Report of Middle TN School (USA) 2015-2016

Some school in the state of Tennessee are performing below average academically .most of the parents and school administration approached as with the task of understanding Why these schools are underperforming

To improve school performance we are learn more about these schools and their students to understand its own strength and weaknesses.

With the help of data includes various demographic, school faculty, and income variable .we are perform a Data Analysis to find some insights and helpful information to improve the academicals performance and school rating.

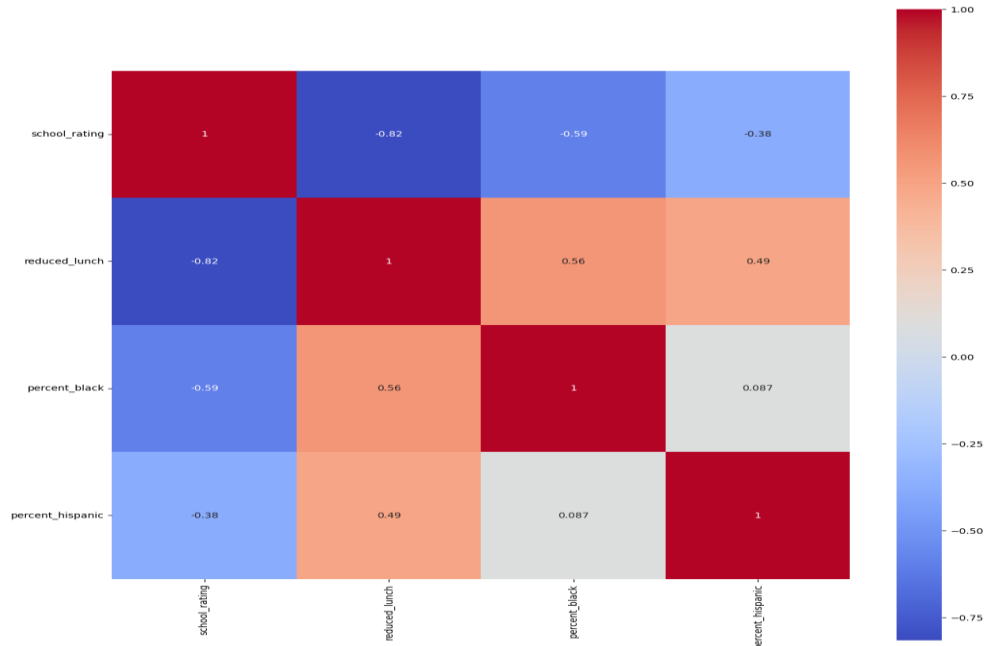**Name: Mr. Raj Arya (Datascientist in Vijai)**

Date: 8-04-2024

Fig-1

Fig -1: Show the correlation

Figure-1: show the negative relation of school rating on three factors:

1. Percentage of Black (African American)
2. Percentage of Hispanic (Mexican, Latin etc...)
3. Reduced Lunch (Percentage of students eligible for free or reduced-price lunch, often used as a proxy for socio-economic status.)

This graphs show that school rating is negative effects by these three factors.
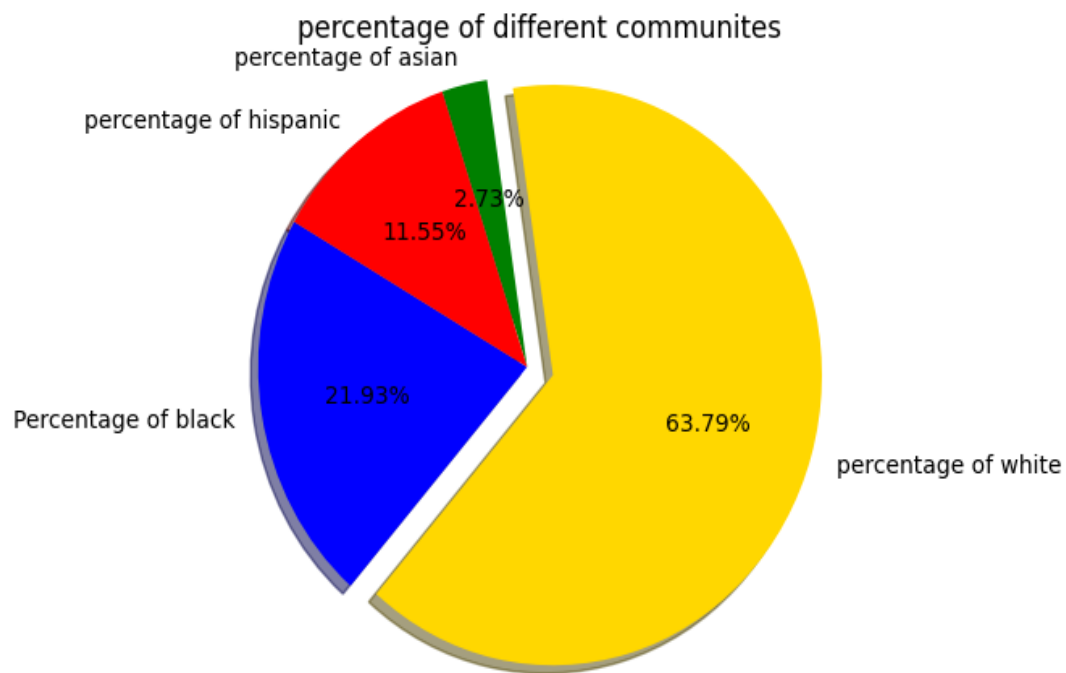
Fig-2

Fig-2: Show percentage of Different communities Students.

- ➢ 63.79 percent are white American.
- ➢ 21.93 % are Black African American.
- ➢ 11.55% are Hispanic.
- ➢ 2.73% are Asian.

Here are the approximate median family income figures for different racial and ethnic communities in the United States based on 2015-2016 ACS(American Community Survey) data: ¶

- White (non-Hispanic): Approximately 63,000$–70,000$ per year.
- Asian: Approximately 78,000$–85,000$ per year.
- Hispanic or Latino: Approximately 45,000$–52,000$ per year.
- Black or African American: Approximately 38,000$–45,000$ per year.

To determine the income thresholds for reduced-price or free school lunch eligibility in Middle Tennessee for these years, we can use the following calculations: ¶

1 .Free Lunch Eligibility:
- For a family of four:
- 130% of the poverty guideline for 2015: approximately $31,525
- 130% of the poverty guideline for 2016:approximately $31,590

2. Reduced-Price Lunch Eligibility:
- For a family of four:
- 185% of the poverty guideline for 2015: approximately $43,913
- 185% of the poverty guideline for 2016: approximately $43,955

- According the report of ACS(American Community Survey) Data 2015-2016:
- Hispanic and Black African American are financially weak comparatively to Asian and white American.

- According to our analysis most of the students who take the advantages of reduced lunch are Black African American and Hispanic that why reduced lunch is also effect and relate a negative impact on school rating.
- Because they can't afford expensive books or even afford a good quality of food that's why they mostly dependent on a reduced lunch facilities.
- Or not able to afford to take an extra classes or tuitions from outside.
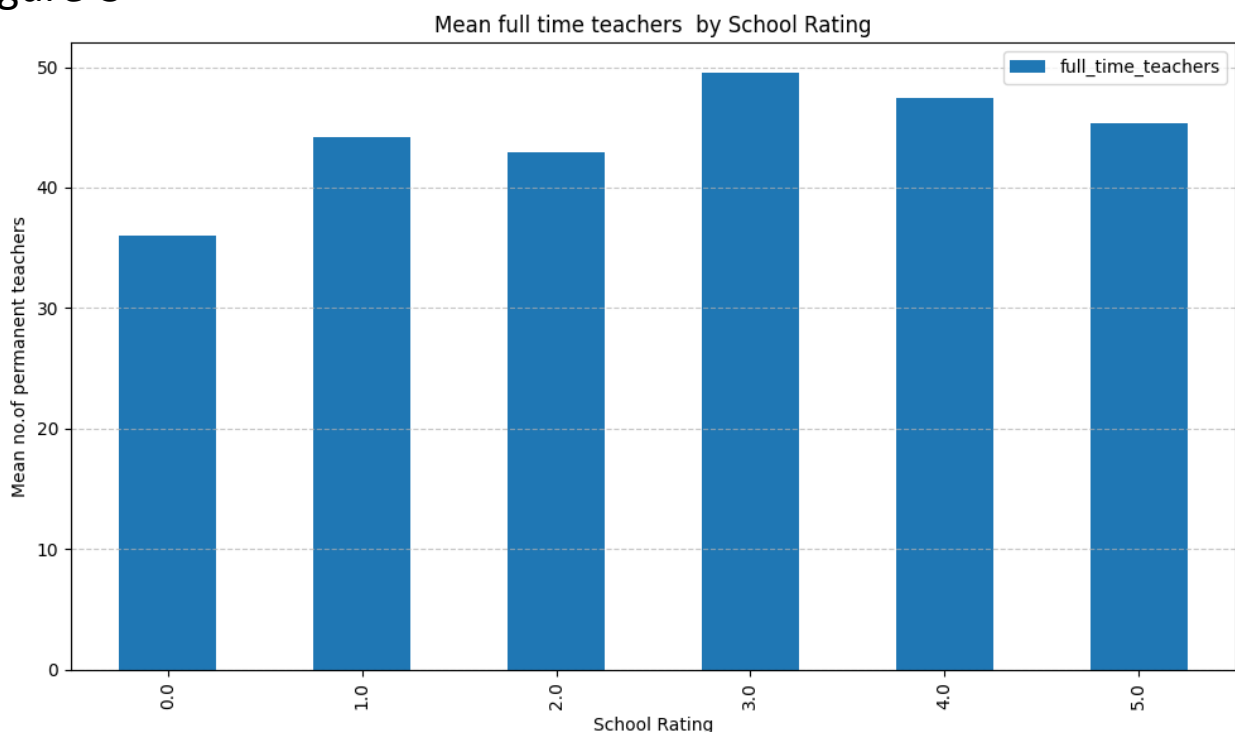
figure-3

Figure -3: show the comparison of school rating and mean permanent teacher ration.

➢ This graph show that how number of permanent teacher affect the rating of school .it means if number of permanent teacher is increase so rating and performance of school academic is also increase.

Conclusions

If schools wanted to grow our school rating or academic performances so focus on these factors.

➢ Hispanic and black African American is financially weak so focus on these 2 communities to provide books on cheap or affordable price.
➢ Provide a Free access   of library and books for study.
➢ Or provide second hand books to these students.
➢ And also provide a extra classes or tuitions in affordable prices
➢ Also increase the numbers of permanent teachers.