A blurred background image of a business meeting. Several people in professional attire (suits, blouses) are gathered around a table. One person is holding a smartphone, another is holding a tablet displaying a chart. There are coffee cups on the table. The overall scene suggests a collaborative work environment.

SURVEY OF SAT & ACT ENTRANCE TEST IN UNITED STATES

BY FAIZ PUAD

PROBLEM STATEMENT

- Mr. Abu recently got job offer and need to migrate to California, United States. His son, Samad just recently turn 17 years old and is migrating to US with him. Mr. Abu in dilemma to find best college to admit his son and how to secure place in that top flight college too. The goal of this survey is to find possible universities for Mr Abu's son to enter with their requirement scores. This includes the best states with high entrance test scores to live in.

● ● ● ● ● ●

Pa, how can afford flight ticket to US meh?

● ● ● ● ● ●

Use your duit raya la.
Can sell kidney too wat?



EXPLORATORY DATA ANALYSIS

*JOM EXPLORE
TOGETHER!*

01

Entrance test
relevant ?

02

Which test has
highest
participation and
the reverse stats ?

03

Which school
contained high
scores mark
student & which
is most lenient ?

04

Which state pass
with flying
colour & which
state does not ?

ACT VS SAT

BACKGROUND

- 51 states in US
- Dataset use includes:
 - ACT Data (2017 & 2019)
 - SAT Data (2017 & 2019)
 - SAT & ACT By Intended College (2021)

ACT DATA (2019 – 2017)

Participant

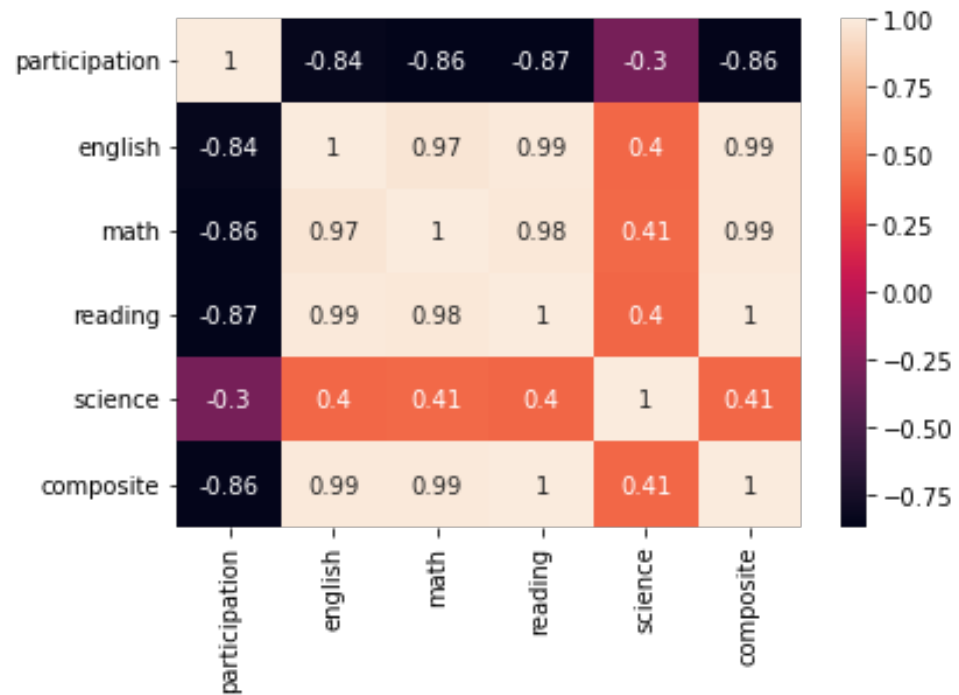
- Contain 51 states
- Mean participant is 0.59 – 0.65
- Minimum participant is 0.06 – 0.08
- Max participant is 1

Composite

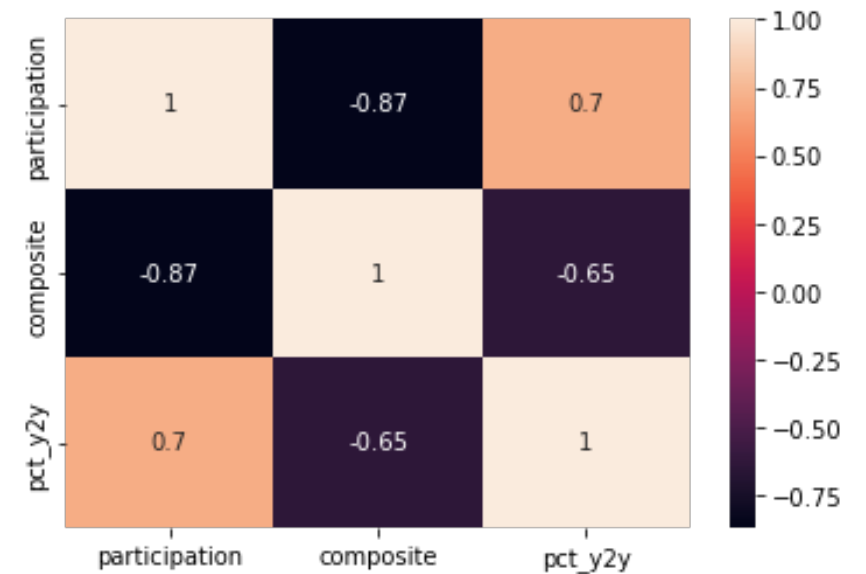
- Mean is 22 - 21
 - Minimum is 18 - 18
 - Max is 26 - 26
-

ACT DATA

YEAR 2017

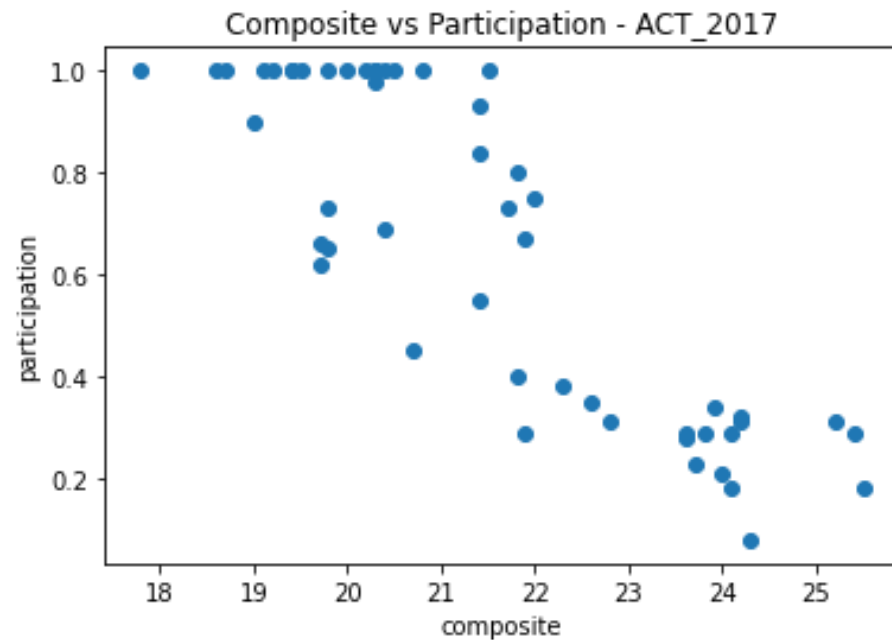


YEAR 2019

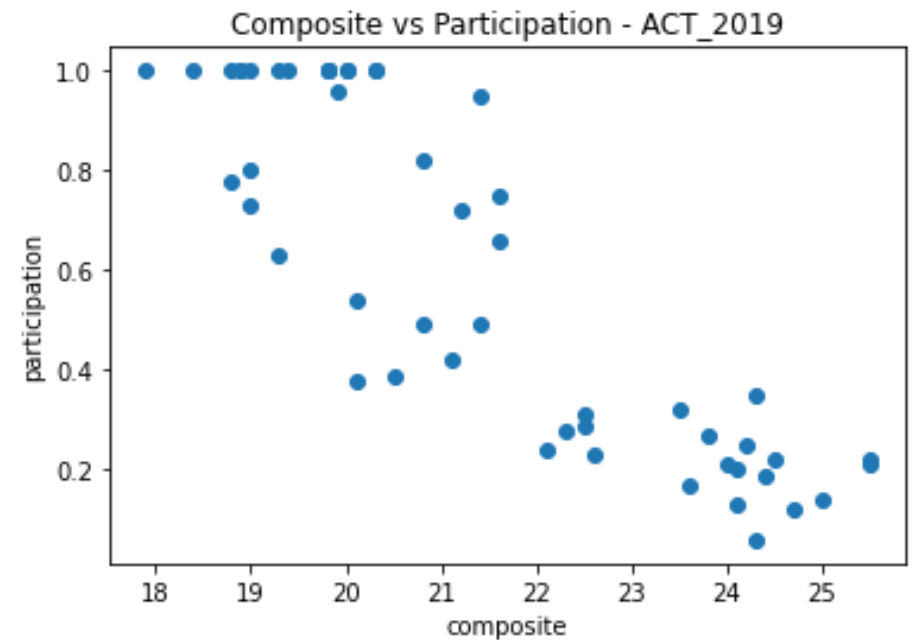


ACT DATA

YEAR 2017



YEAR 2019



SAT DATA (2019 – 2017)

Participant

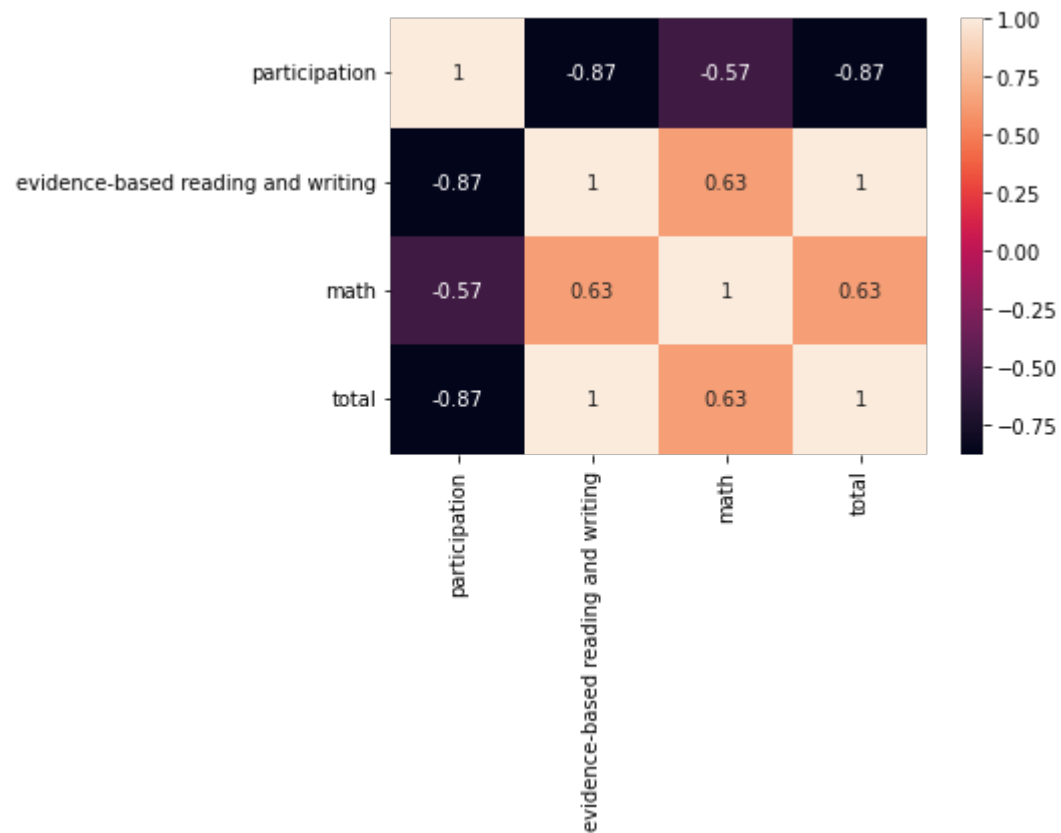
- Contain 51 states
- Mean is 0.50 – 0.40
- Minimum is 0.02 – 0.02
- Max is 1

Total

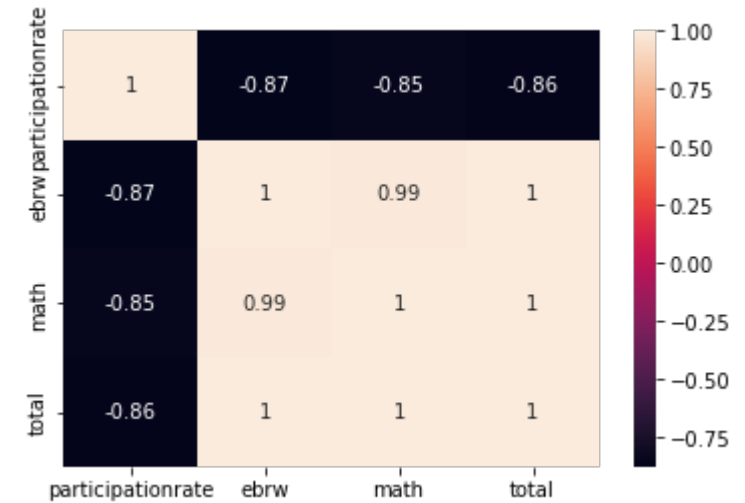
- Mean is 1113 - 1126
 - Minimum is 943 - 950
 - Max is 1284 - 1295
-

SAT DATA

YEAR 2017

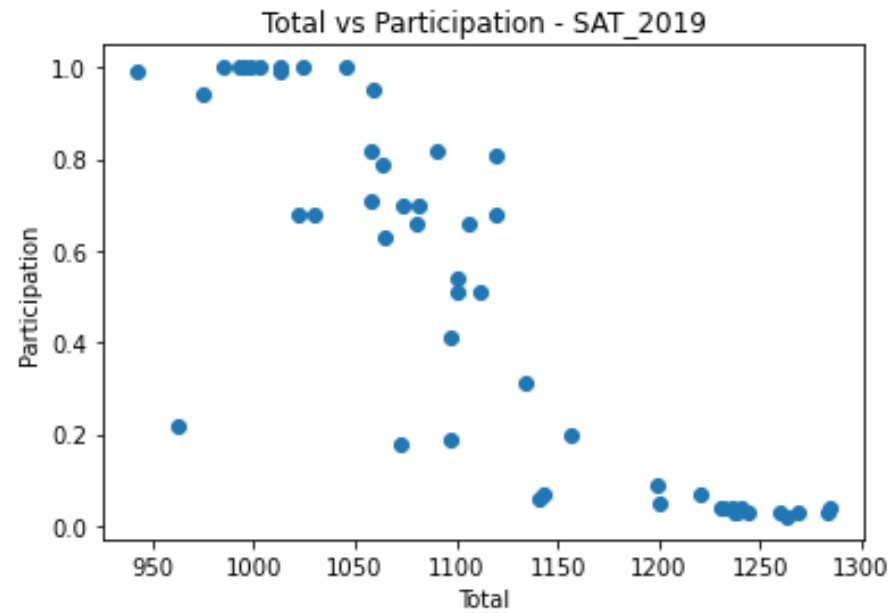


YEAR 2019



SAT DATA

YEAR 2019



SAT ACT STATS BY COLLEGE (2019 – 2017)

Applicants

- Contain 416 college
- Mean is 17482
- Minimum is 211
- Max is 111322

Accept Rate

- Mean is 0.56
- Minimum is 0.04
- Max is 0.99

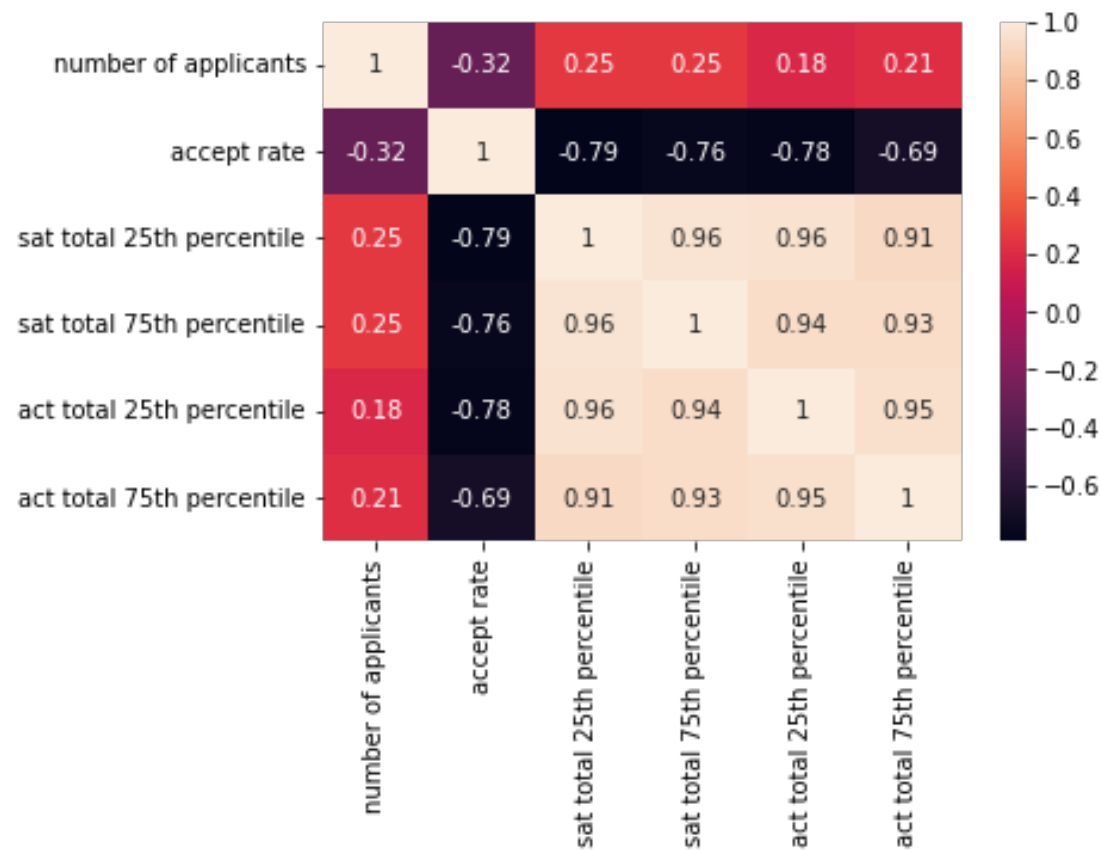
Total 25 percentile SAT - ACT

- Mean is 1166 - 24
- Minimum is 793 - 15
- Max is 1530 - 35

Total 75 percentile SAT - ACT

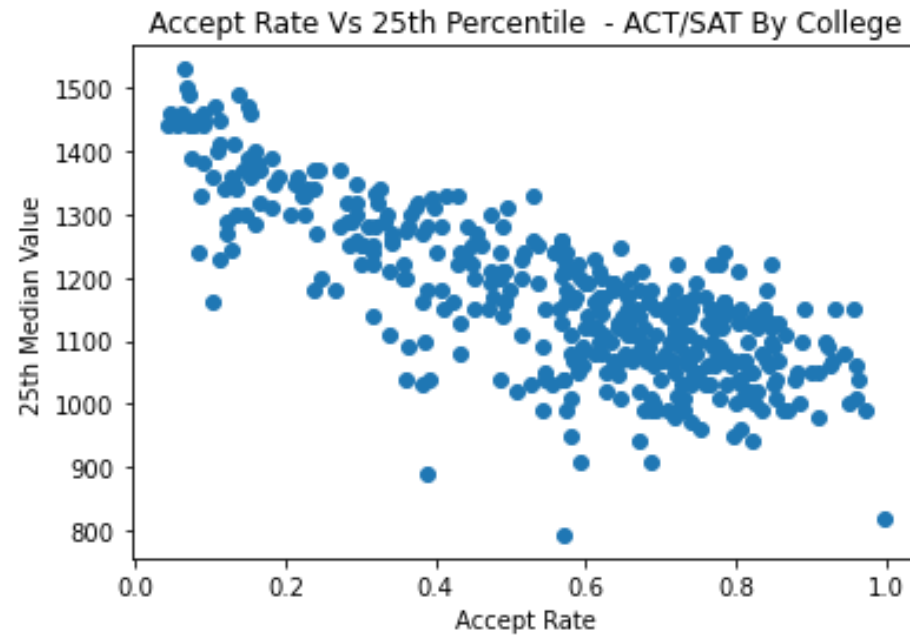
- Mean is 1358 - 30
 - Minimum is 1050 - 19
 - Max is 1580 - 36
-

SAT ACT STATS BY COLLEGE

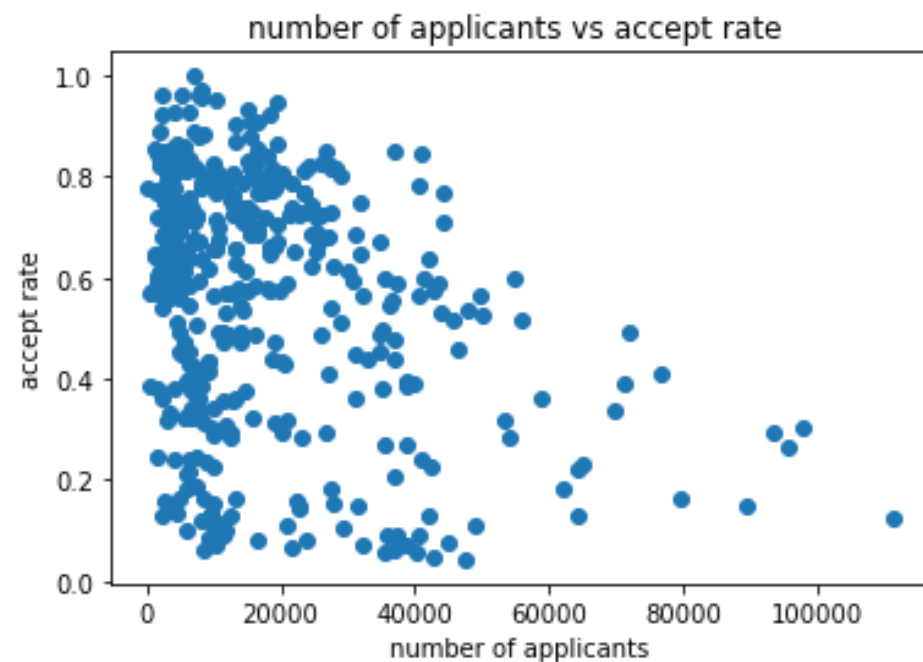


SAT ACT STATS BY COLLEGE

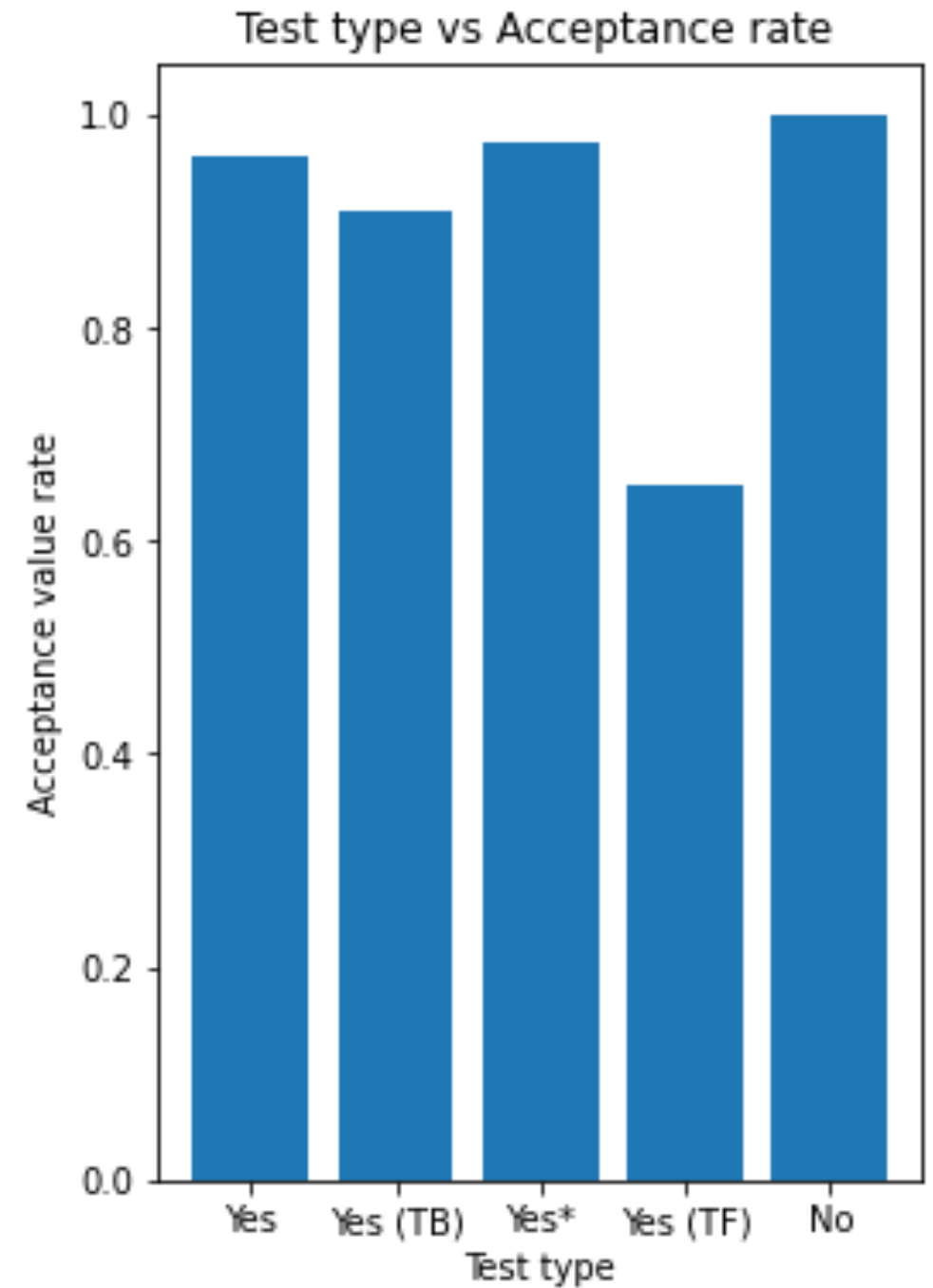
YEAR 2021



SAT ACT STATS BY COLLEGE



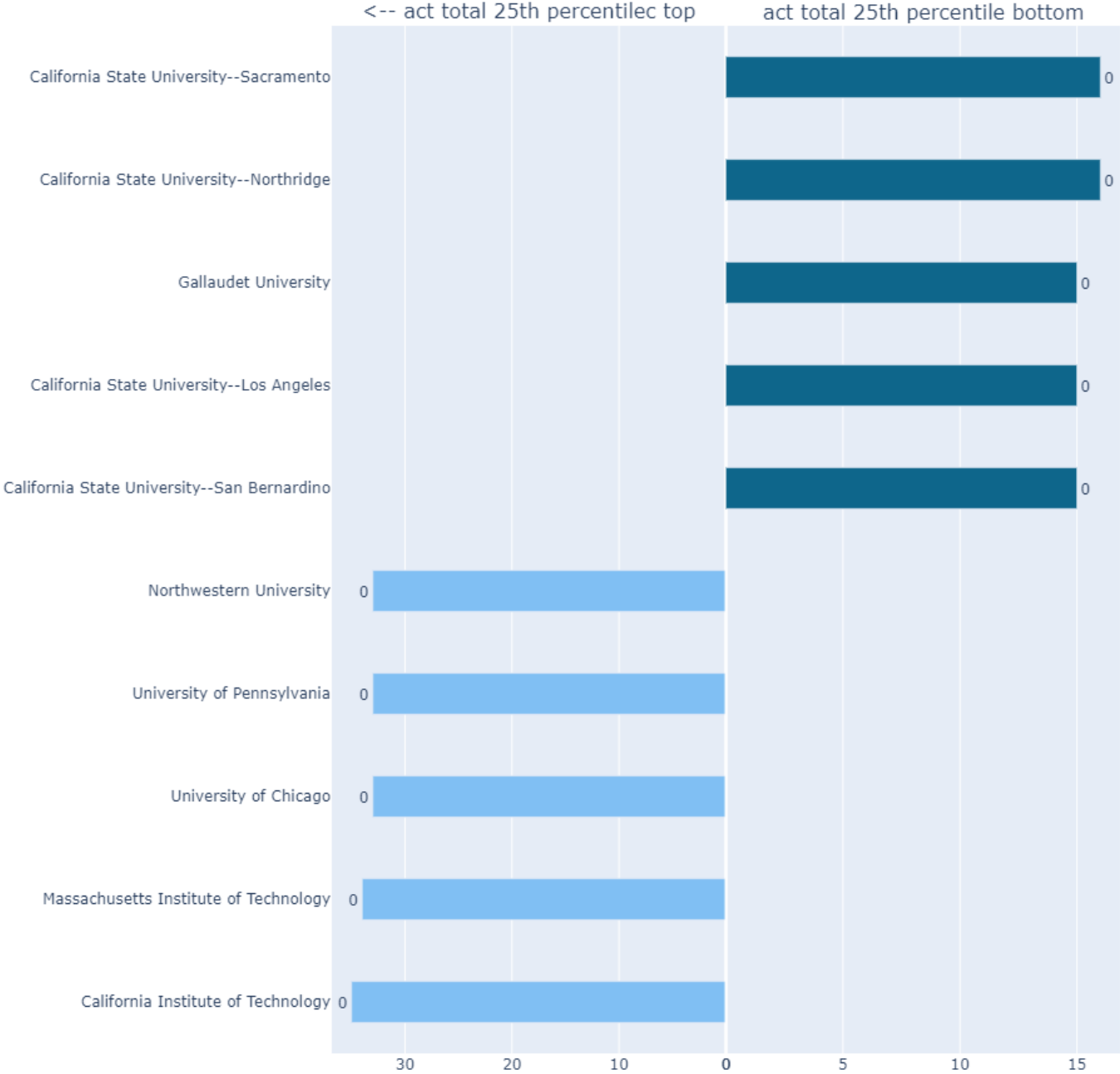
SAT ACT STATS BY COLLEGE



Average Cost of In-State Tuition & Fees, Most to Least Expensive

Rank	State	In-State Tuition & Fees
1	Vermont	\$17,083
2	New Hampshire	\$16,679
3	Pennsylvania ✓	\$15,565
4	Illinois ✓	\$14,455
5	New Jersey	\$14,360
6	Connecticut	\$13,886
7	Massachusetts ✓	\$13,729
22	Maryland ✓	\$9,714
23	Louisiana	\$9,571
24	Iowa	\$9,373
-	U.S. Average	\$9,349
25	Indiana	\$9,268
26	Colorado	\$9,144
27	Kansas	\$9,088
28	Missouri	\$8,992
29	South Dakota	\$8,978
30	Wisconsin	\$8,764
31	Arkansas	\$8,689
32	North Dakota	\$8,628
33	Mississippi	\$8,604
34	Texas ✗	\$8,598
35	Nebraska	\$8,582
36	New York	\$8,467
37	Alaska	\$8,297
38	West Virginia	\$8,195
39	California ✗ ✓	\$8,192
40	Oklahoma	\$8,009
41	Idaho	\$7,518
42	Georgia	\$7,457
43	North Carolina	\$7,228
44	Washington ✗	\$7,168

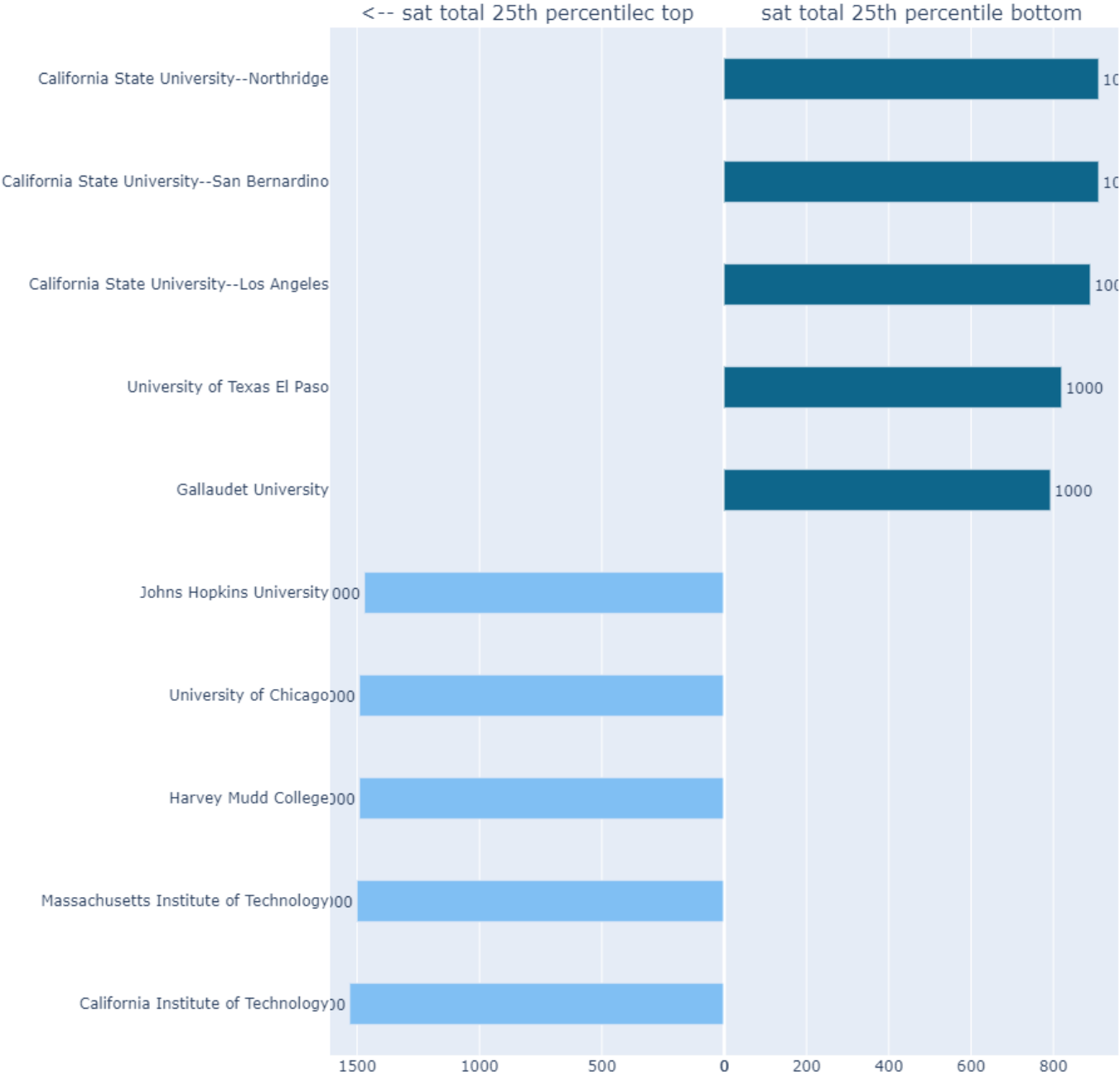
Comparison of composites of countries by states for act test in the years 2017 and 2019



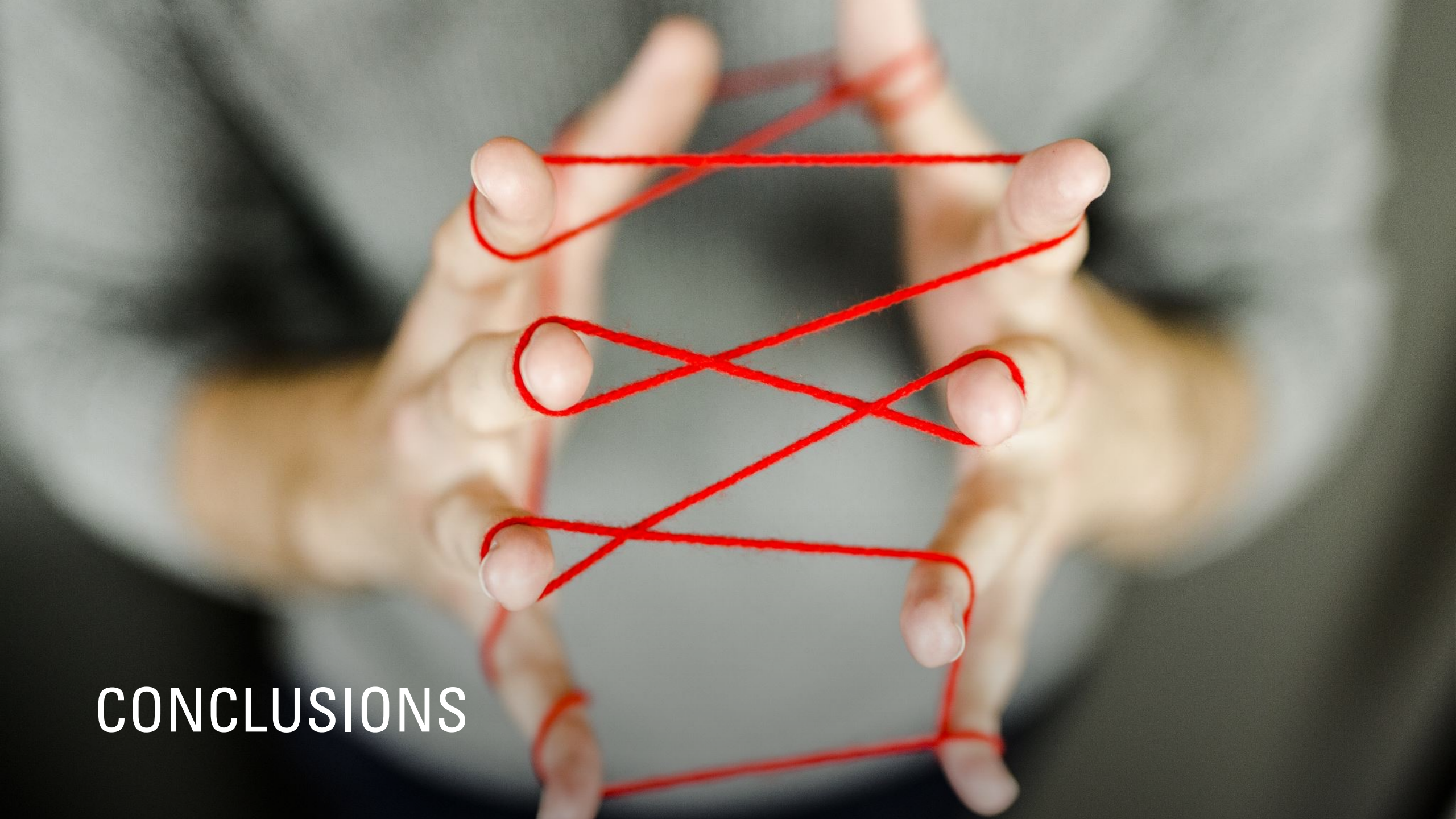
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Comparison of composites of countries by states for sat test in the years 2017 and 2019



Universities	Times Higher Education Ranking (2022)	Shanghai Jiao Tong University Ranking (2021)	TopUniversities Ranking (2022)	U.S. News & World Report Ranking (2021)
California Institute of Technology - Caltech	2	9	6	7
Harvard University	2	1	5	1
Stanford University	4	2	3	3
Massachusetts Institute of Technology (MIT)	5	4	1	2
Princeton University	7	6	20	11
University of California, Berkeley	8	5	32	4
Yale University	9	11	14	11
University of Chicago	10	10	10	15
Columbia University	11	8	19	6
Johns Hopkins University	13	16	25	10



CONCLUSIONS

CONCLUSION

- at least median mark for scores to achieve
 - high living cost is also associate with stricter n more achiever result in that area
 - also choose school that is non optional test for higher chance
 - low participant school show greater marks in each test
 - sat has higher participation mean than act
 - cost of tuition fees, living, participation, lowest & ideal scores mark are recommended features for new student to consider when selecting which entrance test to pick for which type of college.
-

REFERENCES

- Universities Ranking
 - <https://www.mastersportal.com/ranking-country/82/united-states.html>
- Average Cost of Tuition Fees of College in US's state
 - <https://educationdata.org/average-cost-of-college-by-state#:~:text=Massachusetts%20has%20the%20highest%20average,%2411%2C686%20per%20year%20on%20average.>
- Annual Average Cost of Living in States of US
 - <https://meric.mo.gov/data/cost-living-data-series>



THANK YOU