

## 1.Business Overview

- Shamiri Institute is a data-driven organisation focused on developing and disseminating mental health interventions for African youths.
- The Purpose of the data analysis is to identify important trends among the questionnaires given to students.

## 2.Nature and Description of the data

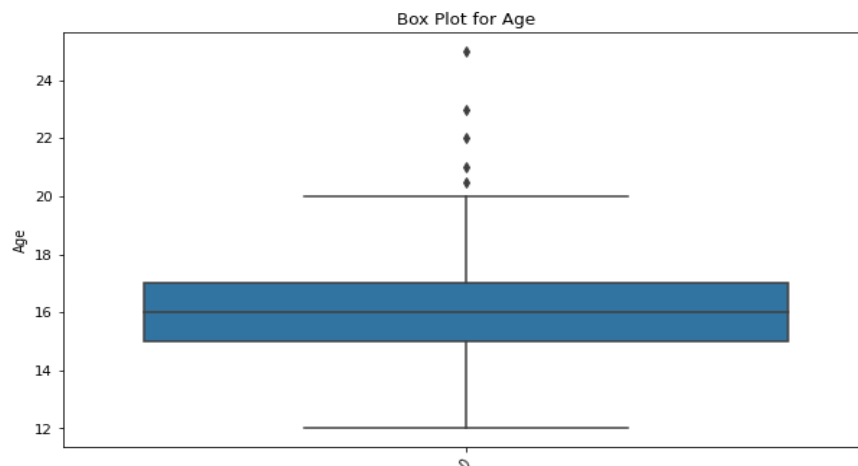
### Description

- PHQ indicates Depression index measure, GAD represents Anxiety index measure, MSS indicates social support index measure.
- The data has shape of 653 rows and 33 columns
- The data has no missing values
- The data has no duplicates
- The data has no significant Outliers

### Nature

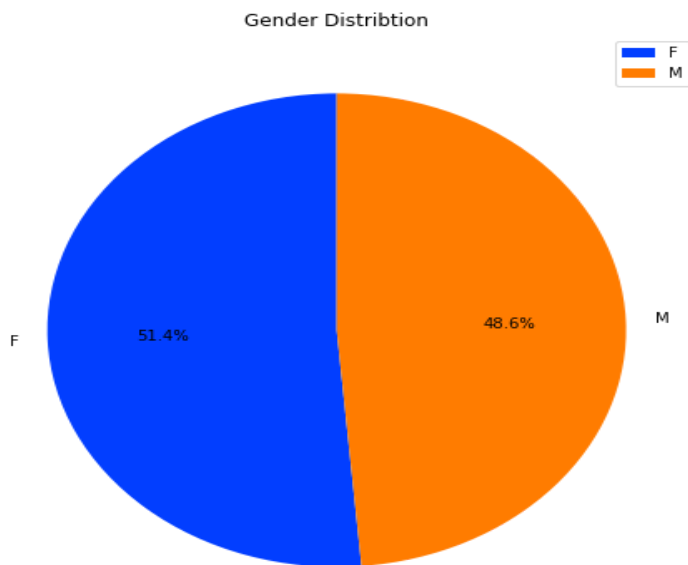
#### *a) Age*

The mean Age for the respondents is 16 years with the oldest respondent being 25 years and youngest 12 years

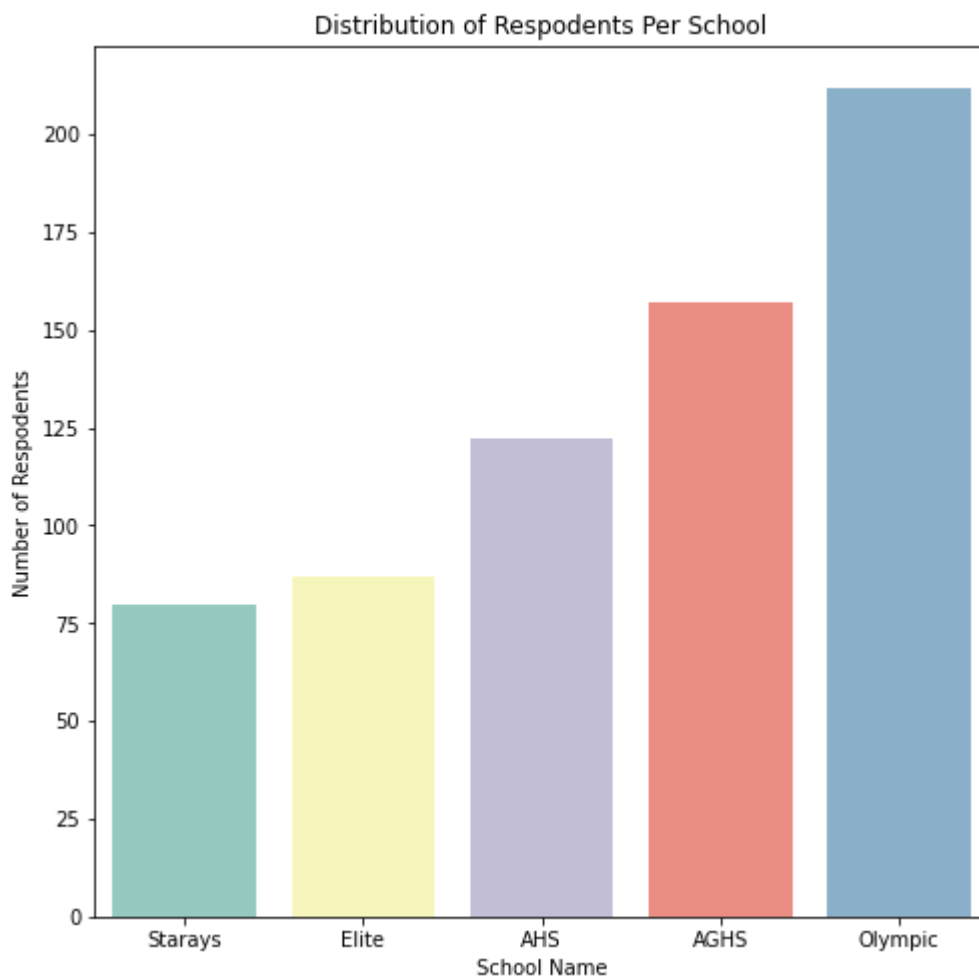


*b) Gender Distribution*

51.4% of the respondents were female while 48.6% were male

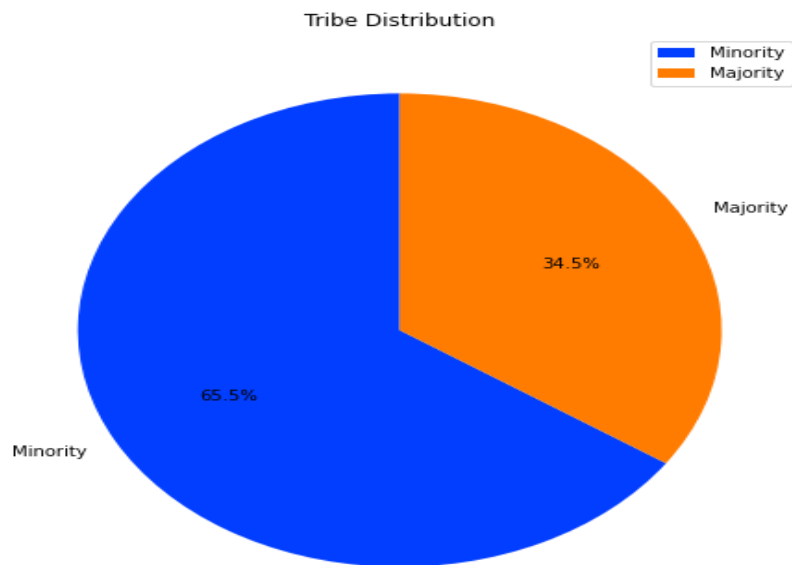


*c) Distribution of Respondents Per School*



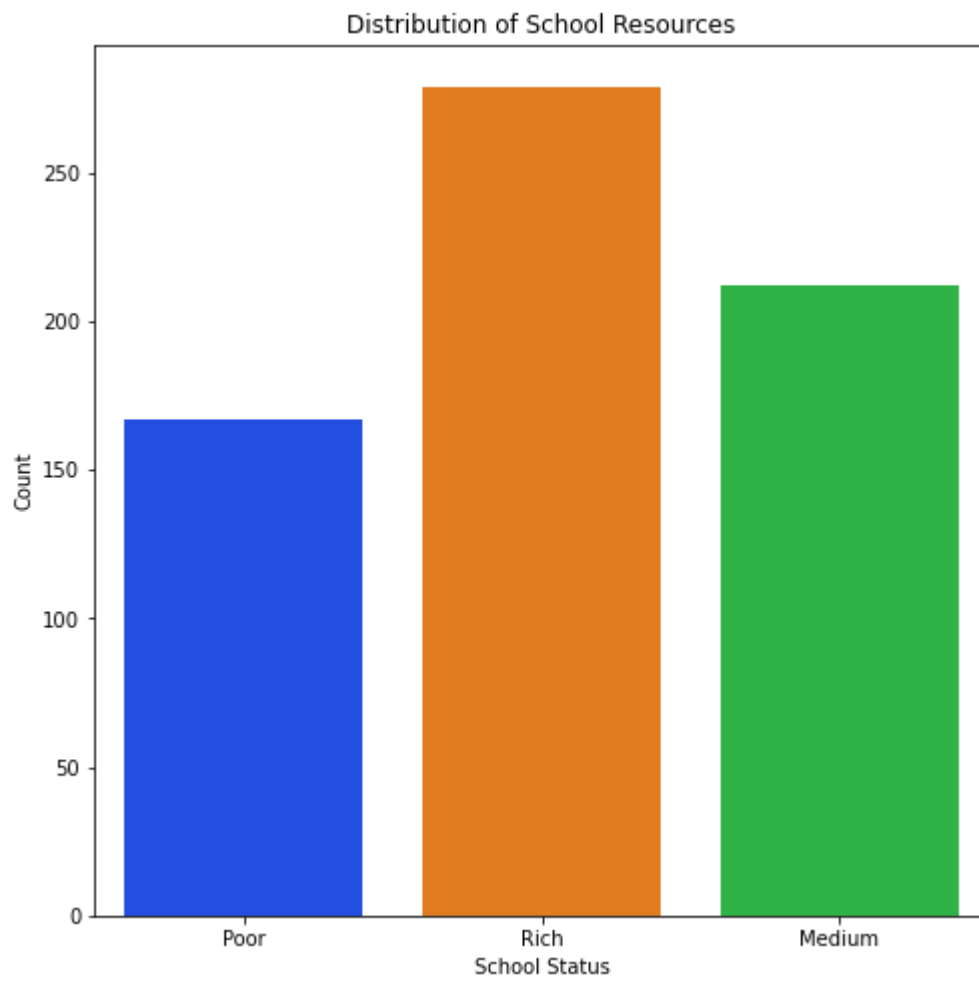
Olympic School had the highest number of respondents (212) While Starays had the lowest number of respondents (76)

*d) Tribe Distribution*



65.5% Minority tribe, 34.5% Majority Tribe

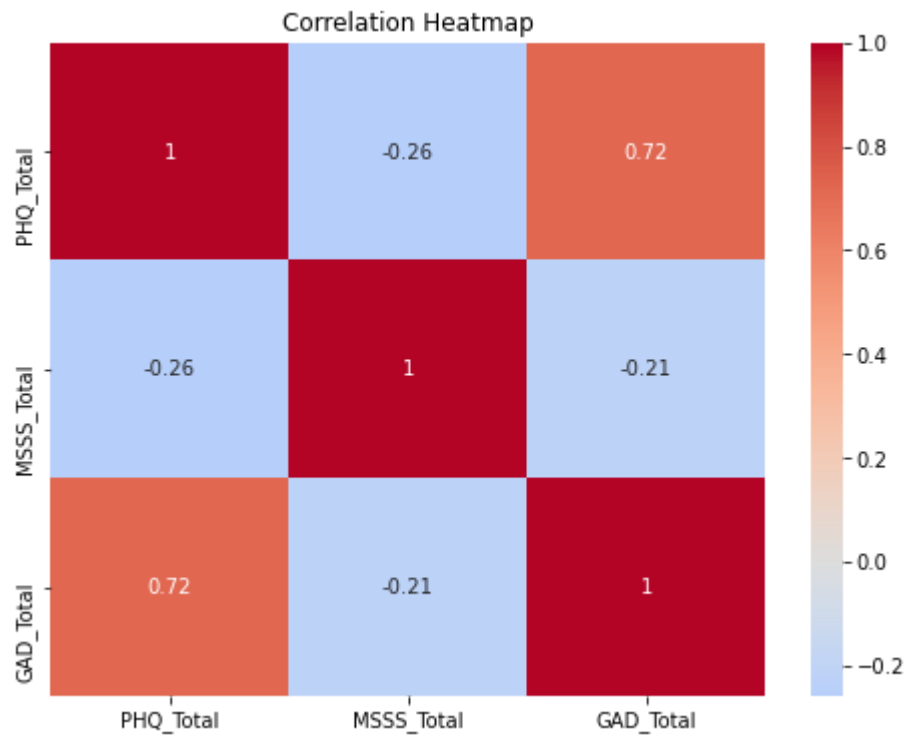
e) *Distribution Of School Resources*



Majority of the respondents were from a Rich School.

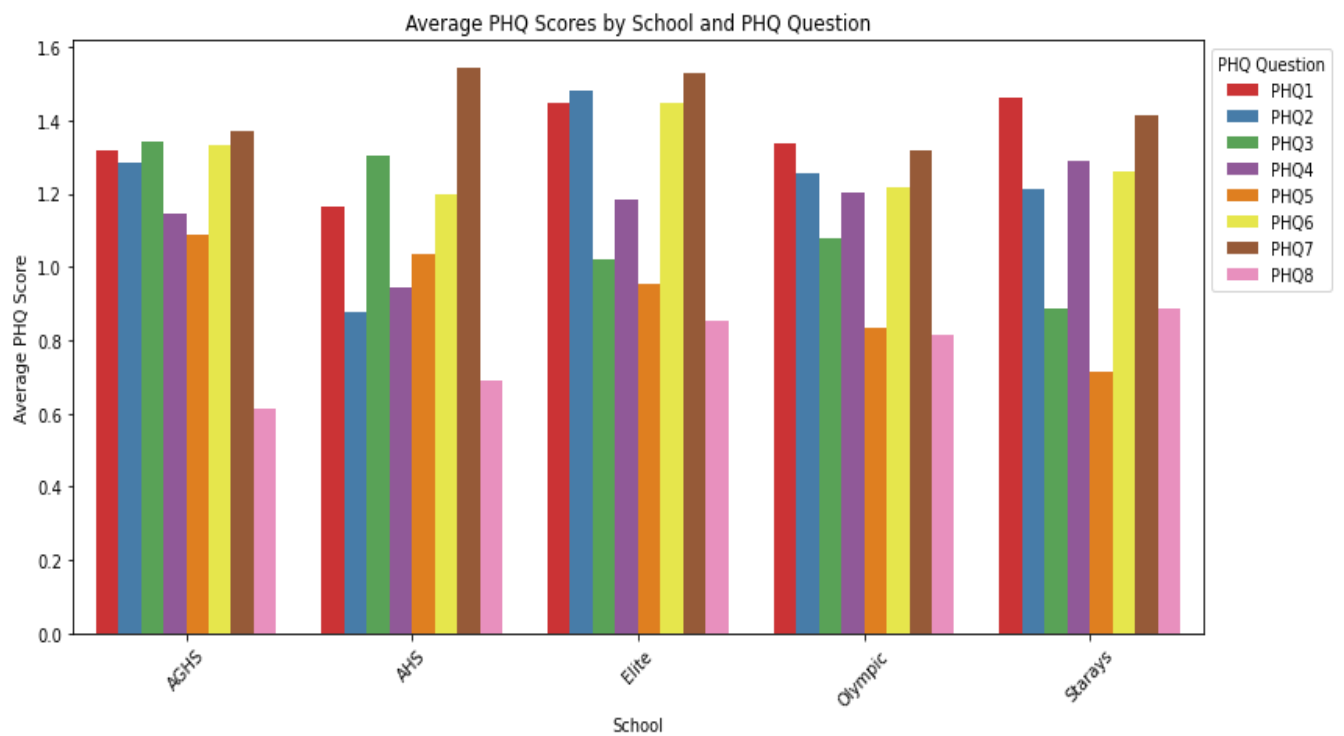
### 3.EDA And Insights

#### a) Correlation



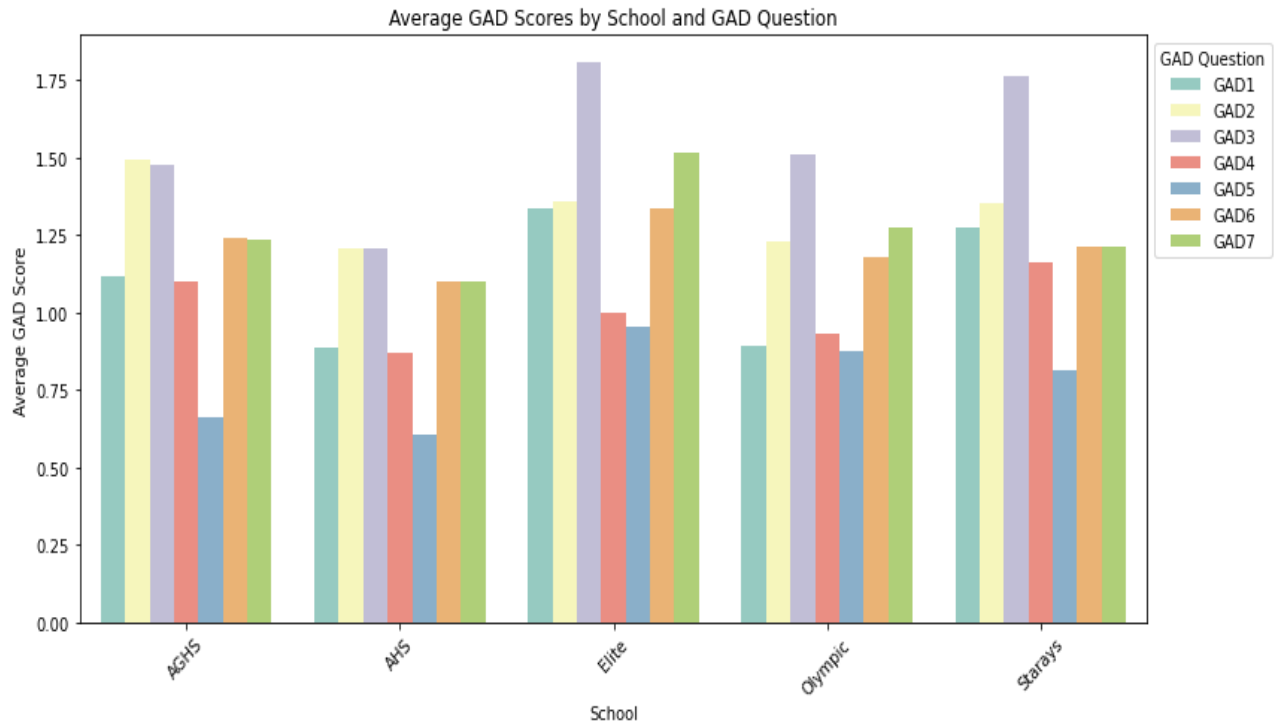
- There is a high correlation between PHQ scores and GAD scores.

#### b) Average PHQ Question score by school



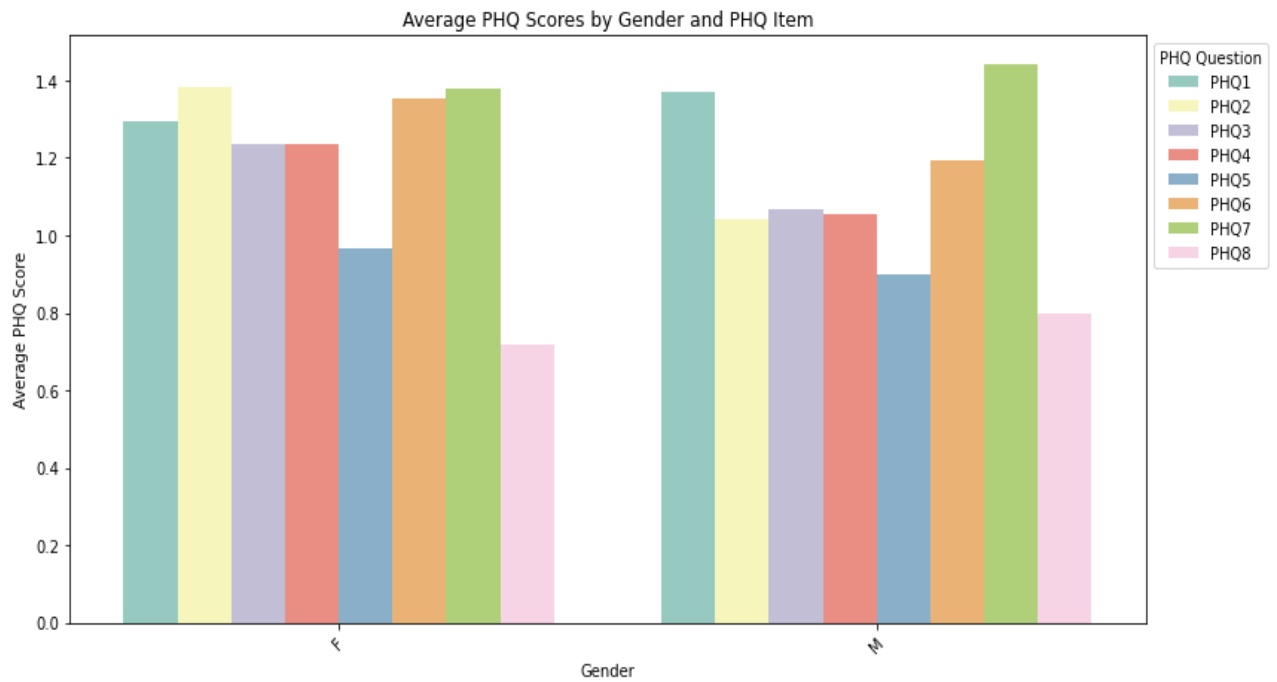
- Averagely, PHQ7 has the highest score among all schools indicating a moderate severe depression rate on the question. AHS has the highest score in PHQ7 indicating a concern
- PHQ1 has a high average score in Elite and staray school compared to other schools.
- PHQ8 is relatively low in all schools

c) *Average GAD Question scores by school*



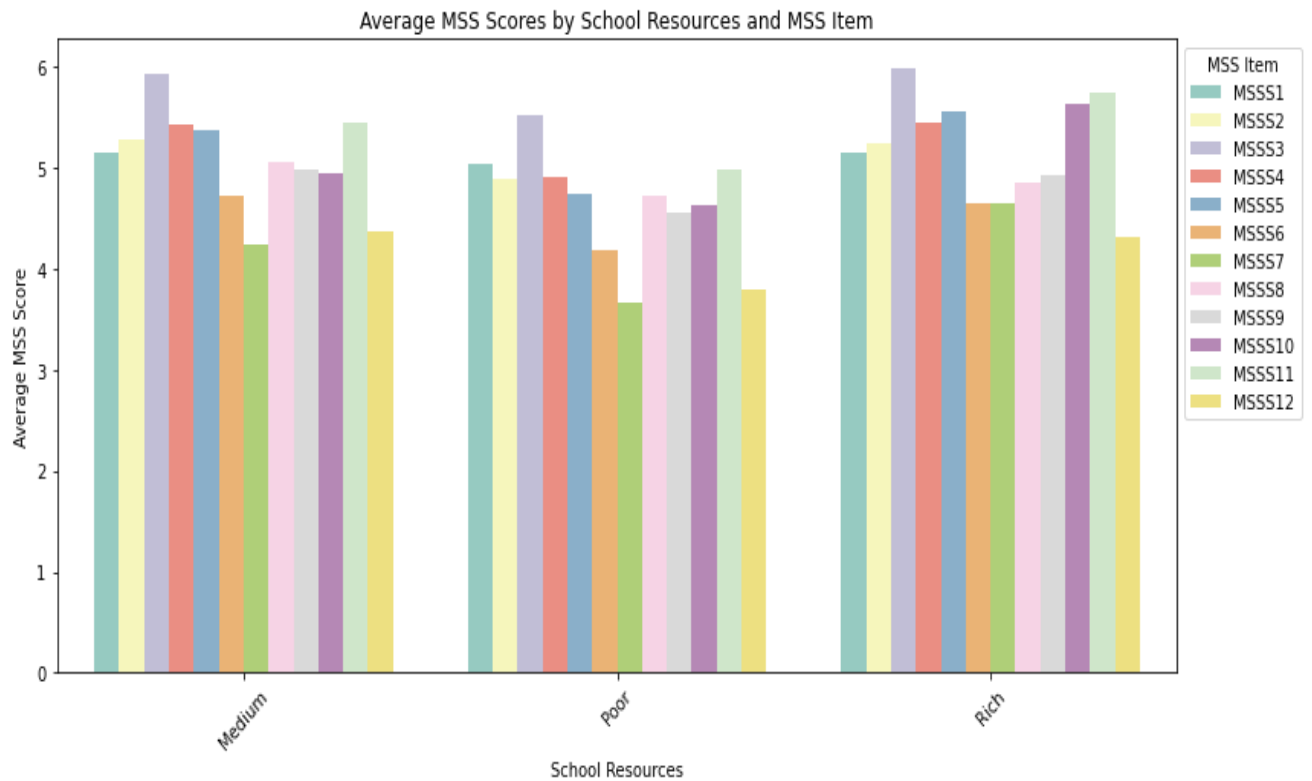
- Averagely, GAD3 has a high score in Elite, Olympic and Starays compared to AGHS and AHS
- GAD2 and GAD3 have an almost similar score in AGHS and AG compared to other schools
- GAD5 is averagely lowest in all schools
- AHS has relatively lower GAD scores compared to other schools

d) *PHQ scores by Gender*



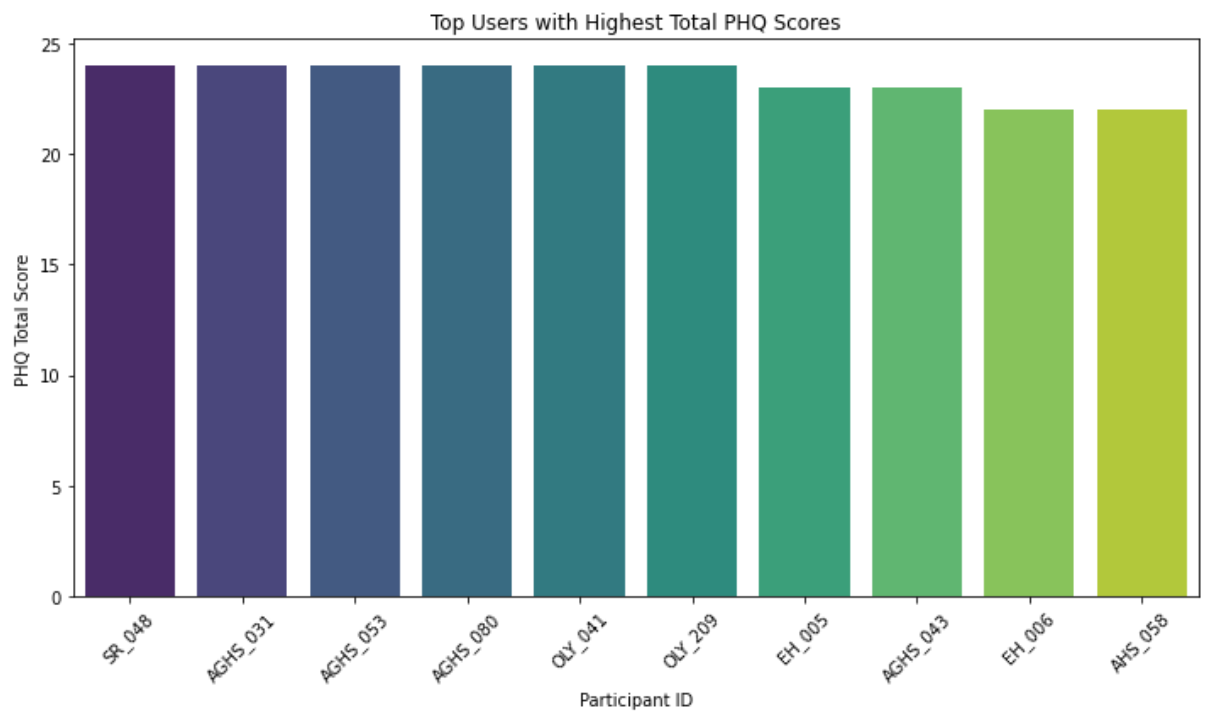
- PHQ2 had the highest score among Female while PHQ7 was the highest among men
- Both genders had a low score on PHQ8

e) *MSS Score by School resources*



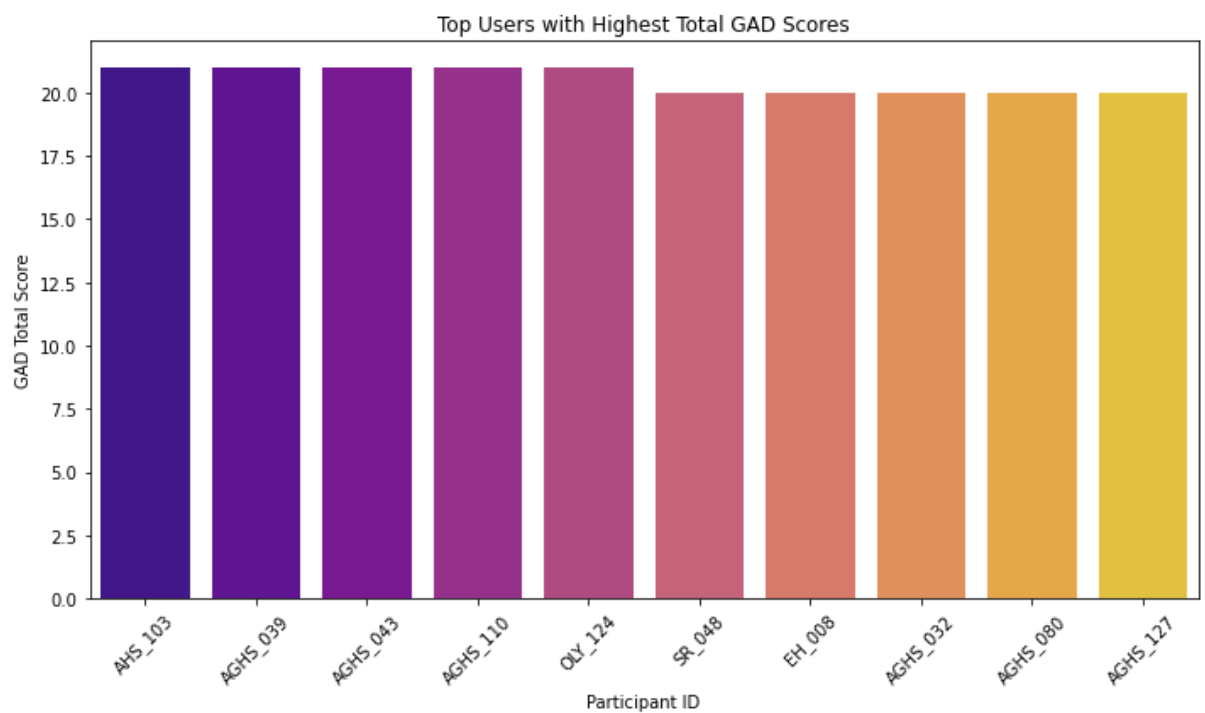
- MSS3 had the highest scores in all three school resources category

*f) Individuals with high Total PHQ scores*



- SR048 student had the highest PHQ total score among all Participants

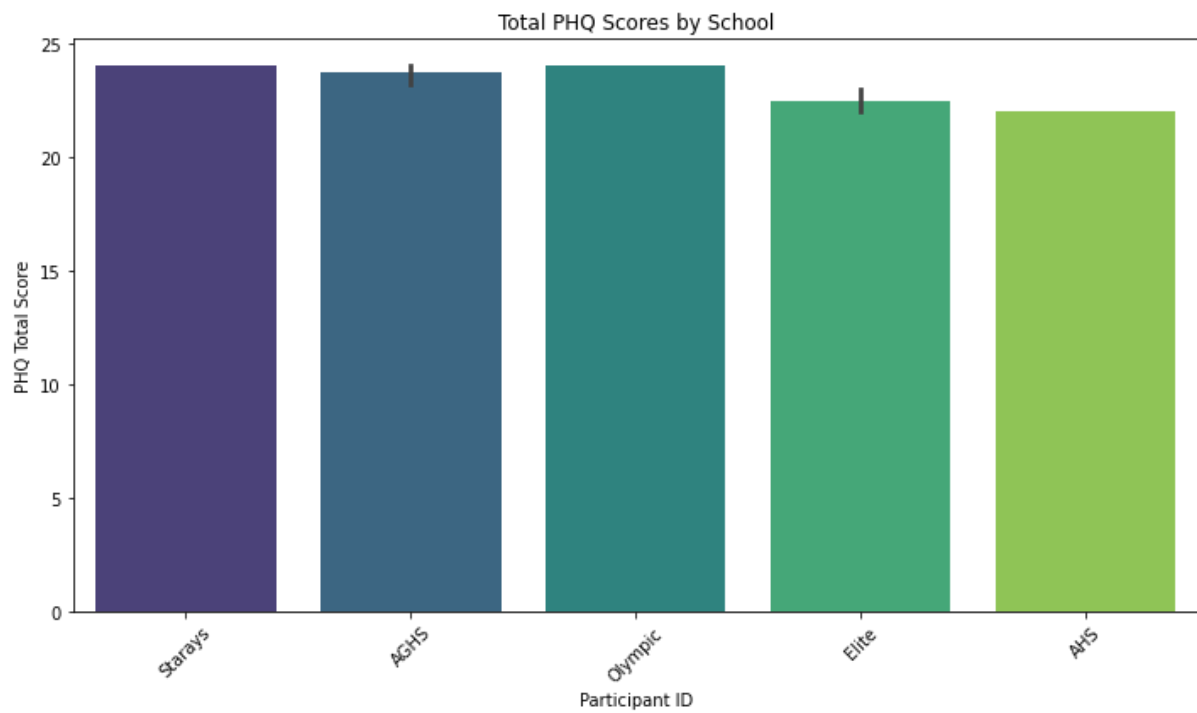
*g) Individuals with High Total GAD scores*



- Participant AHS103 had the highest GAD score among all participants

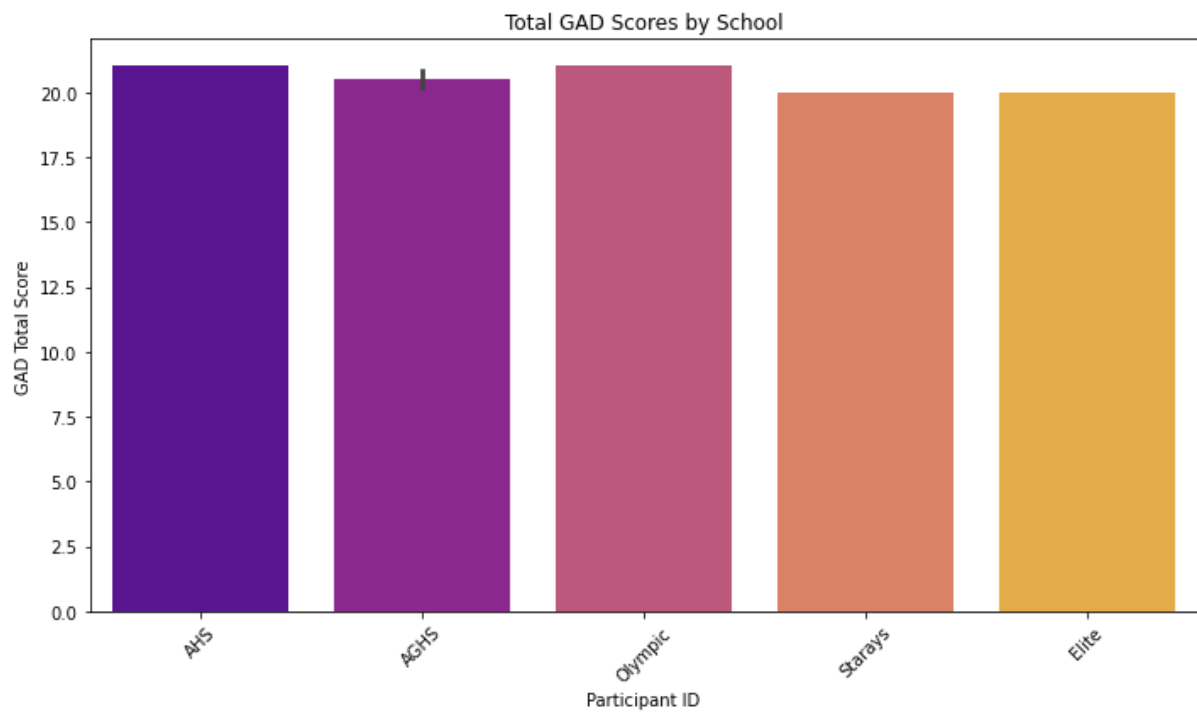


*h) Total PHQ scores by School*



- Starays school had the highest PHQ score among all schools

*i) Total GAD Scores by school*



- AHS school had the highest GAD scores among all schools

#### **4.Conclusion**

- There is correlation between anxiety and depression meaning there is a cause-effect relationship between the two variables
- PHQ7 is very high across all schools and responsible team should focus on addressing the issue raised in PHQ7
- GAD3 is very high across all schools and responsible team should focus on addressing the issue raised in GAD3
- PHQ indicator is fairly similar across gender but male seem to have a higher output per question
- PHQ2 is extremely high in Elite school compared to other schools thus needing attention.
- PHQ2 average score is higher in Female than in male
- Individual SR048, AGHS031 and AGHS035 are the top three individuals with the highest PHQ scores indicating a high depression index
- Individual AHS103, AGHS039 and AGHS043 have the top most GAD scores indicating a high anxiety index
- Starayas school students had the highest total score in PHQ measure score
- AHS school students had the highest GAD measure scores