What are the indicators that impact GPA?

Radley JOSEPH
June 28,2024

01 - Why?

02 - Hypothesis

03 - Alternative

04 - Conclusions

01-Why?

As a parent, one of my priorities is the success of my kids.
This work has afforded me a learning opportunity in my quest to always find better ways to support their growth.

RJ

What are we working with?

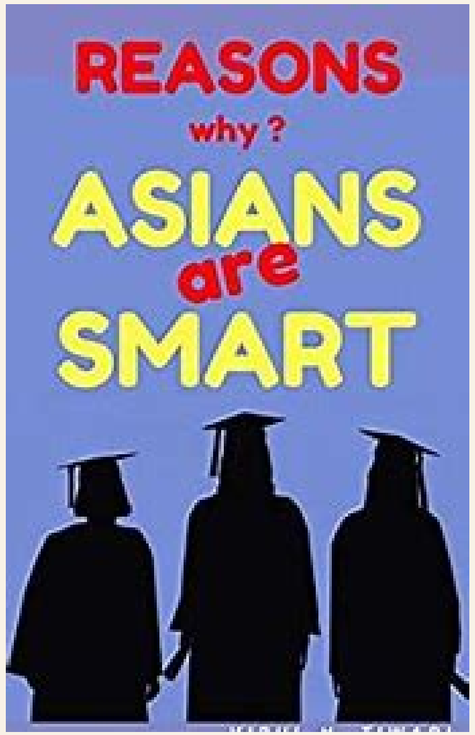
This dataset from Kaggle
Students Performance

***Academic Success Factors in High School Students

Standard Grade Point Average
0-A (GPA >= 3.5)
1- B (3.0 <= GPA < 3.5)
2- C (2.5 <= GPA < 3.0)
3- D (2.0 <= GPA < 2.5)
4- F (GPA < 2.0)

The age of the students ranges from 15 to 18 years

02 - Hypothesis



Distribution

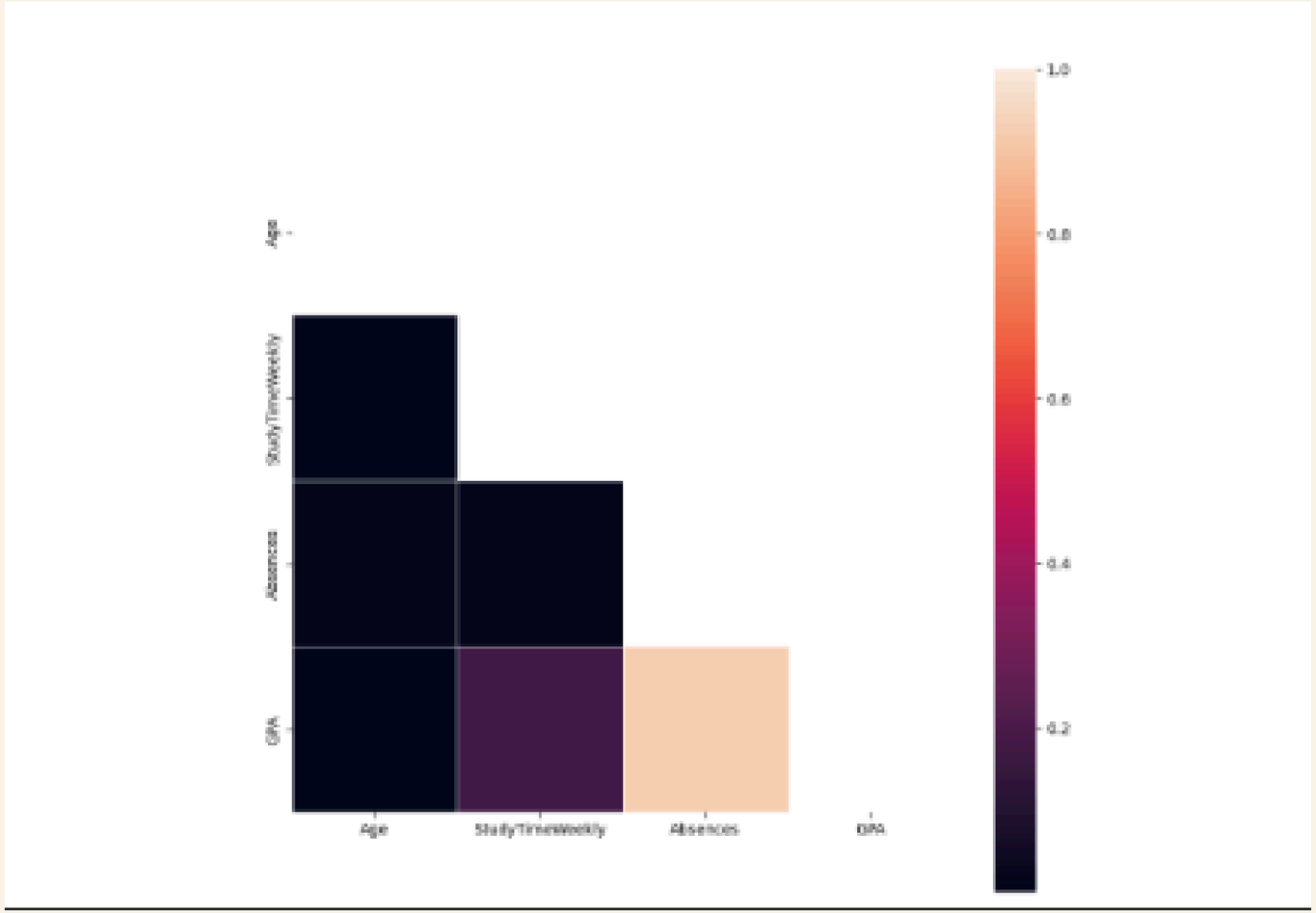
	GPA				
Ethnicity	0	1	2	3	4
0	258	405	387	151	6
1	92	162	167	72	
2	79	167	159	65	
3	39	72	84	26	1

0-A (GPA >= 3.5) 1- B (3.0 <= GPA < 3.5) 2- C (2.5 <= GPA < 3.0) 3- D (2.0 <= GPA < 2.5) 4- F (GPA < 2.0)

0: Caucasian 1: African American 2: Asian 3: Other

03 - Now What?

Categorical factors



Crazy idea

RandomForestClassifier

Accuracy
0.6931106471816284

Data is like **food** and **experience** for the machine,
and it is this data that makes **machine learning** possible.

Thank you
for your time and
attention!

RJ