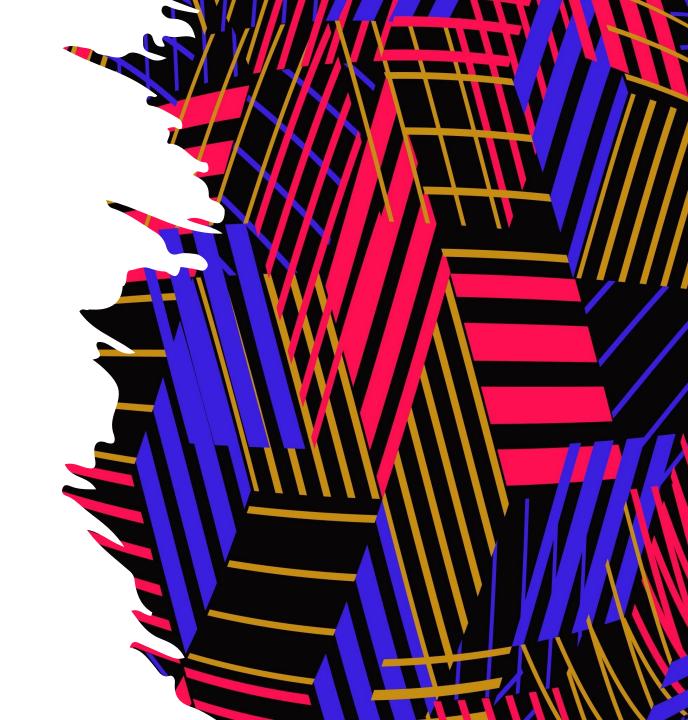
Student's Grade Analysis

By Sudin Giri

SOURCE OF DATA: KAGGLE DATASETS



Purpose of Analysis

After having a good glance at the data, I decided to analyze the dataset so that I can identify how different factors such as: ethnicity, gender, parental support, tutoring affects the GPA of students. The raw data wasn't clear enough to find the pattern/relation so I have analyzed the important factors that could lead us to the business solution.

Significance:

This analysis is significant to dig deep into the data and find pattern/ relations among the different factors that could be affecting the study of the students. This can help us to identify and take the responsible action towards the improvement of study of students.

Business Questions

1) Is there any relationship with student's ethnicity, tutoring towards the GPA the students are scoring?

2) What is the number of passed, failed, and high distinction scored by students in comparison of gender?

3) Are students that give more time to study in a week scoring better than the students that are not?

Some of the key insights:

- African-American students are scoring comparatively better than other ethnic background students with tutoring.
- Caucasian background students tend to score somehow similar with tutoring.

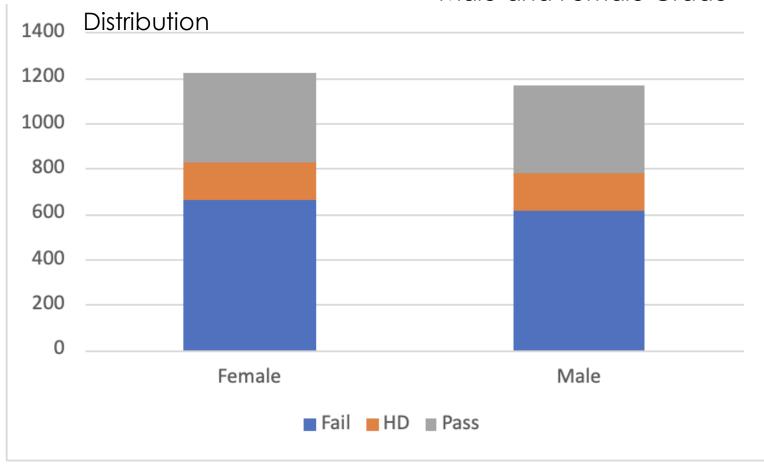


Male and Female Grade

Key Insights:

There's a very thin gap between the number of different grades among male and female.
However,

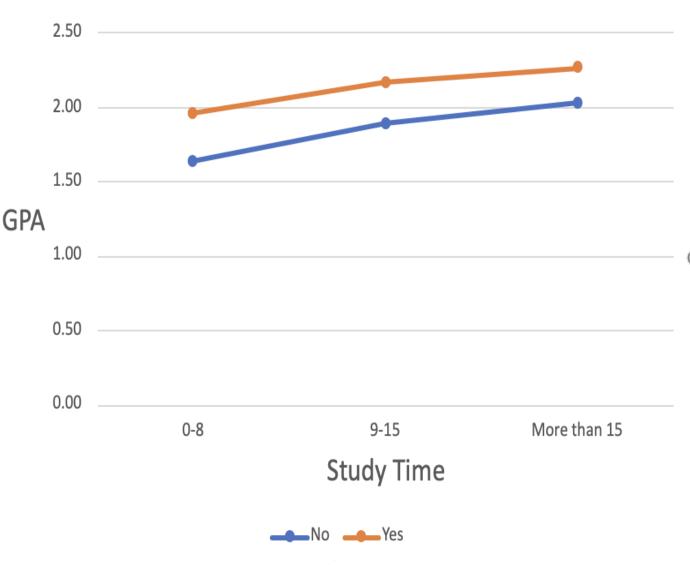
- The number of comparatively more failing students are female than male.
- But, The number of students getting Higher Distinction is also more in female.



Key Insights:

- Students that are giving more than 15 hours for their study are scoring better than those who are giving less in both situations; with tutoring, or without.
- When the study is increased, we can see that there is a little spike in the grade of students too.
- Tutoring has helped students score better in all the categories;
 0-8, 9-15, and more than 15 hours of study.





Recommendations/Suggestions:

From the visualizations, we can see the difference tutoring does to the grades of the students. Hence, the parents and the school should introduce a policy of tutoring every students in the school.

The difference in grade when students are studying 9-15 hours, and students studying more than 15 hours is not much. So, another initiative would be to encourage students to take tuition classes and give 9-15 hours of study paired with other ECAs.

The category of female groups are in front of male group in terms of Fail, Pass, and Higher Distinction. Hence, the school should give a bit more focus on male group as well, because the number of HD in this category is lesser than female which makes it a potential of having more HD conversion from Pass, Fail to HD.