

Student Performance Analysis Report

Key Performance Indicators (KPIs):

1. Total Phone Usage: This DAX function will tell the average total hours a kid spends on their phone whether using it to scroll reels or watching Netflix.

Formula: $(\text{Average}(\text{Social_media_hours}) + \text{Average}(\text{Netflix_hours})) / 2$

`1 Phone Usage = DIVIDE(AVERAGE(student_habits_performance[social_media_hours])+AVERAGE(student_habits_performance[netflix_hours]),2)`

Insights and Analysis:

1. Exam score by Correlation: From our EDA, we can see that our exam score mainly depends upon 'study hours per day' feature i.e by **0.83**. Secondly, it depends upon 'mental health rating' feature i.e by **0.32**. Followed by features like 'Social_media_hours' and 'Netflix_hours' with **0.17** each.

Conclusion: From this we can conclude that these features shape a student's exam score more than any other feature in our data.

2. Exam Score by Study Hours: From our dashboard, we can see that with an **average study hours of 5.64**, we have an **outstanding** grade with **average exam score of 96.86**. And as we move down the scale, with **average study hours 0.62**, the grade is **Fail** with **average exam score of 28.51**.

Conclusion: From this we can conclude that exam score is directly dependent on the 'study hours per day'.

3. Exam Score by Mental Health: According to our dashboard, where 10 being the best mental health and 1 being the worst, with the **best mental health rating i.e 10** we have average exam score of **77.95** and with the **worst i.e 1**, **average exam score is 62.37**.

Conclusion: And with this, we certainly conclude that exam score also directly depends upon student's mental health but not as much as study hours.

4. Exam score by Gender: With male students, we have average exam score of **69.37**, whereas with female students have average exam score of **69.74** but with "Other" gender has an average exam score of **70.65** which is highest.

Conclusion: We can see that students with 'other' gender have performed well as compared to both male and female students.

5. Exam score with Attendance: In EDA, we can see that 'Attendance percentage' feature when correlated with exam score, gives just **0.09**.

Conclusion: From here we can conclude that students don't rely on study taught in schools.