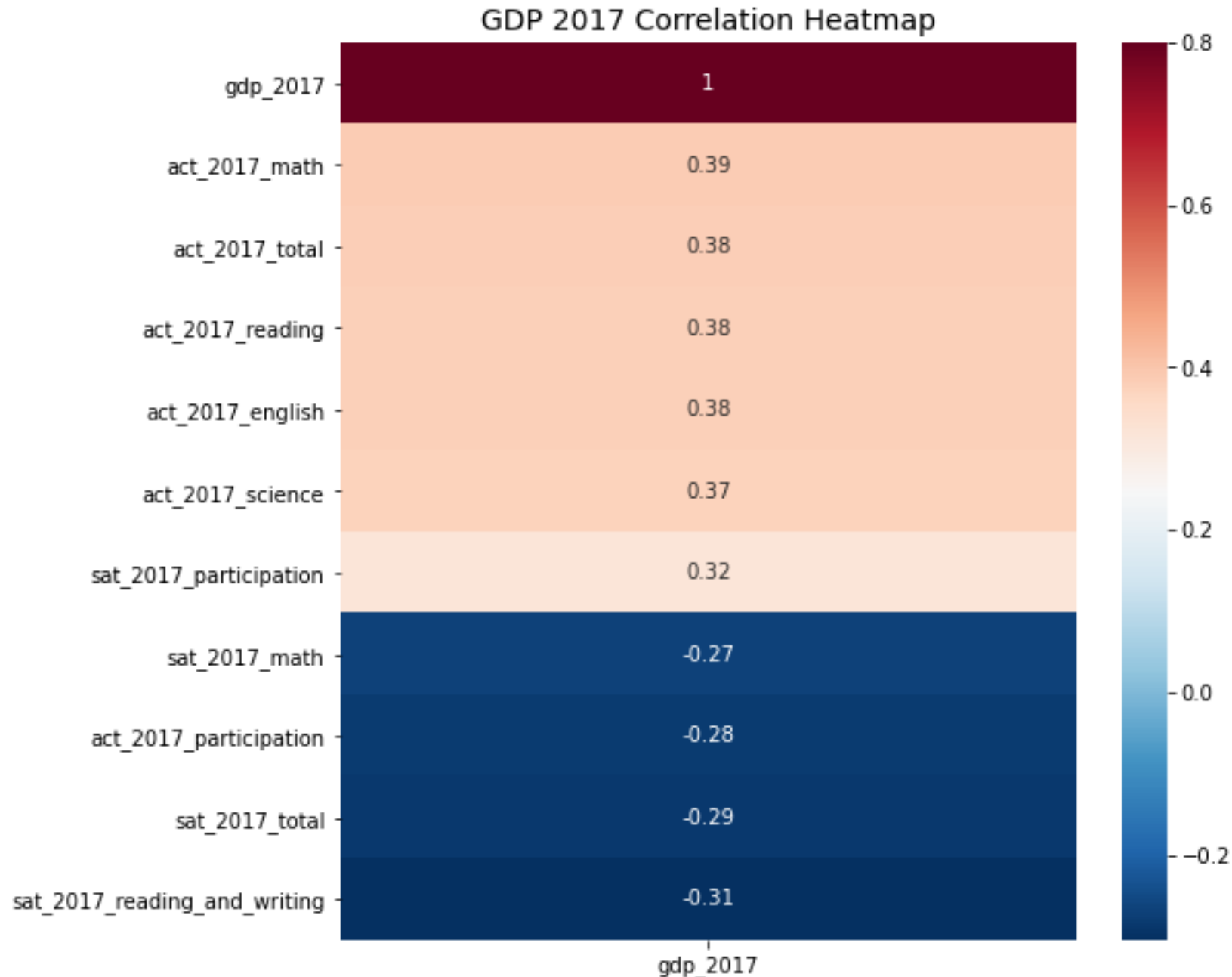


- ACT + Low GDP per Capita = Low ACT Scores
- ACT + High GDP per Capita = Higher ACT Scores
- SAT + Low GDP per Capita = Average SAT Scores (with high variance)
- This suggests that **lower income states can perform well on the SAT despite lower levels of educational funding.**





- GDP is negatively correlated with SAT scores and participation.
- GDP is positively correlated with ACT scores and participation.
- Hence, the higher a state's GDP, the higher their ACT test scores.
- The opposite is true for SAT test scores.



So, which state should  
the College Board target?

A map of the United States with state boundaries outlined. South Carolina is highlighted in a solid red color, while the rest of the map is in a muted tan/brown color. The Great Lakes and the Atlantic Ocean are shown in a dark blue color.

## South Carolina

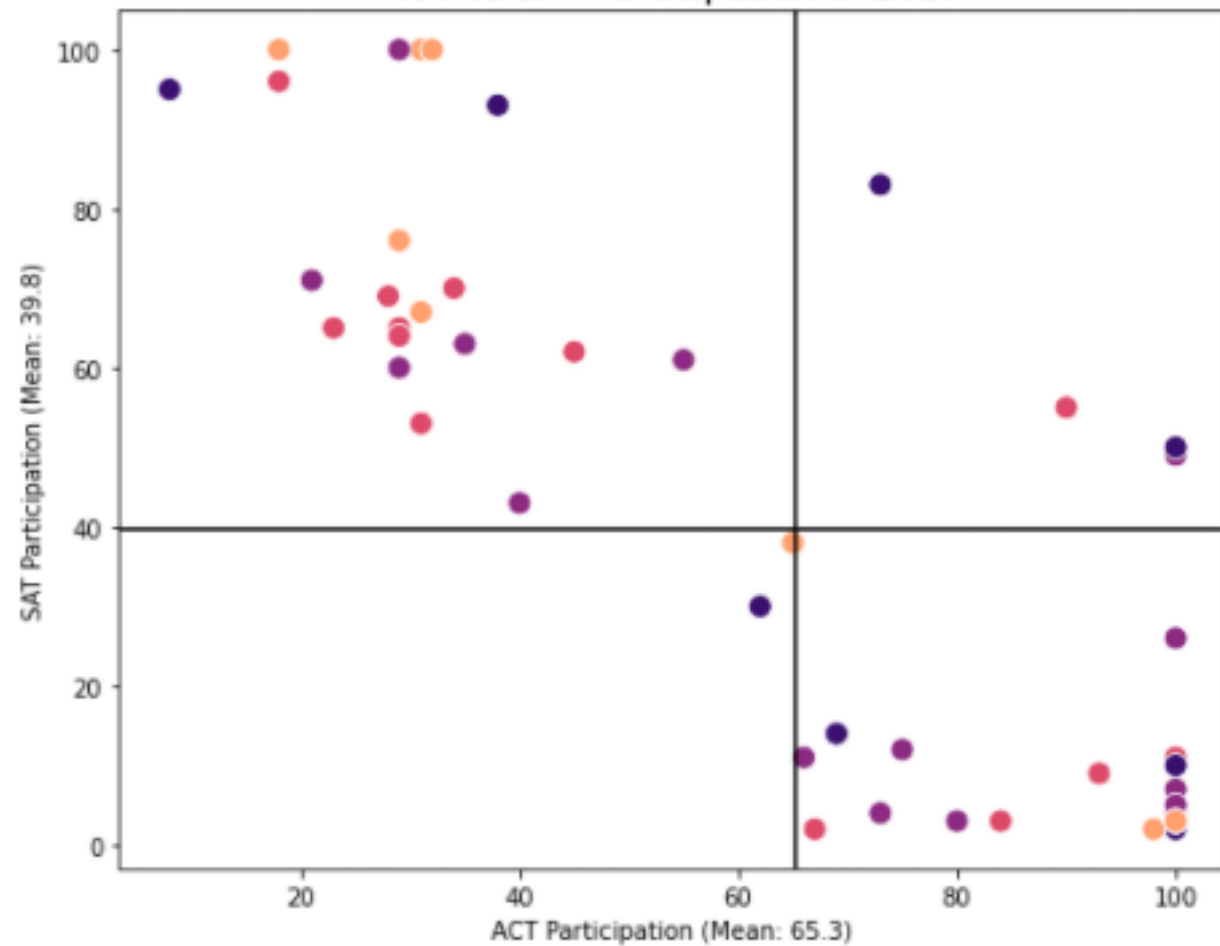
1. High ACT Participation Rate: 100%
2. Low GDP: <\$40,000
3. Below Average ACT scores: 18.30

# However, we need to keep in mind that correlation $\neq$ causation.

- While the SAT may be more socially equitable than the ACT due to the policies like the fee waivers for low-income students, research shows that standardized test measures generally show **a negative correlation between socioeconomic status and test results** ([NC Gov 2017](#)).
- The College Board must continue to work with states to address this issue. This could mean incorporating other forms of testing such as **portfolio-based assessment** or **adaptive testing**.
- With COVID-19 changing the landscape of standardized testing, the College Board must continue to adapt the SAT to the times we are now in.

# Appendix

# ACT vs SAT Participation in 2017



# ACT vs SAT Participation in 2018

