



Standardized Test Analysis: Project 1

Goh Yan Da



Table of contents

01

Background

02

Problem Statement

03

Methodology

04

**Discussion &
recommendations**

Background

Originally established in the US in 1926, developed by the college board for high school students.

- **College Admissions**
- **Indicator of Success**
- **Consists of 3 sections:**
 - Reading
 - Writing
 - Math

However, as of fall 2022 SAT is no longer required in most Universities in the US.



Problem Statement

In **2018**, top ivy universities such as Harvard **dropped** the SAT requirement for **university application**, how did it affect the **total SAT scores and participation rates?**



Methodology

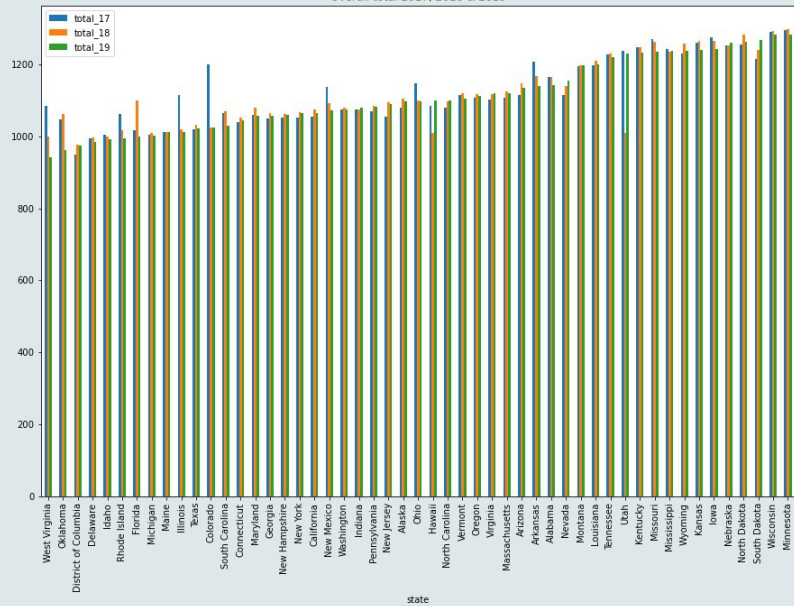
Using historical data of past SAT scores from 2017 to 2019

- **Total scores**
- **Participation scores**

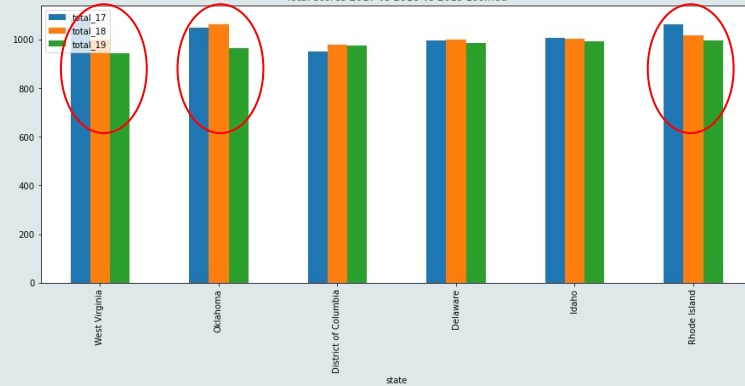
Data is filtered and sorted and unwanted columns removed



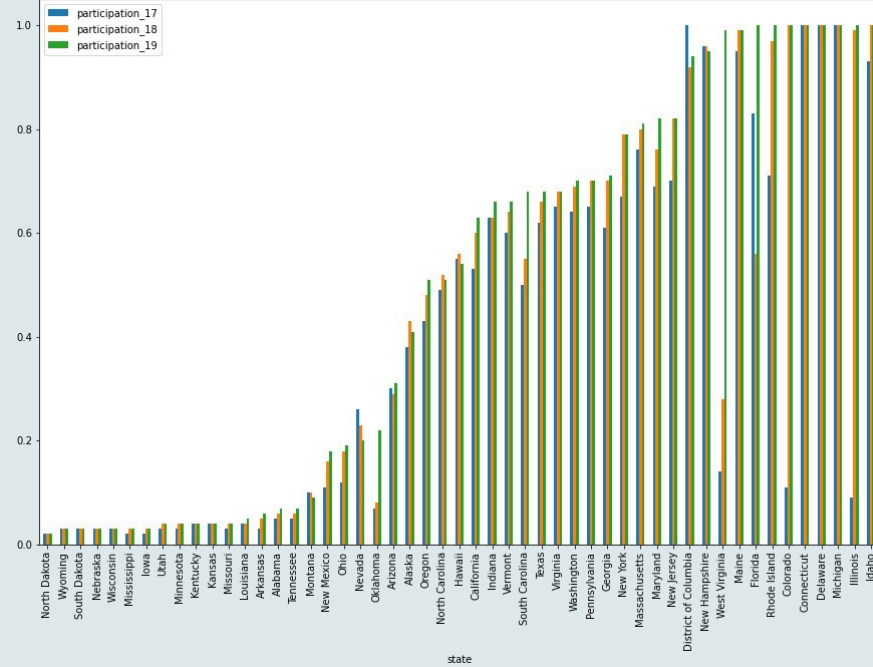
Overall total 2017, 2018 & 2019



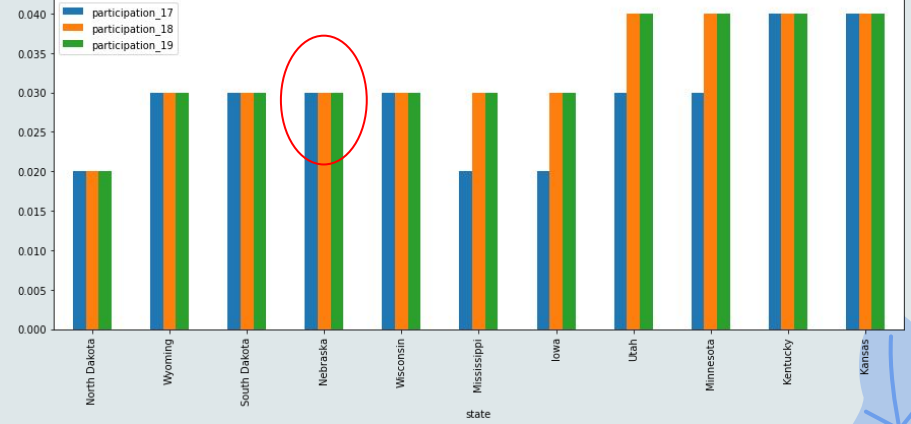
Total scores 2017 vs 2018 vs 2019 zoomed

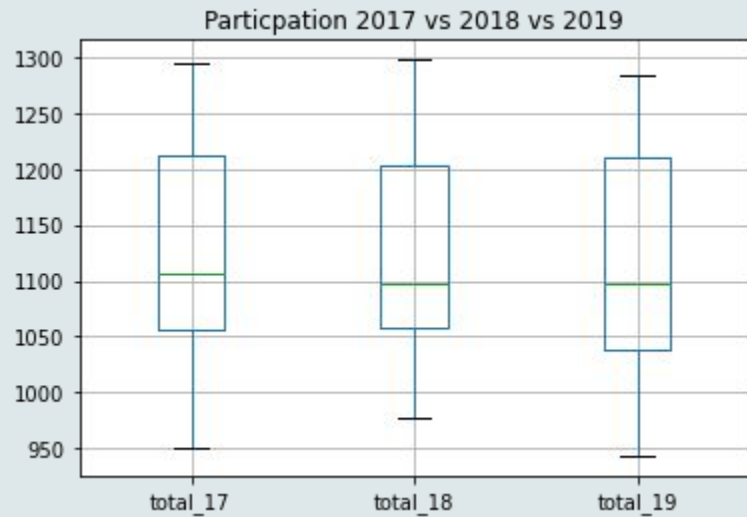
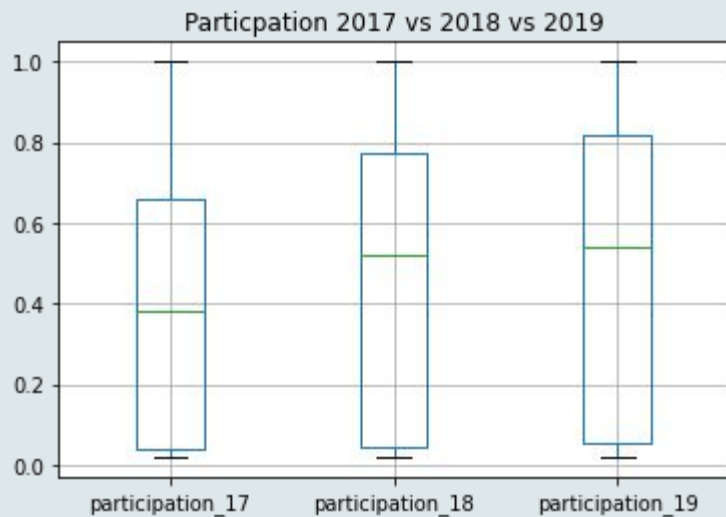


Overall Participation 2017, 2018 & 2019



Participation rates 2017 vs 2018 vs 2019 zoomed





Conclusions

Top ivy universities had an influence

- **Total mean – decreased slightly**
- **Participation scores – no significant change**

| | state | total_17 | total_18 | total_19 |
|----|----------------------|----------|----------|----------|
| 48 | West Virginia | 1086 | 999 | 943 |
| 36 | Oklahoma | 1047 | 1062 | 963 |
| 8 | District of Columbia | 950 | 977 | 975 |
| 7 | Delaware | 996 | 998 | 985 |
| 12 | Idaho | 1005 | 1001 | 993 |
| 39 | Rhode Island | 1062 | 1018 | 995 |

| | count | mean |
|------------------|-------|-------------|
| participation_17 | 51.0 | 0.398039 |
| total_17 | 51.0 | 1126.098039 |
| participation_18 | 51.0 | 0.457451 |
| total_18 | 51.0 | 1120.019608 |
| participation_19 | 51.0 | 0.490588 |
| total_19 | 51.0 | 1113.078431 |

| | state | participation_17 | participation_18 | participation_19 |
|----|--------------|------------------|------------------|------------------|
| 34 | North Dakota | 0.02 | 0.02 | 0.02 |
| 50 | Wyoming | 0.03 | 0.03 | 0.03 |
| 41 | South Dakota | 0.03 | 0.03 | 0.03 |
| 27 | Nebraska | 0.03 | 0.03 | 0.03 |
| 49 | Wisconsin | 0.03 | 0.03 | 0.03 |
| 24 | Mississippi | 0.02 | 0.03 | 0.03 |



Recommendations

- Identify if there is other external factors that might affect the SAT and participation rates (Pandemic, changes in learning structure)
- Collect data over a longer period of time



The image features a central text area framed by a blue border. The border is held by two orange hands at the bottom corners. The corners are decorated with autumn leaves in shades of yellow, orange, and light blue. The background is a light gray.

Questions