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BACKGROUND

- SAT and ACT are standardized tests used by colleges and universities for acceptance decision
- New SAT format introduced in 2016
- Similarities with the ACT

PROBLEM STATEMENT

Analyse the SAT and ACT participation rates and scores from 2017 to 2019 and provide recommendations to improve SAT participation rates.

METHODOLOGY

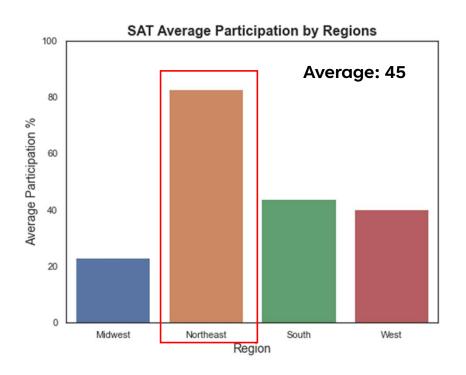
Datasets:

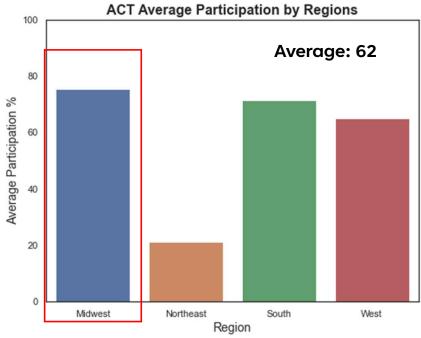
- SAT / ACT data 2017 to 2019
- Data includes participation rate and scores for each state
- Added US Region information

Data Cleaning

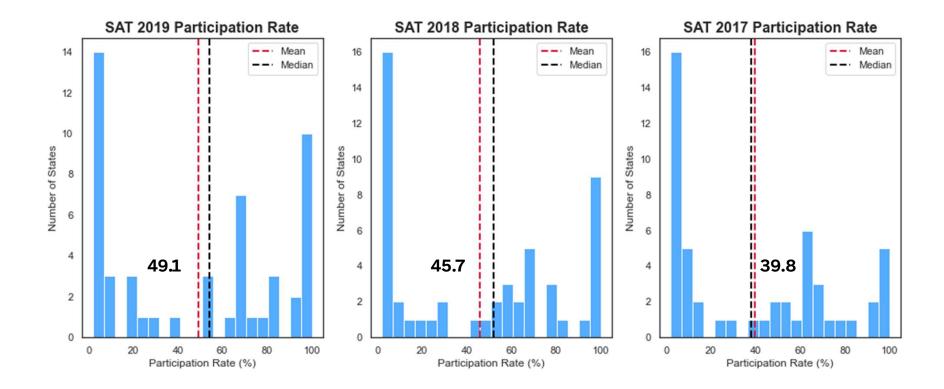
- Removed duplicate
- Removed irrelevant data columns
- Rectified incorrect data

AVERAGE PARTICIPATION RATE BY REGIONS (2017 TO 2019)

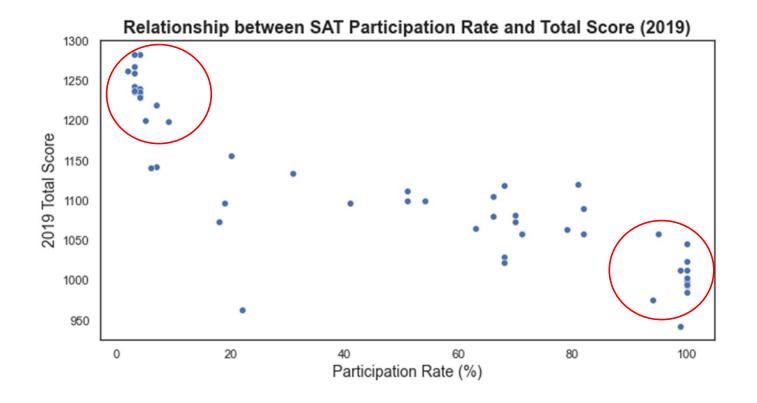




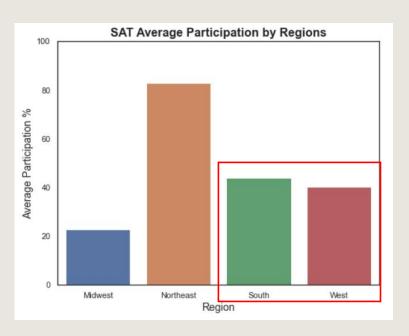
SAT PARTICIPATION RATE



SAT RELATIONSHIP BETWEEN PARTICIPANT RATE & SCORE



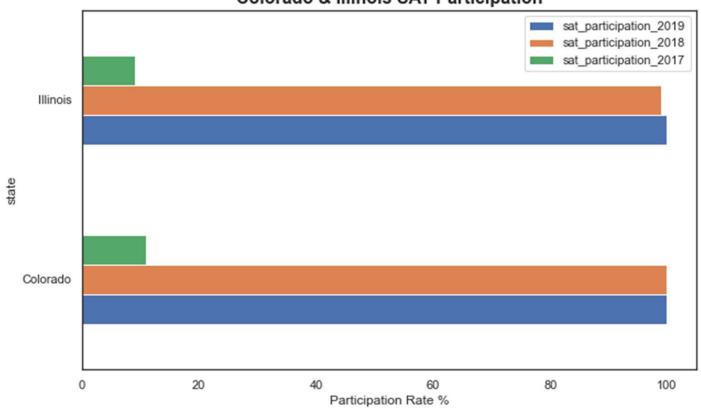
AVERAGE SAT PARTICIPATION RATE BETWEEN 40 TO 70%



State	Region	Ave. SAT Participation Rate %	Ave. ACT Participation Rate %
Georgia	South	67.33	52.33
North Carolina	South	50.67	100.00
South Carolina	South	57.67	92.67
Texas	South	67.00	24.67
Virginia	South	67.00	24.67
Alaska	West	40.67	45.33
California	West	58.67	27.00
Hawaii	West	55.55	86.33
Oregon	West	47.33	41.33

CASE STUDY

Colorado & Illinois SAT Participation

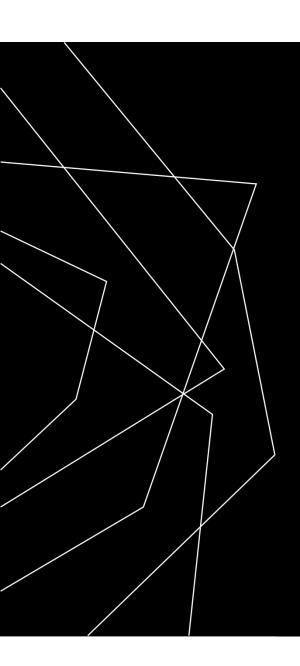




- Increase in the SAT participation rate since 2017. SAT fares better in Northeast region
- Test score is inversely related to the participation rate where a high participation rate implies a lower test score
- Colorado and Illinois are two cases where SAT participation rate improved tremendously when the states require the students to take the SAT test.

RECOMMENDATIONS

- Work with states to offer SAT as a mandatory requirement
 - Consider focusing on states with 40 to 70% participation rates
 - Suggested states are Texas, Virginia and California
- To work with states that currently require students to take either SAT or ACT
 - North Carolina and South Carolina are recommended



THANK YOU