In [15]:
```
import numpy as np
from datascience import *
import math as m

# These lines do some fancy plotting magic.
import matplotlib
%matplotlib inline
import matplotlib.pyplot as plt
plt.style.use('fivethirtyeight')
import warnings
warnings.simplefilter('ignore', FutureWarning)


import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
import itertools

from ipywidgets import interact, interactive, fixed, interact_manual
import ipywidgets as widgets
```

In [9]:
```
#students=Table.read_table("enhanced_student_habits_performance_dataset.csv")
students = pd.read_csv("enhanced_student_habits_performance_dataset.csv")
students
```

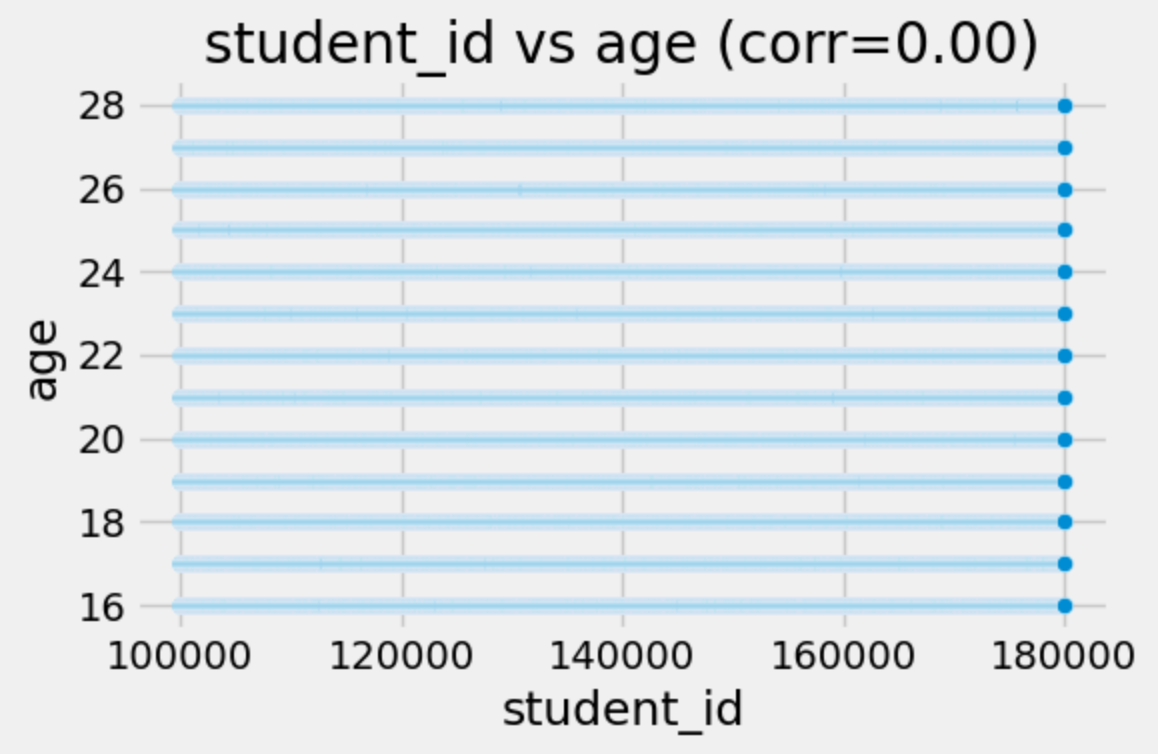
Out[9]:

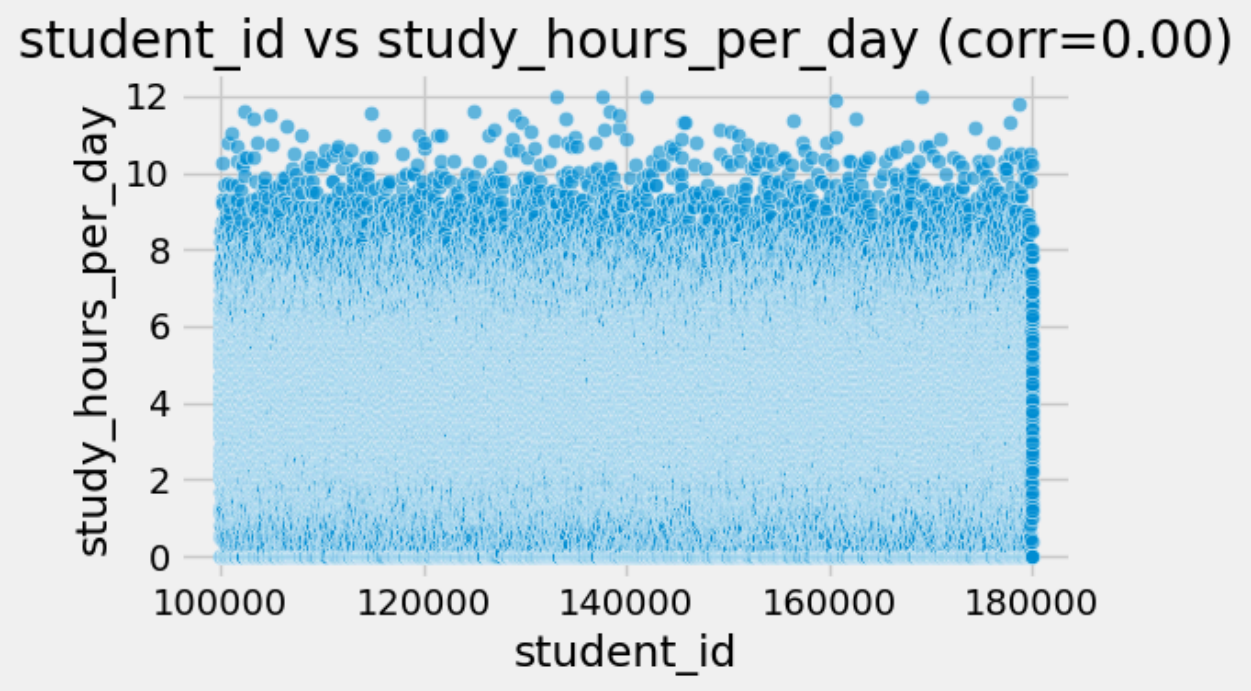
	student_id	age	gender	major	study_hours_per_day	social_media_
0	100000	26	Male	Computer Science	7.645367	
1	100001	28	Male	Arts	5.700000	
2	100002	17	Male	Arts	2.400000	
3	100003	27	Other	Psychology	3.400000	
4	100004	25	Female	Business	4.700000	
...	...	...	...	...	...	
79995	179995	16	Male	Engineering	3.700000	
79996	179996	16	Female	Business	1.200000	
79997	179997	26	Female	Arts	4.100000	
79998	179998	23	Other	Biology	3.800000	
79999	179999	25	Other	Engineering	3.000000	

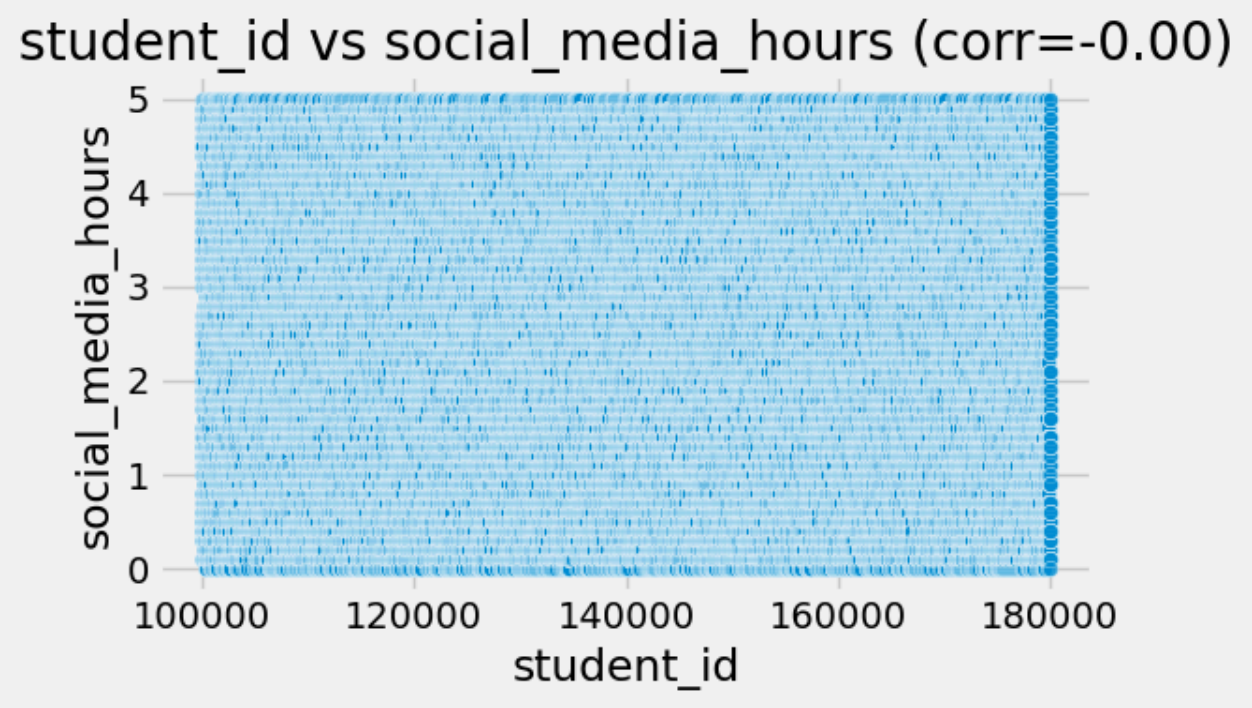
80000 rows × 31 columns

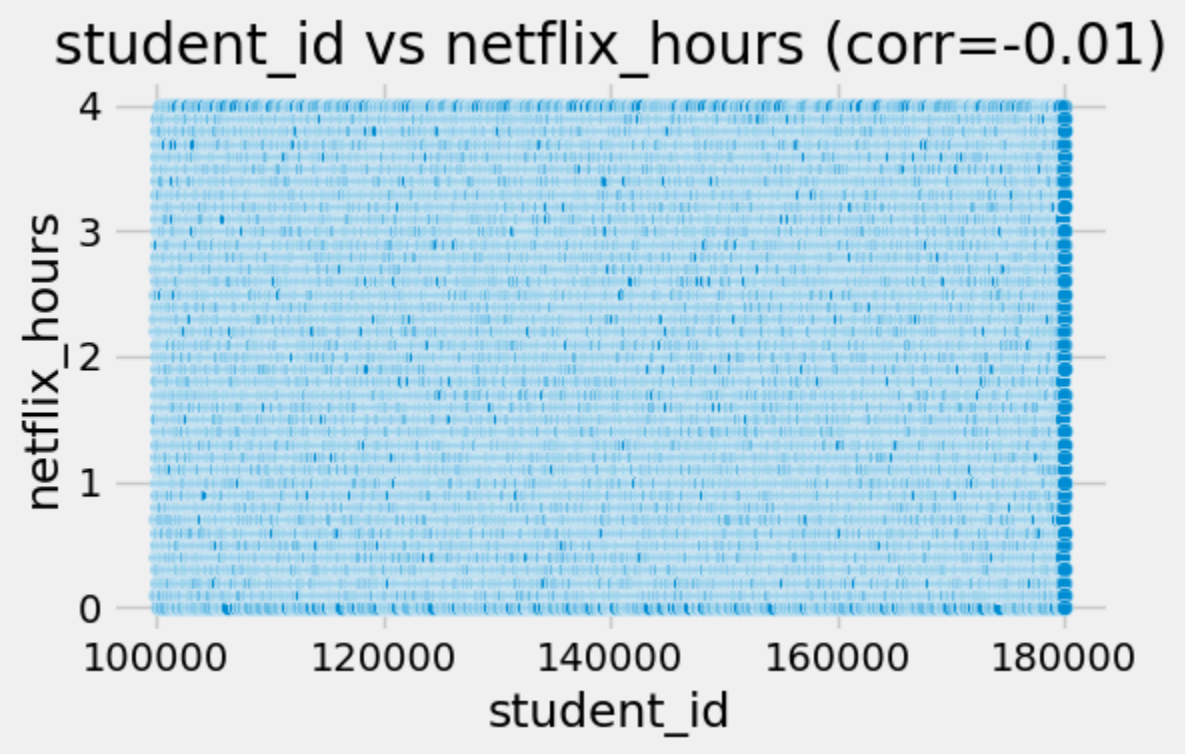
In [12]:
```
def plot_variable_associations(df, max_plots=3000):
    """
    Iterates through pairs of variables in df and plots them based on type.
    Limits number of plots with max_plots for readability.
```

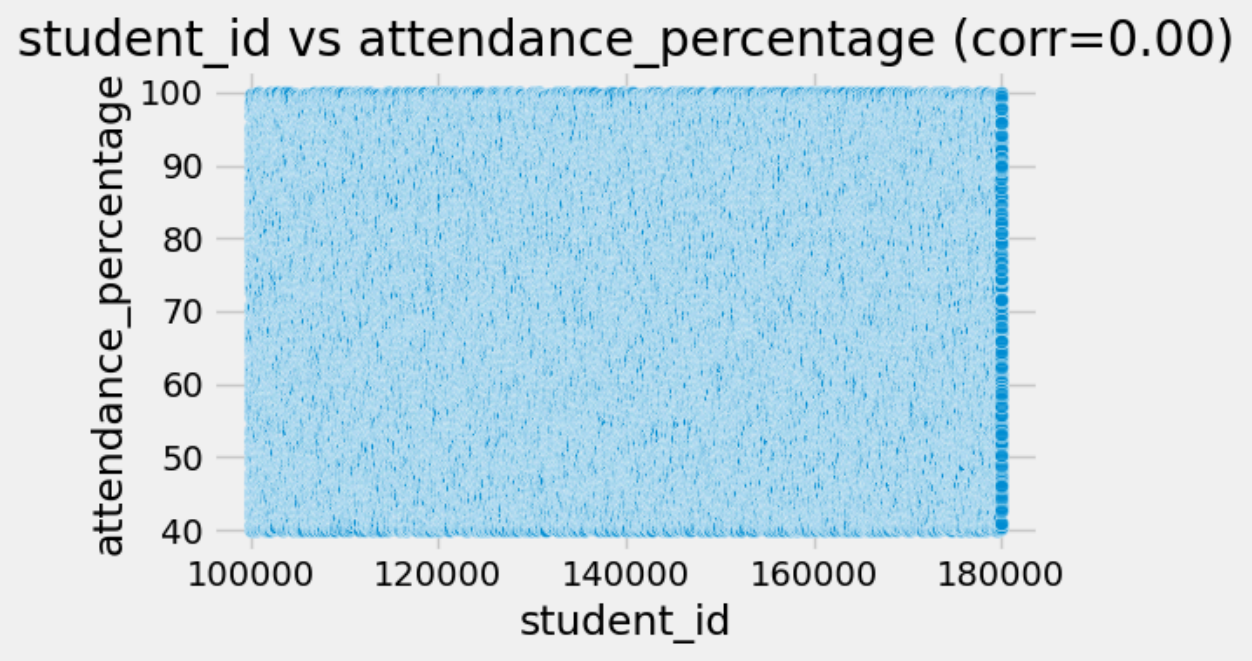
```
    """
    num_cols = df.select_dtypes(include=['int64', 'float64']).columns
    cat_cols = df.select_dtypes(include=['object', 'category', 'bool']).columr

    all_vars = list(num_cols) + list(cat_cols)
    combos = list(itertools.combinations(all_vars, 2))

    for i, (var1, var2) in enumerate(combos):
        if i >= max_plots:
            print(f"Stopped after {max_plots} plots for readability.")
            break

        plt.figure(figsize=(6,4))

        # Numerical vs Numerical
        if var1 in num_cols and var2 in num_cols:
            sns.scatterplot(data=df, x=var1, y=var2, alpha=0.6)
            corr = df[[var1, var2]].corr().iloc[0,1]
            plt.title(f"{var1} vs {var2} (corr={corr:.2f})")

        # Numerical vs Categorical
        elif var1 in cat_cols and var2 in num_cols:
            sns.boxplot(data=df, x=var1, y=var2)
            plt.title(f"{var2} by {var1}")
        elif var2 in cat_cols and var1 in num_cols:
            sns.boxplot(data=df, x=var2, y=var1)
            plt.title(f"{var1} by {var2}")

        # Categorical vs Categorical
        else:
            ctab = pd.crosstab(df[var1], df[var2])
            sns.heatmap(ctab, annot=True, fmt="d", cmap="Blues")
            plt.title(f"{var1} vs {var2} (counts)")

        plt.tight_layout()
        plt.show()



plot_variable_associations(students)
```

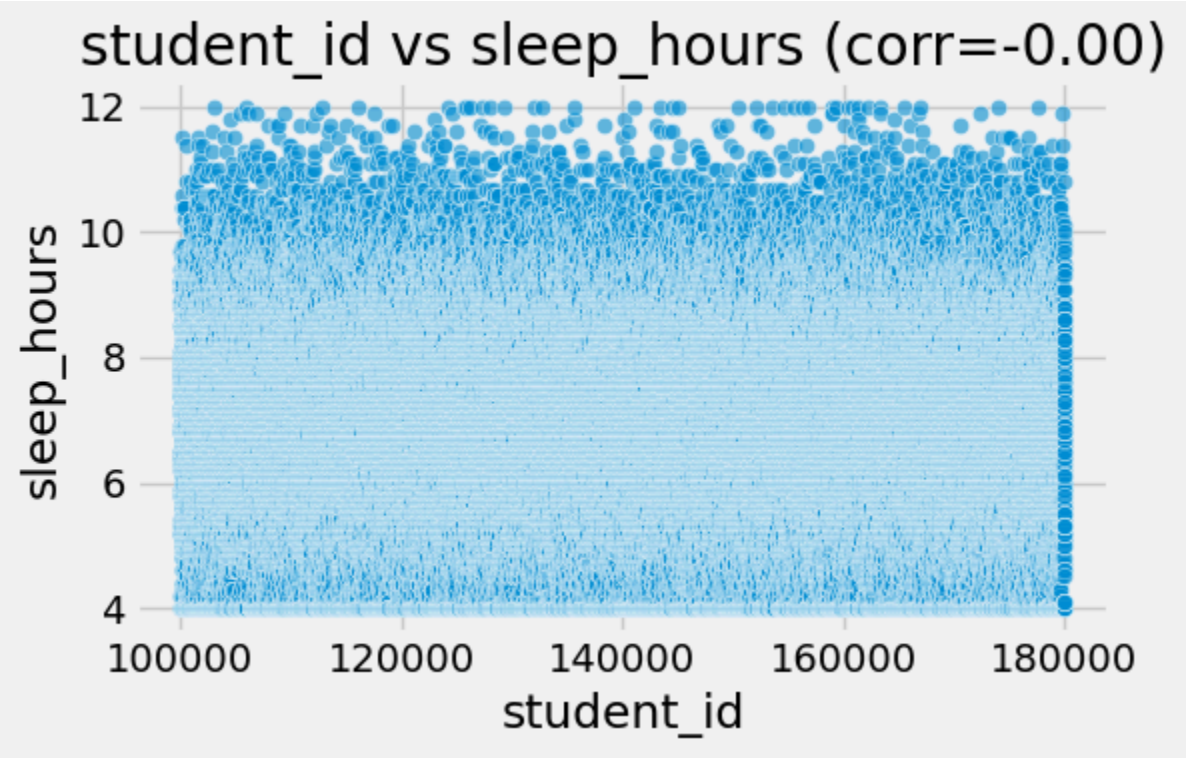

student_id vs age (corr=0.00)
age
28
26
24
22
20
18
16
100000
120000
140000
160000
180000
student_id

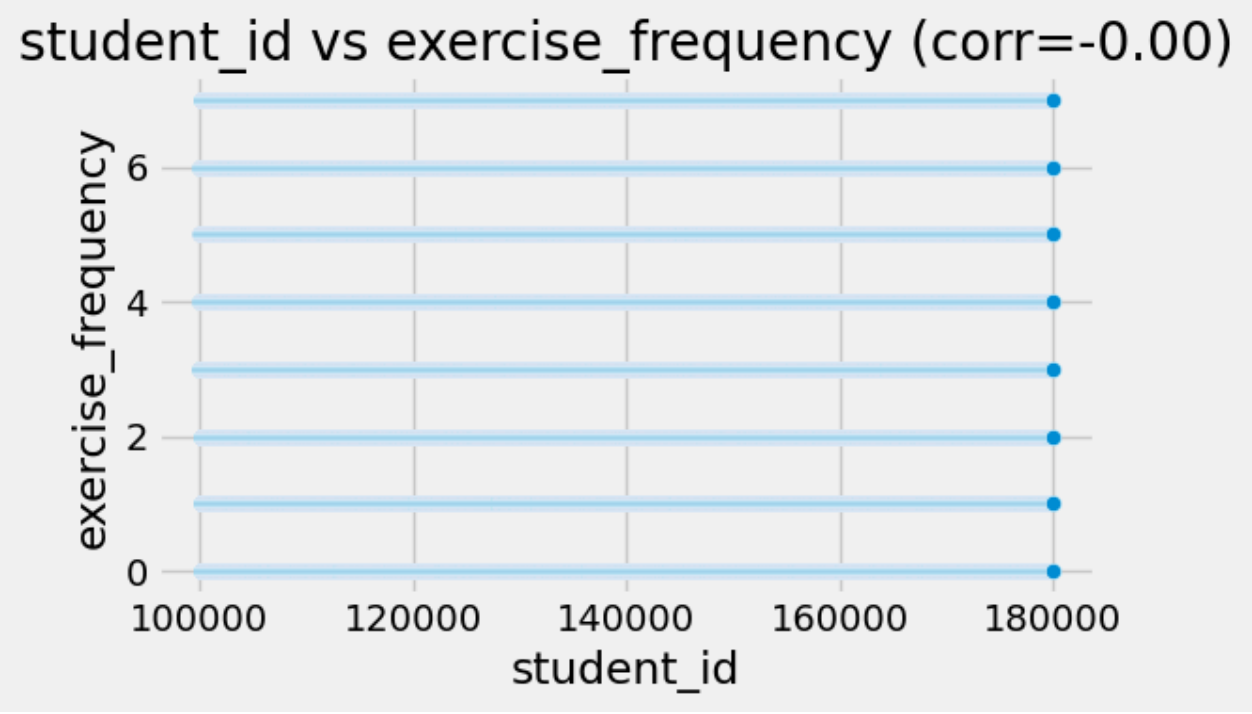

student_id vs study_hours_per_day (corr=0.00)
study_hours_per_day
12
10
8
6
4
2
0
100000
120000
140000
160000
180000
student_id

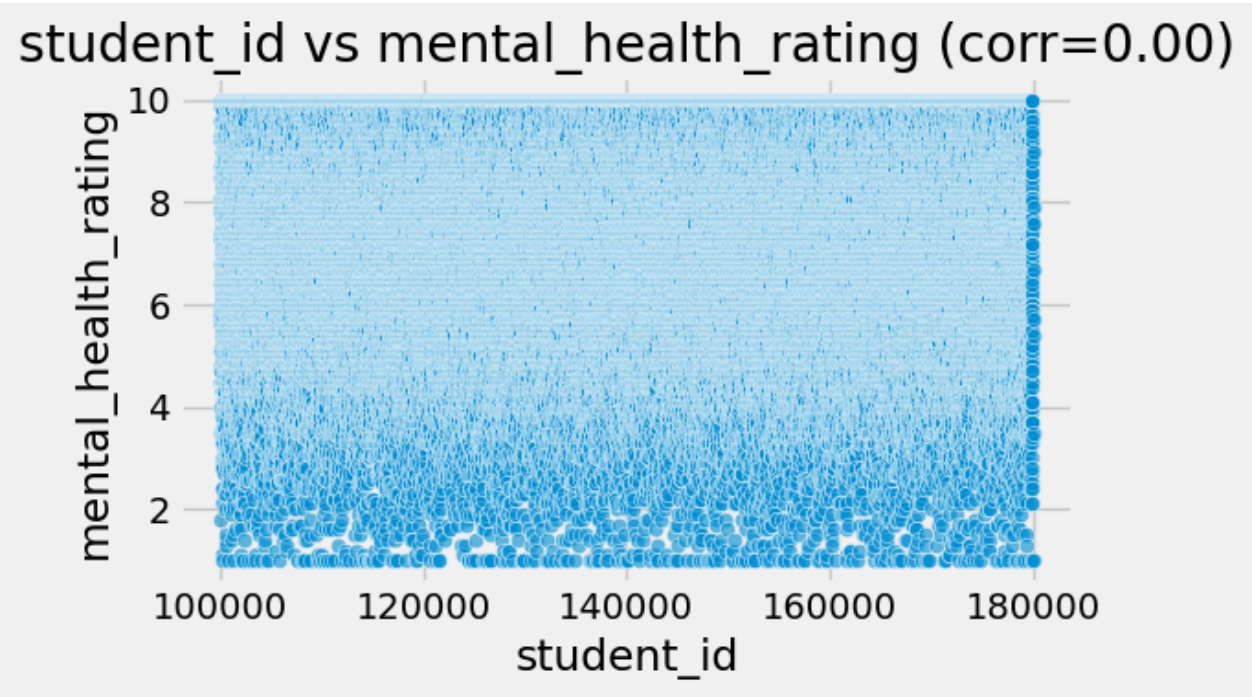

student_id vs social_media_hours (corr=-0.00)
social_media_hours
0
1
2
3
4
5
100000
120000
140000
160000
180000
student_id

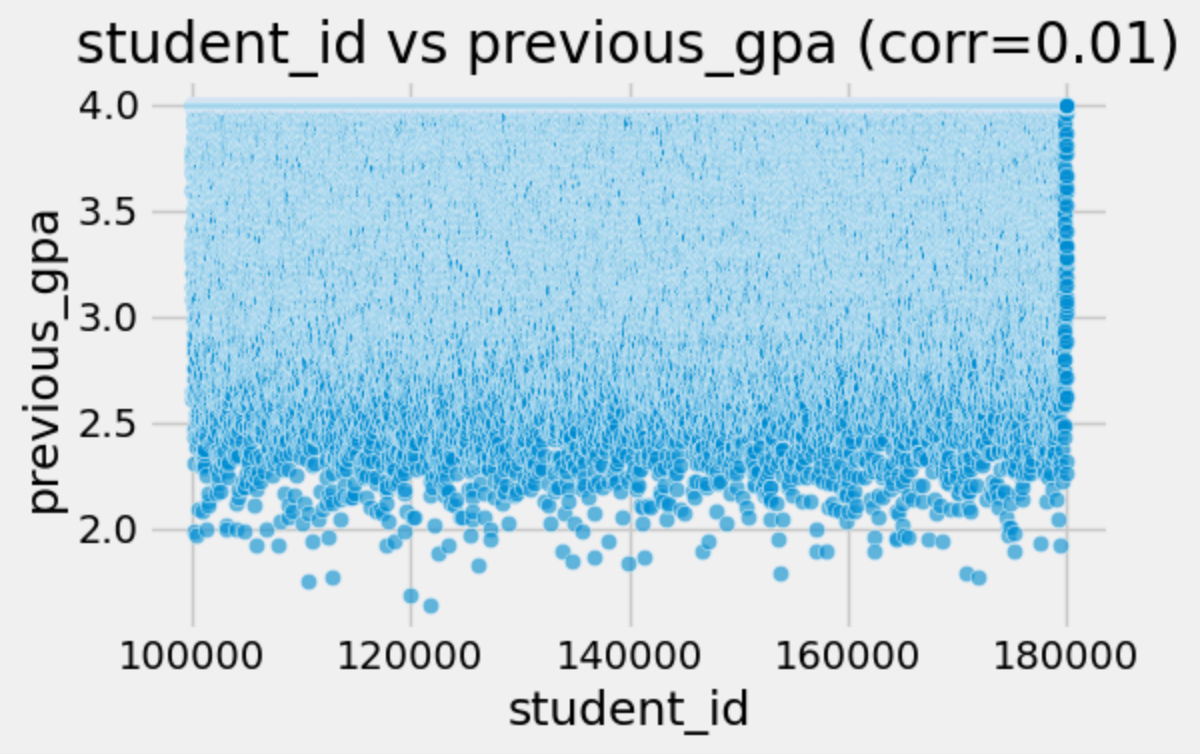

student_id vs netflix_hours (corr=-0.01)
netflix_hours
0
1
2
3
4
100000
120000
140000
160000
180000
student_id

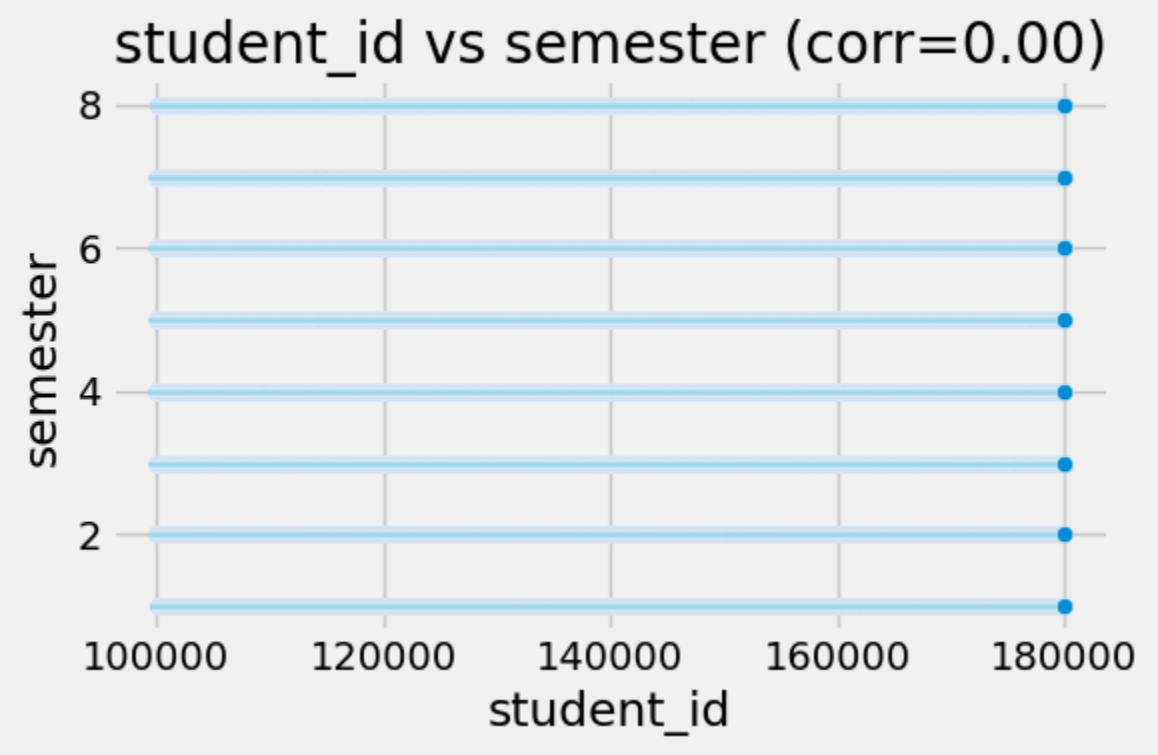

student_id vs attendance_percentage (corr=0.00)
attendance_percentage
100
90
80
70
60
50
40
100000
120000
140000
160000
180000
student_id

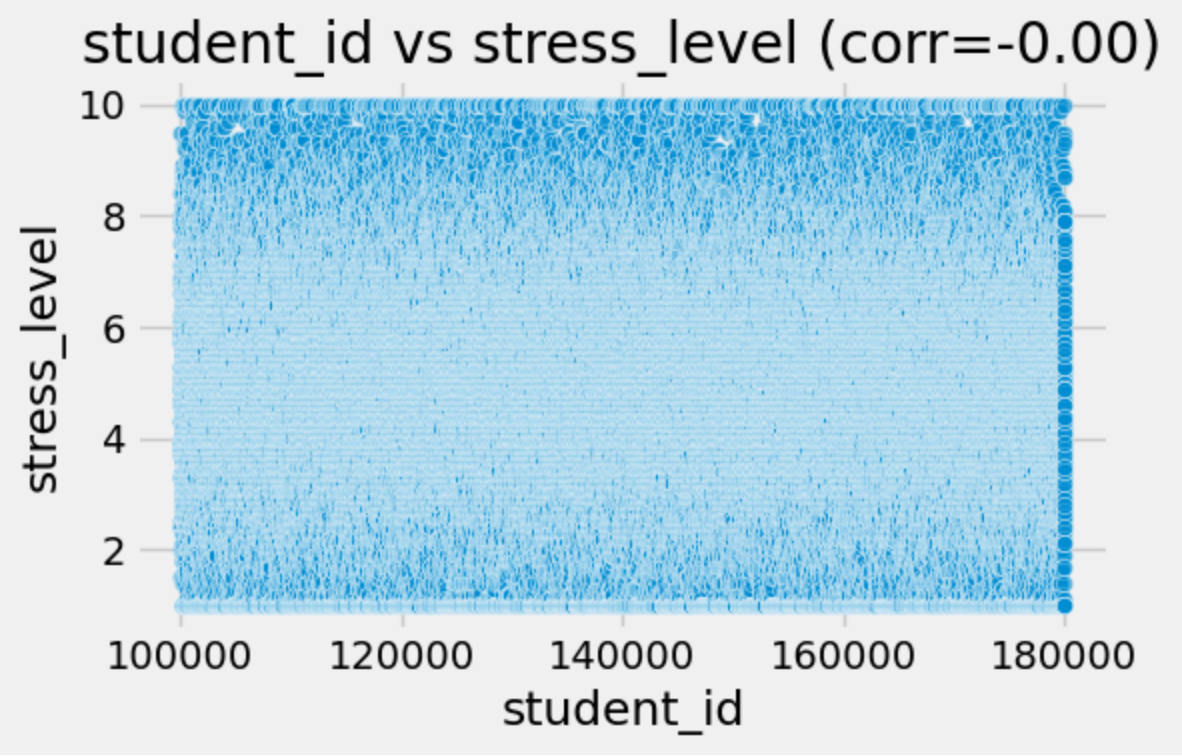

student_id vs sleep_hours (corr=-0.00)
sleep_hours
12
10
8
6
4
100000
120000
140000
160000
180000
student_id

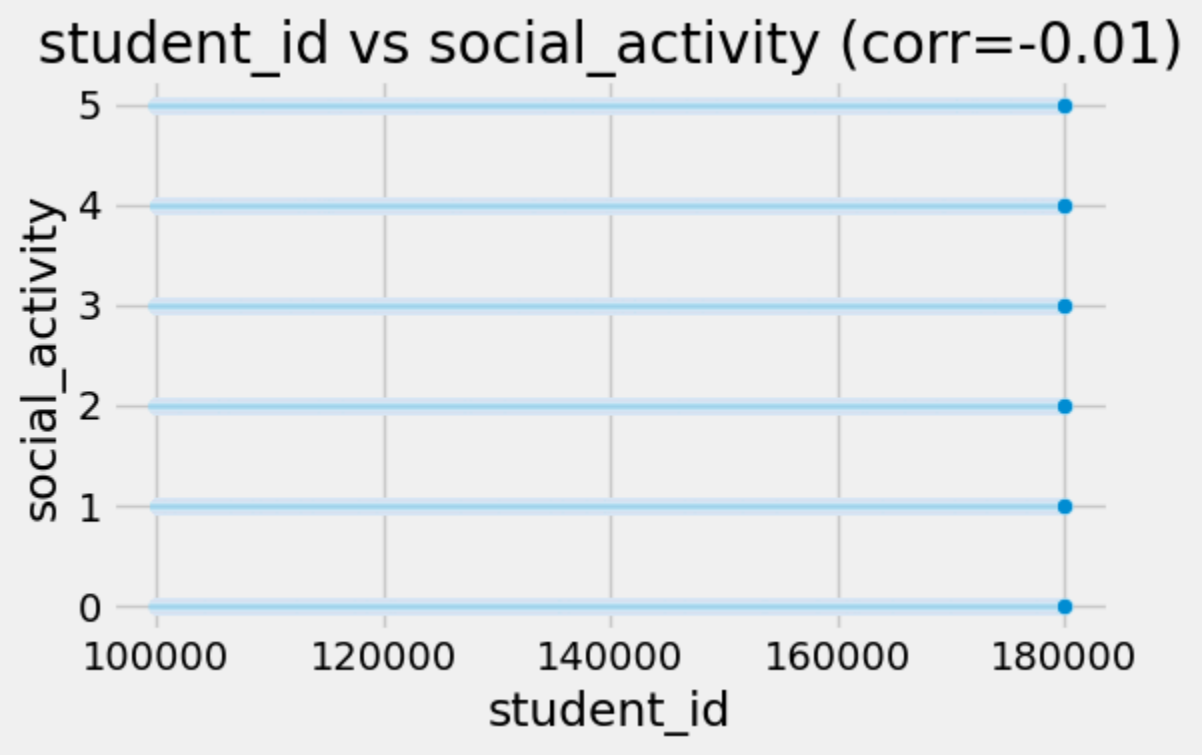

student_id vs exercise_frequency (corr=-0.00)
exercise_frequency
0
2
4
6
100000
120000
140000
160000
180000
student_id

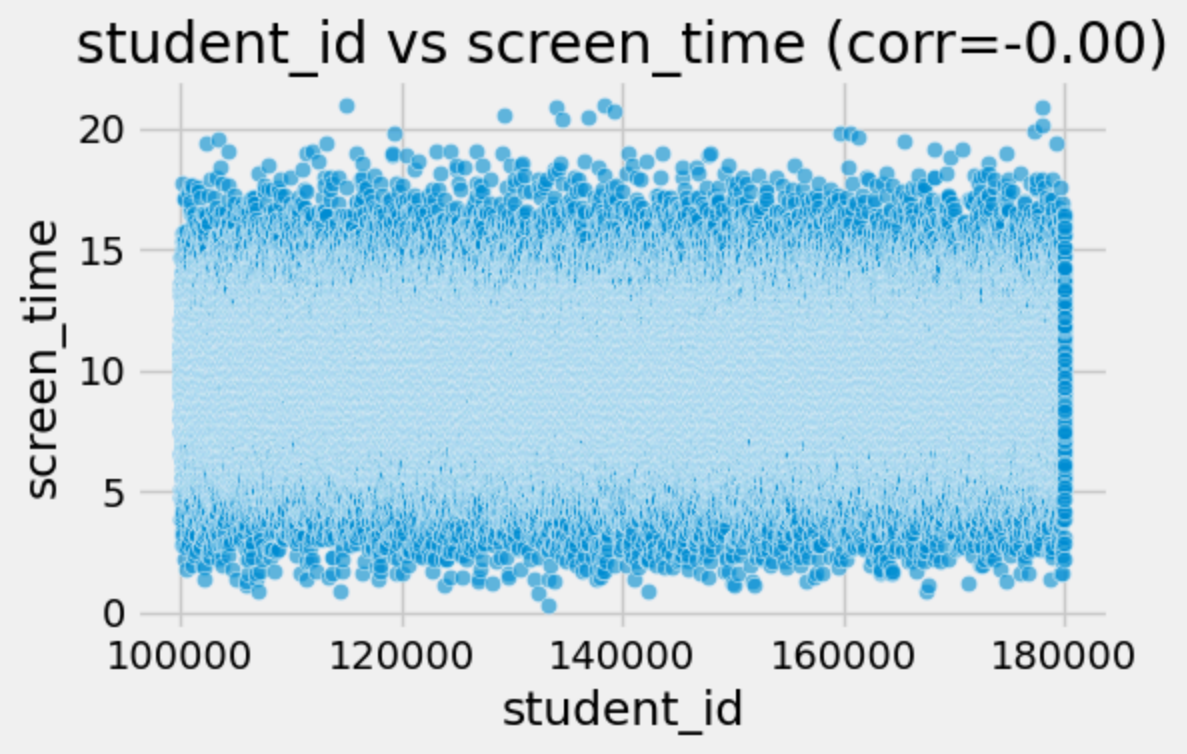

student_id vs mental_health_rating (corr=0.00)
mental_health_rating
2
4
6
8
10
100000
120000
140000
160000
180000
student_id

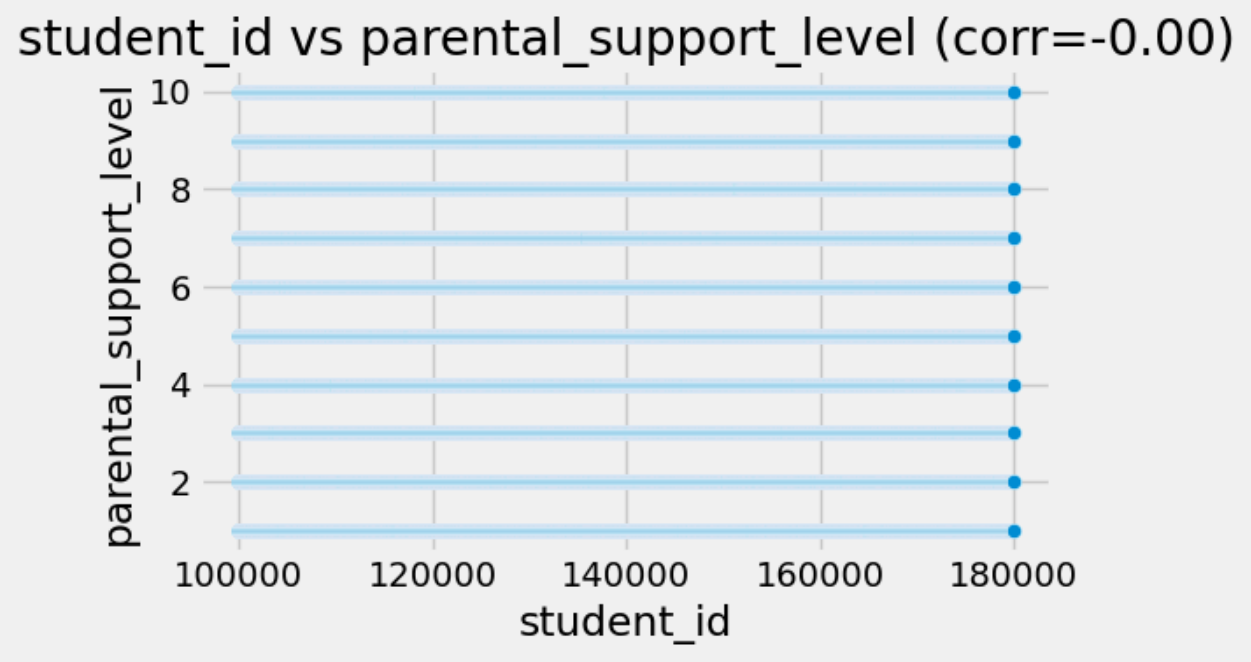

student_id vs previous_gpa (corr=0.01)
previous_gpa
4.0
3.5
3.0
2.5
2.0
100000
120000
140000
160000
180000
student_id

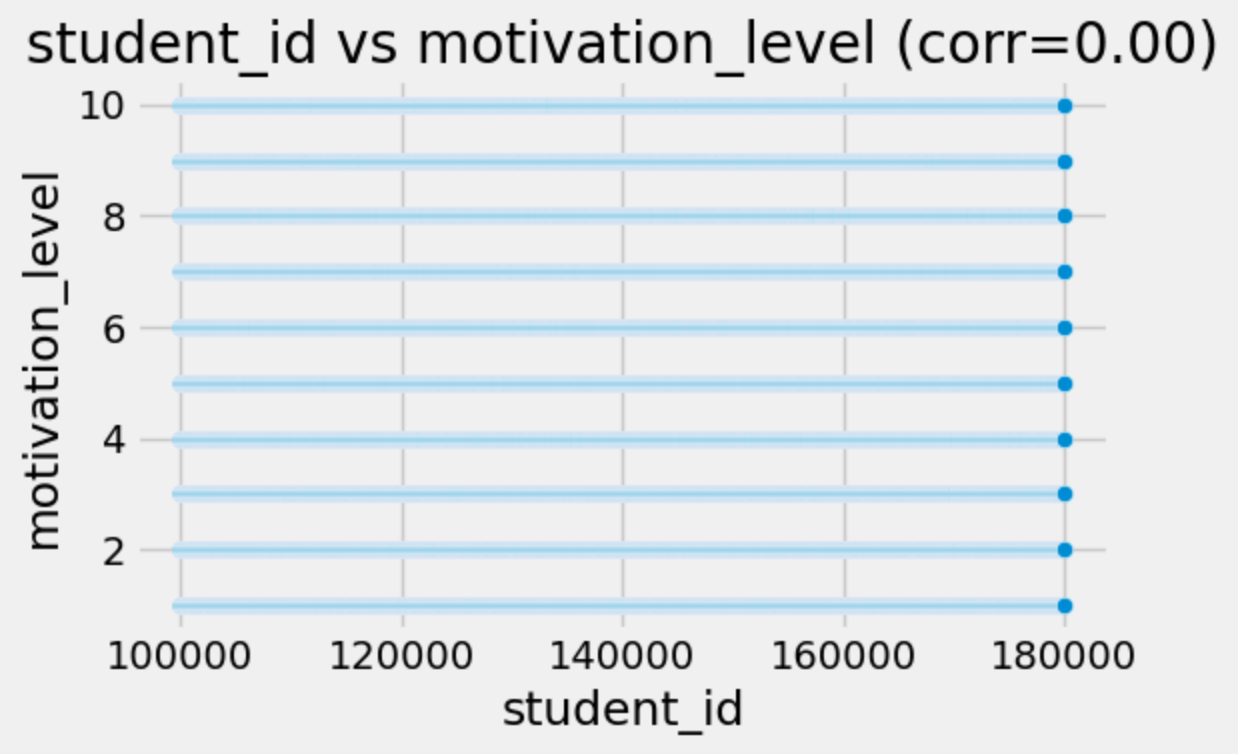

student_id vs semester (corr=0.00)
semester
8
6
4
2
100000
120000
140000
160000
180000
student_id

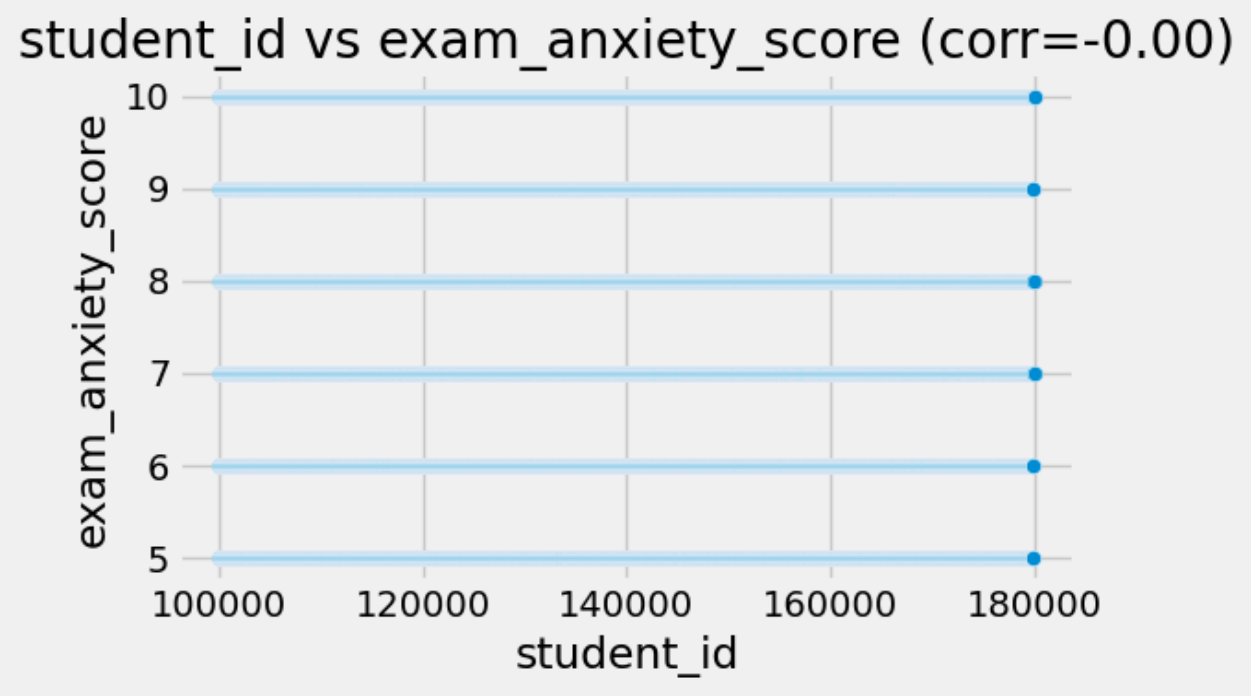

student_id vs stress_level (corr=-0.00)
stress_level
10
8
6
4
2
100000
120000
140000
160000
180000
student_id

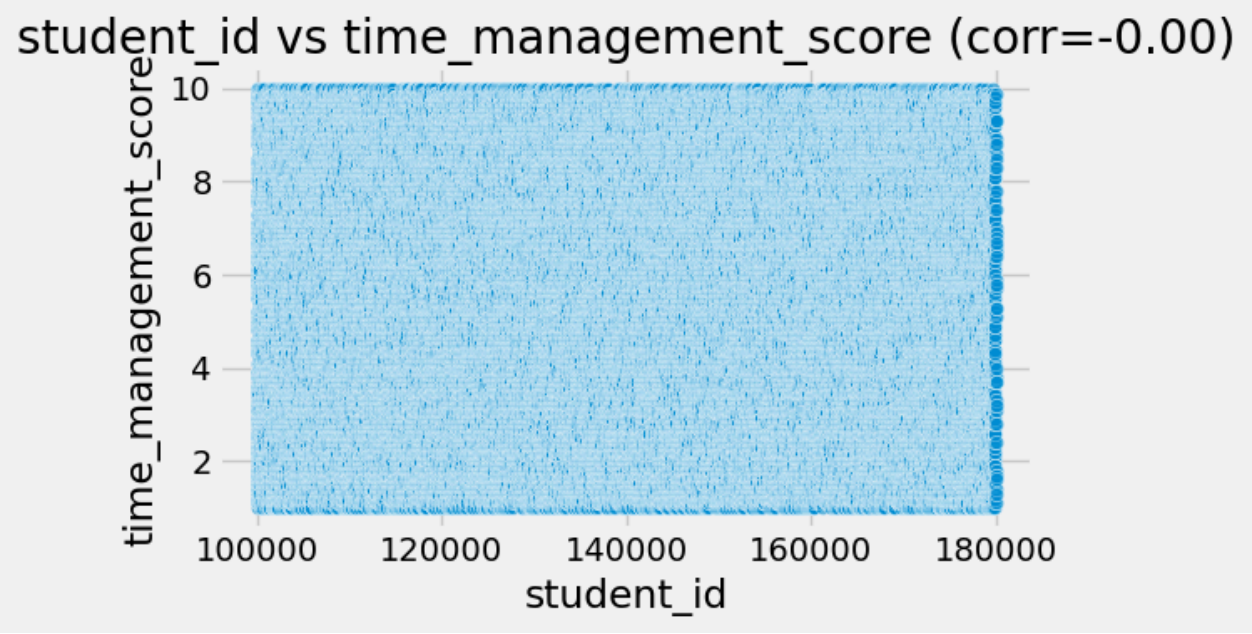

student_id vs social_activity (corr=-0.01)
social_activity
5
4
3
2
1
0
100000
120000
140000
160000
180000
student_id

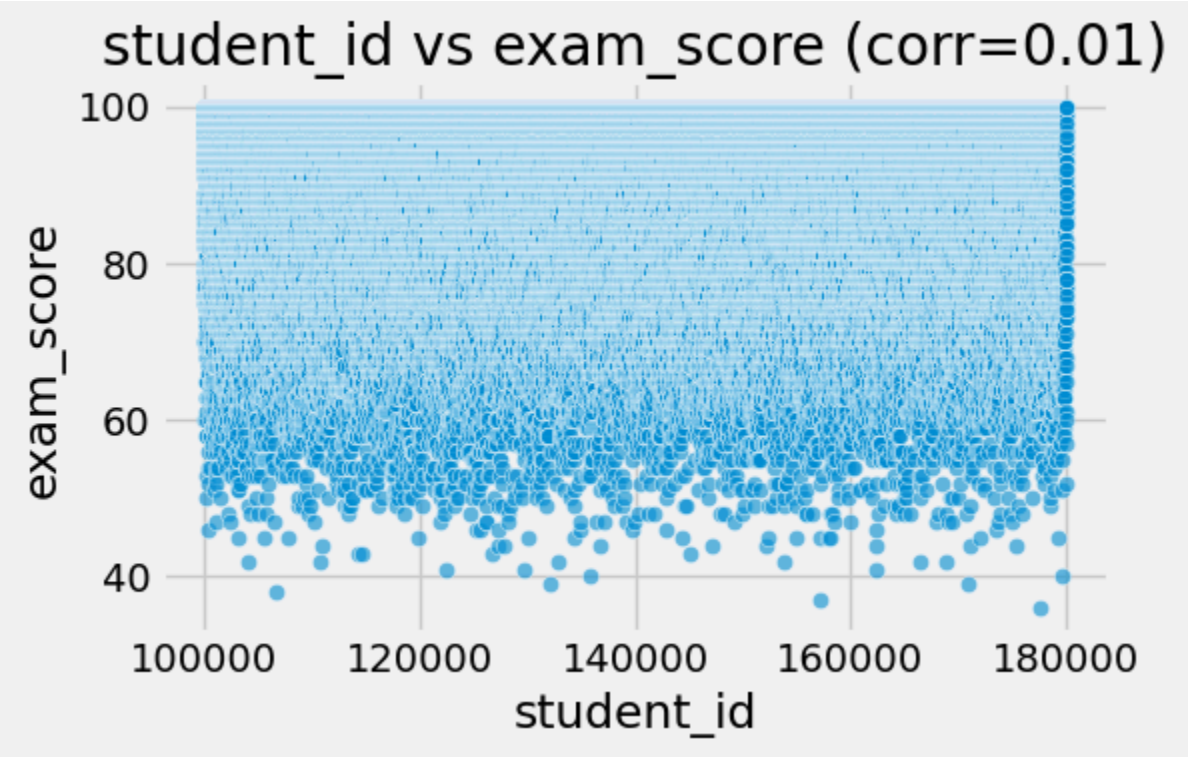

student_id vs screen_time (corr=-0.00)
screen_time
20
15
10
5
0
100000
120000
140000
160000
180000
student_id

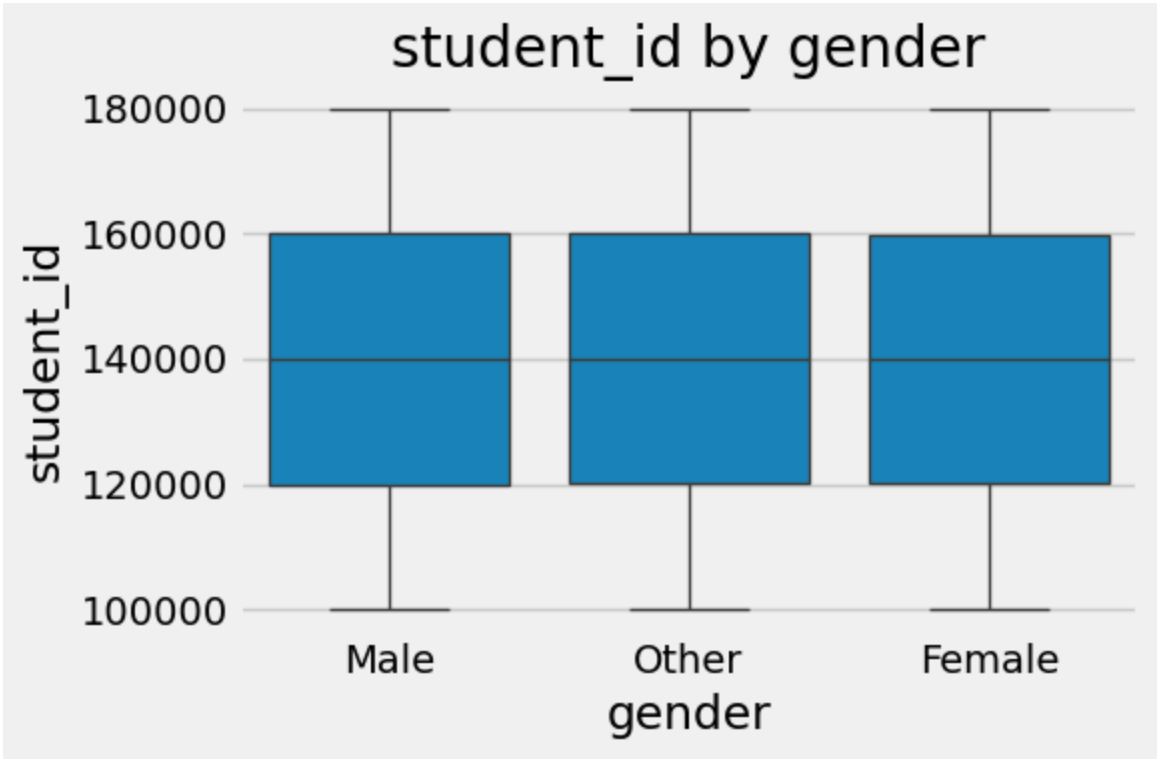

student_id vs parental_support_level (corr=-0.00)
parental_support_level
10
8
6
4
2
100000
120000
140000
160000
180000
student_id

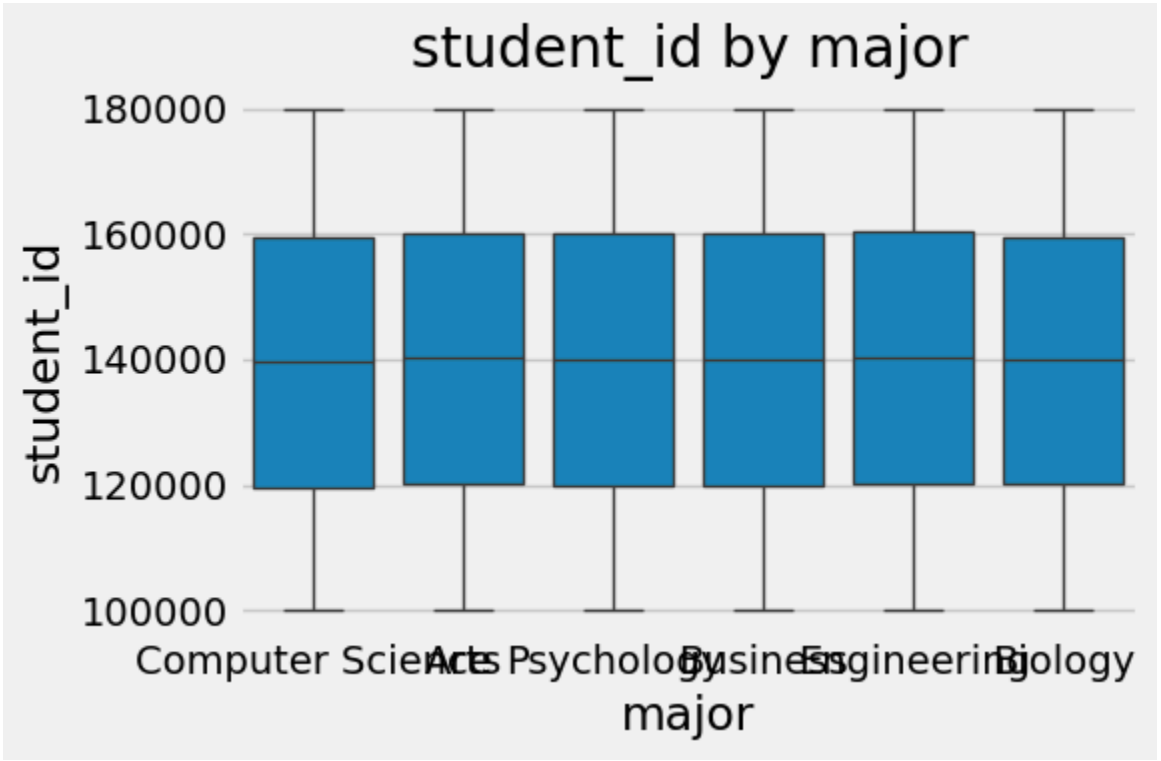

student_id vs motivation_level (corr=0.00)
motivation_level
10
8
6
4
2
100000
120000
140000
160000
180000
student_id

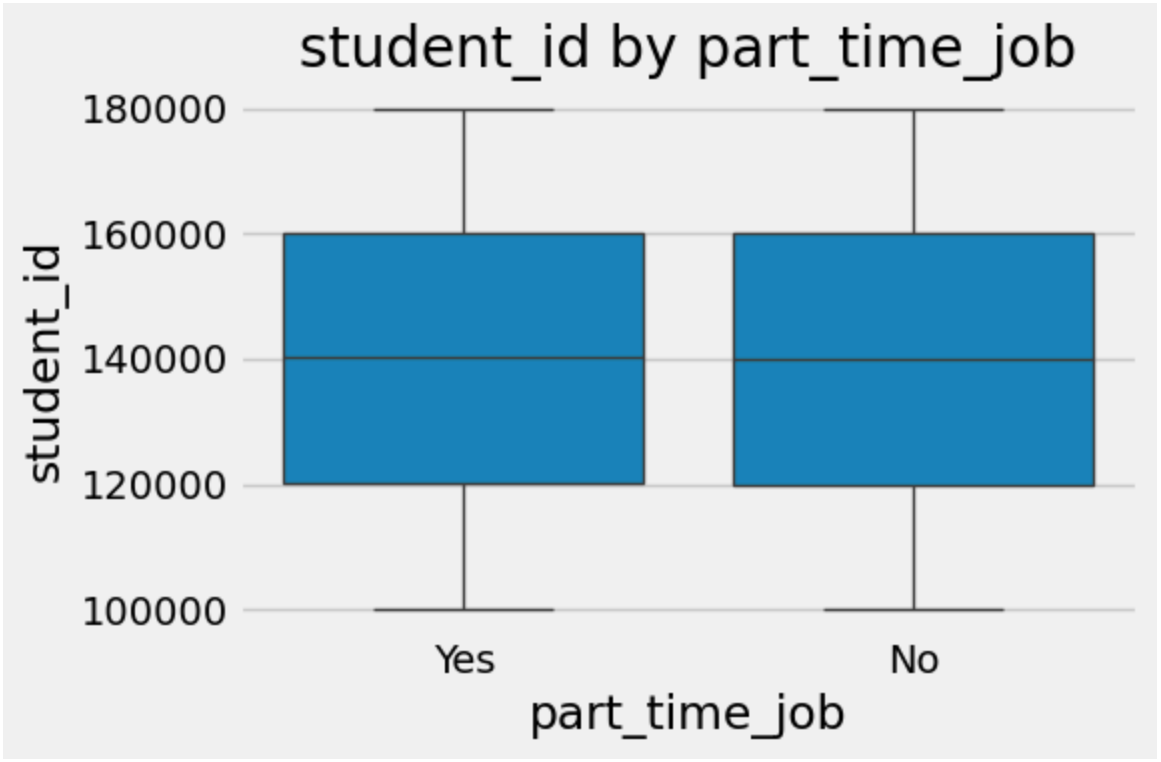

student_id vs exam_anxiety_score (corr=-0.00)
exam_anxiety_score
10
9
8
7
6
5
100000
120000
140000
160000
180000
student_id

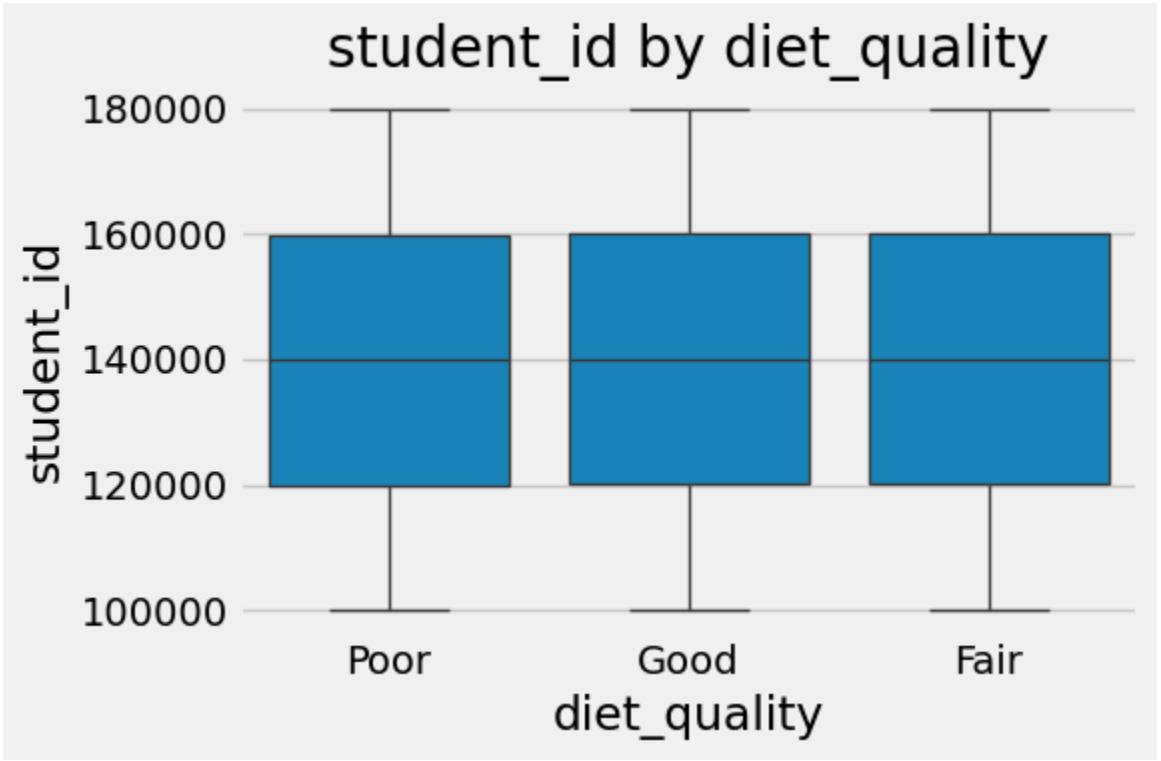

student_id vs time_management_score (corr=-0.00)
time_management_score
10
8
6
4
2
100000
120000
140000
160000
180000
student_id

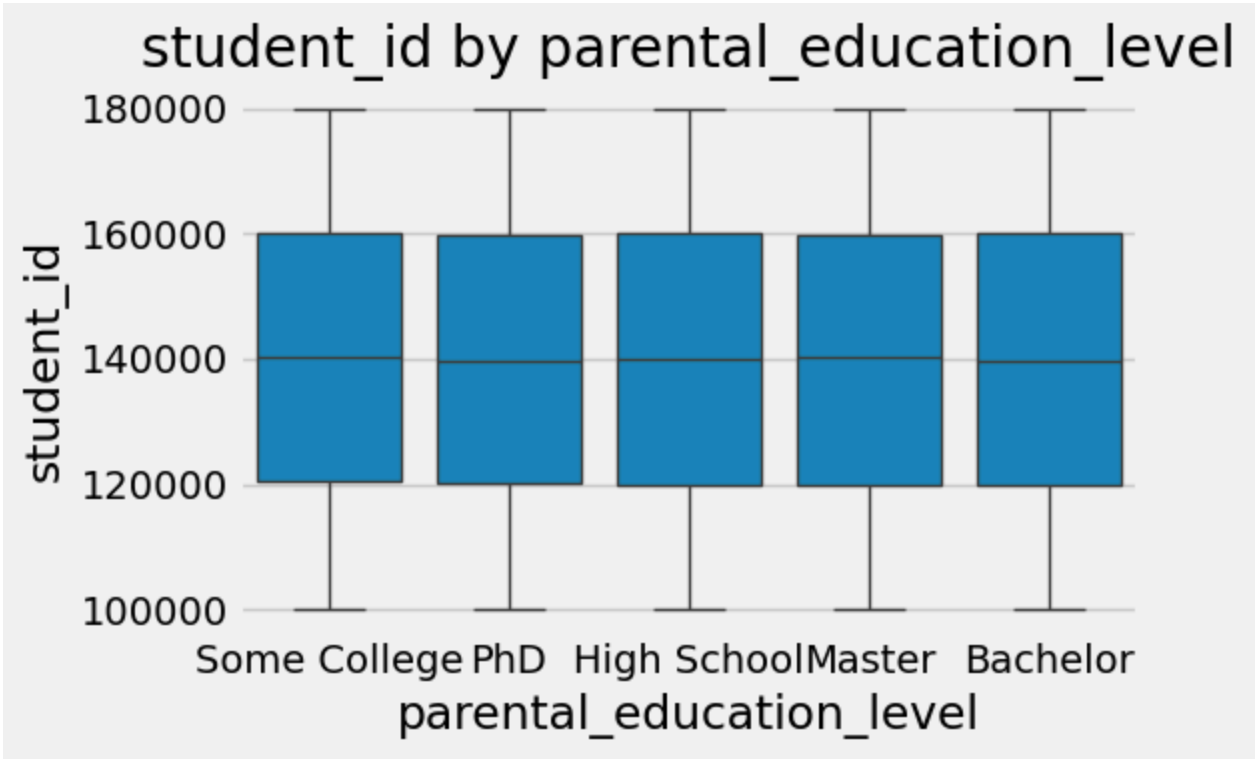

student_id vs exam_score (corr=0.01)
exam_score
100
80
60
40
100000
120000
140000
160000
180000
student_id

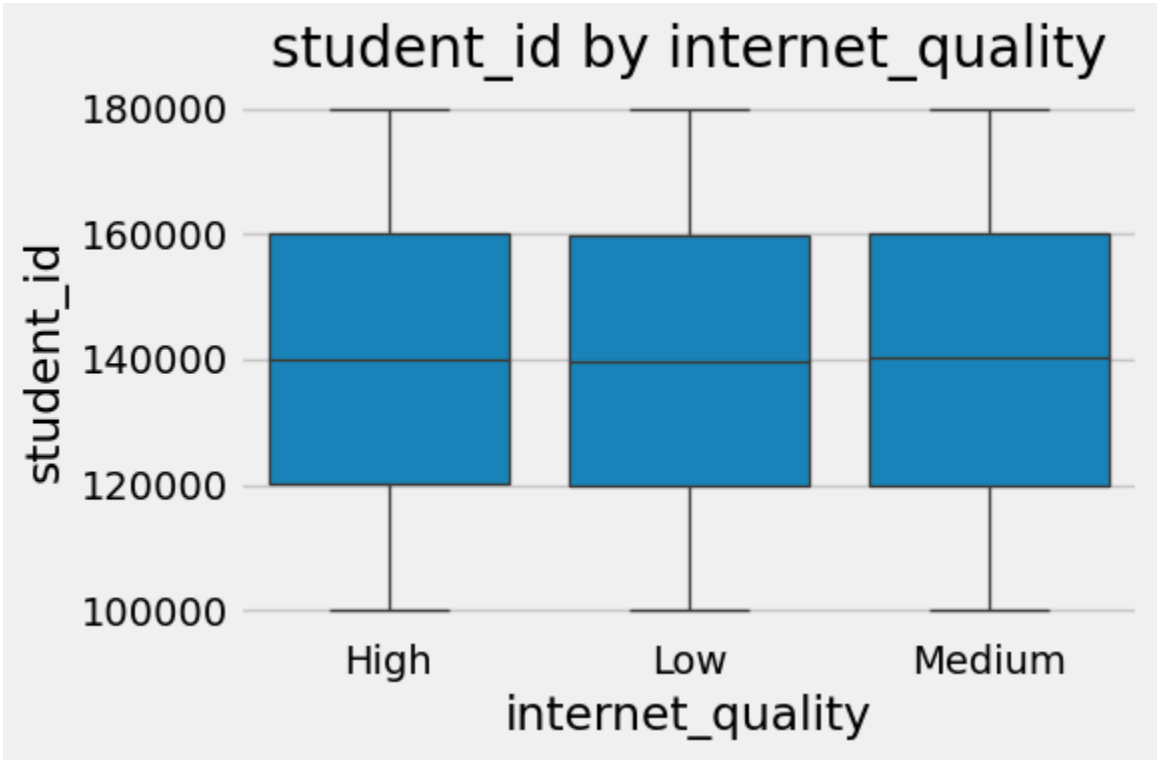

student_id by gender
180000
160000
140000
120000
100000
student_id
Male
Other
Female
gender

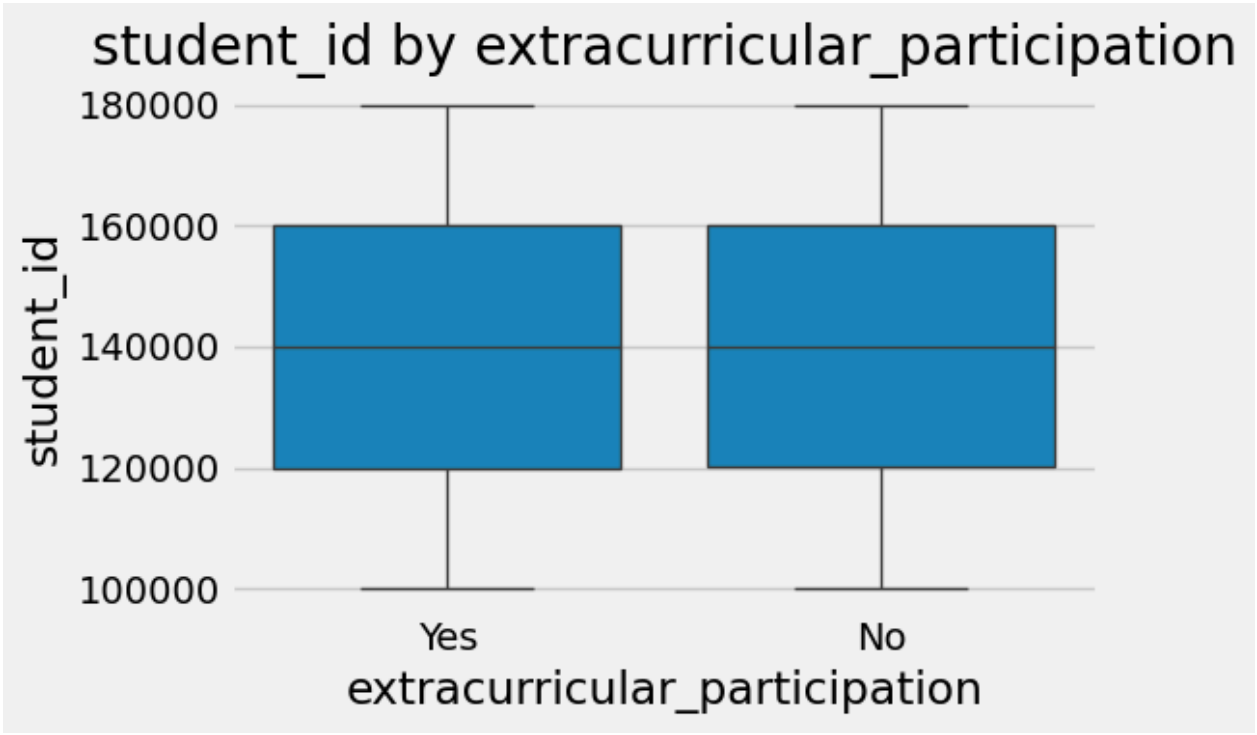

student_id by major
180000
160000
140000
120000
100000
student_id
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

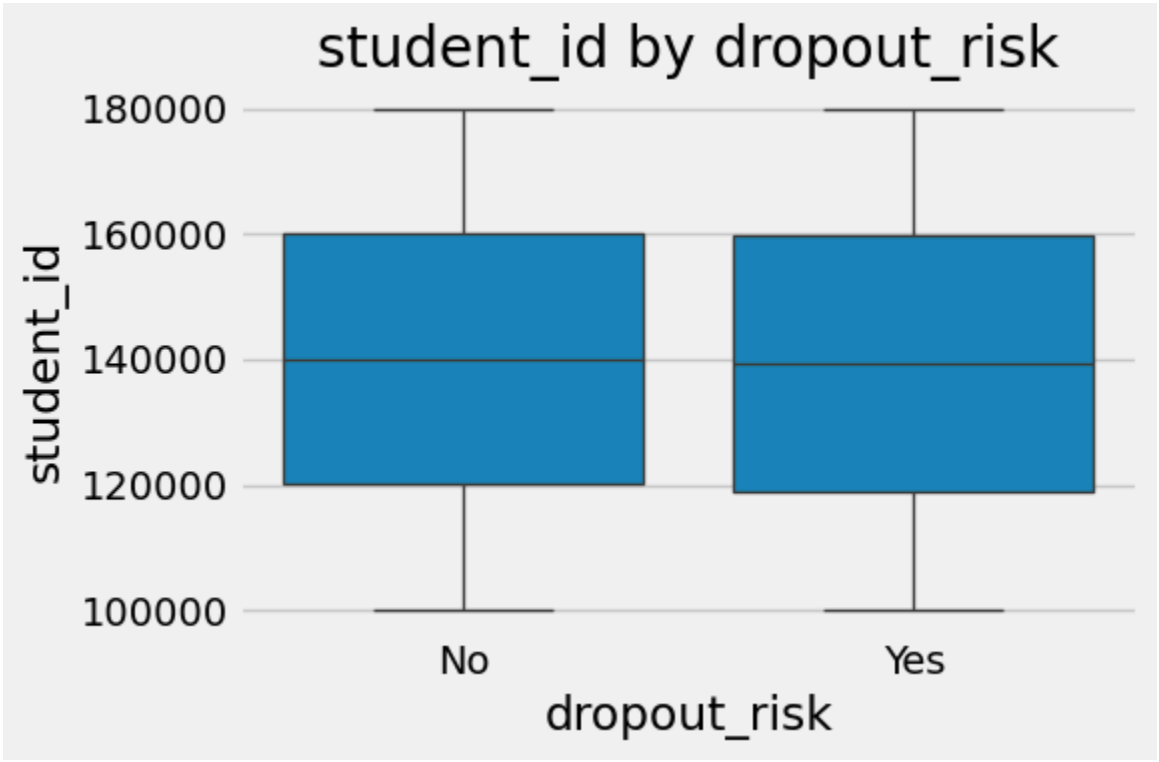

student_id by part_time_job
180000
160000
140000
120000
100000
student_id
Yes
No
part_time_job

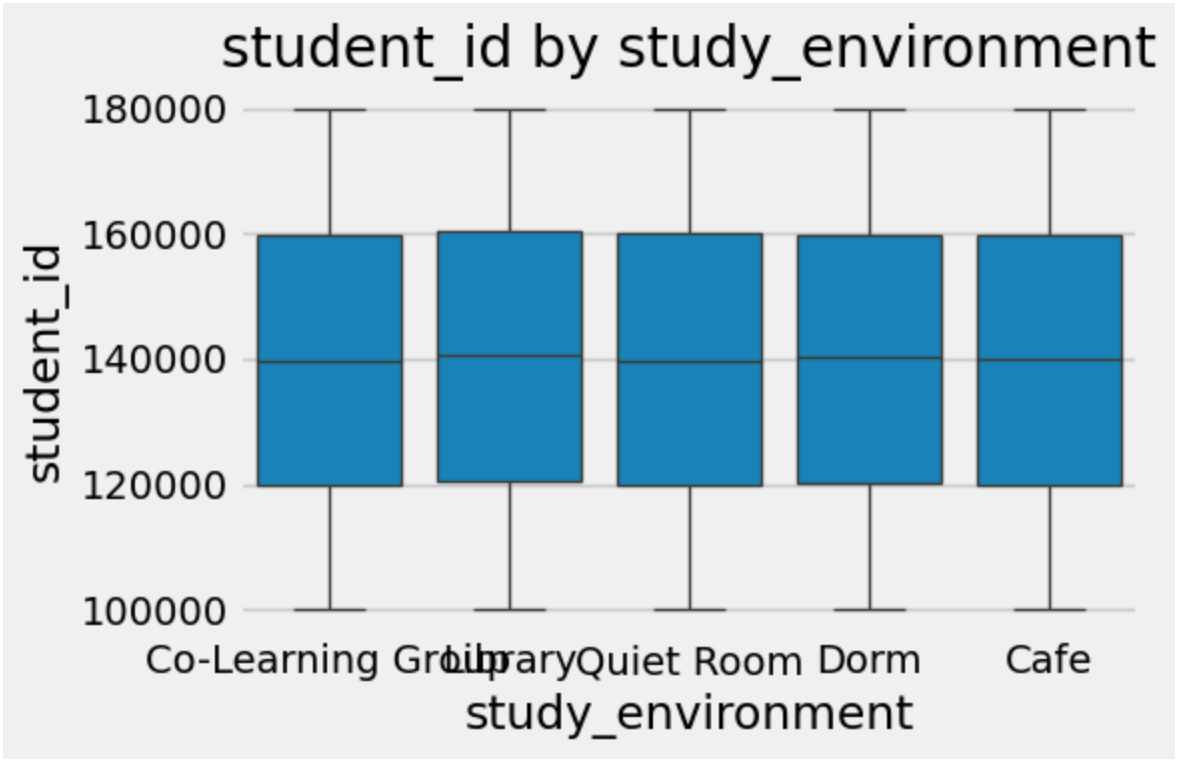

student_id by diet_quality
180000
160000
140000
120000
100000
student_id
Poor
Good
Fair
diet_quality

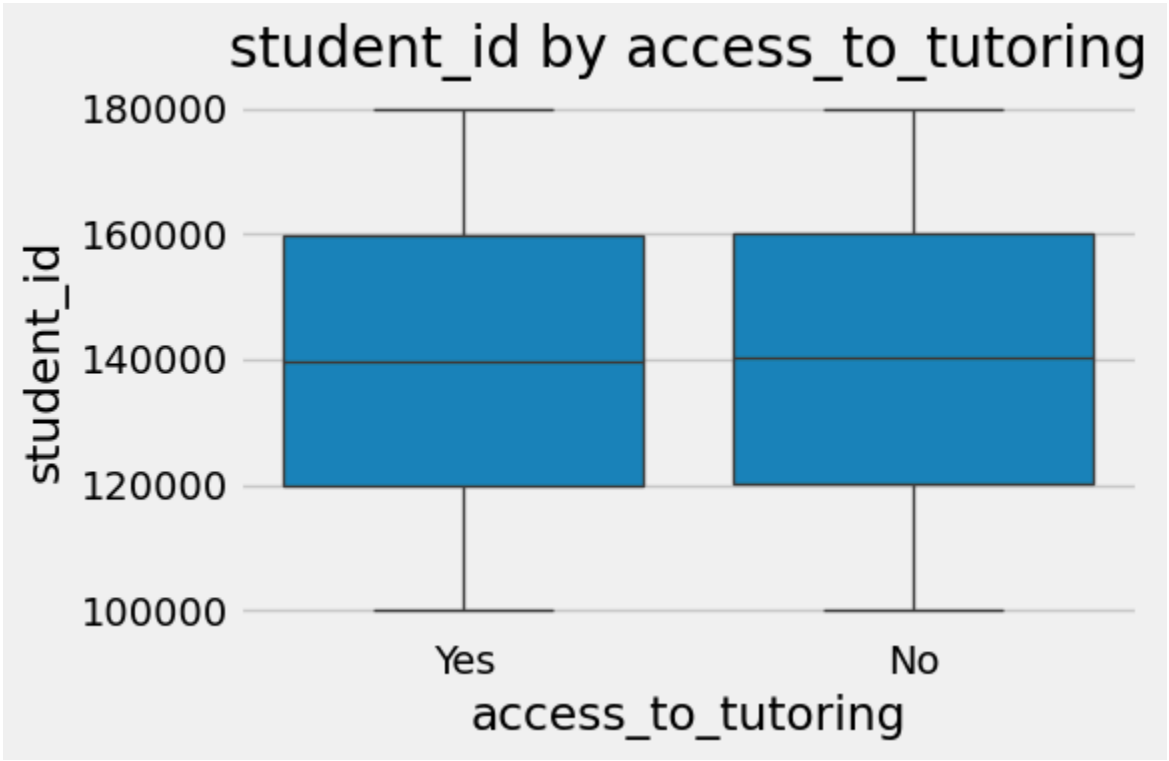

student_id by parental_education_level
180000
160000
140000
120000
100000
student_id
Some College
PhD
High School
Master
Bachelor
parental_education_level

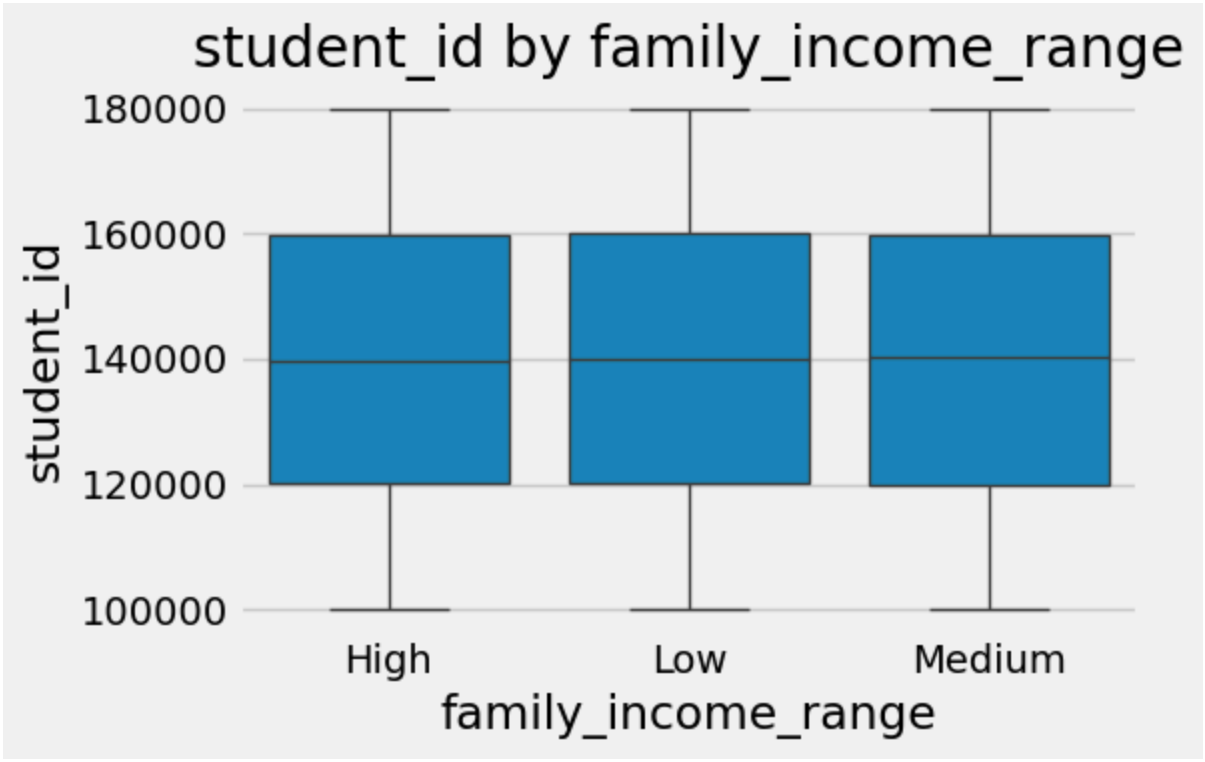

student_id by internet_quality
180000
160000
140000
120000
100000
student_id
High
Low
Medium
internet_quality

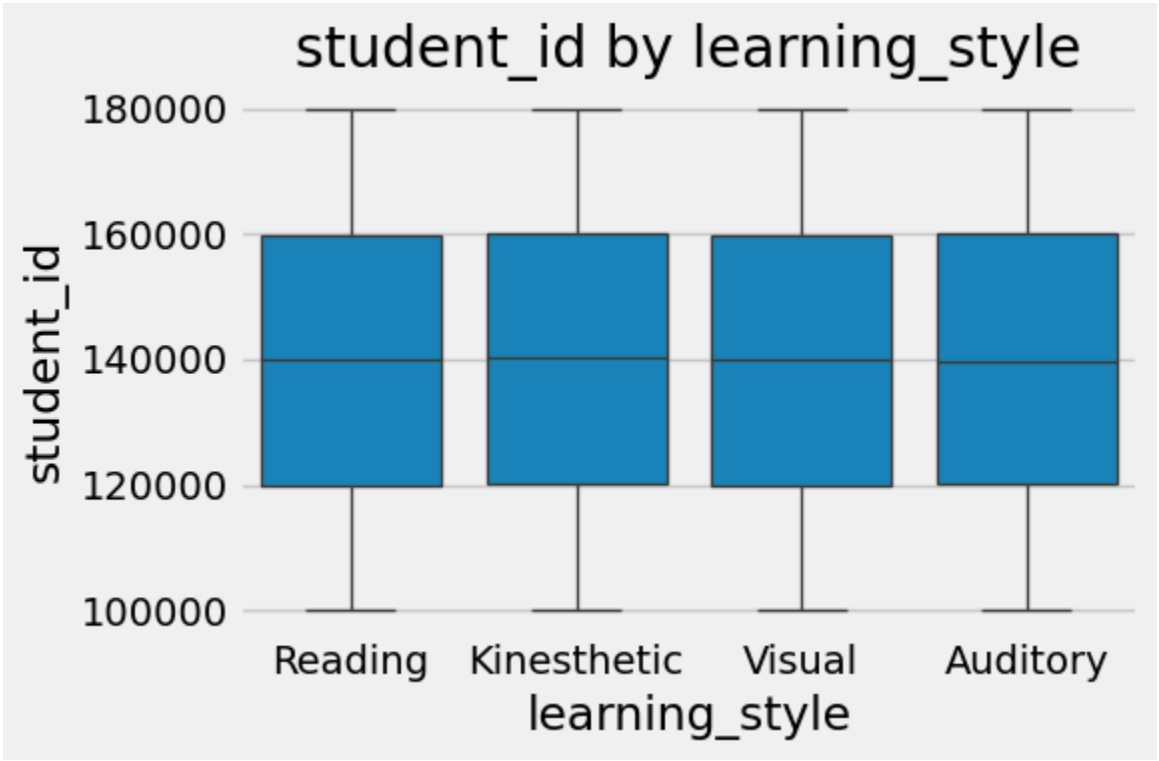

student_id by extracurricular_participation
180000
160000
140000
120000
100000
student_id
Yes
No
extracurricular_participation

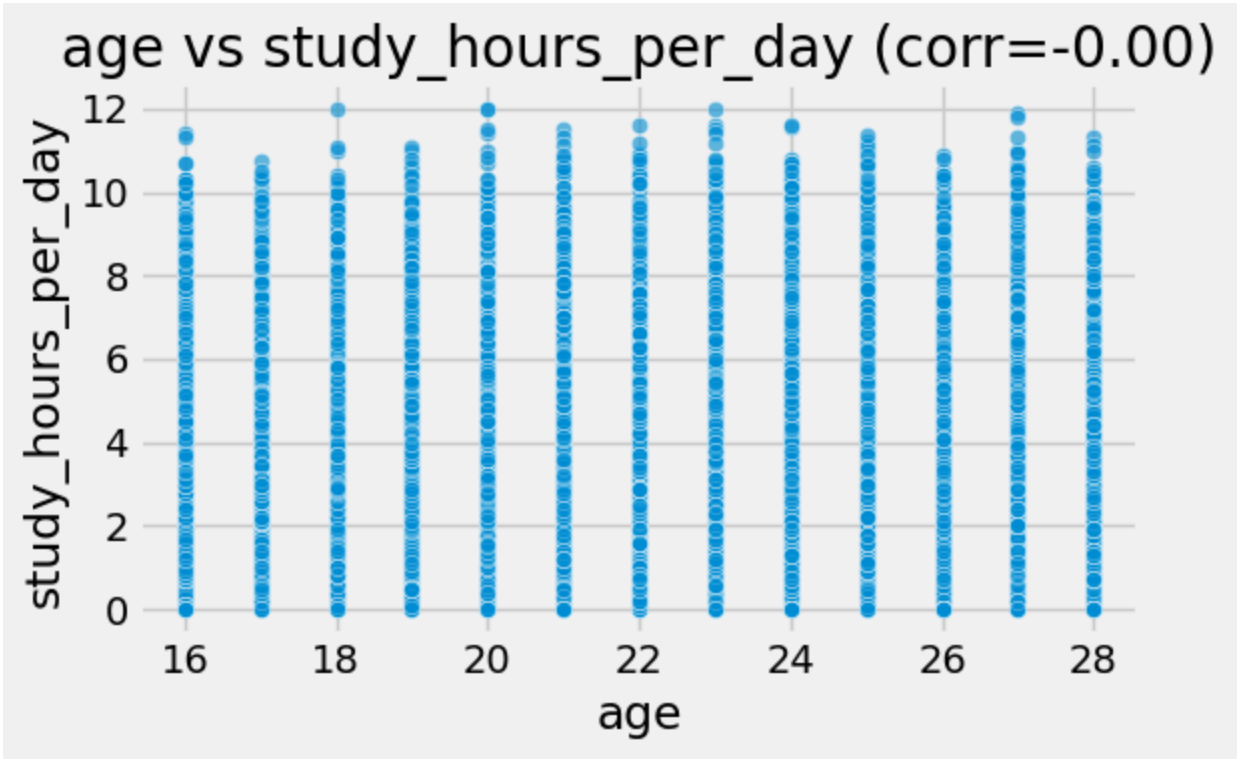

student_id by dropout_risk
180000
160000
140000
120000
100000
student_id
No
Yes
dropout_risk

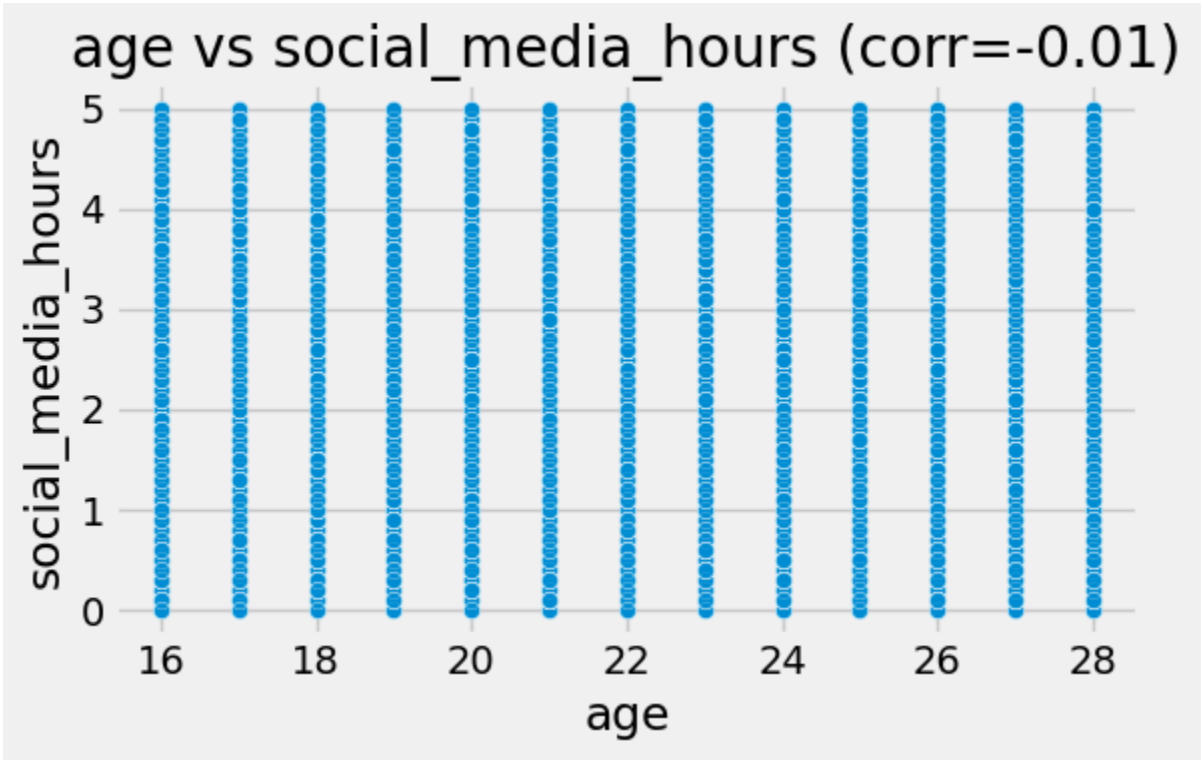

student_id by study_environment
180000
160000
140000
120000
100000
student_id
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

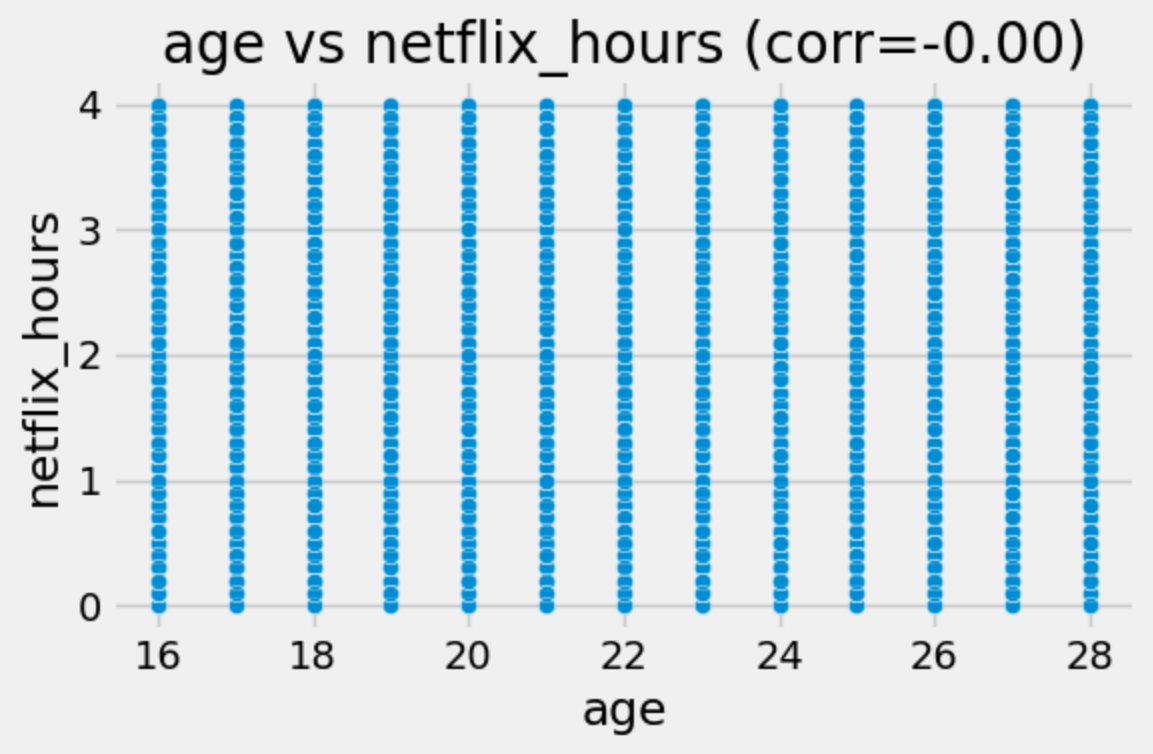

student_id by access_to_tutoring
180000
160000
140000
120000
100000
student_id
Yes
No
access_to_tutoring

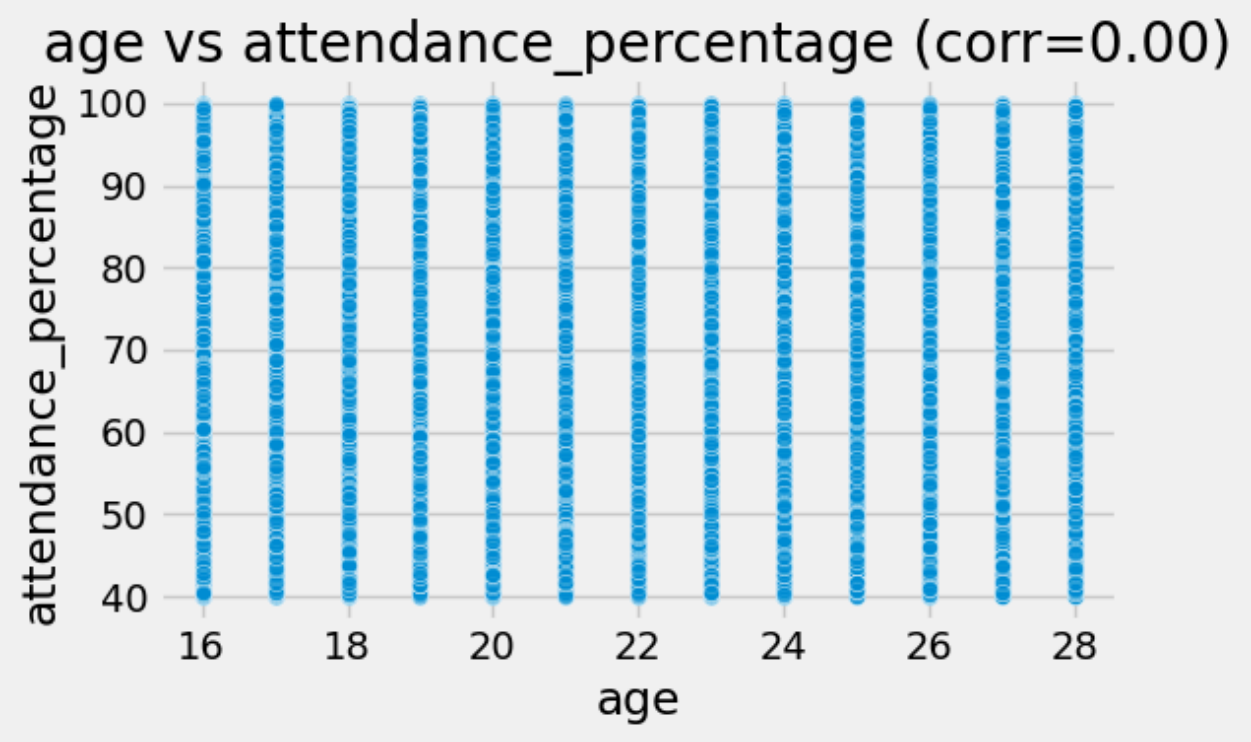

student_id by family_income_range
180000
160000
140000
120000
100000
student_id
High
Low
Medium
family_income_range

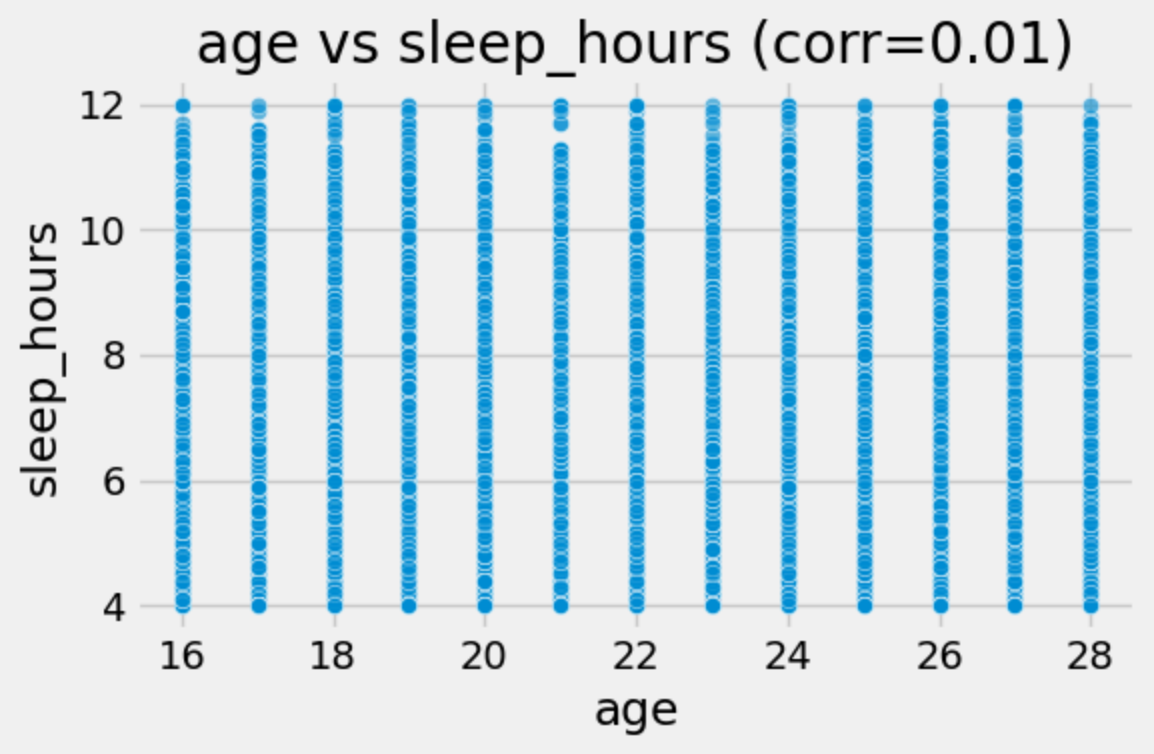

student_id by learning_style
180000
160000
140000
120000
100000
student_id
Reading
Kinesthetic
Visual
Auditory
learning_style

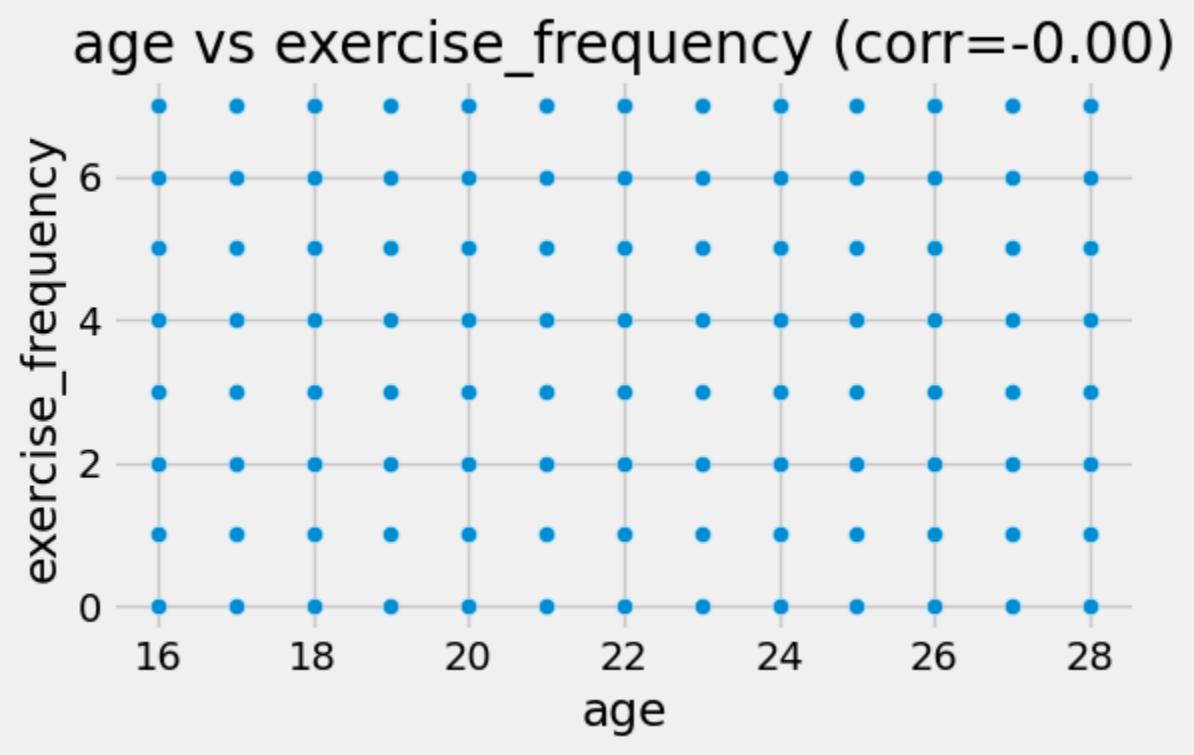

age vs study_hours_per_day (corr=-0.00)
study_hours_per_day
0
2
4
6
8
10
12
16
18
20
22
24
26
28
age

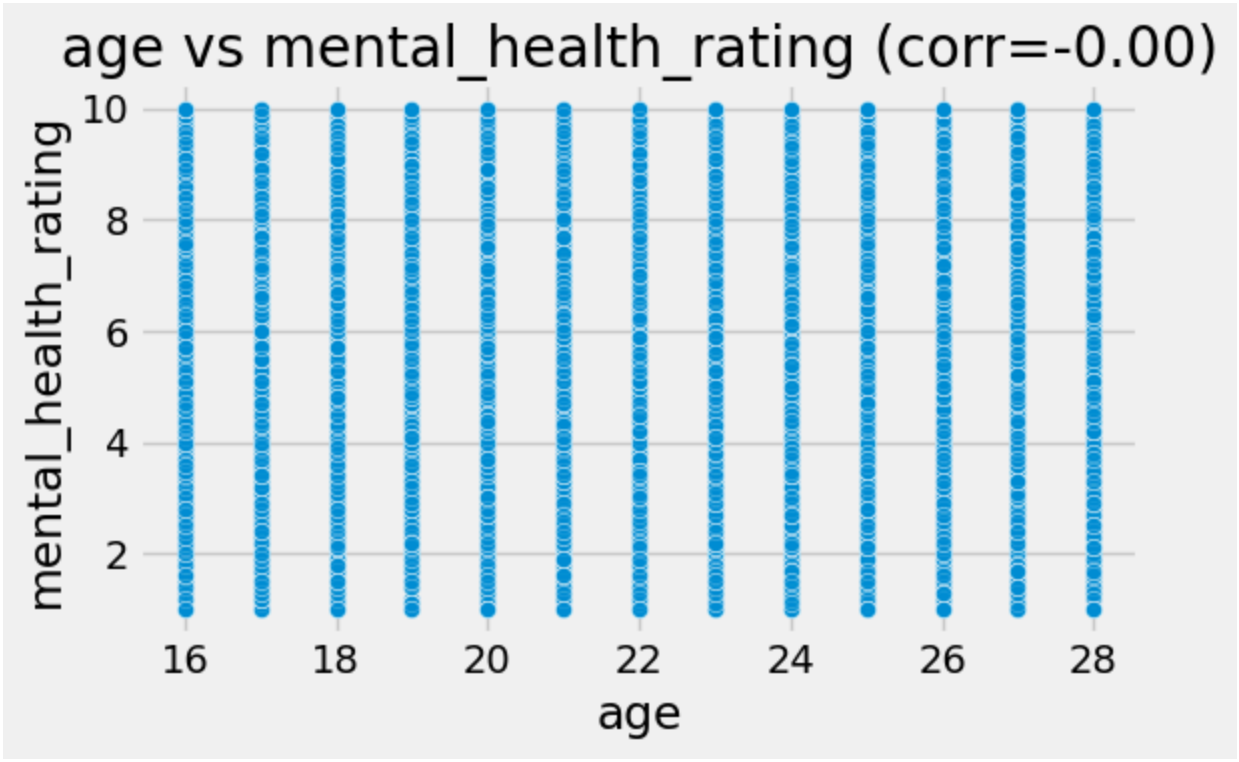

age vs social_media_hours (corr=-0.01)
social_media_hours
0
1
2
3
4
5
16
18
20
22
24
26
28
age

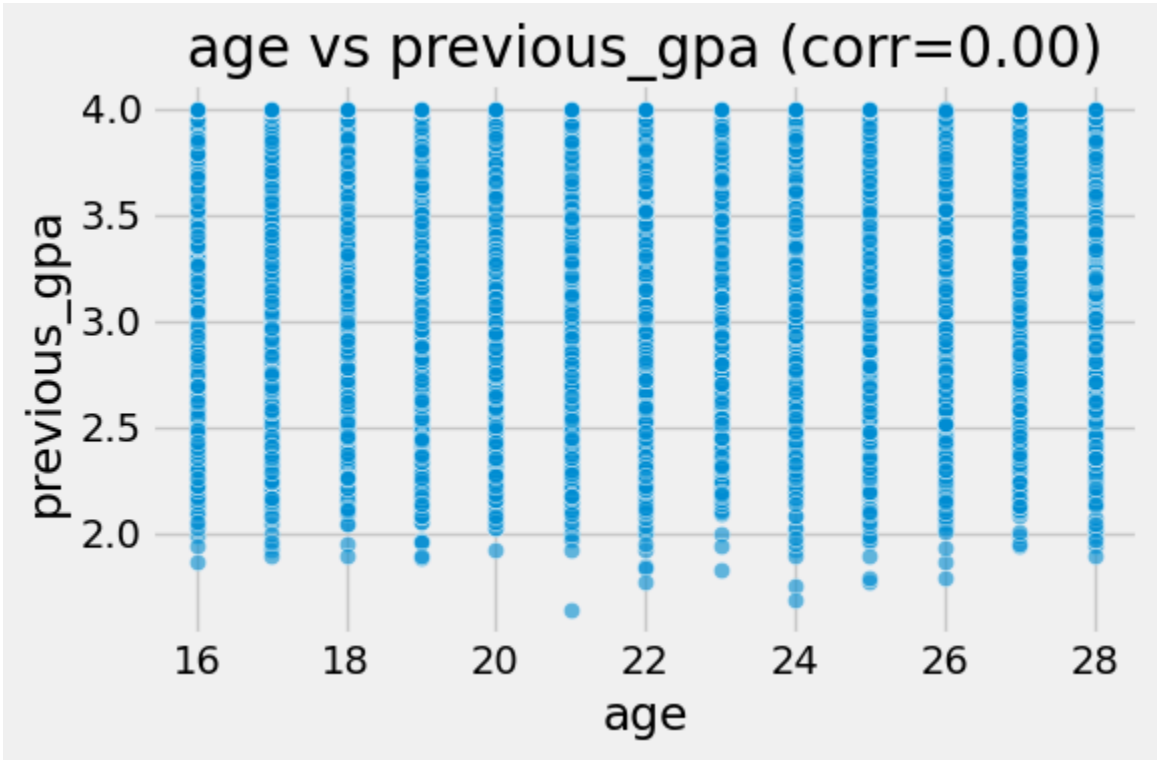

age vs netflix_hours (corr=-0.00)
netflix_hours
0
1
2
3
4
16
18
20
22
24
26
28
age

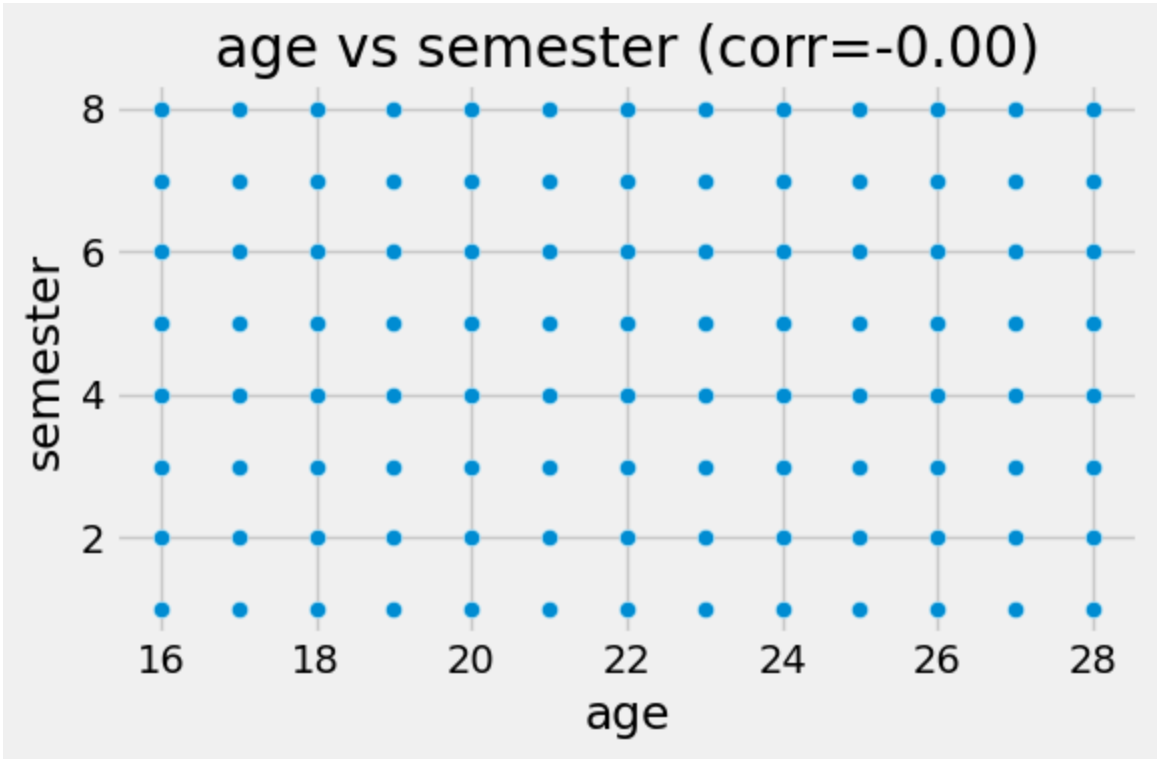

age vs attendance_percentage (corr=0.00)
attendance_percentage
40
50
60
70
80
90
100
16
18
20
22
24
26
28
age

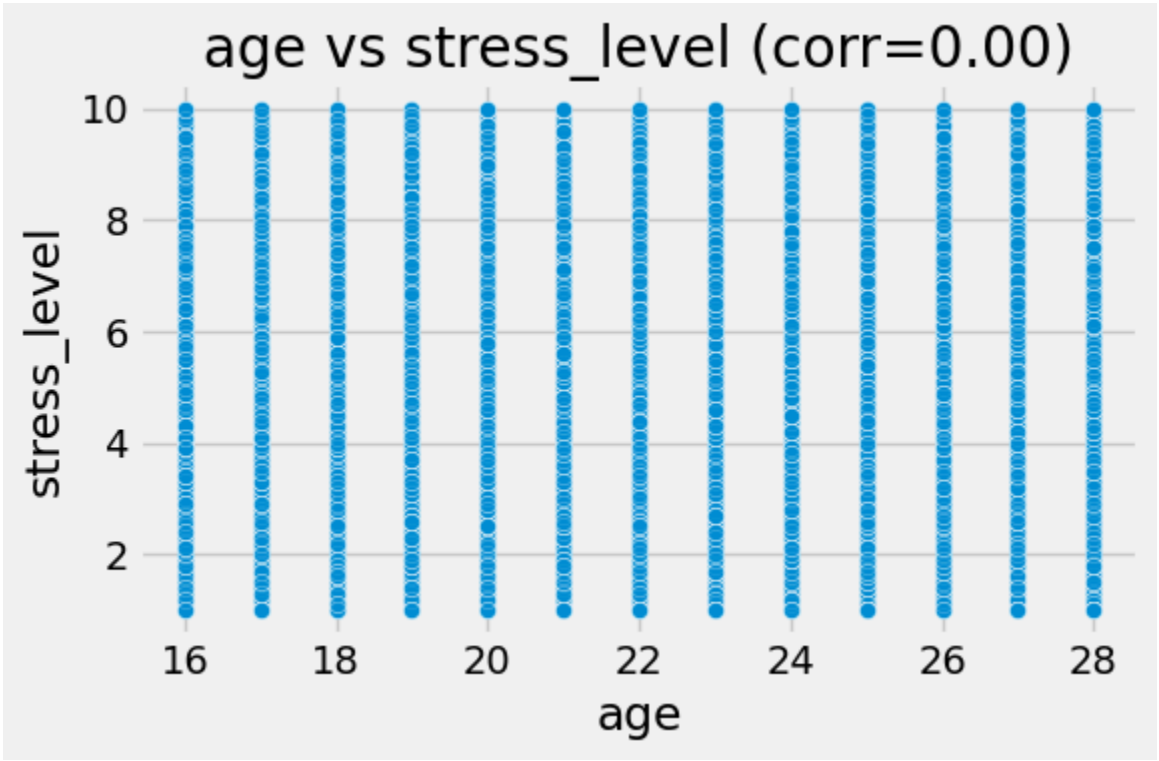

age vs sleep_hours (corr=0.01)
sleep_hours
12
10
8
6
4
16
18
20
22
24
26
28
age

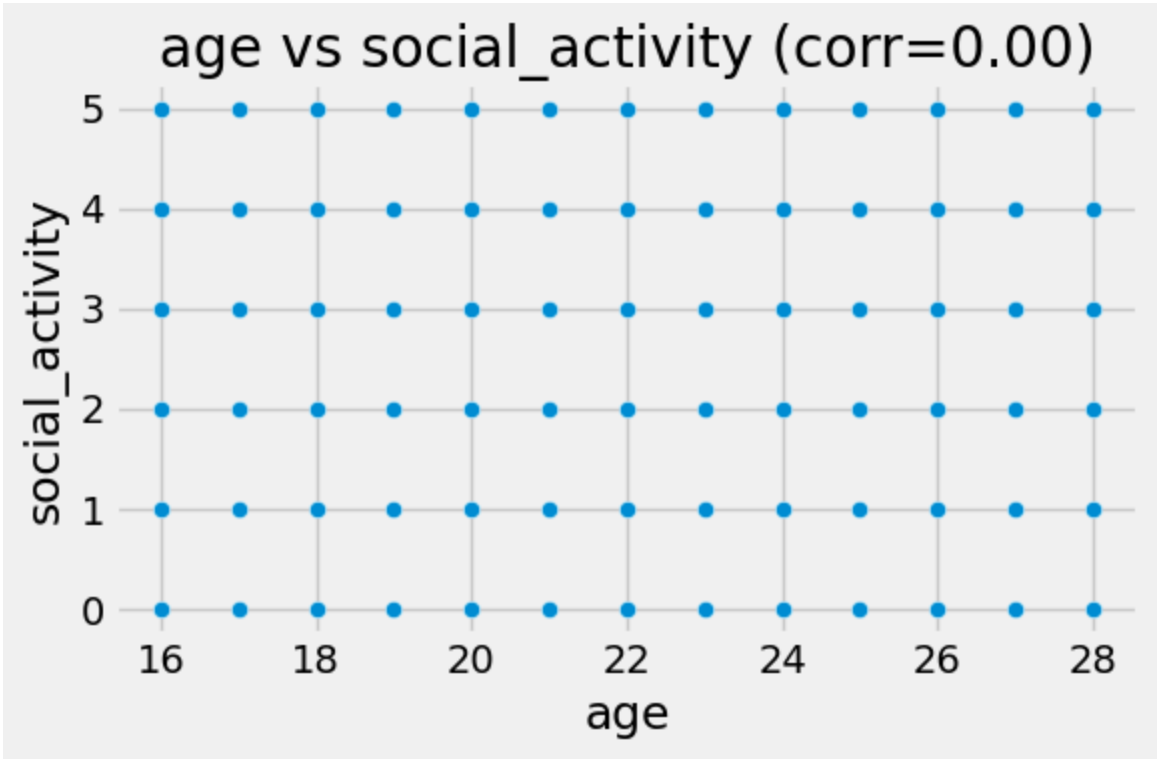

age vs exercise_frequency (corr=-0.00)
exercise_frequency
6
4
2
0
16
18
20
22
24
26
28
age

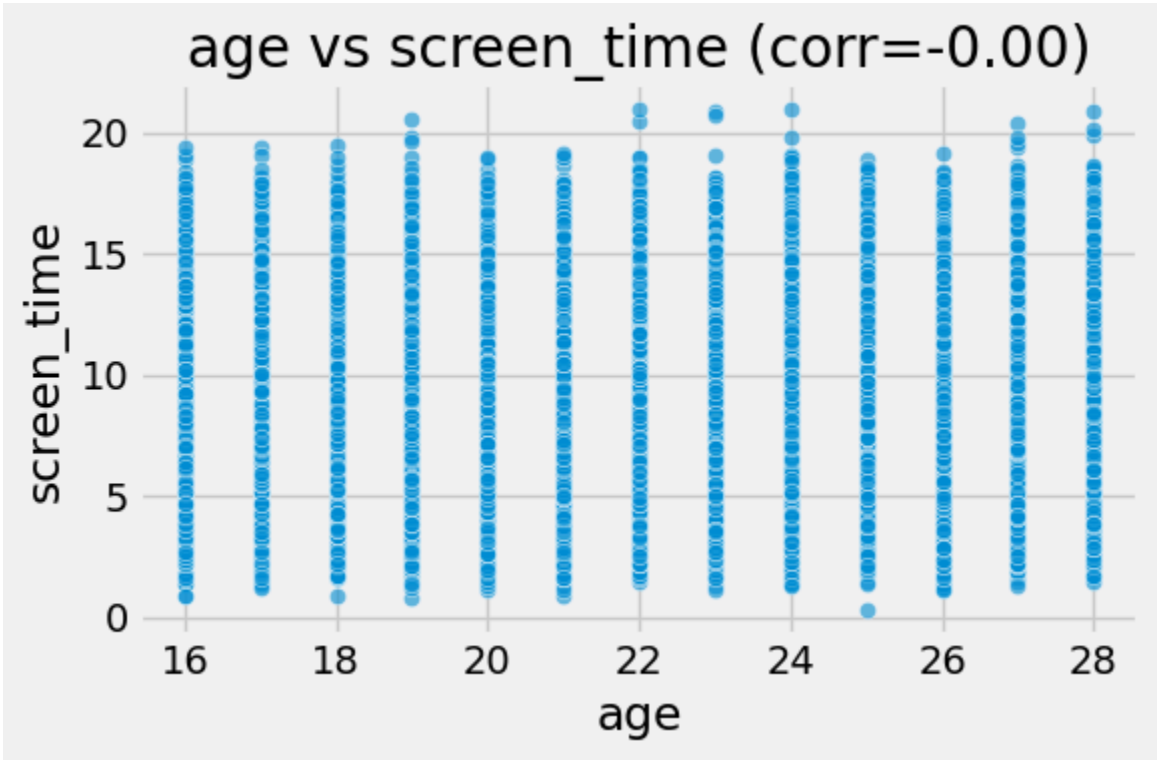

age vs mental_health_rating (corr=-0.00)
mental_health_rating
10
8
6
4
2
16
18
20
22
24
26
28
age

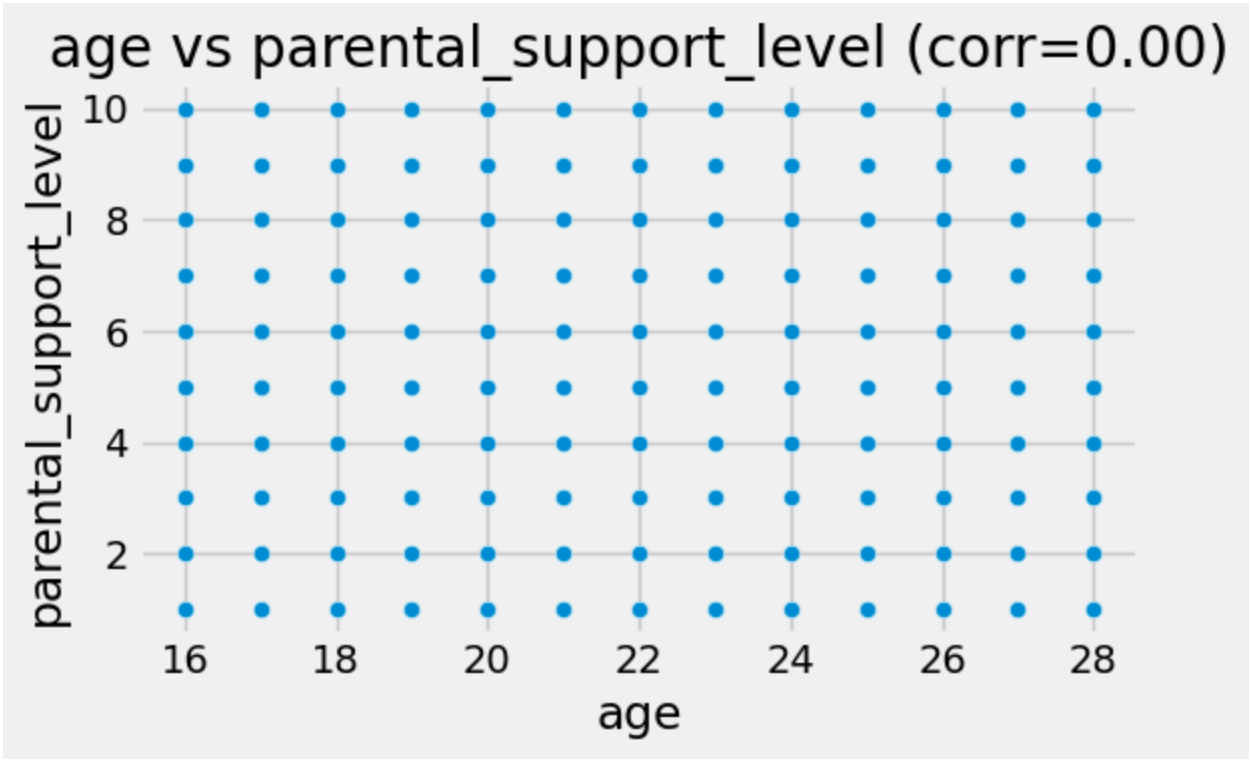

age vs previous_gpa (corr=0.00)
previous_gpa
4.0
3.5
3.0
2.5
2.0
16
18
20
22
24
26
28
age

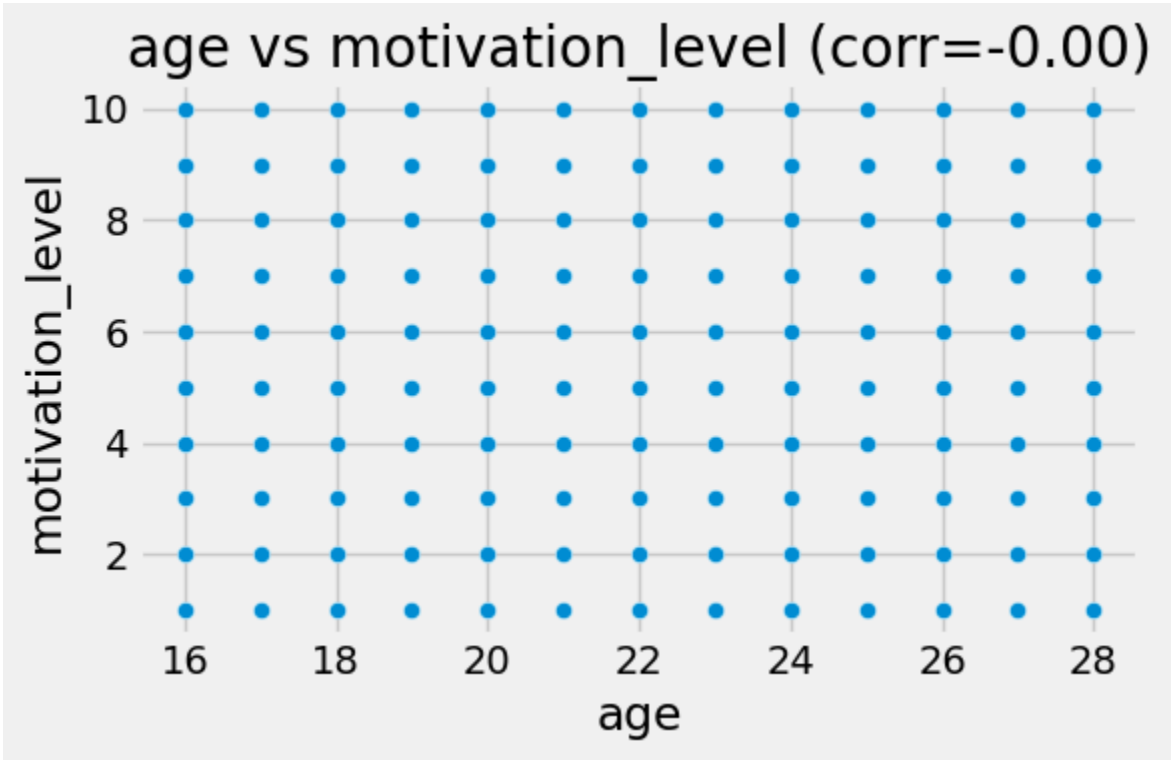

age vs semester (corr=-0.00)
semester
8
6
4
2
16
18
20
22
24
26
28
age

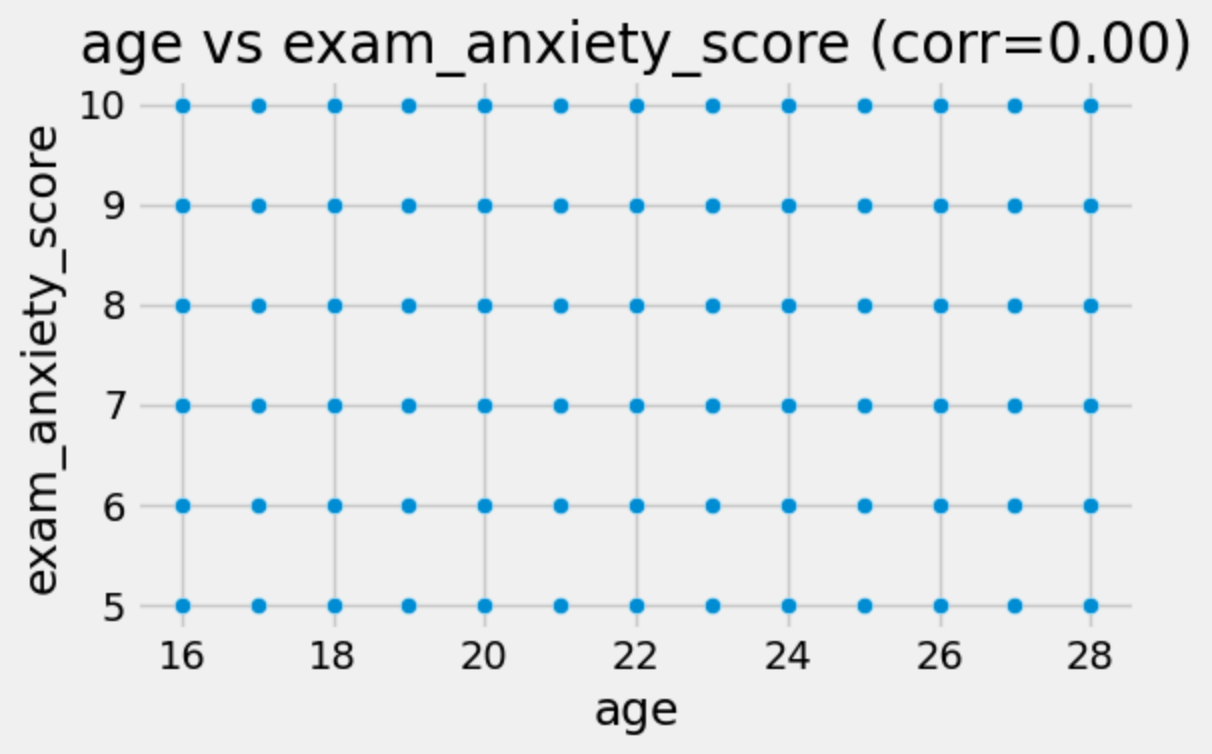

age vs stress_level (corr=0.00)
stress_level
10
8
6
4
2
16
18
20
22
24
26
28
age

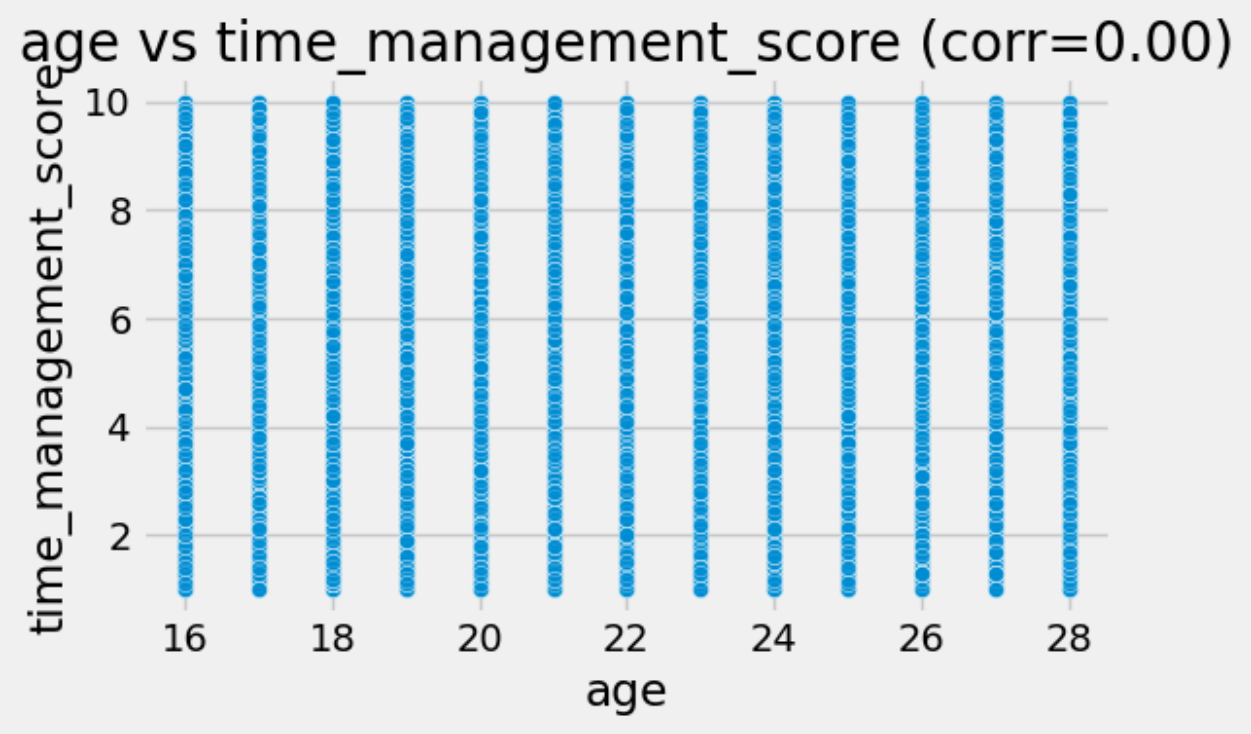

age vs social_activity (corr=0.00)
social_activity
0
1
2
3
4
5
16
18
20
22
24
26
28
age

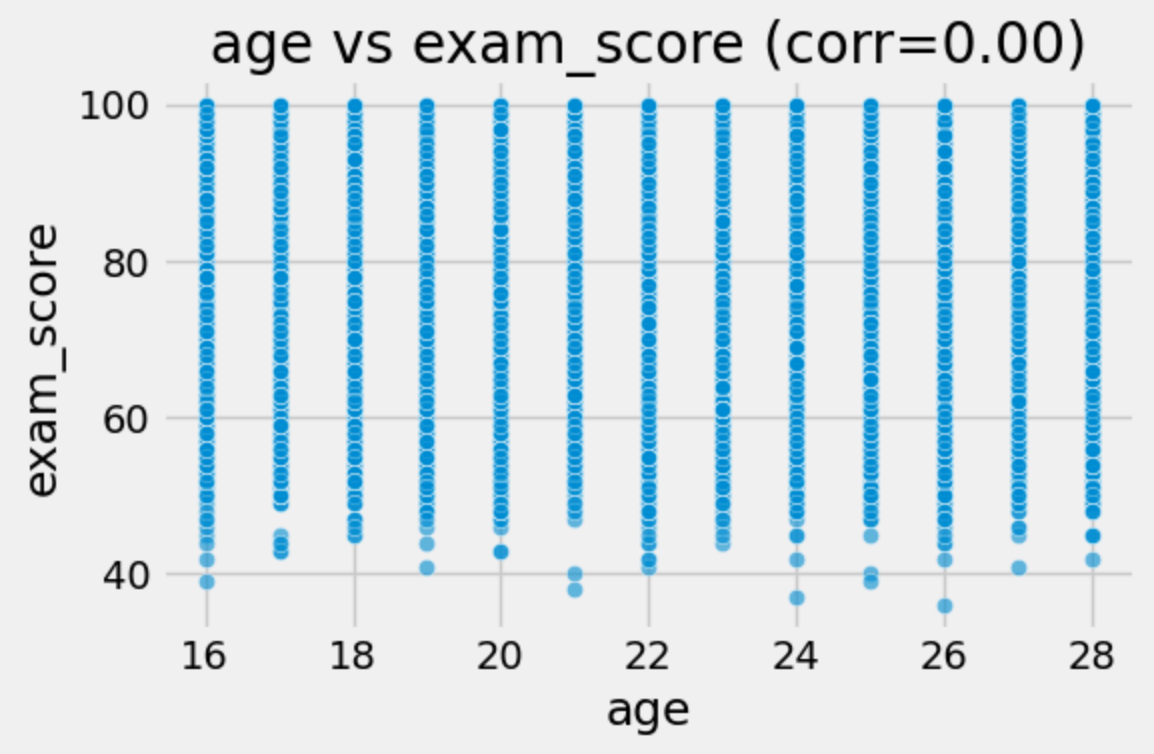

age vs screen_time (corr=-0.00)
screen_time
0
5
10
15
20
16
18
20
22
24
26
28
age

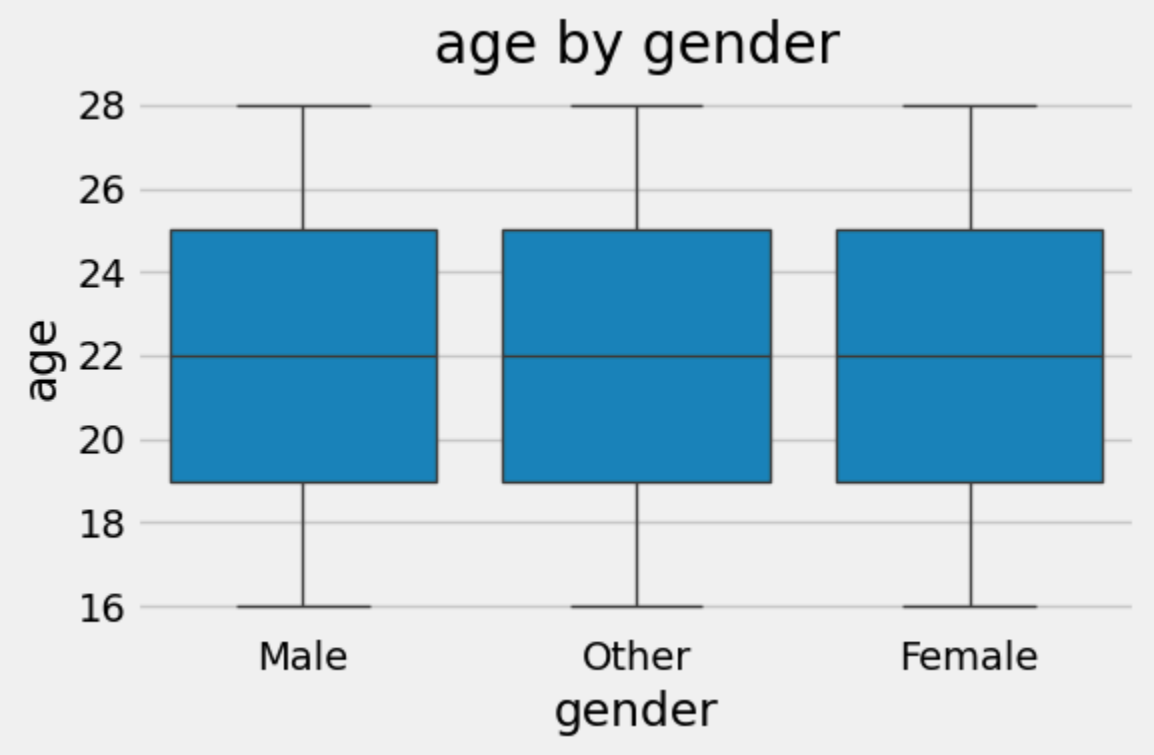

age vs parental_support_level (corr=0.00)
parental_support_level
10
8
6
4
2
16
18
20
22
24
26
28
age

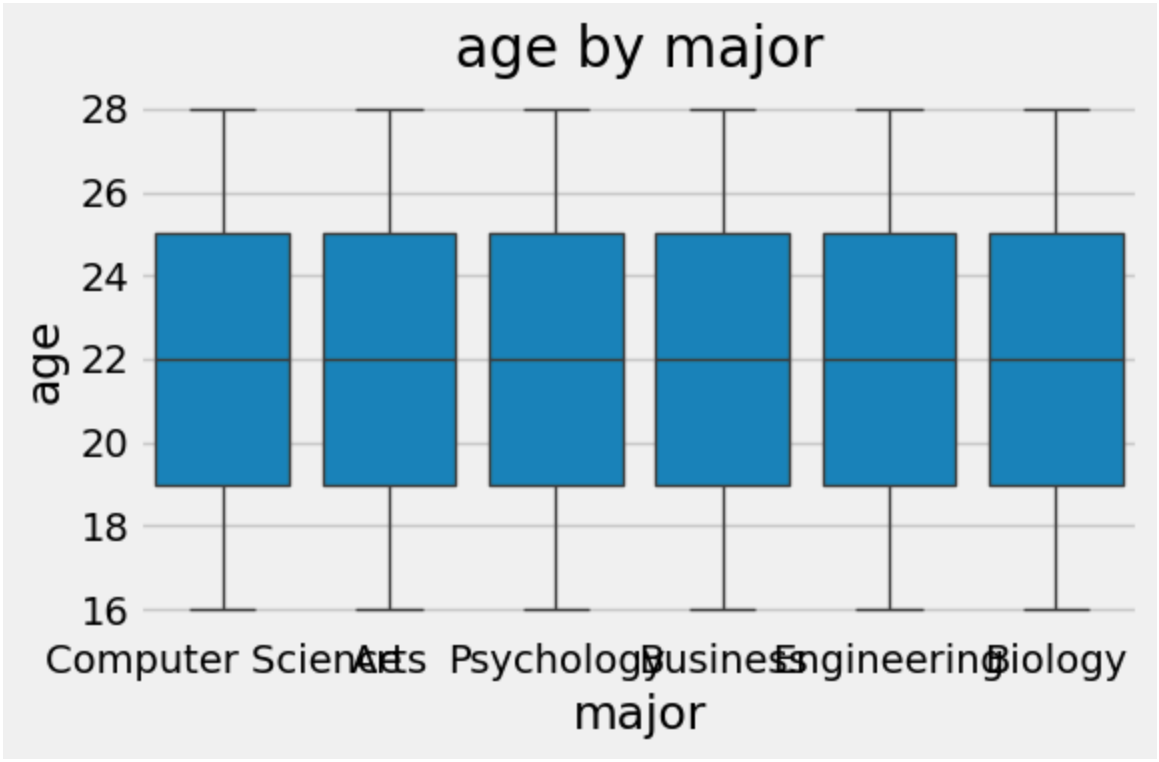

age vs motivation_level (corr=-0.00)
motivation_level
10
8
6
4
2
16
18
20
22
24
26
28
age

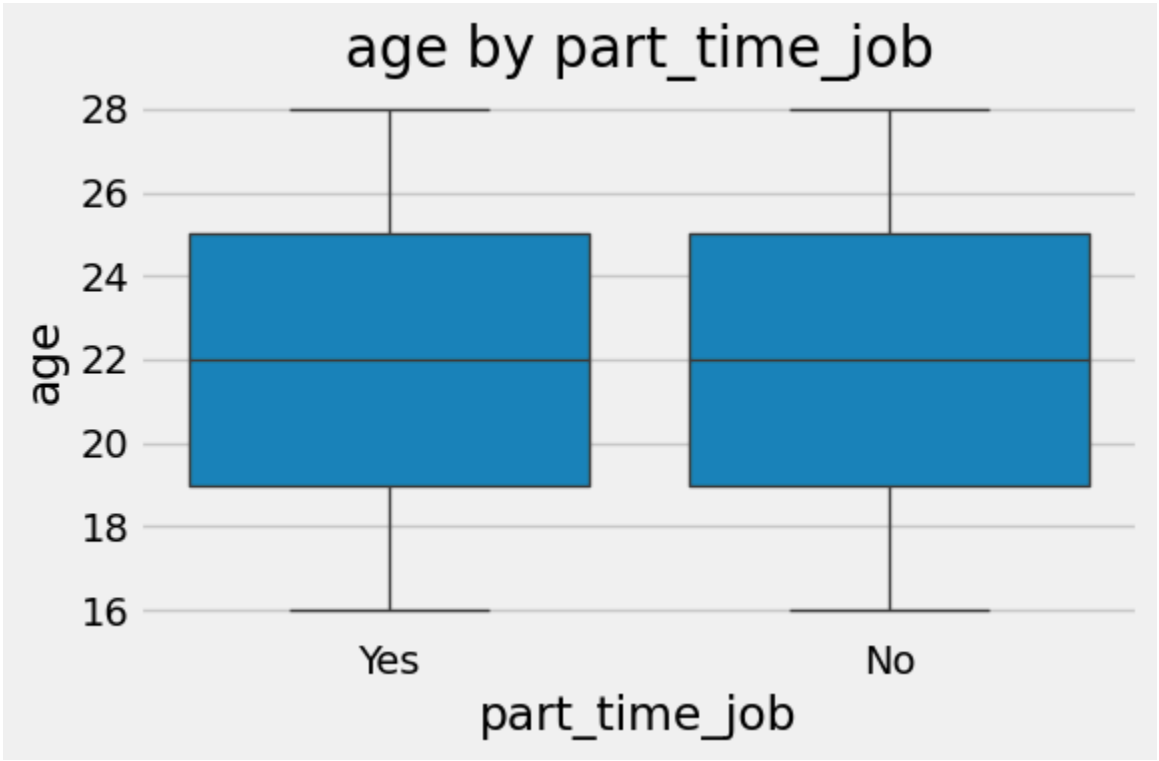

age vs exam_anxiety_score (corr=0.00)
exam_anxiety_score
10
9
8
7
6
5
16
18
20
22
24
26
28
age


age vs time_management_score (corr=0.00)
time_management_score
10
8
6
4
2
16
18
20
22
24
26
28
age

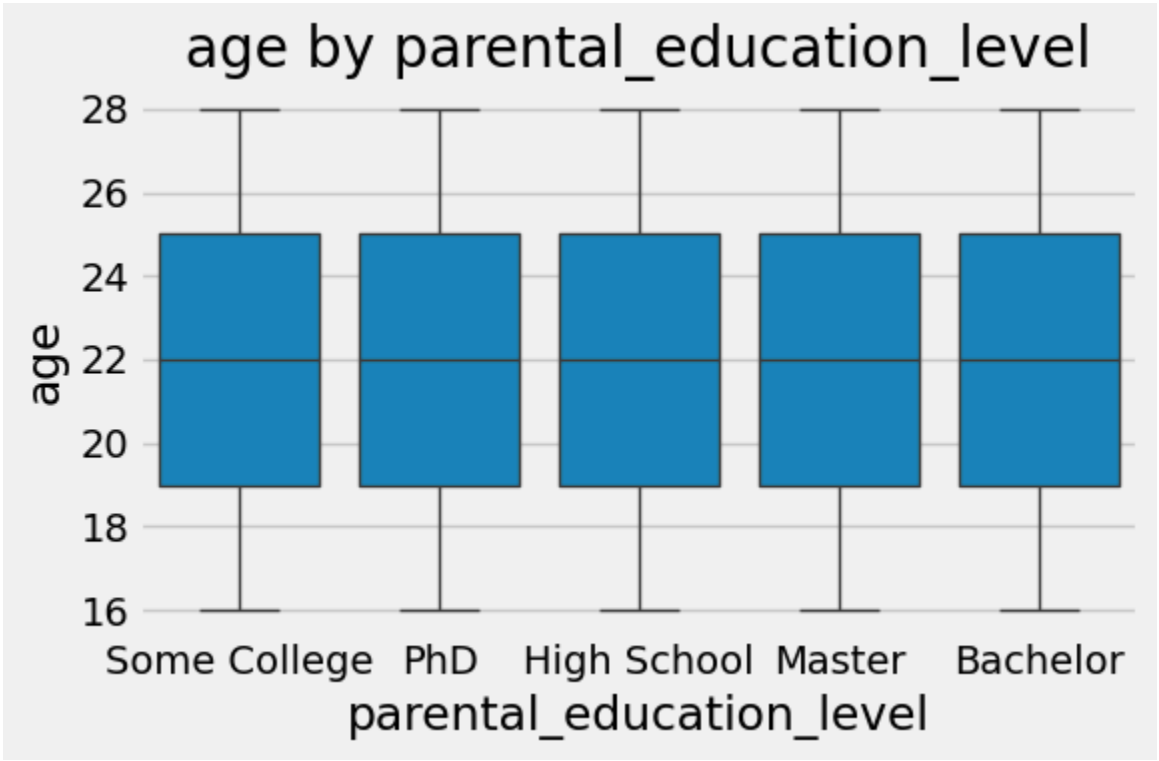

age vs exam_score (corr=0.00)
exam_score
100
80
60
40
16
18
20
22
24
26
28
age

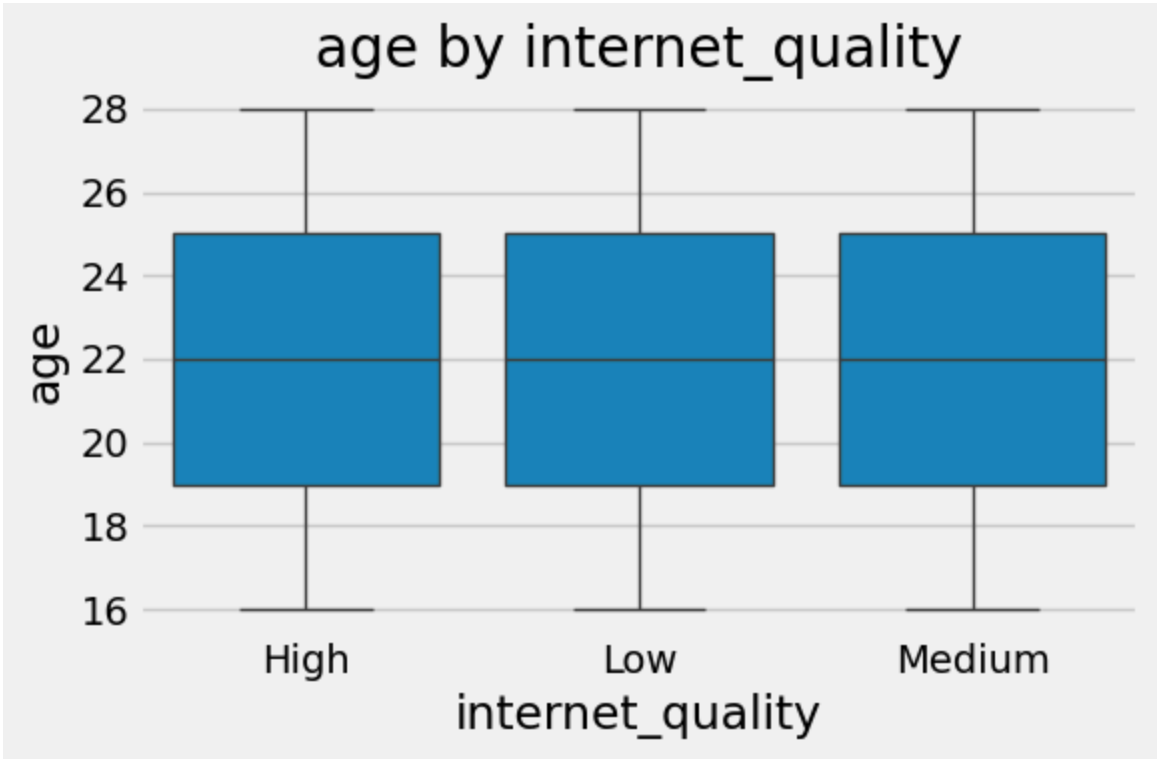

age by gender
age
28
26
24
22
20
18
16
Male
Other
Female
gender

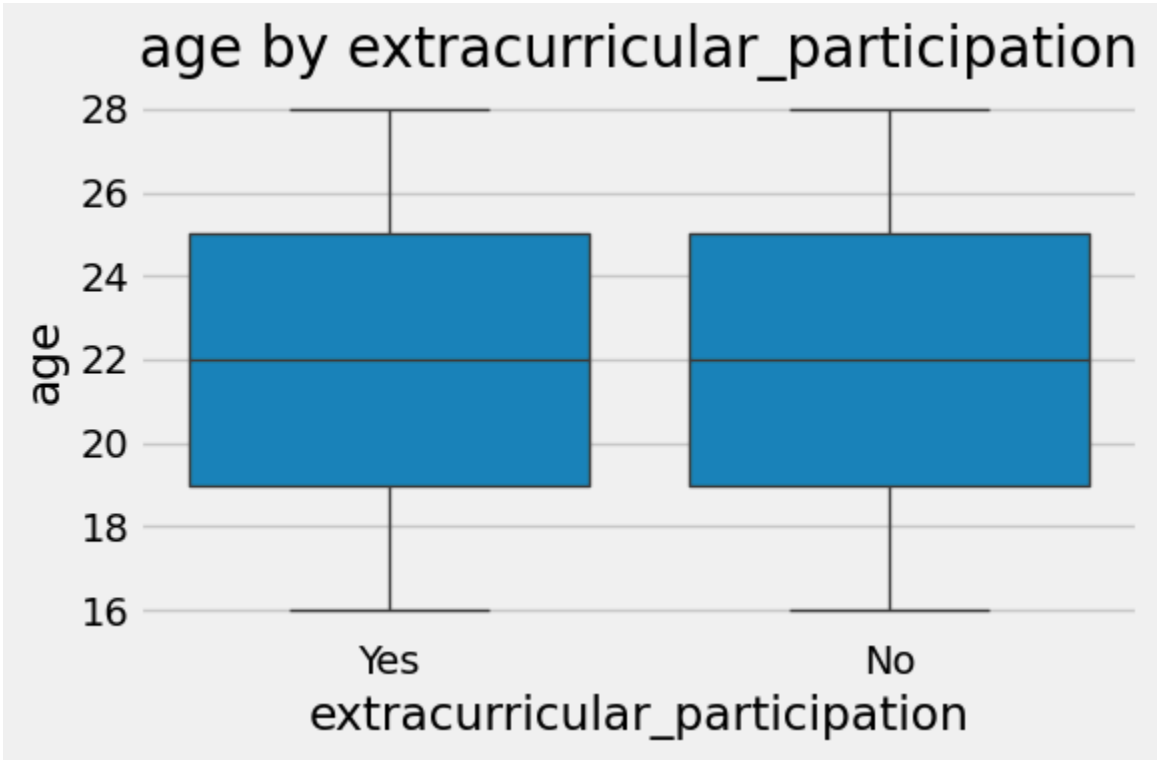

age by major
28
26
24
22
20
18
16
age
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

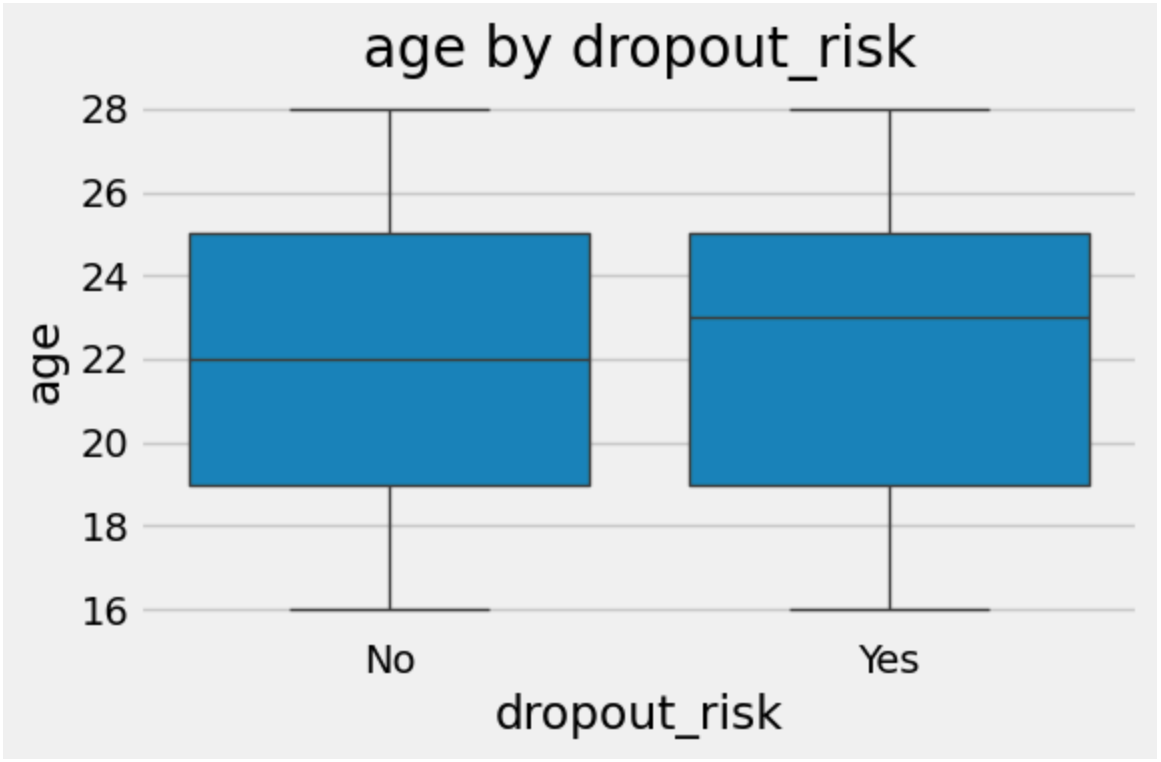

age by part_time_job
28
26
24
22
20
18
16
age
Yes
No
part_time_job

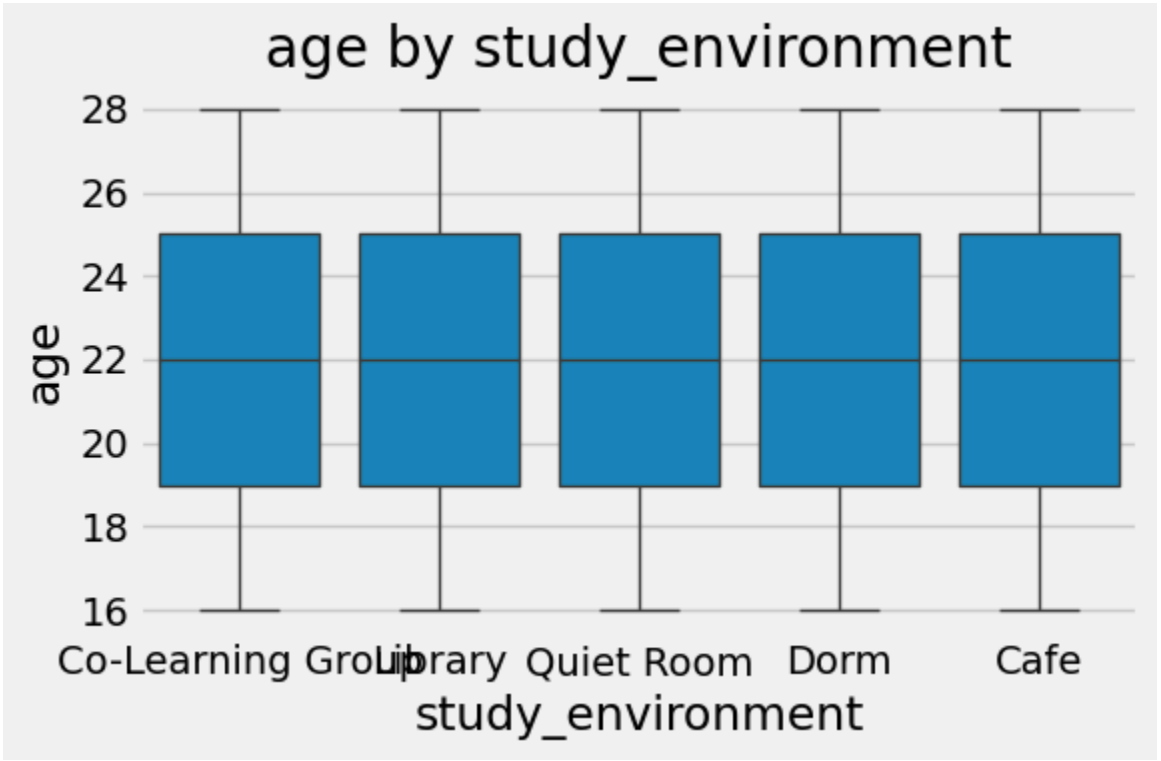

age by diet_quality
28
26
24
22
20
18
16
age
Poor
Good
Fair
diet_quality

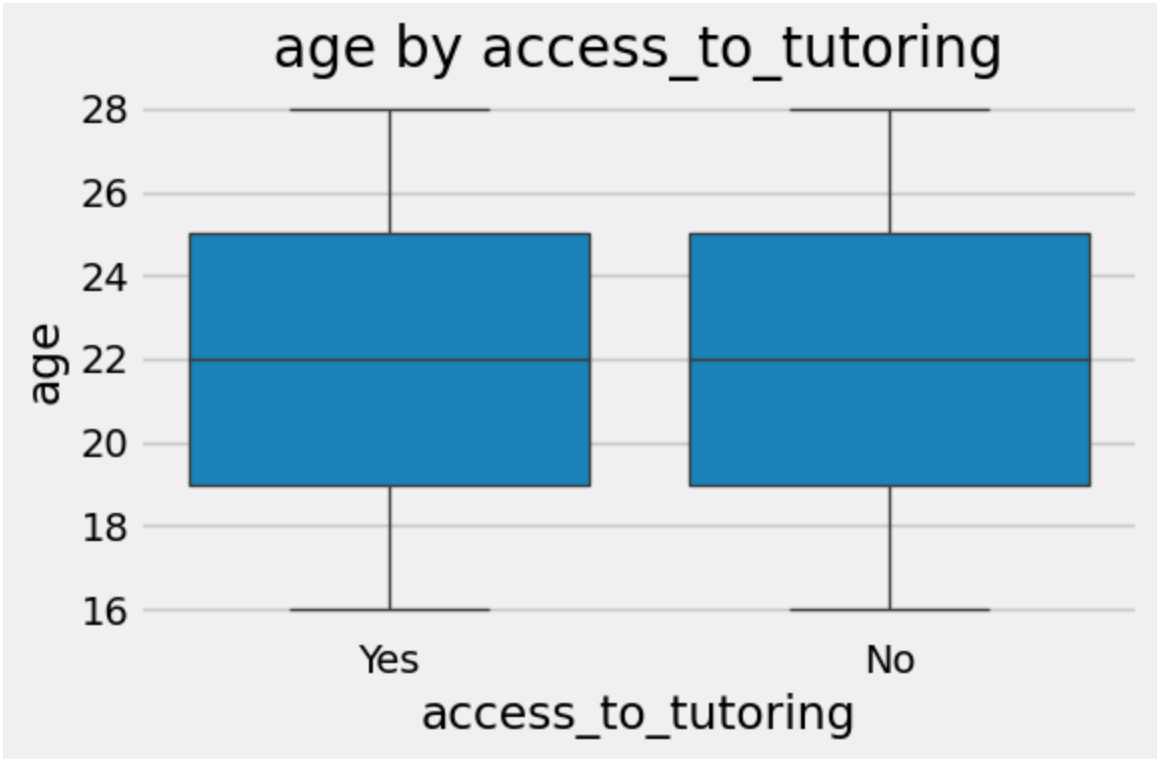

age by parental_education_level
28
26
24
22
20
18
16
age
Some College
PhD
High School
Master
Bachelor
parental_education_level

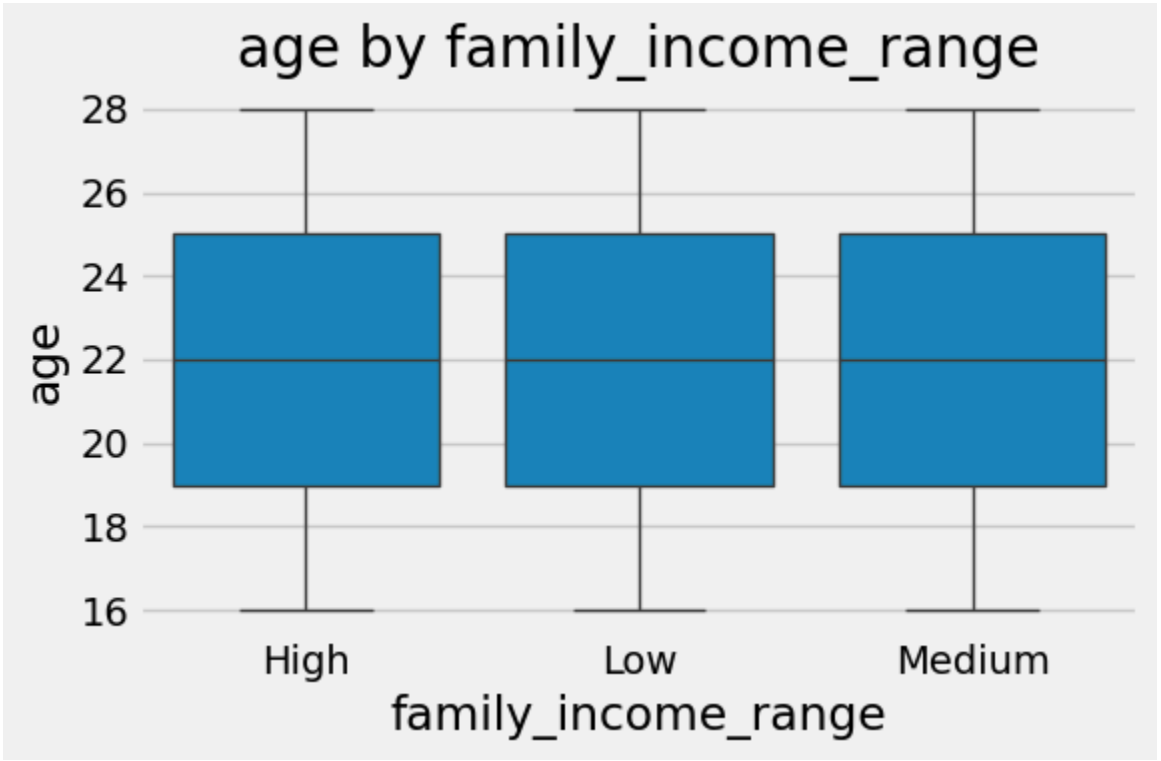

age by internet_quality
28
26
24
22
20
18
16
age
High
Low
Medium
internet_quality

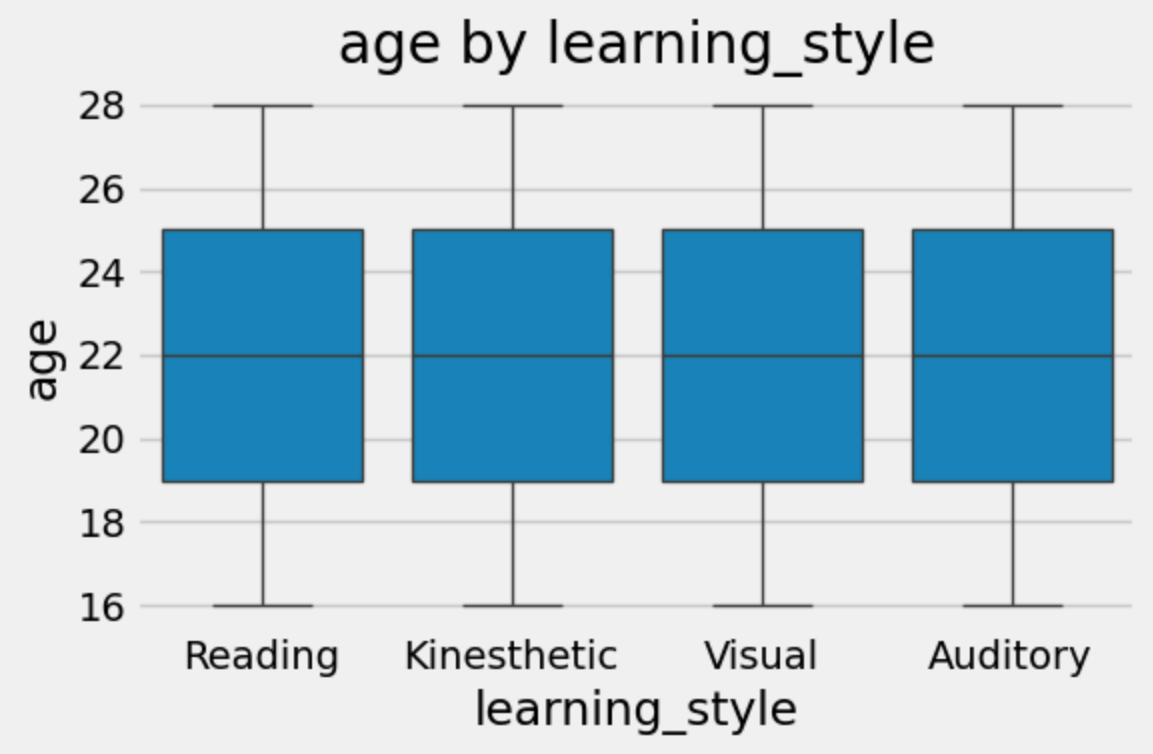

age by extracurricular_participation
28
26
24
22
20
18
16
age
Yes
No
extracurricular_participation

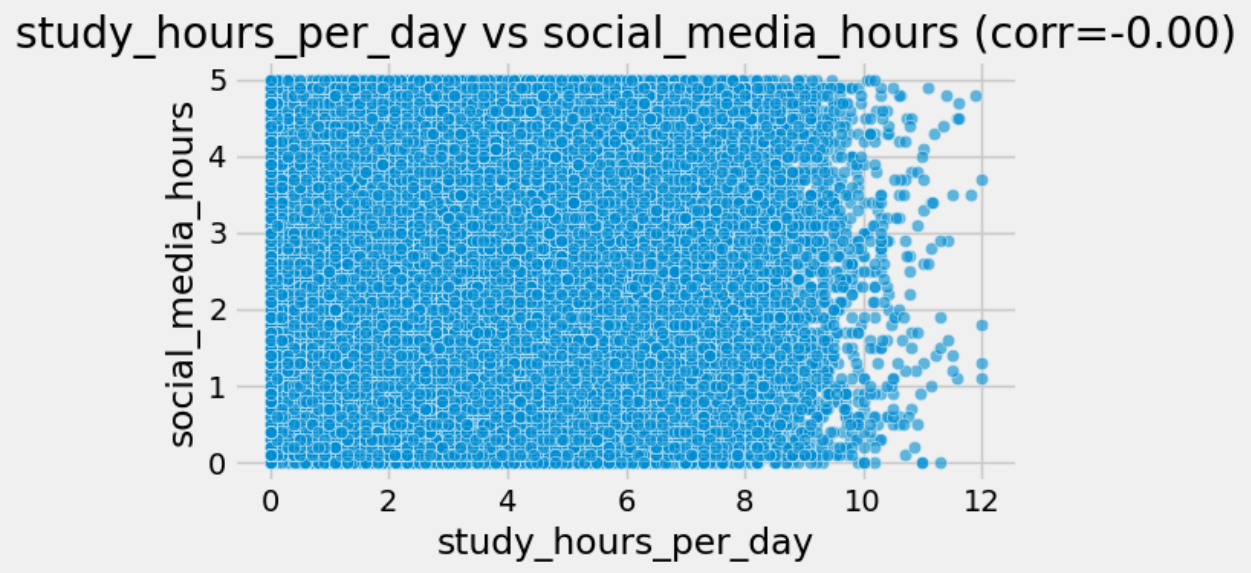

age by dropout_risk
28
26
24
22
20
18
16
age
No
Yes
dropout_risk

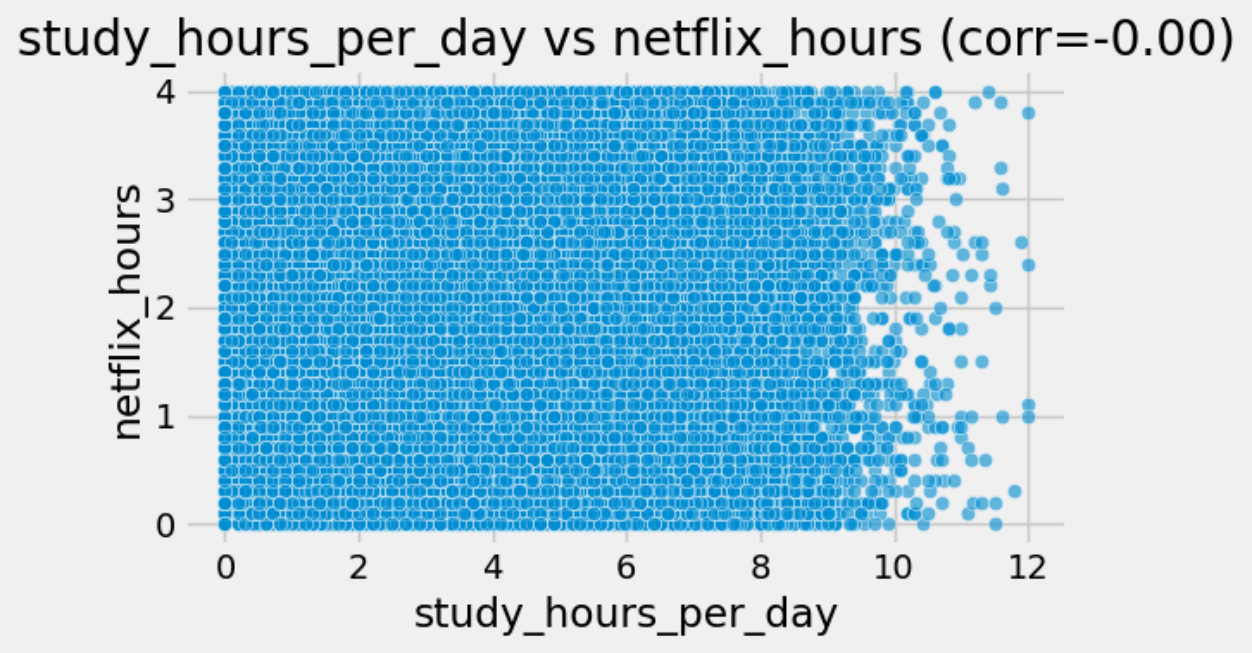

age by study_environment
28
26
24
22
20
18
16
age
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

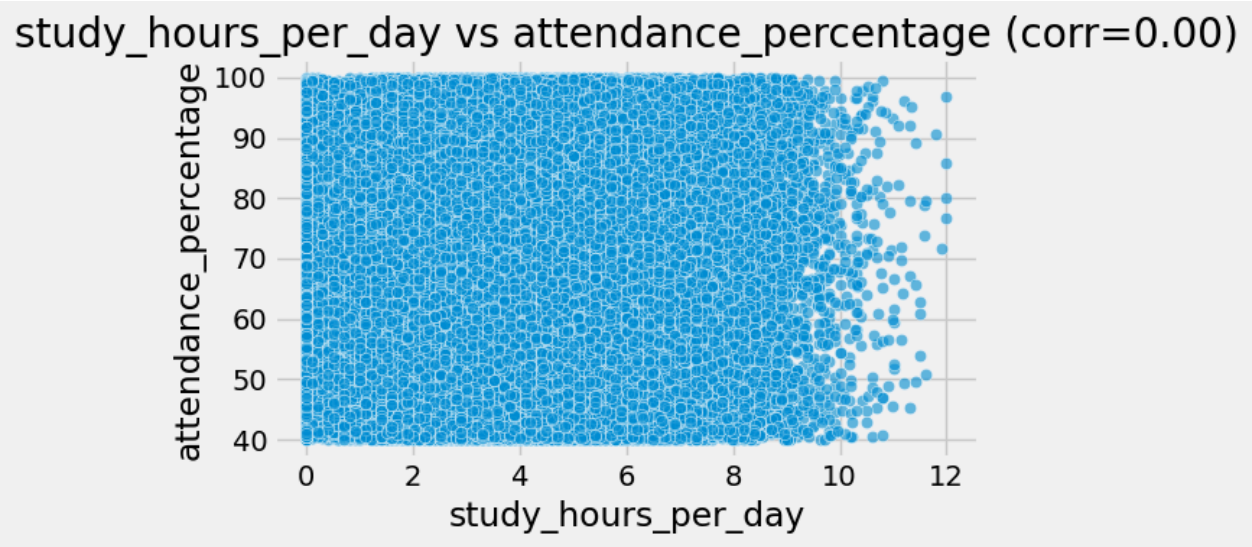

age by access_to_tutoring
28
26
24
22
20
18
16
age
Yes
No
access_to_tutoring

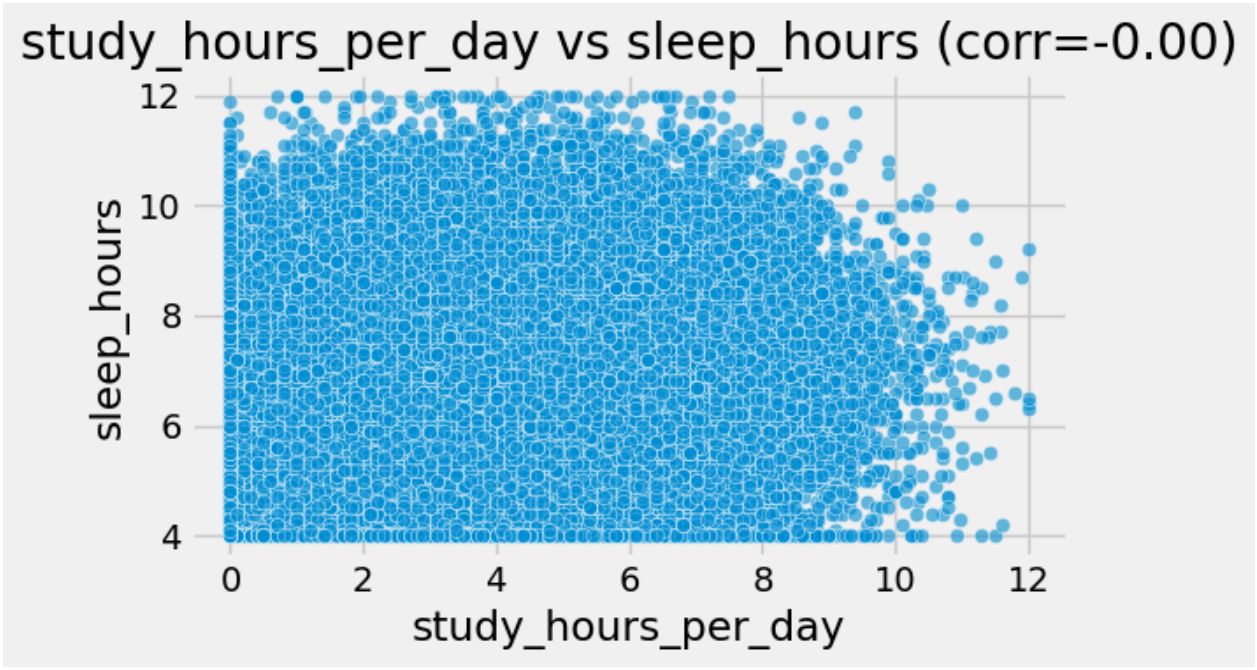

age by family_income_range
28
26
24
22
20
18
16
age
High
Low
Medium
family_income_range

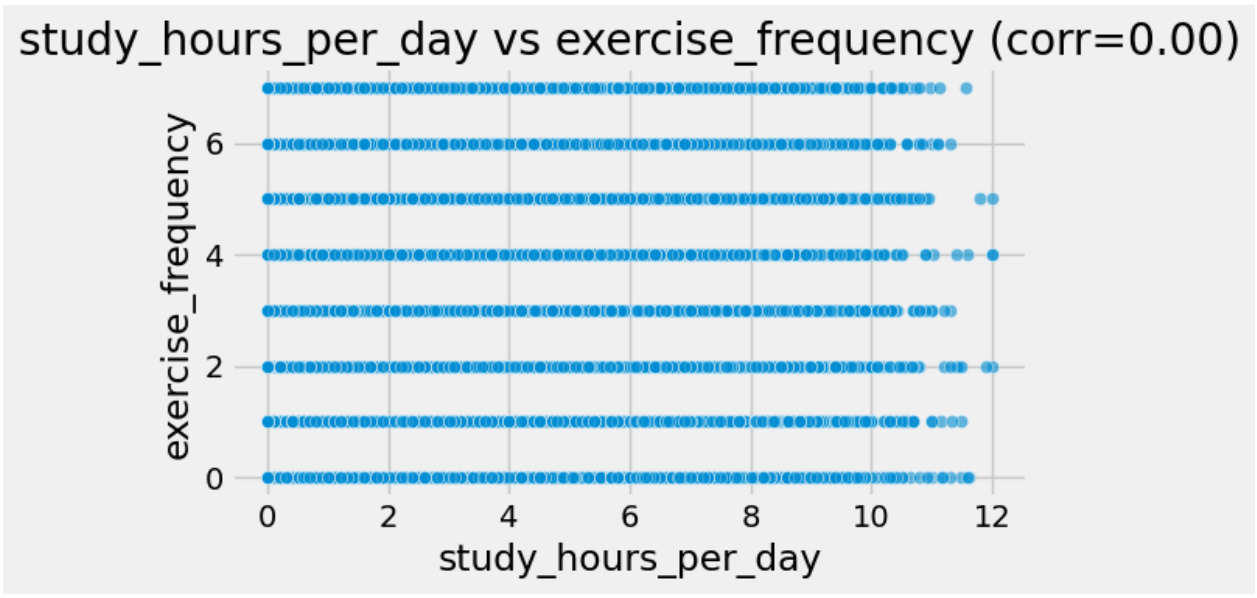

age by learning_style
28
26
24
22
20
18
16
age
Reading
Kinesthetic
Visual
Auditory
learning_style

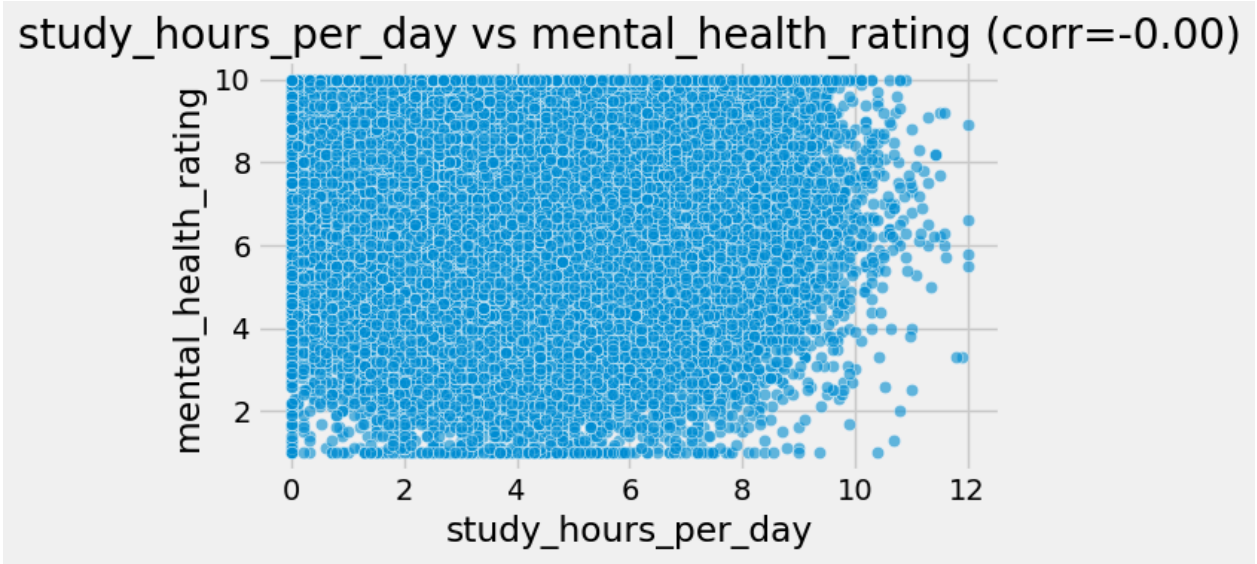

study_hours_per_day vs social_media_hours (corr=-0.00)
5
4
3
2
1
0
social_media_hours
0
2
4
6
8
10
12
study_hours_per_day

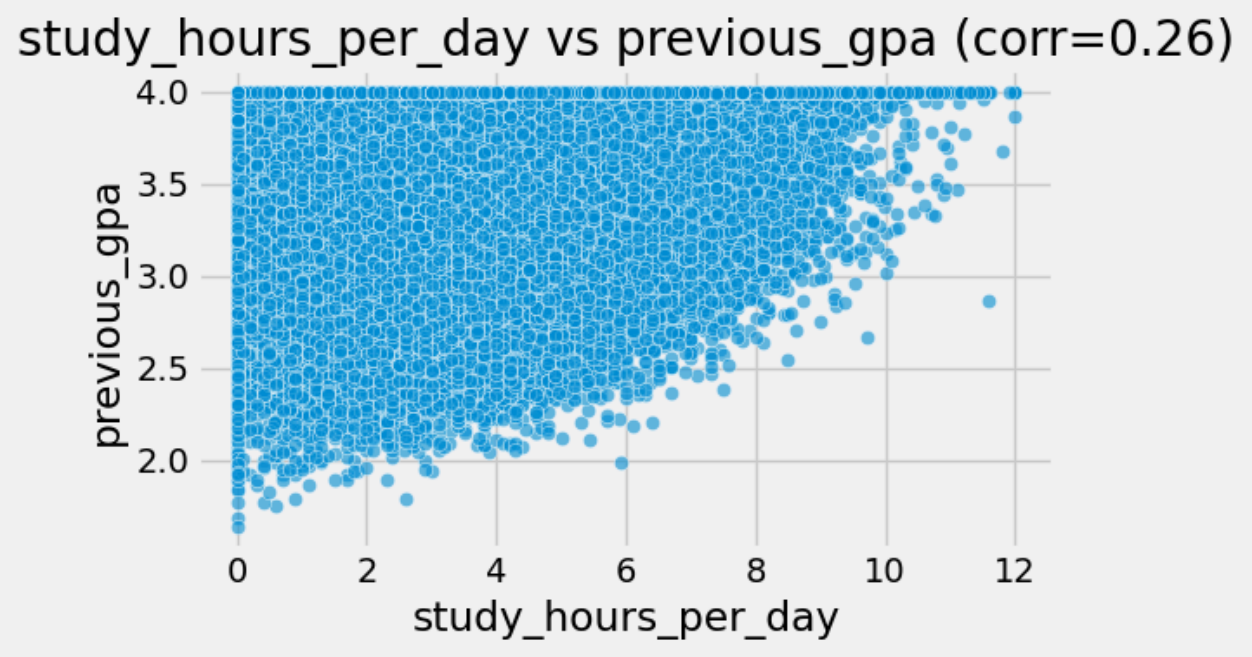

study_hours_per_day vs netflix_hours (corr=-0.00)
netflix_hours
study_hours_per_day
0
1
2
3
4
0
2
4
6
8
10
12

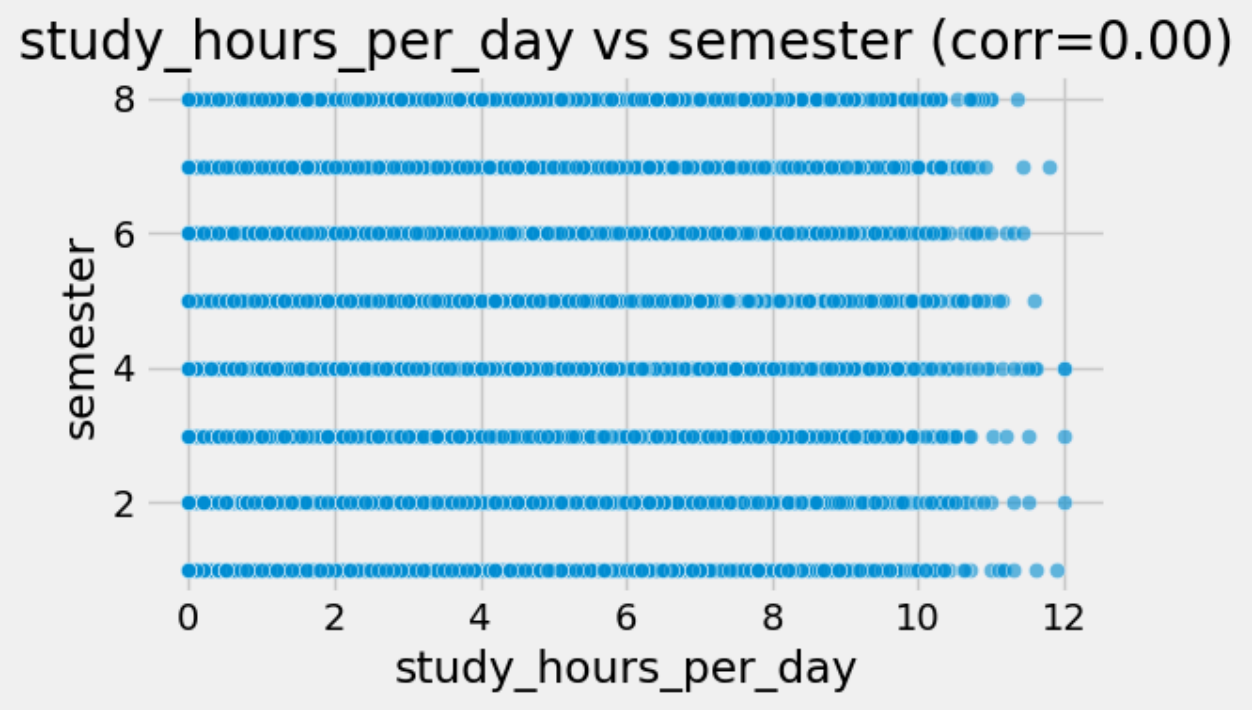

study_hours_per_day vs attendance_percentage (corr=0.00)
attendance_percentage
study_hours_per_day
40
50
60
70
80
90
100
0
2
4
6
8
10
12

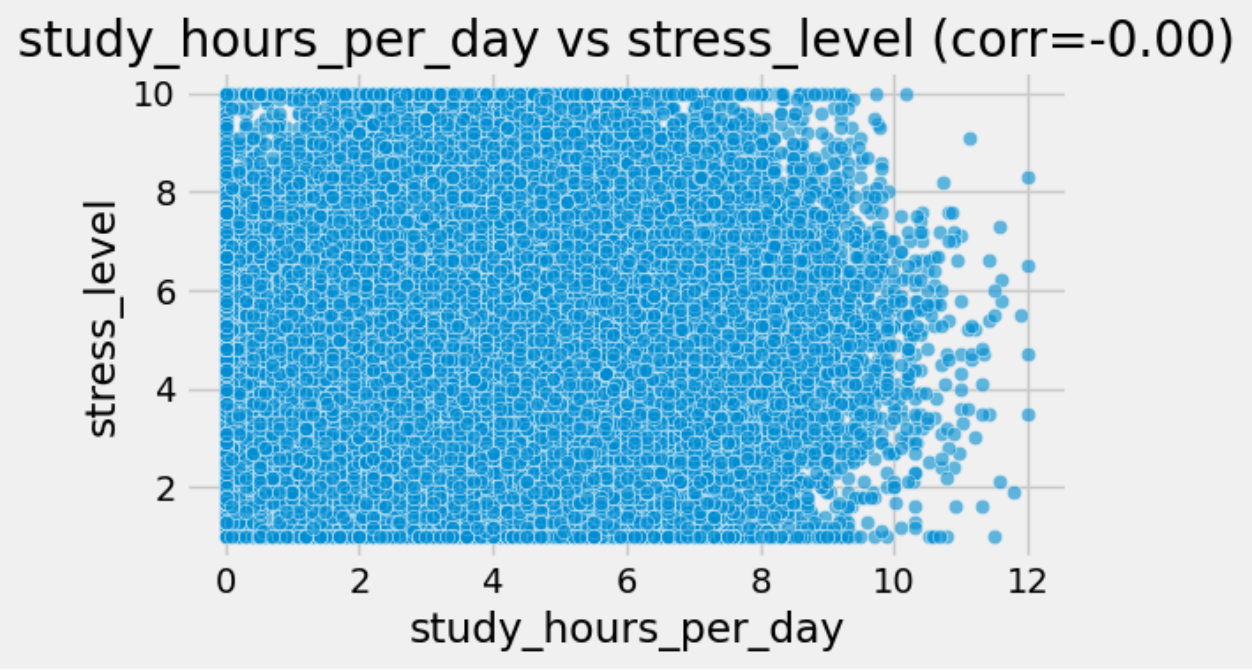

study_hours_per_day vs sleep_hours (corr=-0.00)
sleep_hours
study_hours_per_day
12
10
8
6
4
0
2
4
6
8
10
12

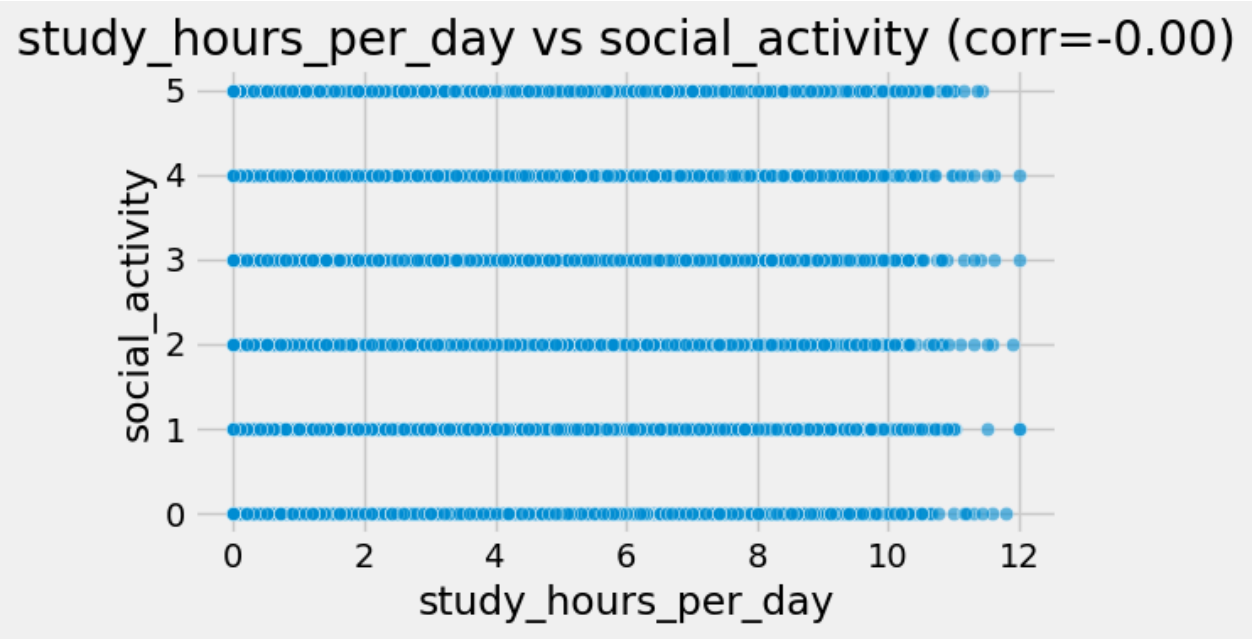

study_hours_per_day vs exercise_frequency (corr=0.00)
exercise_frequency
study_hours_per_day
6
4
2
0
0
2
4
6
8
10
12

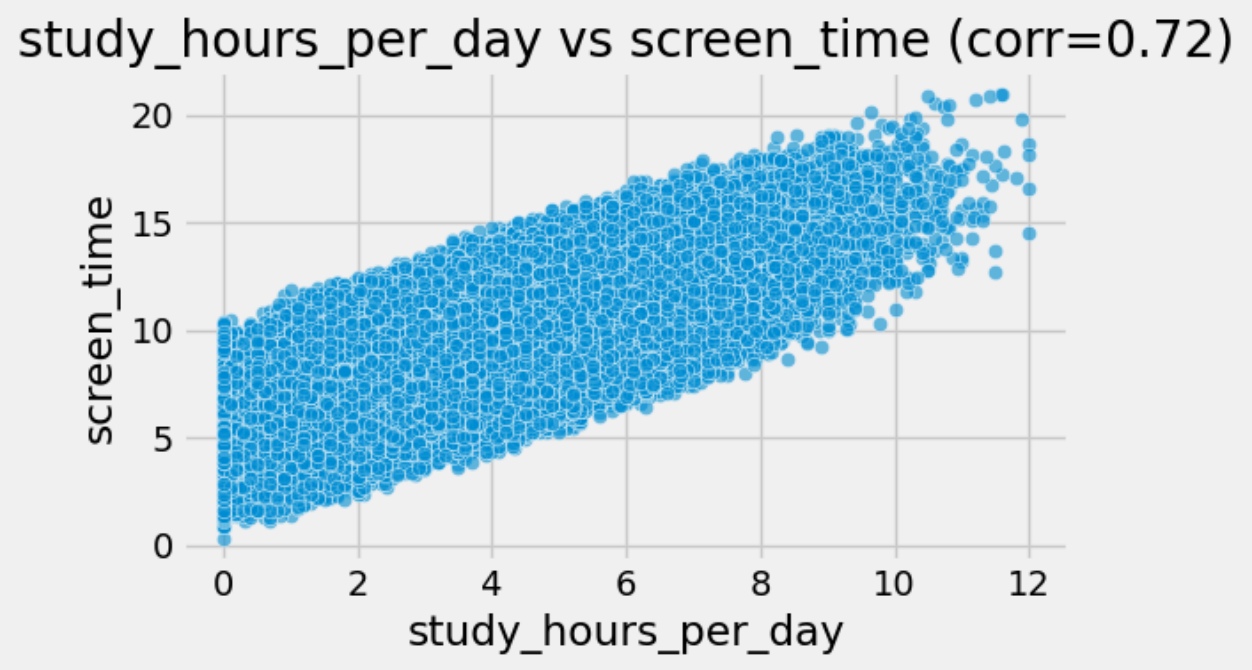

study_hours_per_day vs mental_health_rating (corr=-0.00)
mental_health_rating
study_hours_per_day
10
8
6
4
2
0
2
4
6
8
10
12

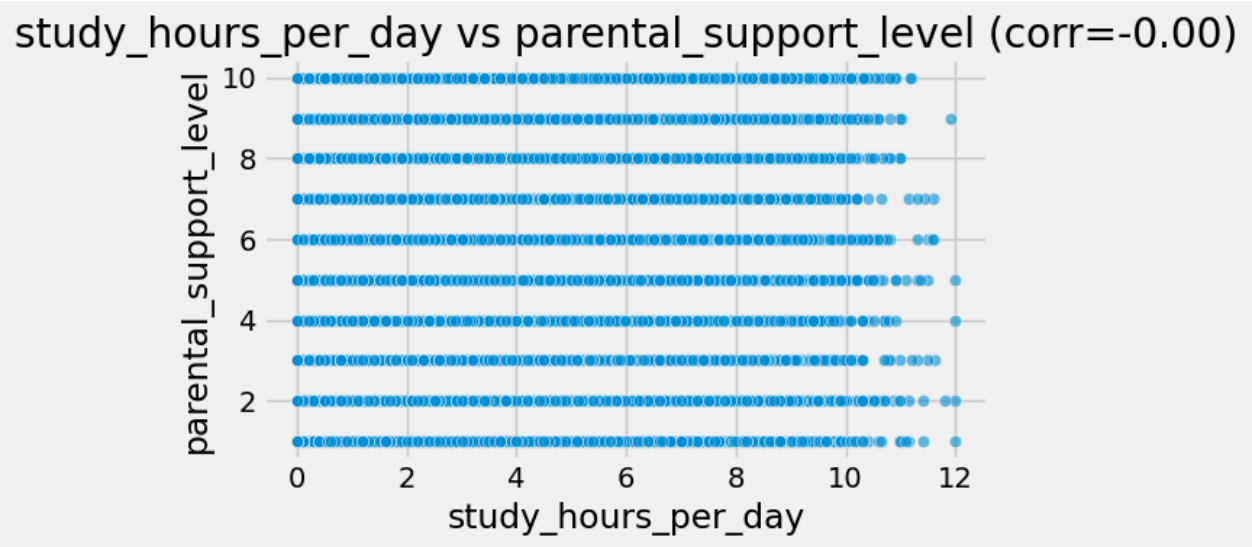

study_hours_per_day vs previous_gpa (corr=0.26)
previous_gpa
4.0
3.5
3.0
2.5
2.0
0
2
4
6
8
10
12
study_hours_per_day

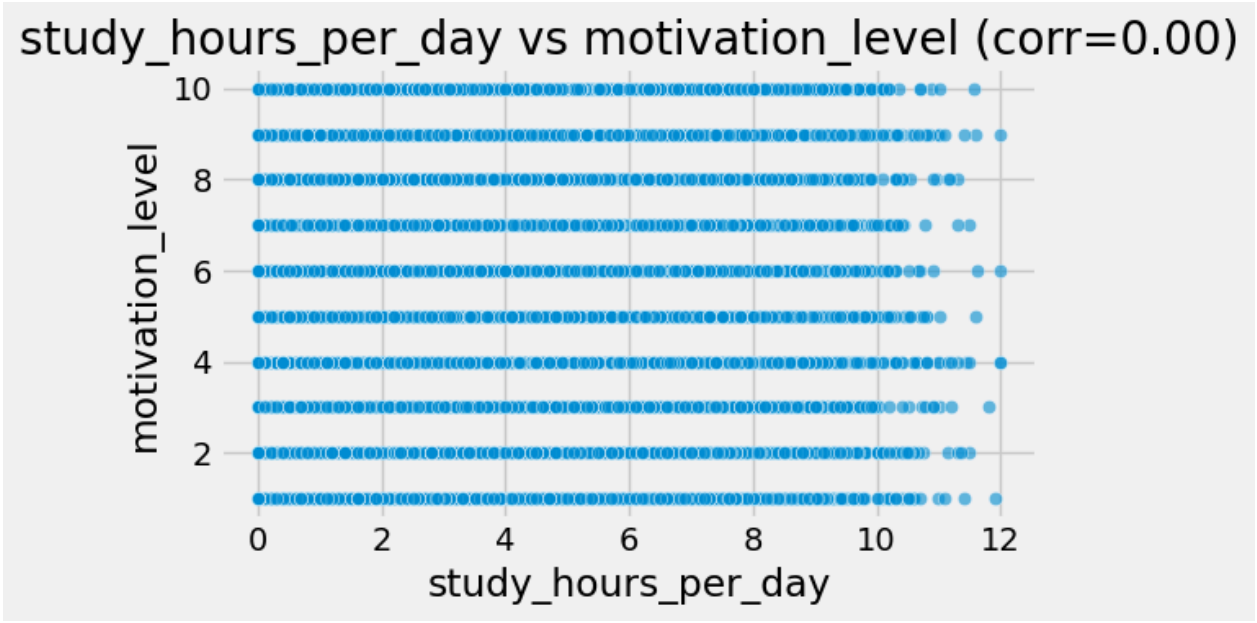

study_hours_per_day vs semester (corr=0.00)
semester
8
6
4
2
0
2
4
6
8
10
12
study_hours_per_day

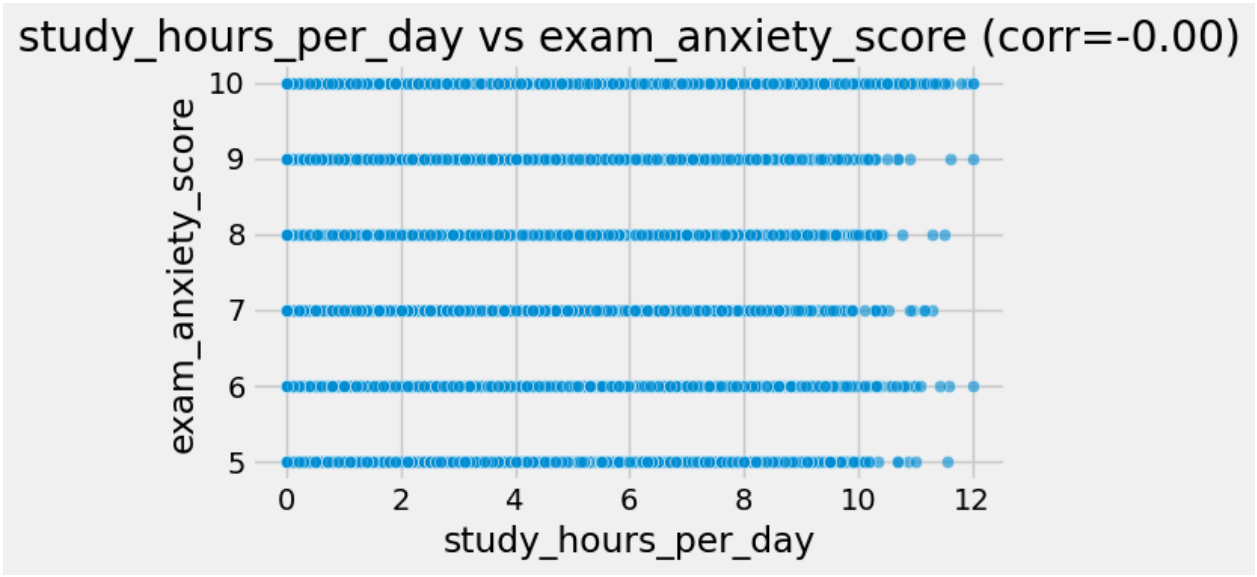

study_hours_per_day vs stress_level (corr=-0.00)
stress_level
10
8
6
4
2
0
2
4
6
8
10
12
study_hours_per_day

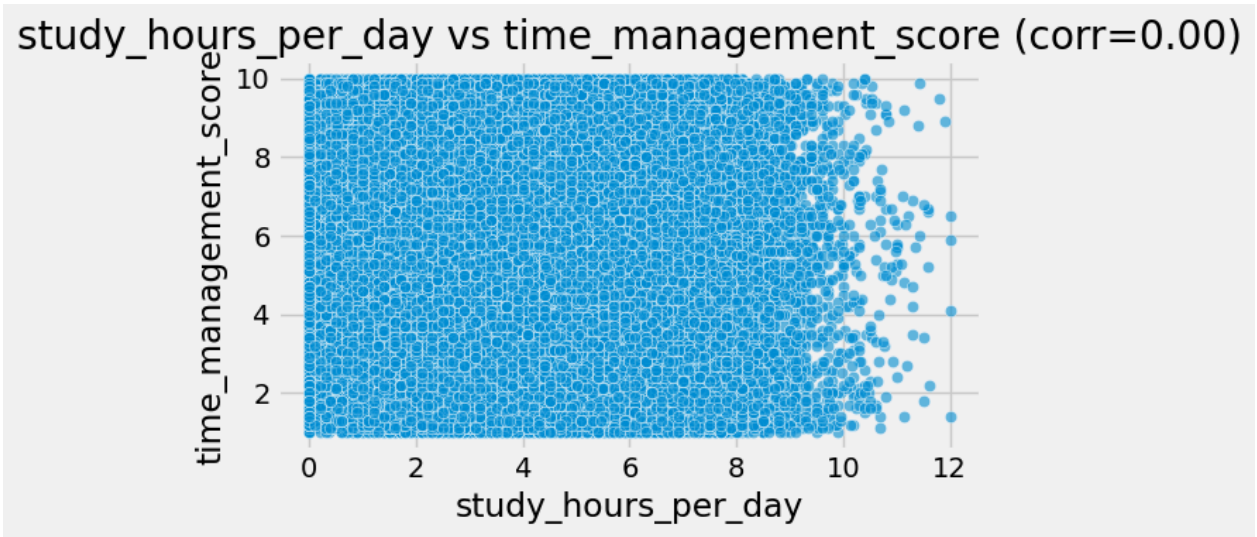

study_hours_per_day vs social_activity (corr=-0.00)
social_activity
5
4
3
2
1
0
0
2
4
6
8
10
12
study_hours_per_day

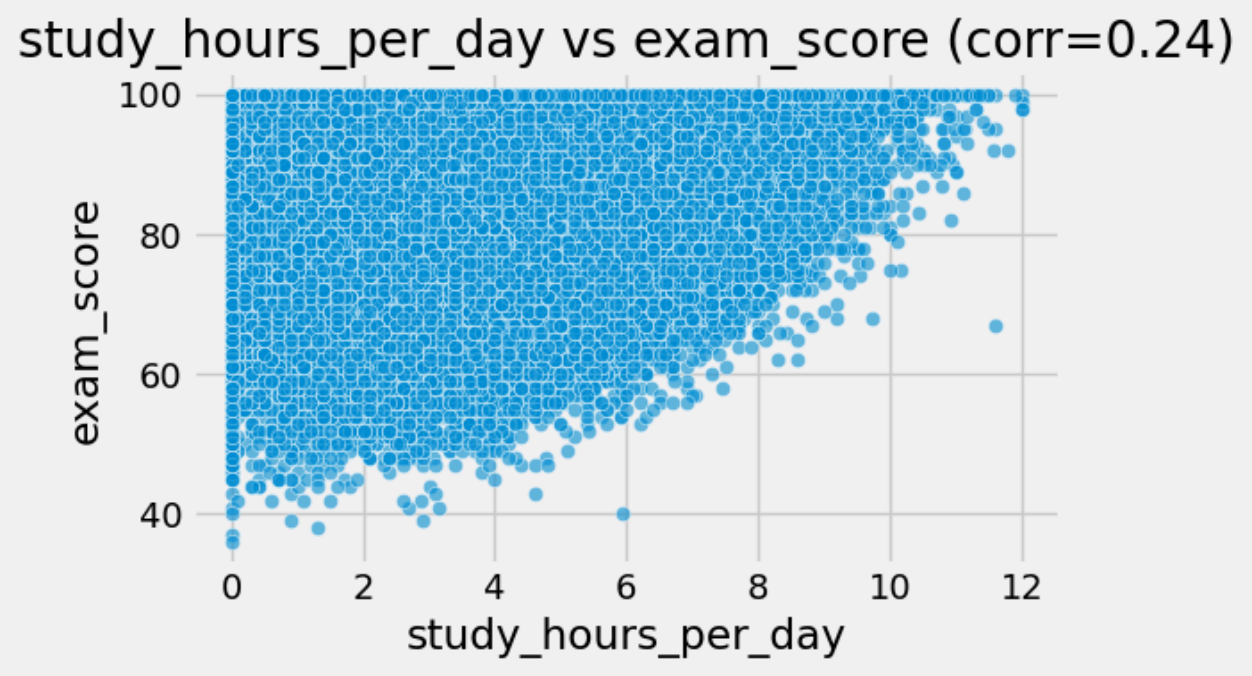

study_hours_per_day vs screen_time (corr=0.72)
screen_time
study_hours_per_day
0
5
10
15
20
0
2
4
6
8
10
12

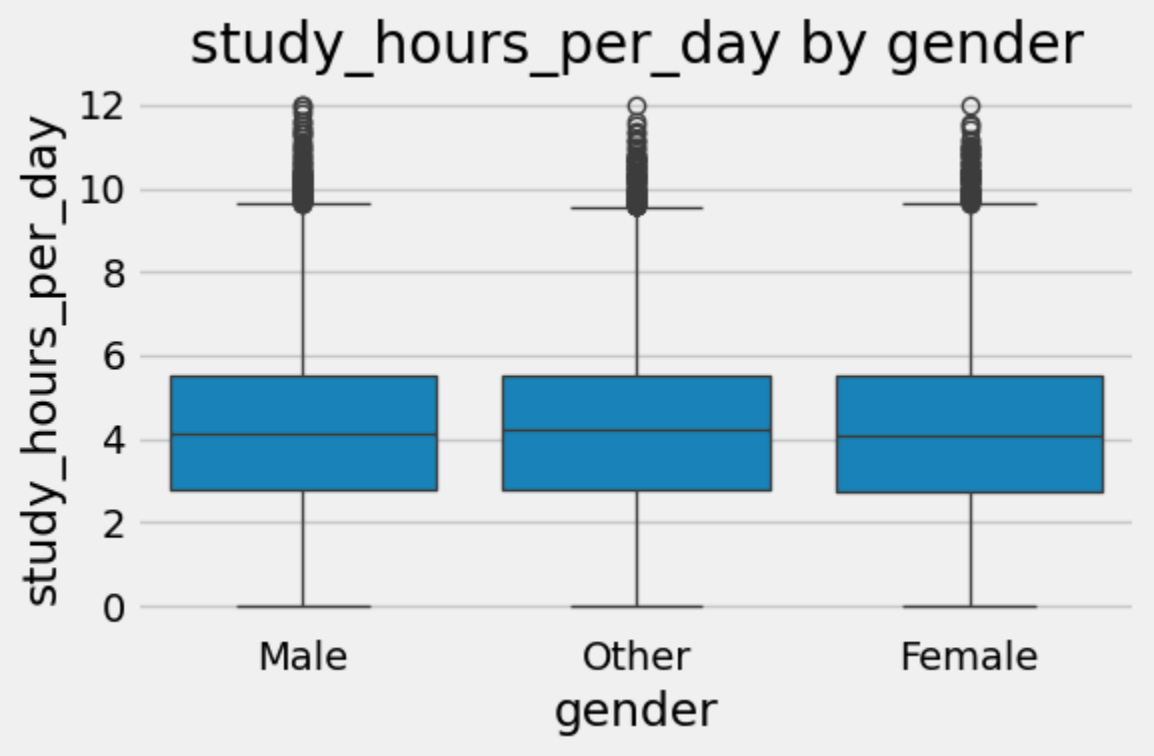

study_hours_per_day vs parental_support_level (corr=-0.00)
parental_support_level
study_hours_per_day
2
4
6
8
10
0
2
4
6
8
10
12

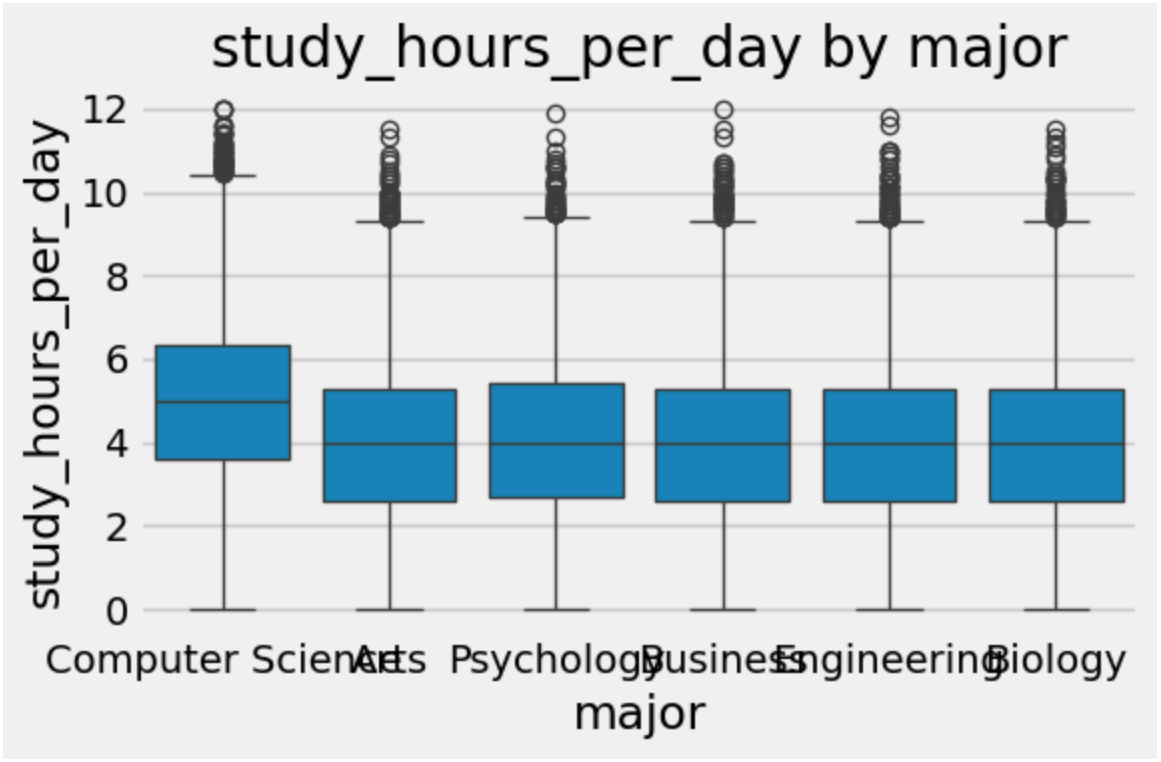

study_hours_per_day vs motivation_level (corr=0.00)
motivation_level
10
8
6
4
2
0
2
4
6
8
10
12
study_hours_per_day

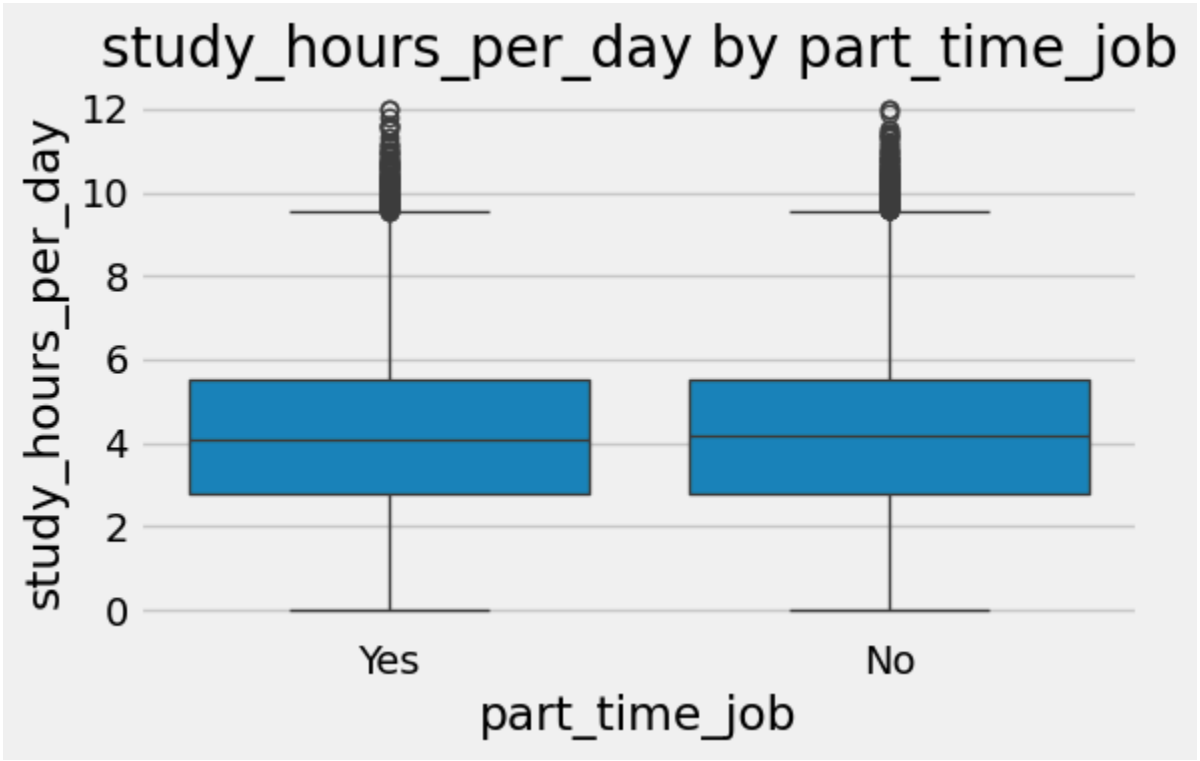

study_hours_per_day vs exam_anxiety_score (corr=-0.00)
exam_anxiety_score
10
9
8
7
6
5
0
2
4
6
8
10
12
study_hours_per_day

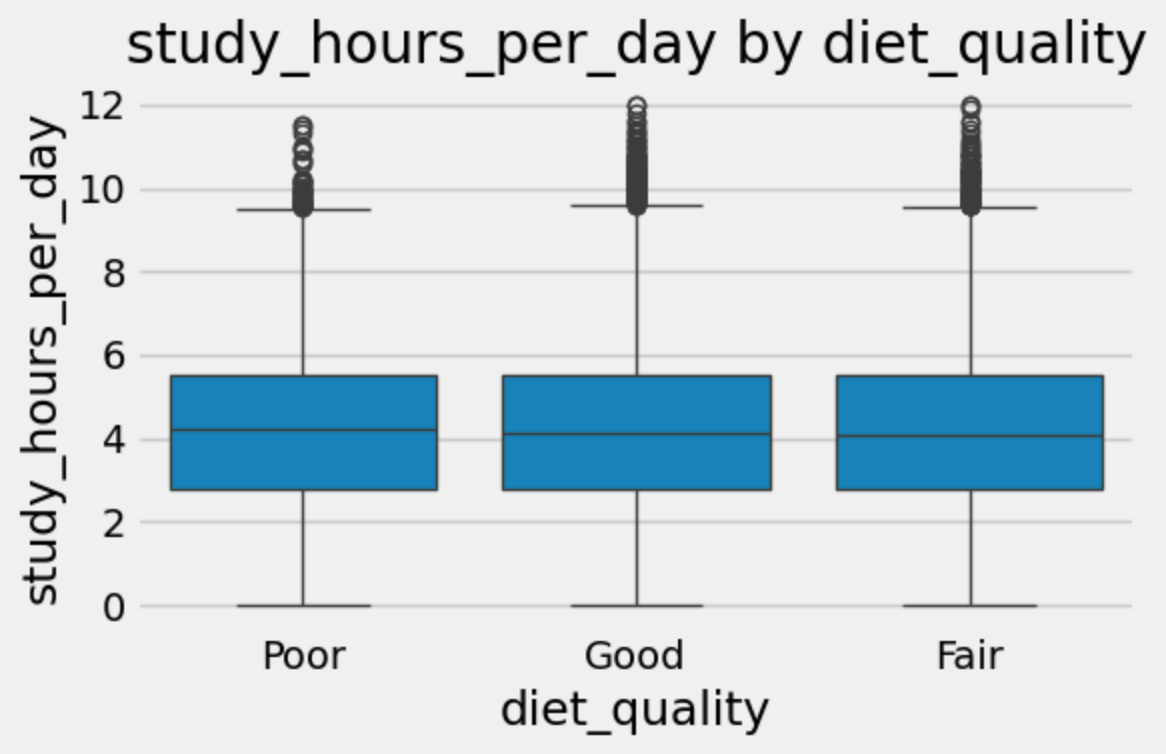

study_hours_per_day vs time_management_score (corr=0.00)
time_management_score
10
8
6
4
2
0
2
4
6
8
10
12
study_hours_per_day

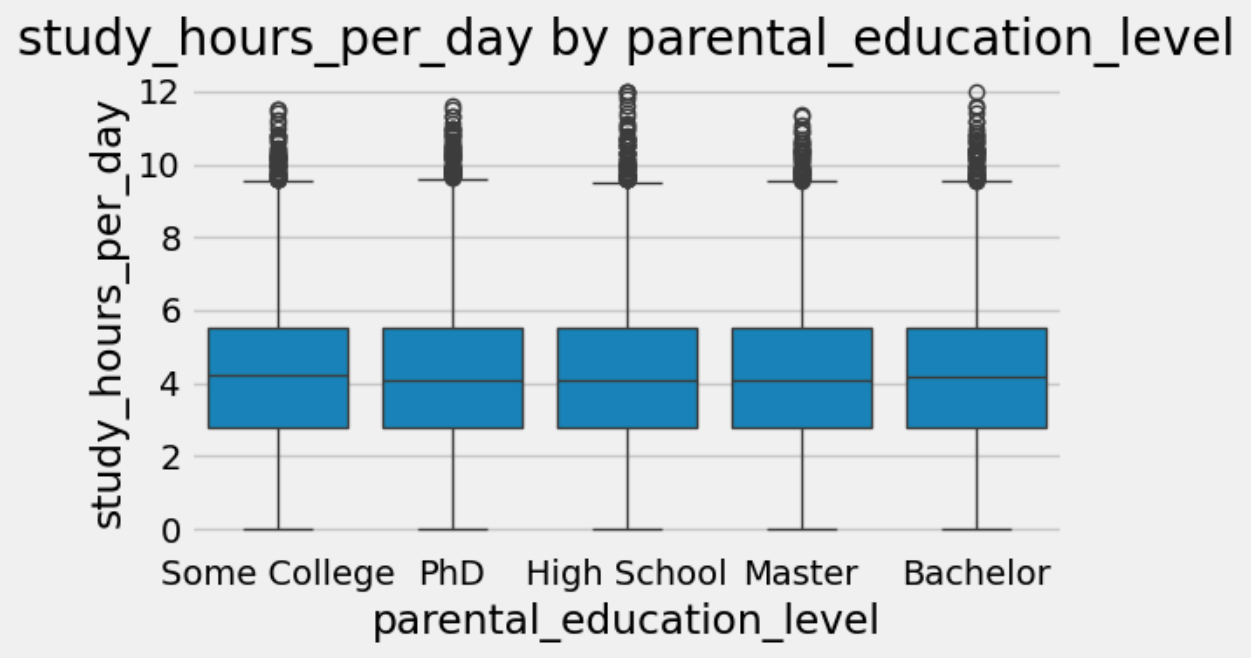

study_hours_per_day vs exam_score (corr=0.24)
exam_score
100
80
60
40
0
2
4
6
8
10
12
study_hours_per_day

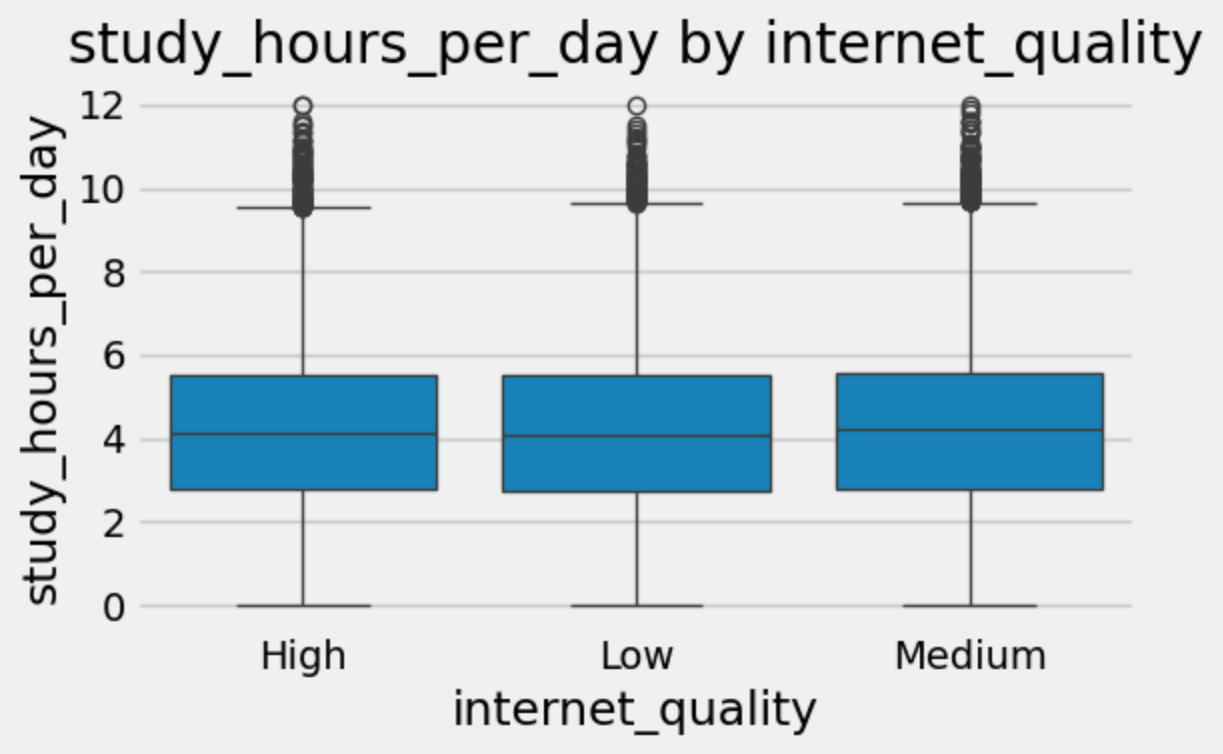

study_hours_per_day by gender
study_hours_per_day
12
10
8
6
4
2
0
Male
Other
Female
gender

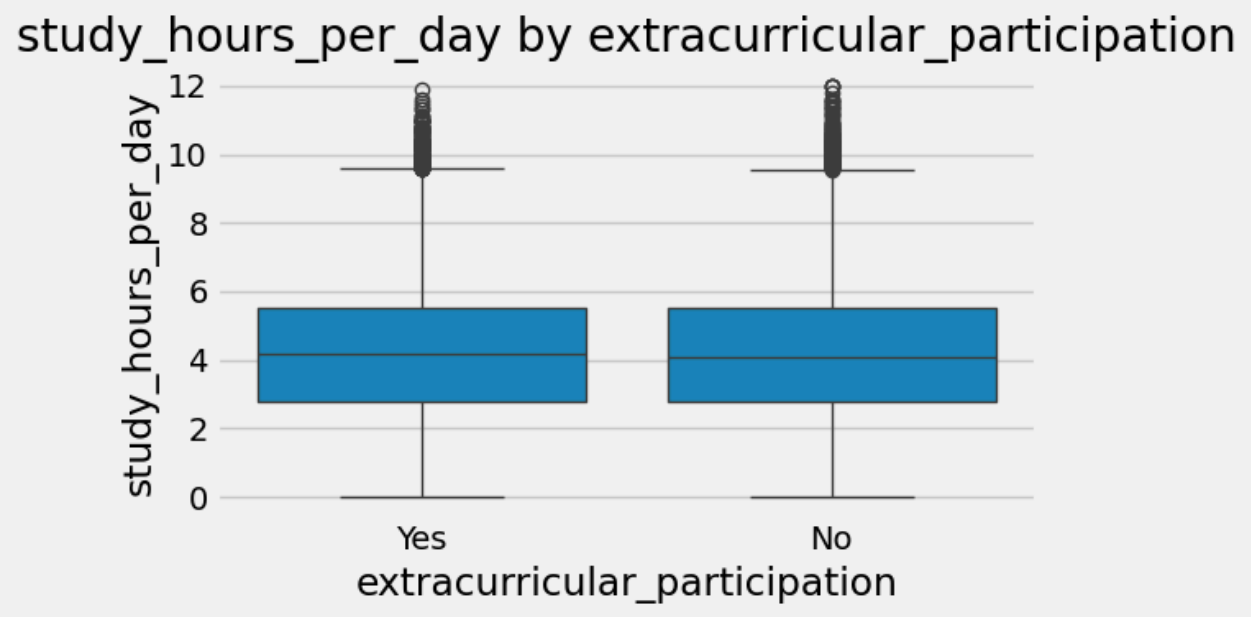

study_hours_per_day by major
study_hours_per_day
12
10
8
6
4
2
0
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

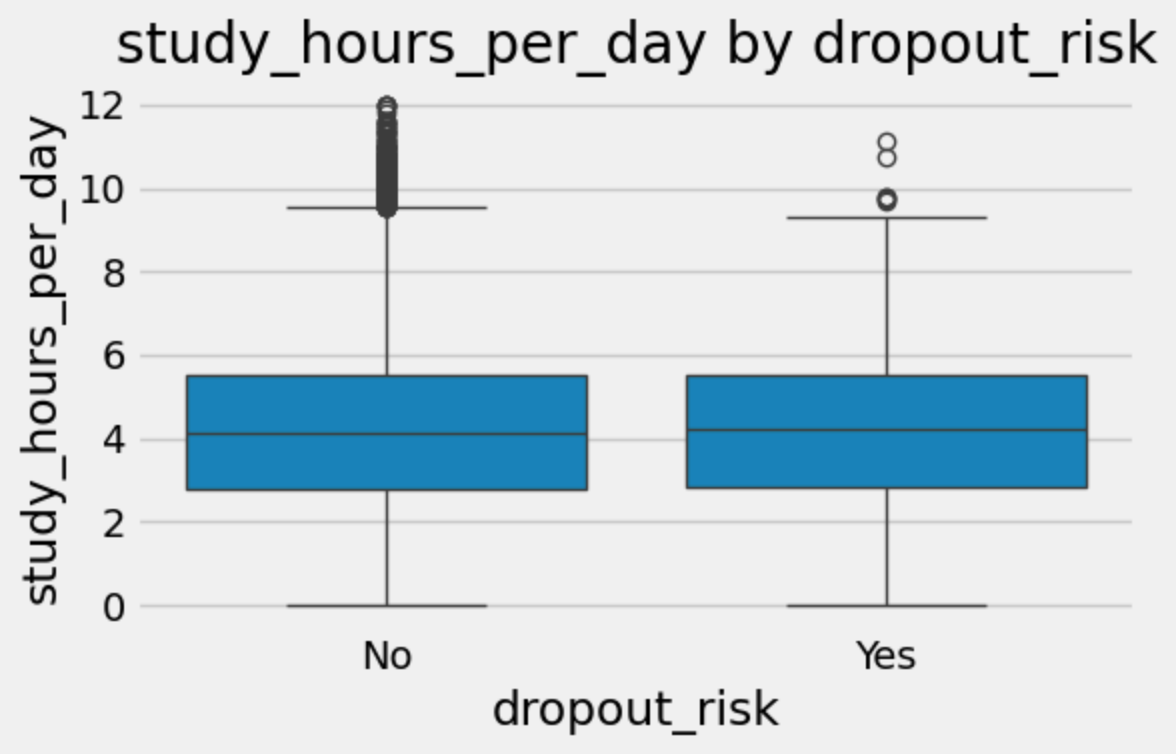

study_hours_per_day by part_time_job
study_hours_per_day
12
10
8
6
4
2
0
Yes
No
part_time_job

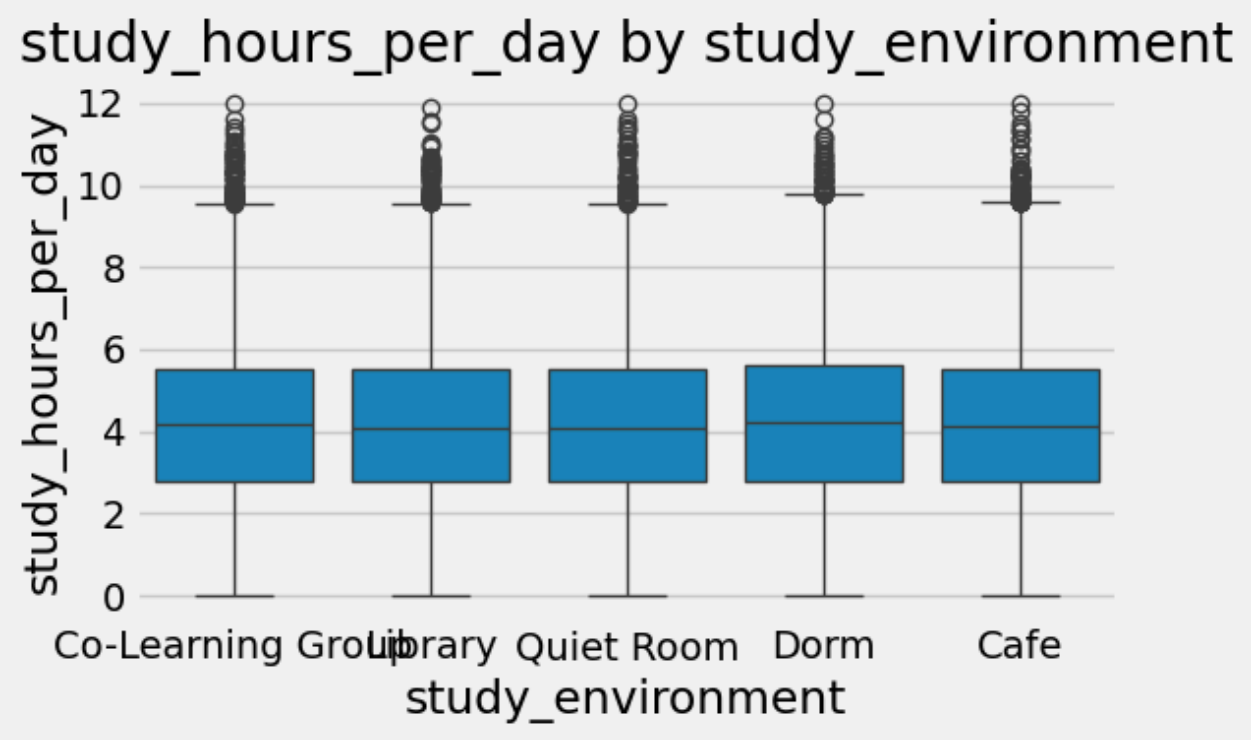

study_hours_per_day by diet_quality
study_hours_per_day
12
10
8
6
4
2
0
Poor
Good
Fair
diet_quality

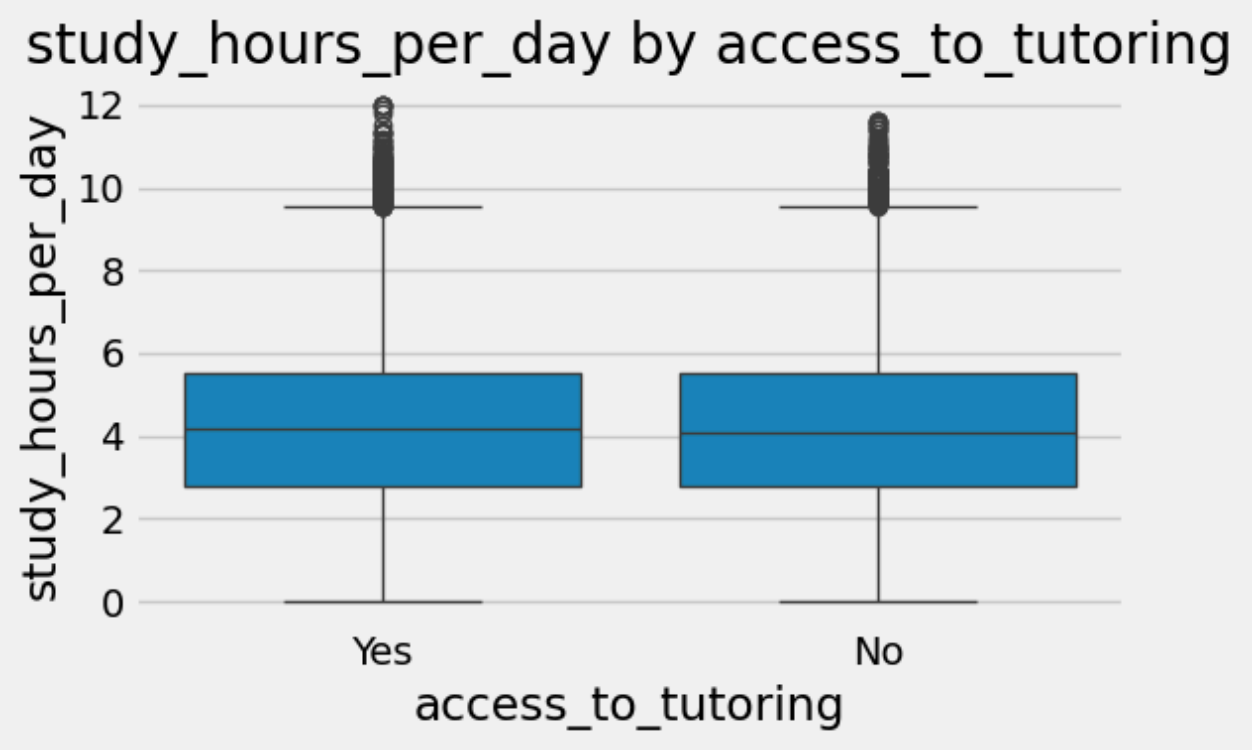

study_hours_per_day by parental_education_level
study_hours_per_day
12
10
8
6
4
2
0
Some College
PhD
High School
Master
Bachelor
parental_education_level

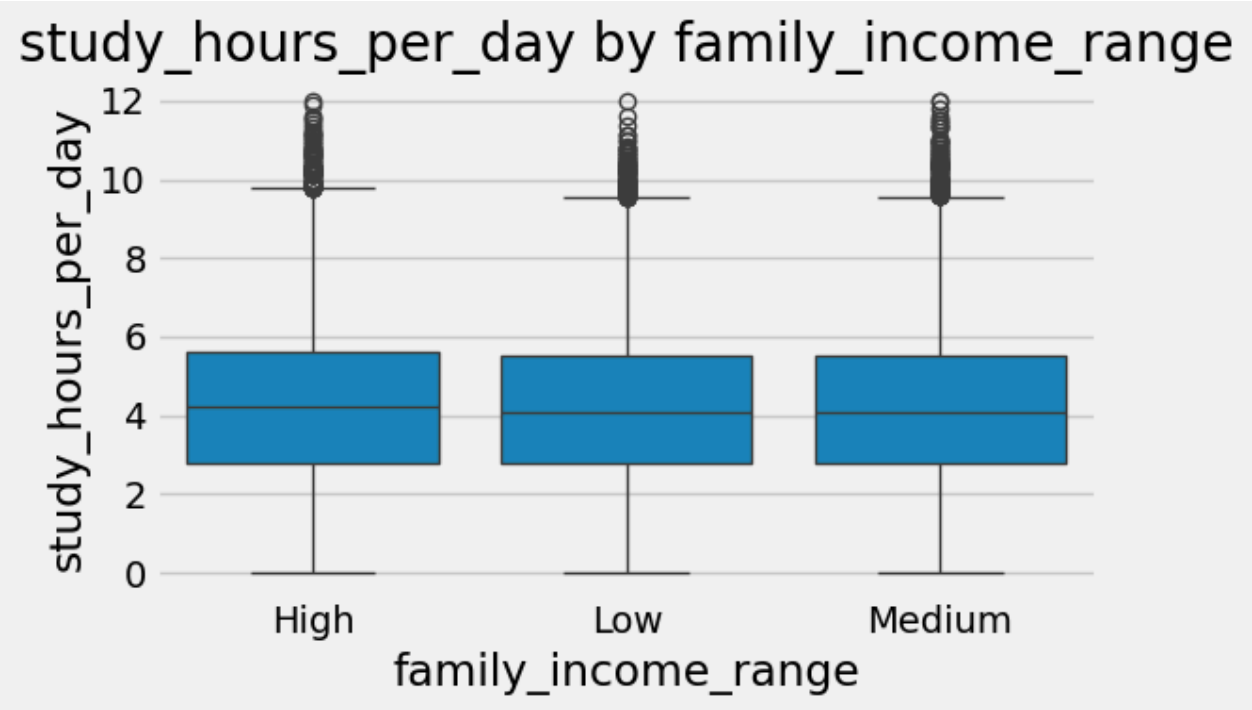

study_hours_per_day by internet_quality
study_hours_per_day
12
10
8
6
4
2
0
High
Low
Medium
internet_quality

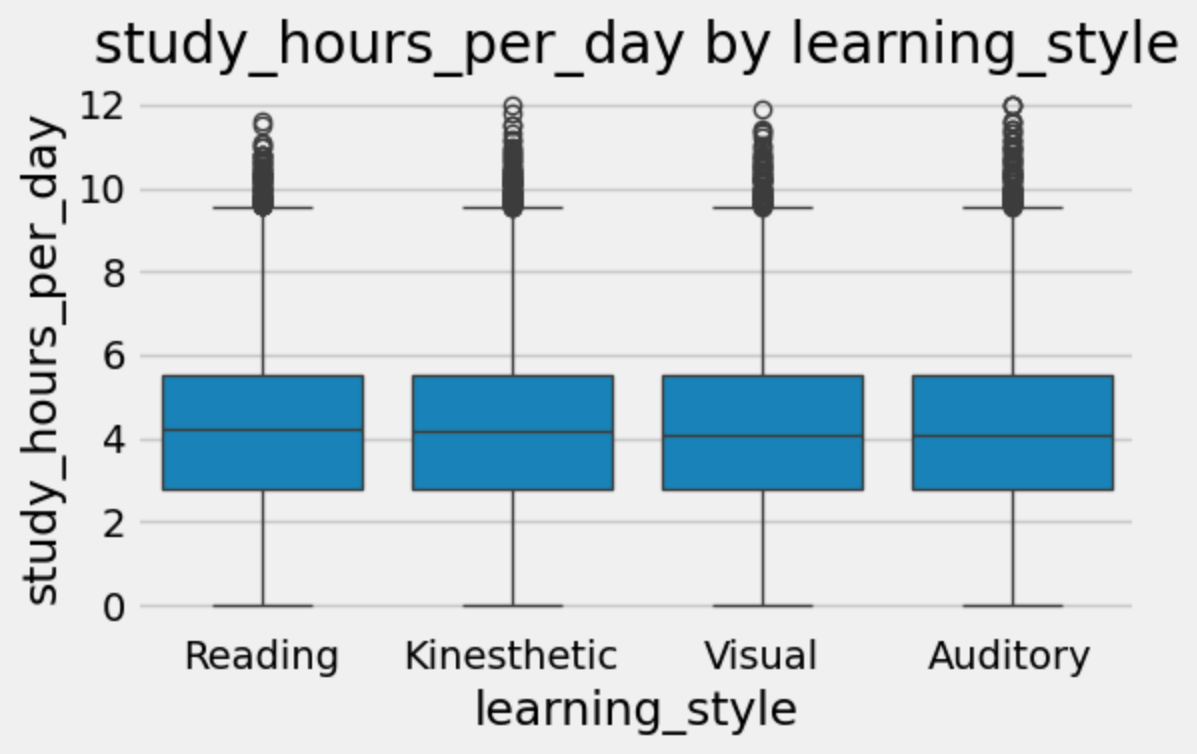

study_hours_per_day by extracurricular_participation
study_hours_per_day
12
10
8
6
4
2
0
Yes
No
extracurricular_participation

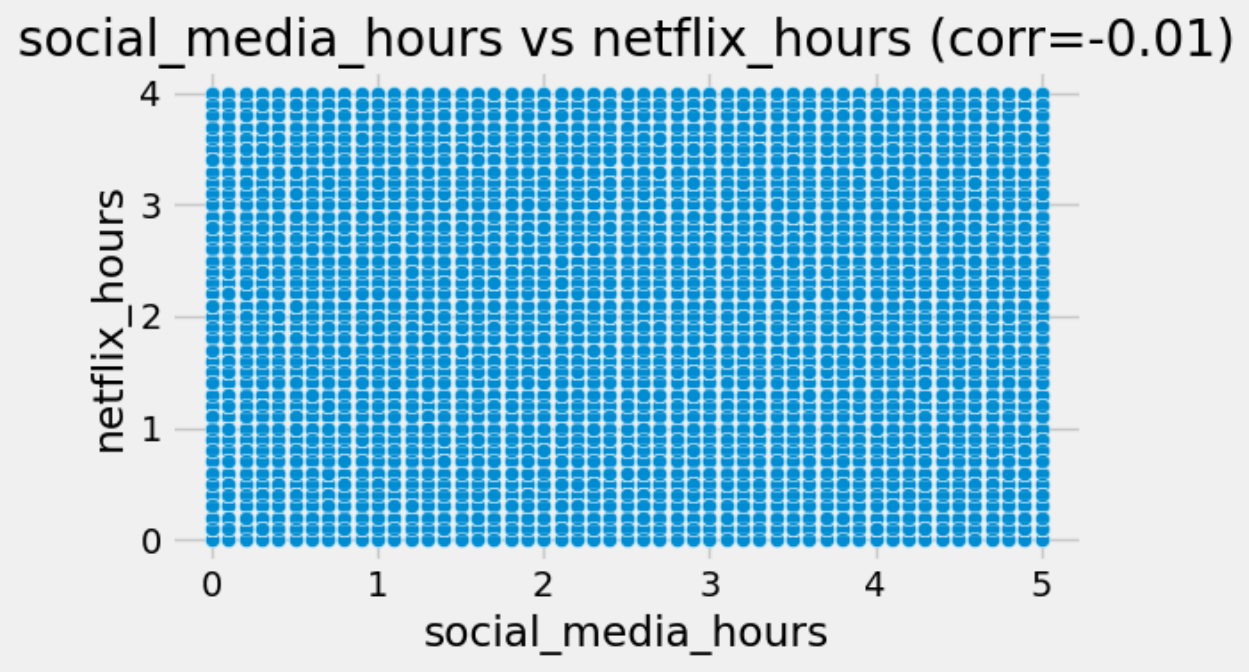

study_hours_per_day by dropout_risk
study_hours_per_day
12
10
8
6
4
2
0
No
Yes
dropout_risk

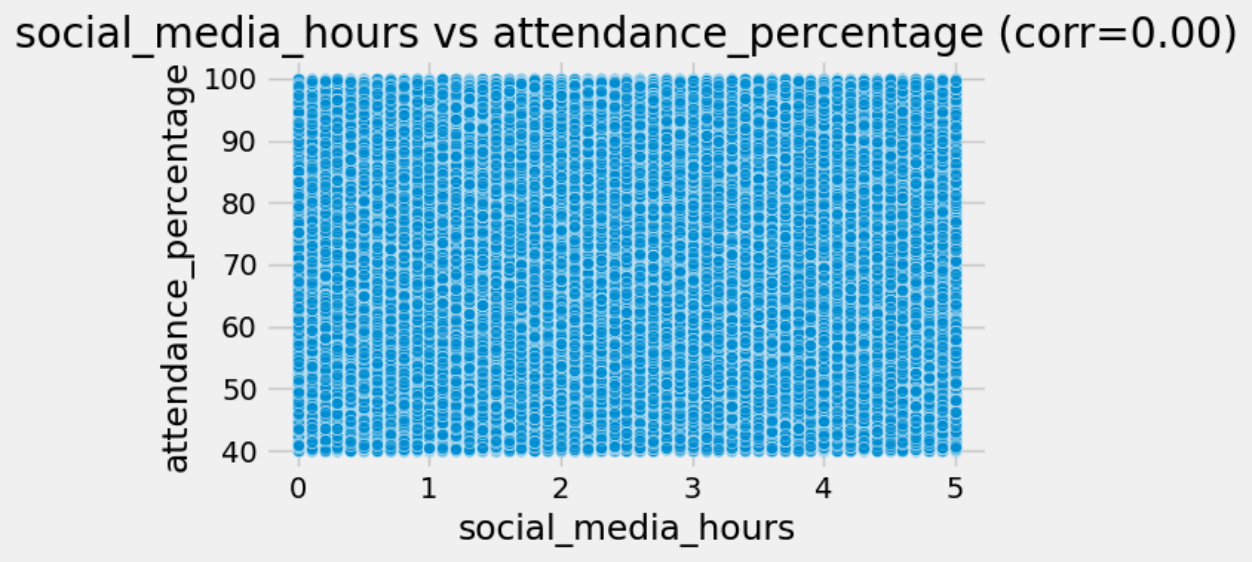

study_hours_per_day by study_environment
study_hours_per_day
12
10
8
6
4
2
0
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

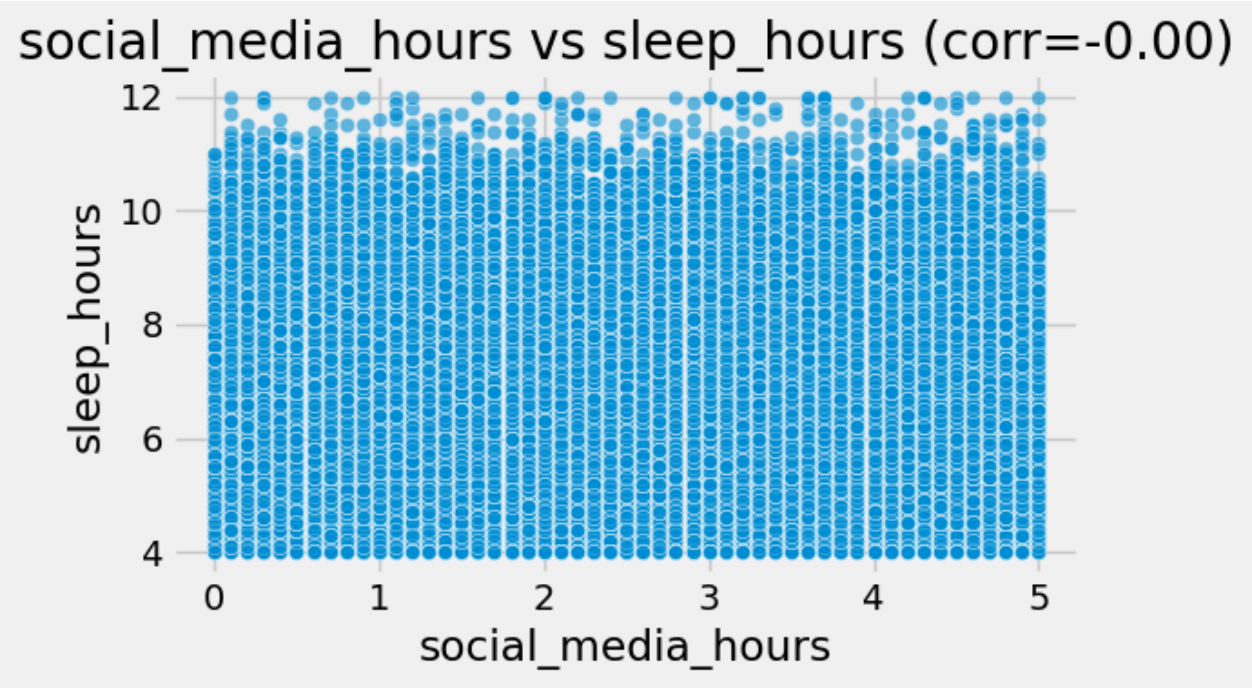

study_hours_per_day by access_to_tutoring
study_hours_per_day
12
10
8
6
4
2
0
Yes
No
access_to_tutoring

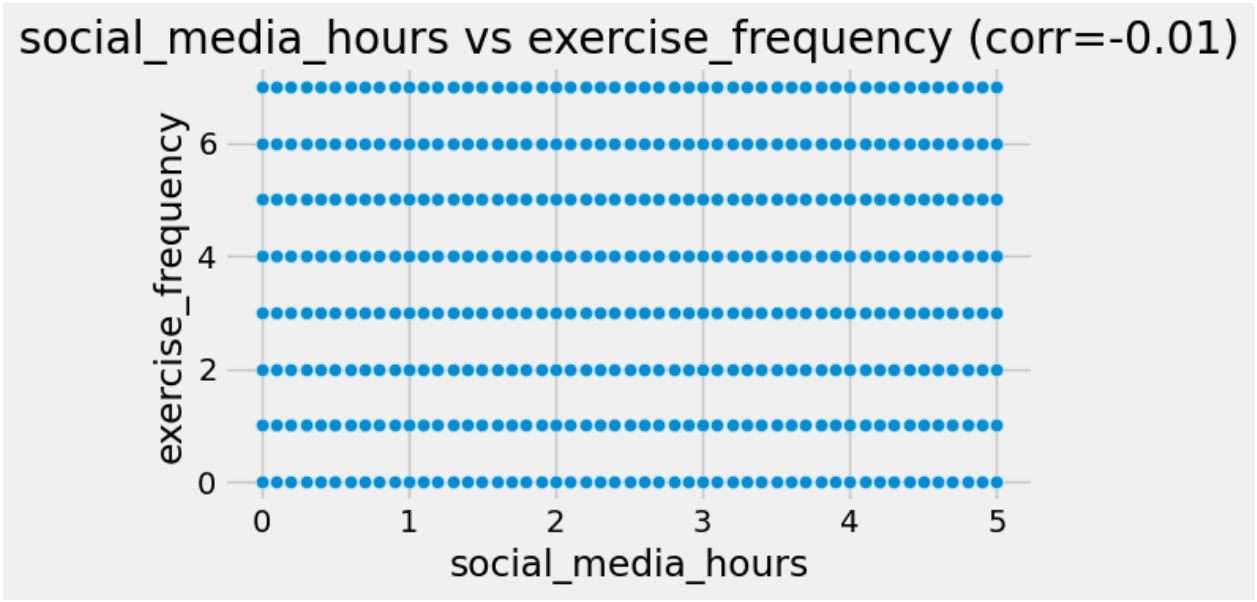

study_hours_per_day by family_income_range
study_hours_per_day
12
10
8
6
4
2
0
High
Low
Medium
family_income_range

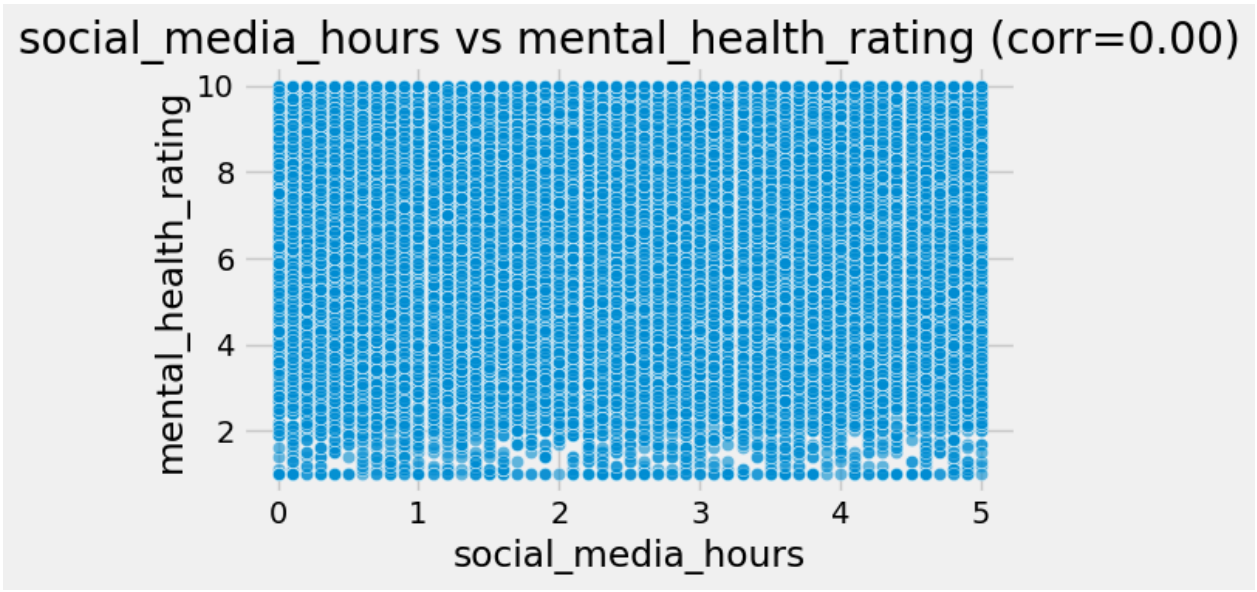

study_hours_per_day by learning_style
study_hours_per_day
12
10
8
6
4
2
0
Reading
Kinesthetic
Visual
Auditory
learning_style

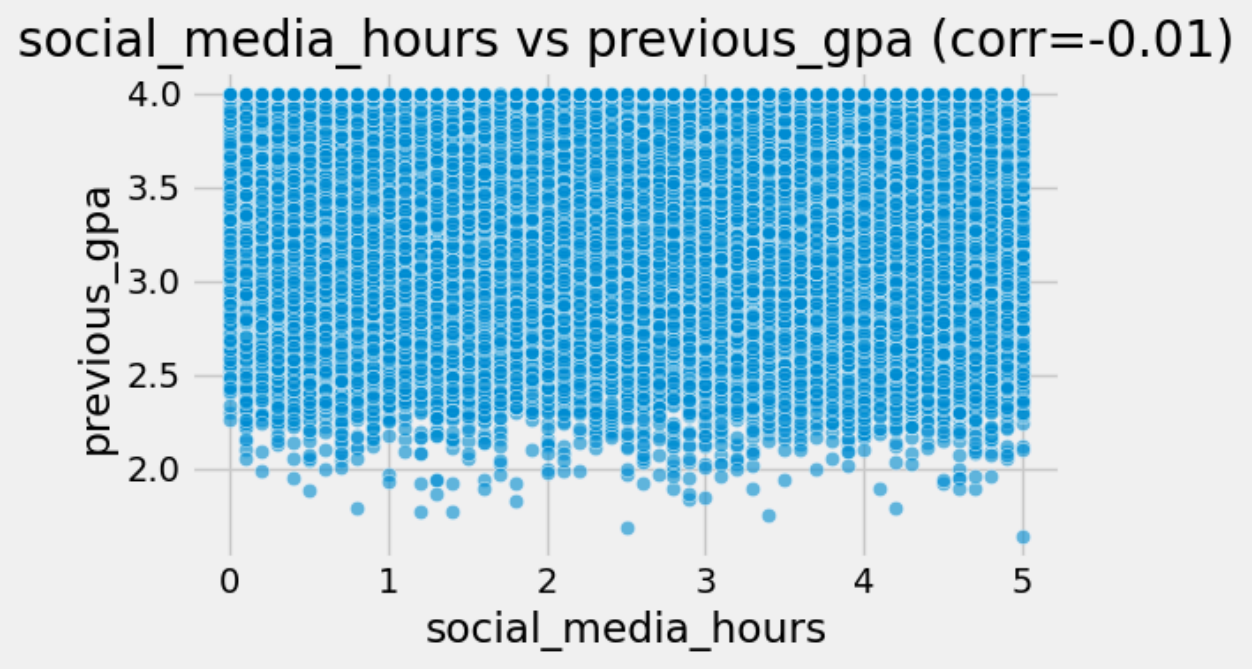

social_media_hours vs netflix_hours (corr=-0.01)
netflix_hours
4
3
2
1
0
0
1
2
3
4
5
social_media_hours

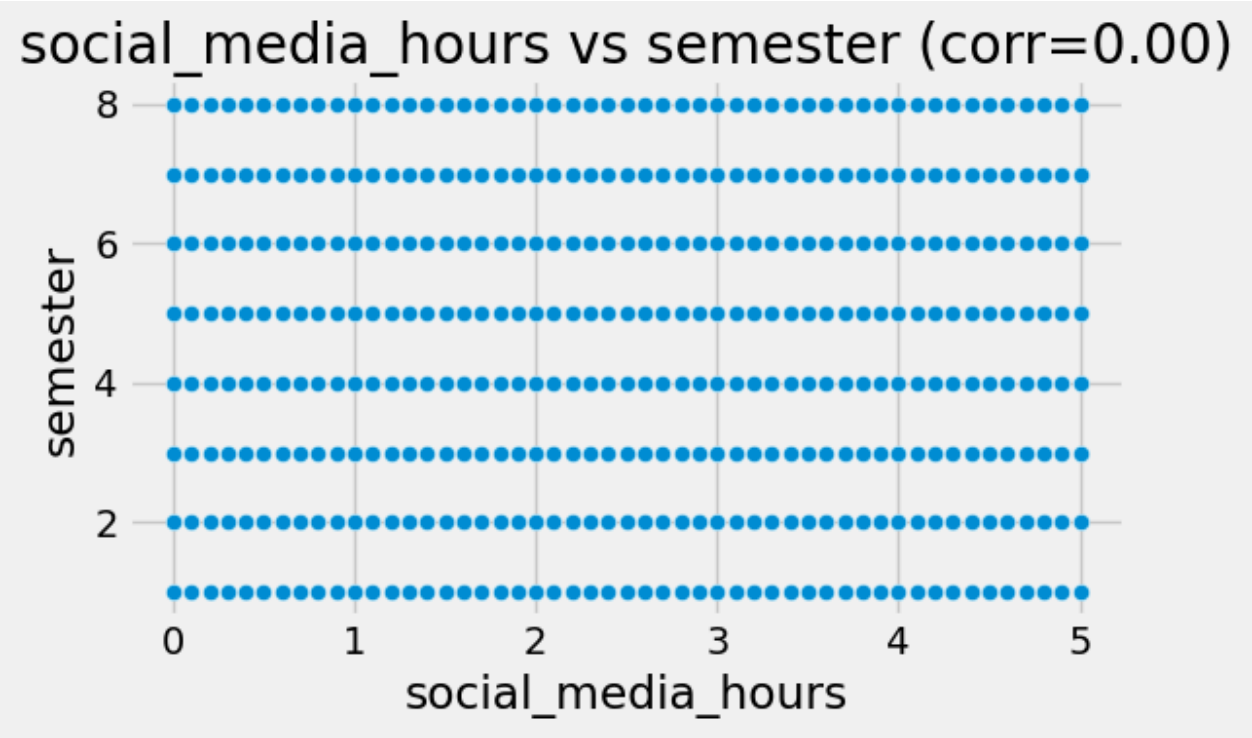

social_media_hours vs attendance_percentage (corr=0.00)
attendance_percentage
100
90
80
70
60
50
40
0
1
2
3
4
5
social_media_hours

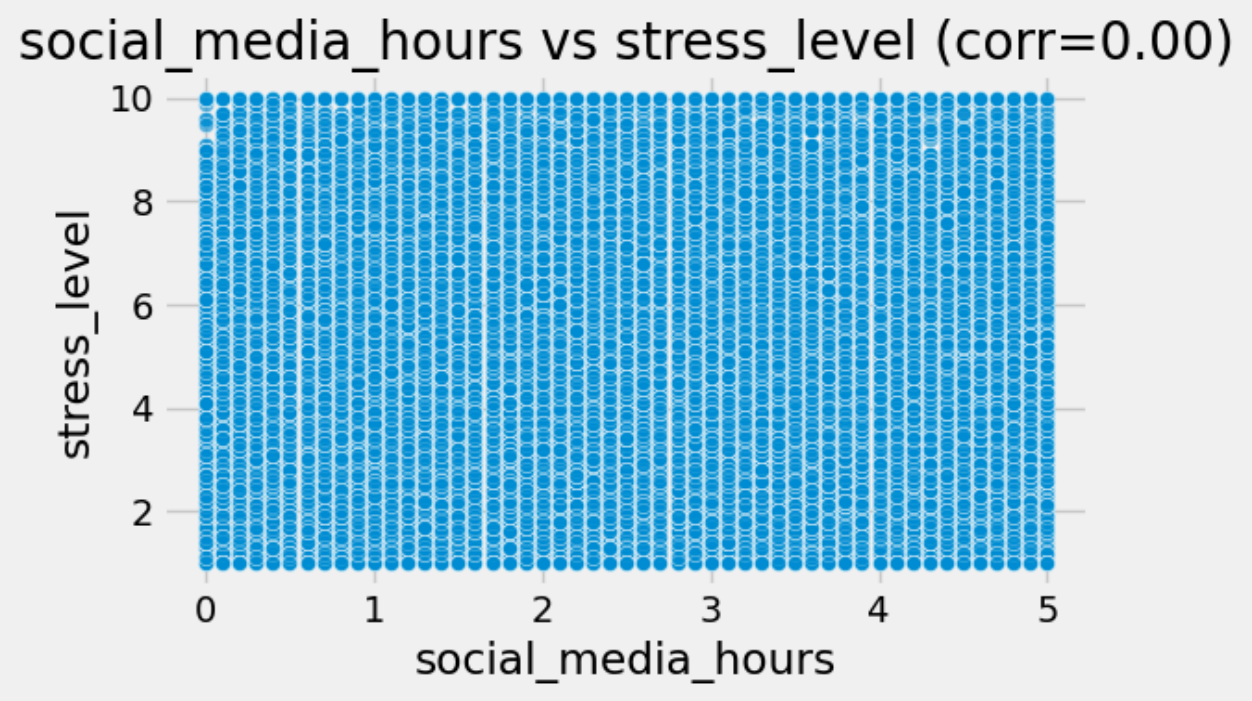

social_media_hours vs sleep_hours (corr=-0.00)
sleep_hours
12
10
8
6
4
0
1
2
3
4
5
social_media_hours

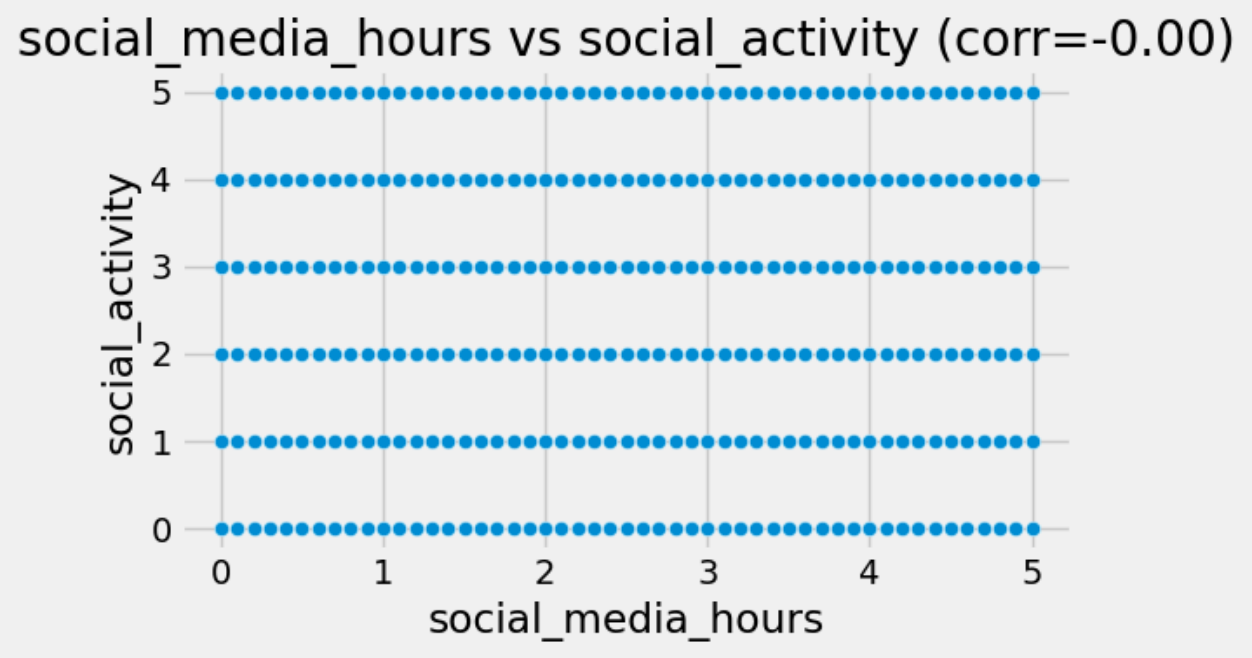

social_media_hours vs exercise_frequency (corr=-0.01)
exercise_frequency
0
2
4
6
0
1
2
3
4
5
social_media_hours

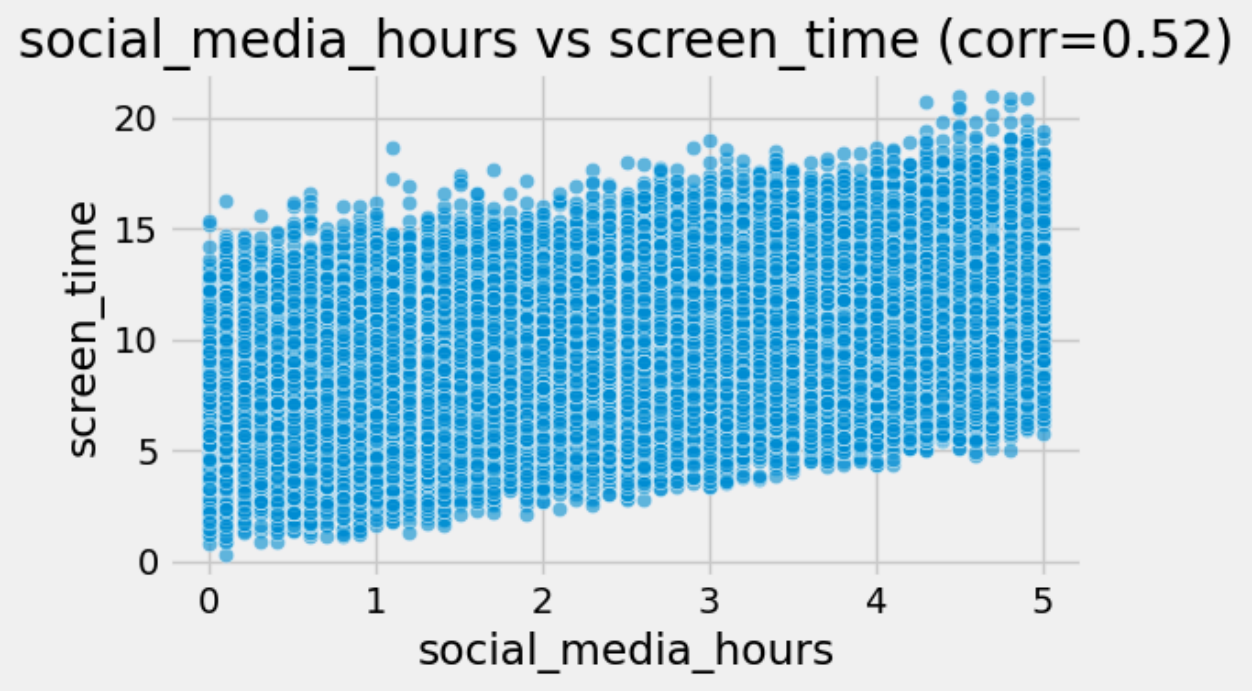

social_media_hours vs mental_health_rating (corr=0.00)
mental_health_rating
2
4
6
8
10
0
1
2
3
4
5
social_media_hours

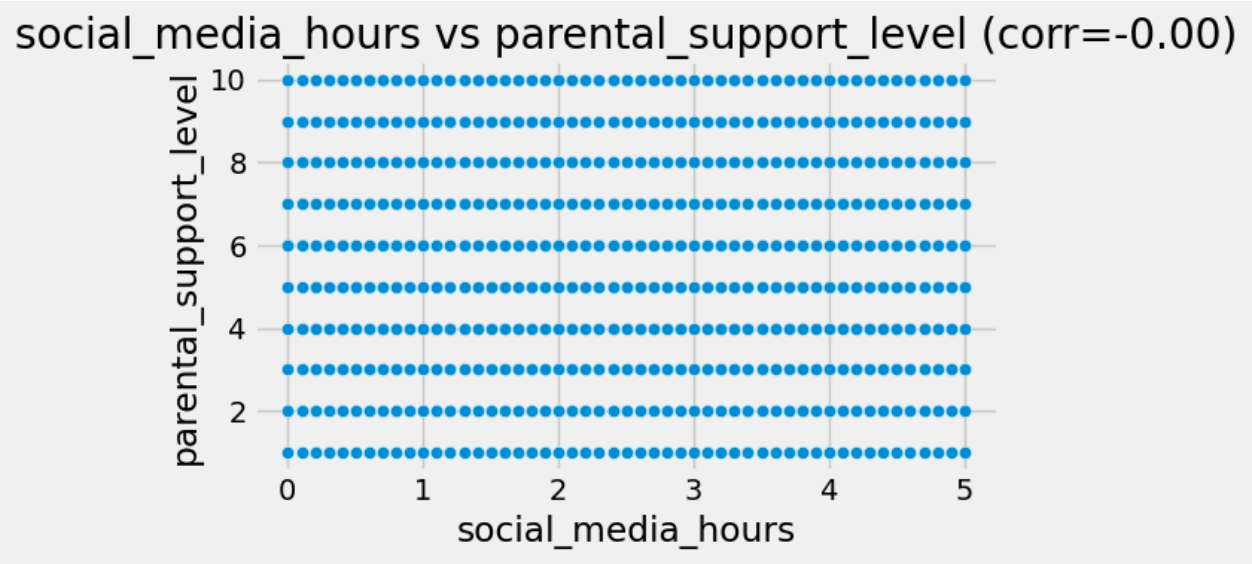

social_media_hours vs previous_gpa (corr=-0.01)
previous_gpa
4.0
3.5
3.0
2.5
2.0
0
1
2
3
4
5
social_media_hours

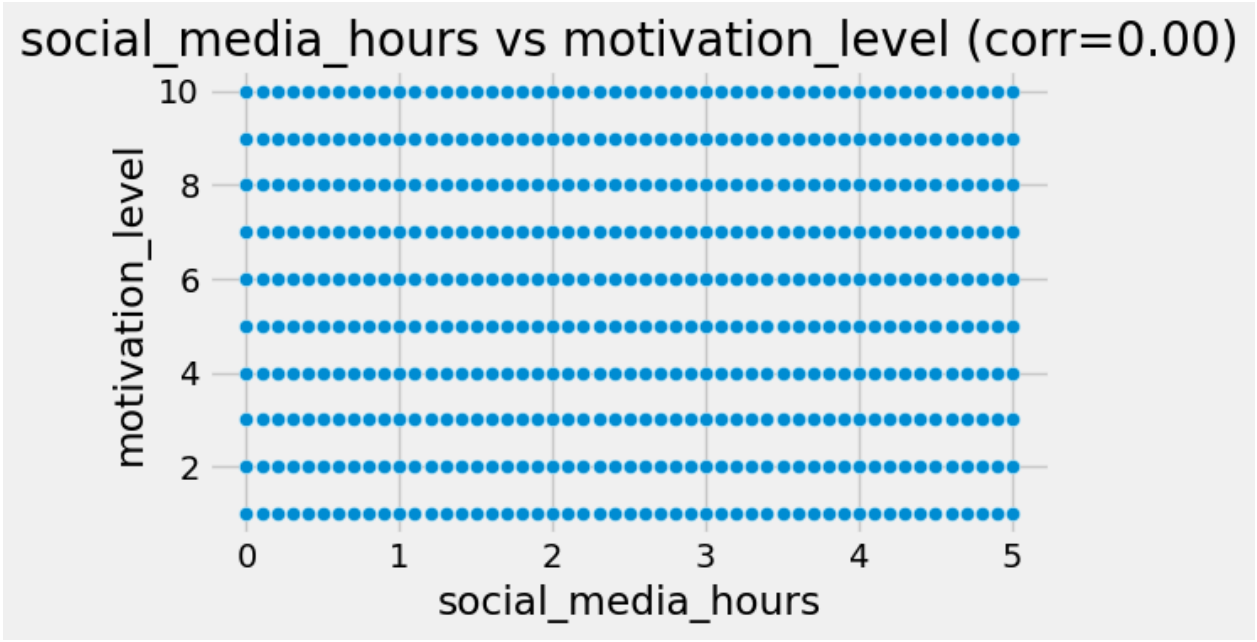

social_media_hours vs semester (corr=0.00)
semester
8
6
4
2
0
1
2
3
4
5
social_media_hours

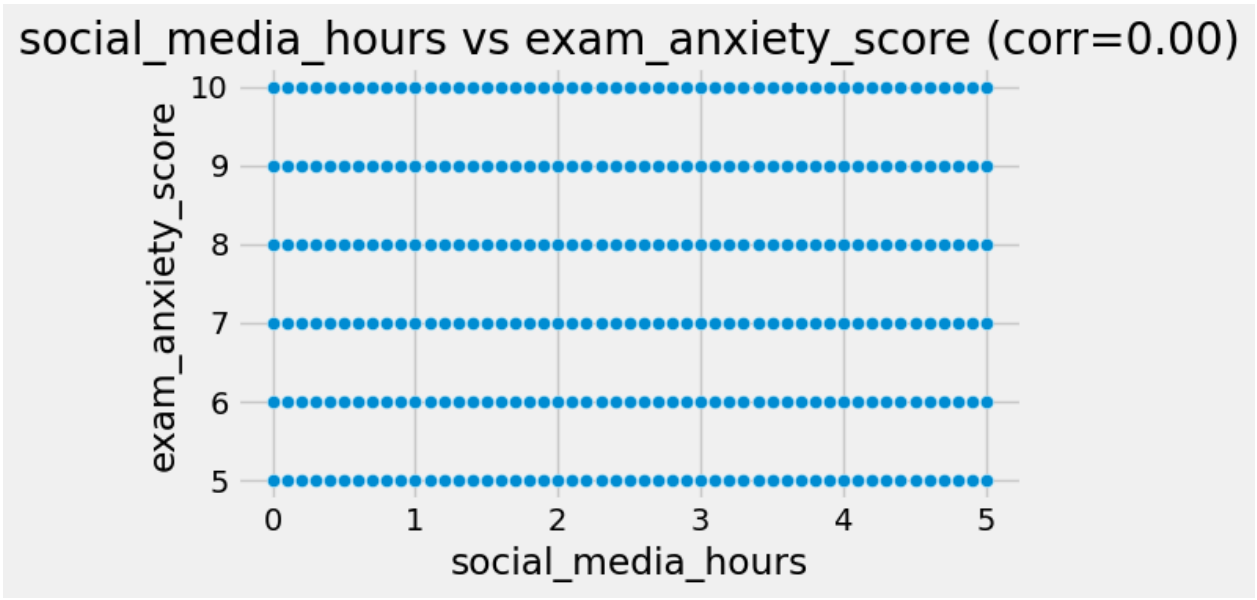

social_media_hours vs stress_level (corr=0.00)
stress_level
10
8
6
4
2
0
1
2
3
4
5
social_media_hours

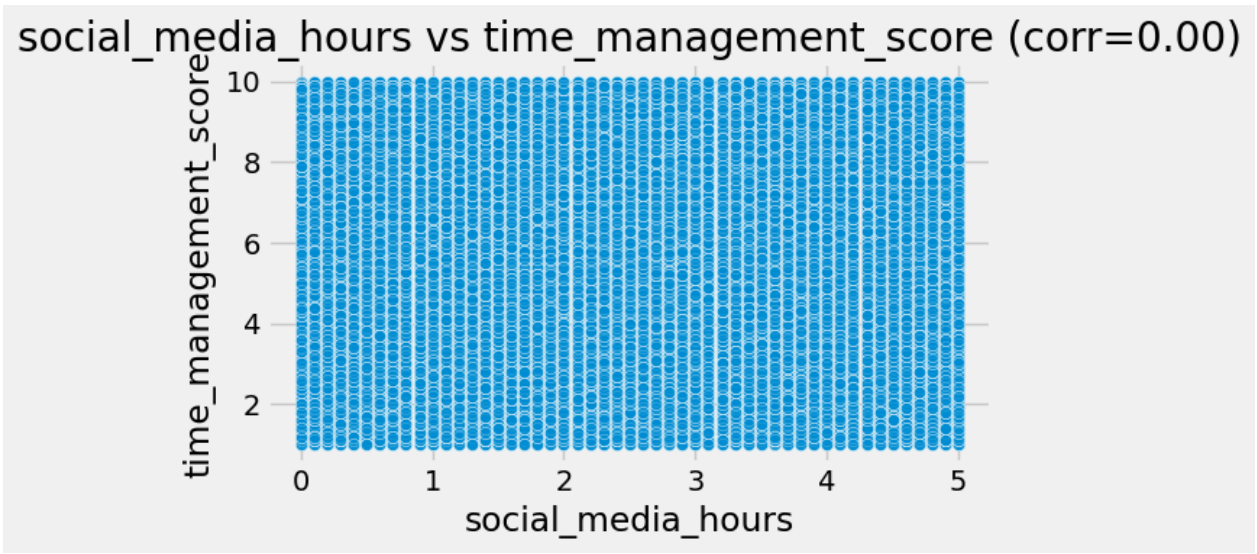

social_media_hours vs social_activity (corr=-0.00)
social_activity
5
4
3
2
1
0
0
1
2
3
4
5
social_media_hours

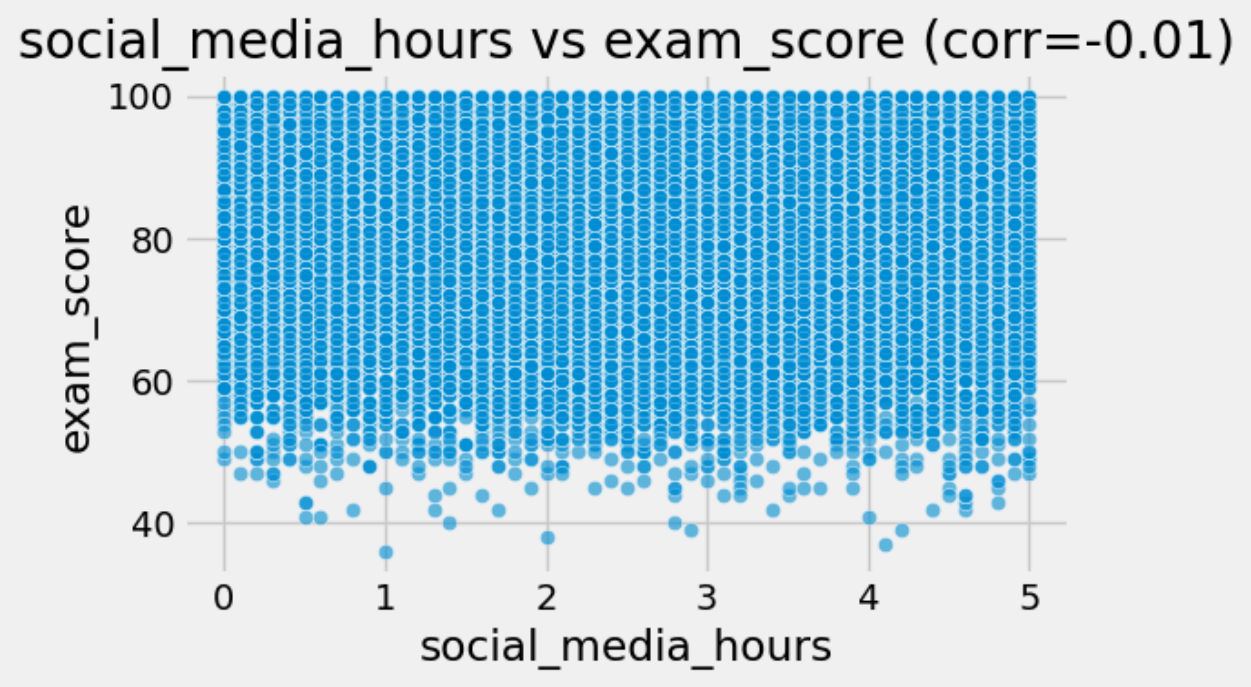

social_media_hours vs screen_time (corr=0.52)
screen_time
social_media_hours
0
5
10
15
20
0
1
2
3
4
5

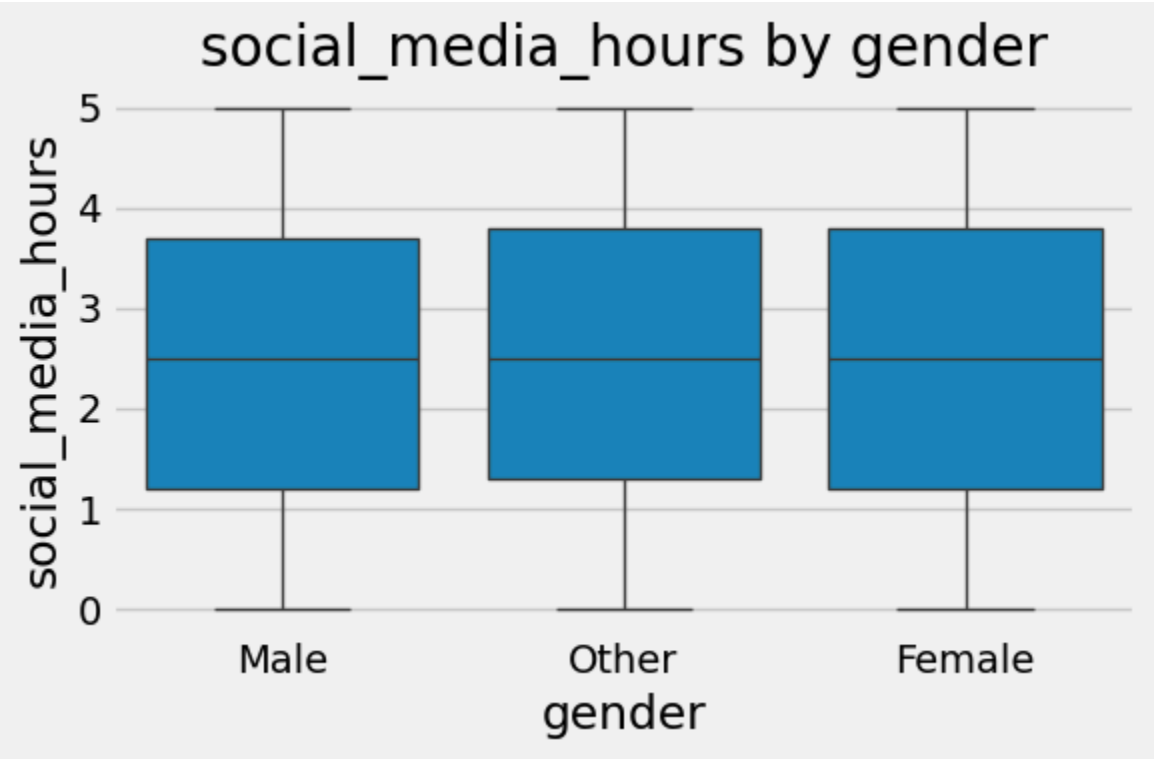

social_media_hours vs parental_support_level (corr=-0.00)
parental_support_level
social_media_hours
2
4
6
8
10
0
1
2
3
4
5

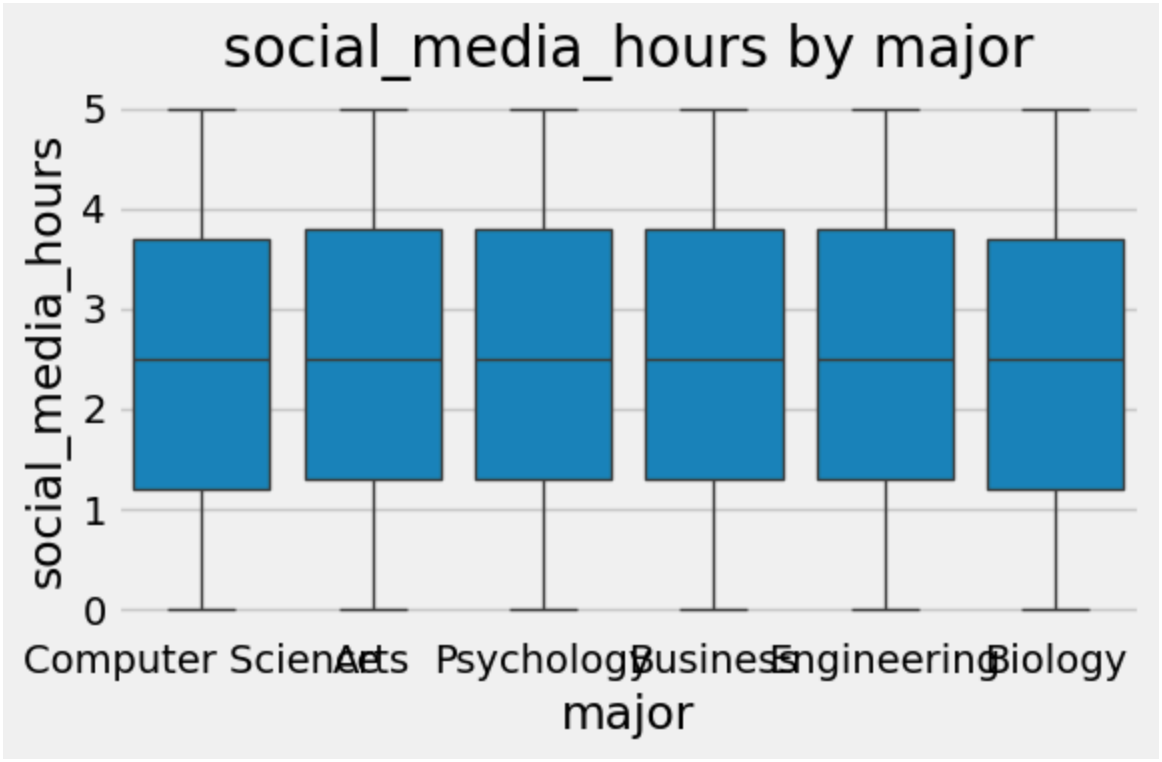

social_media_hours vs motivation_level (corr=0.00)
motivation_level
social_media_hours
10
8
6
4
2
0
1
2
3
4
5

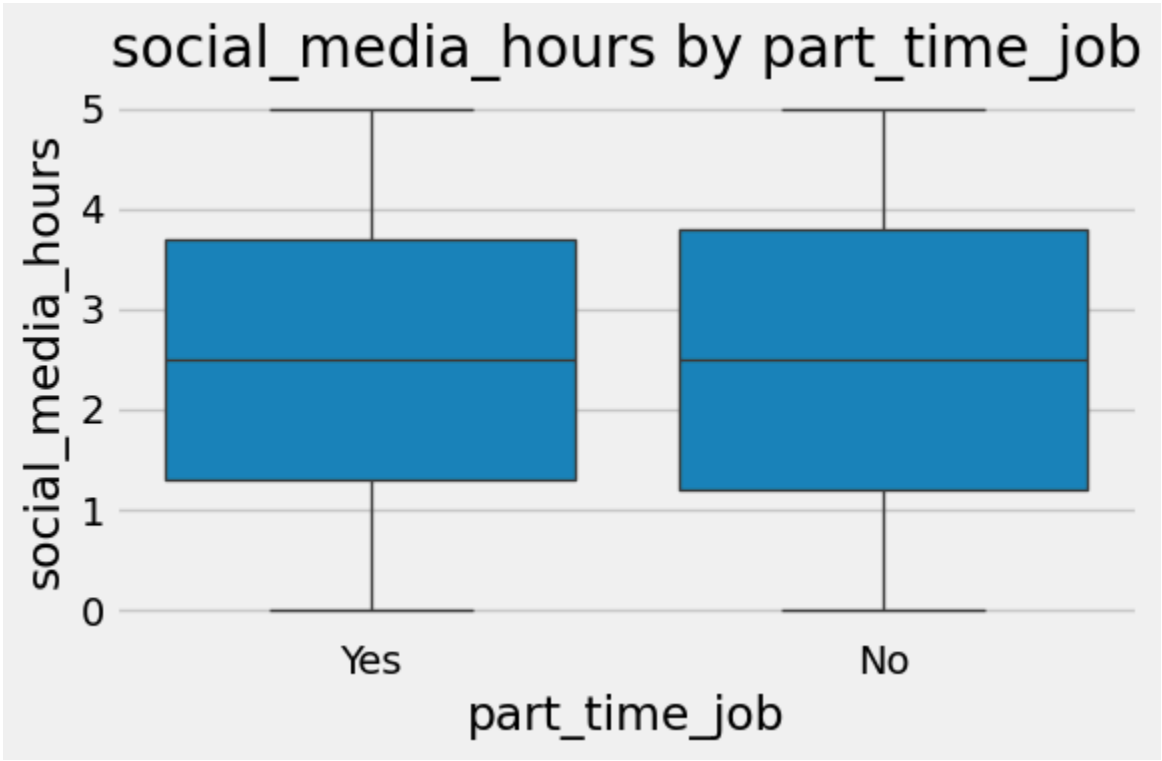

social_media_hours vs exam_anxiety_score (corr=0.00)
exam_anxiety_score
social_media_hours
10
9
8
7
6
5
0
1
2
3
4
5

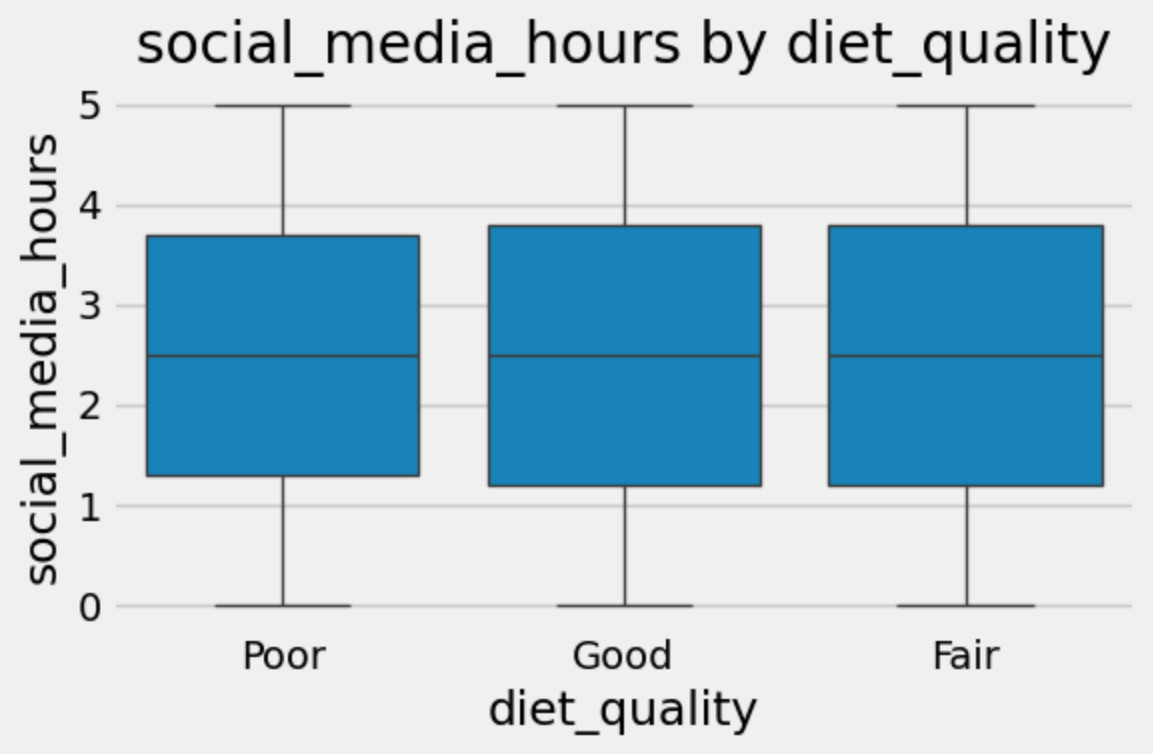

social_media_hours vs time_management_score (corr=0.00)
time_management_score
social_media_hours
10
8
6
4
2
0
1
2
3
4
5

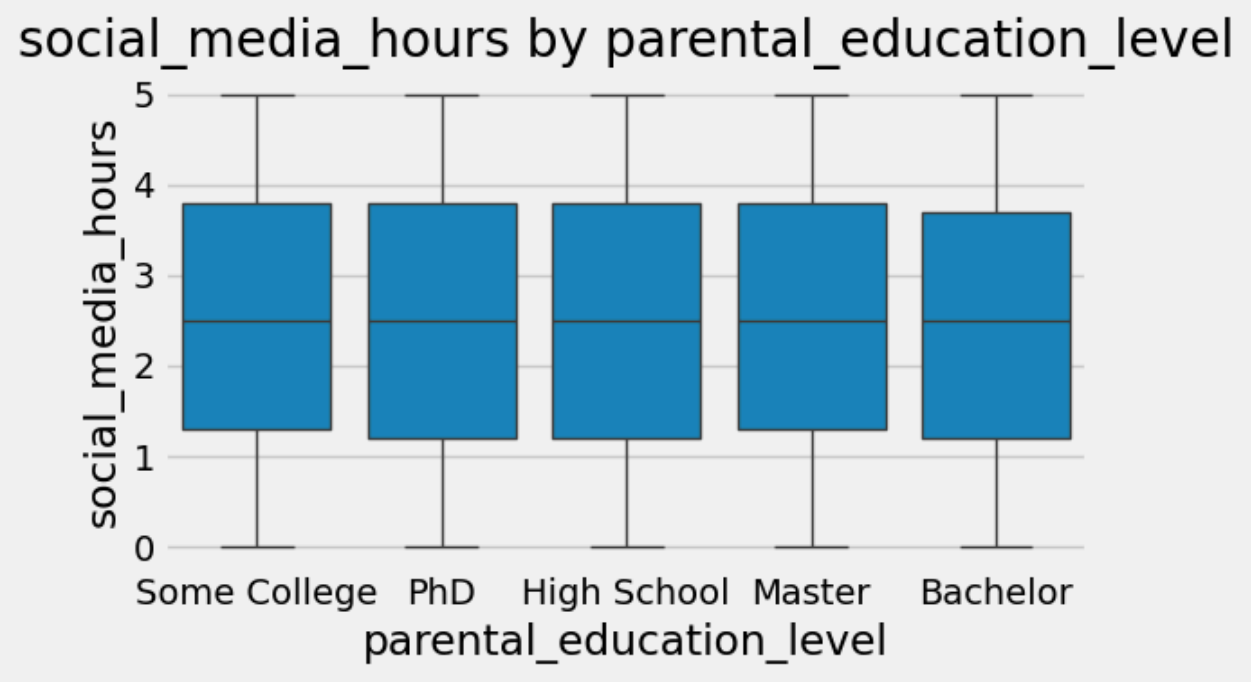

social_media_hours vs exam_score (corr=-0.01)
exam_score
100
80
60
40
0
1
2
3
4
5
social_media_hours

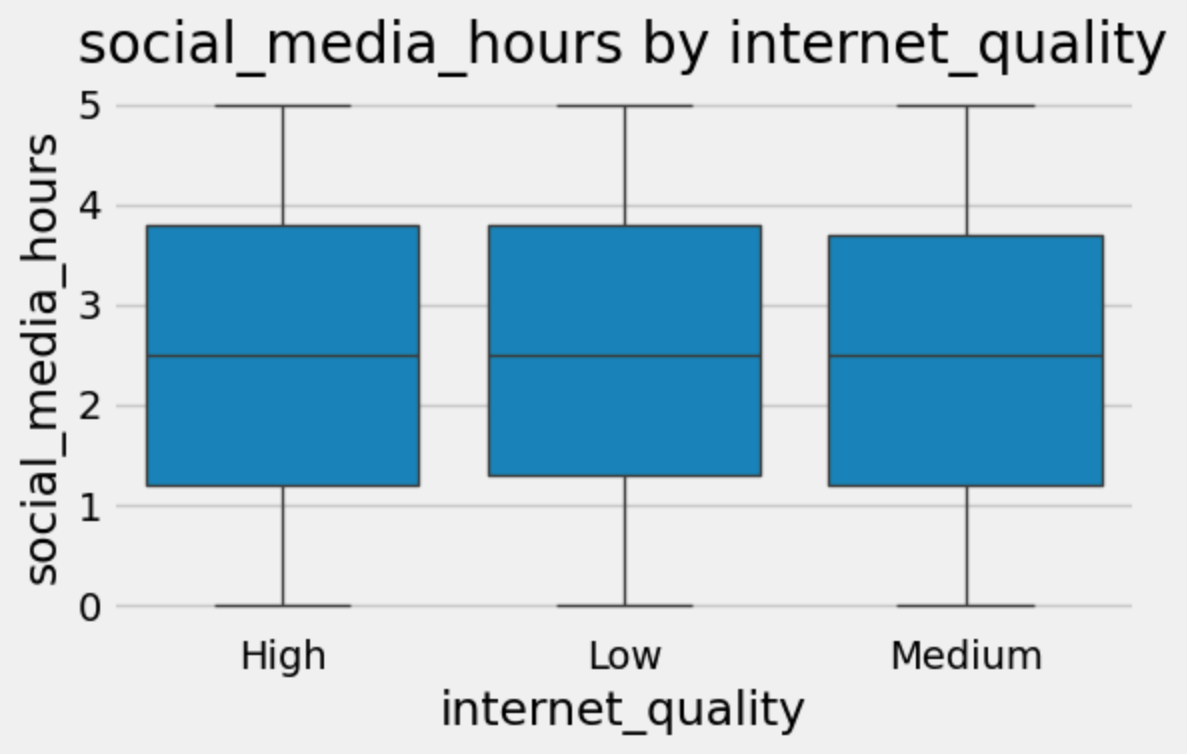

social_media_hours by gender
social_media_hours
5
4
3
2
1
0
Male
Other
Female
gender

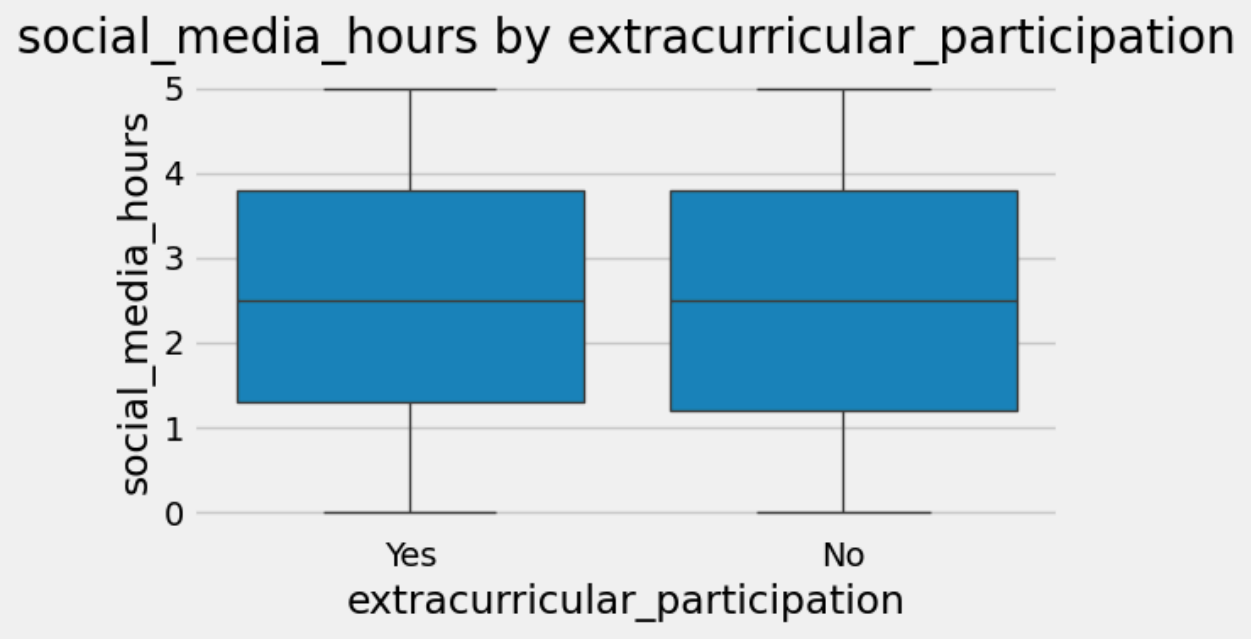

social_media_hours by major
social_media_hours
0
1
2
3
4
5
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

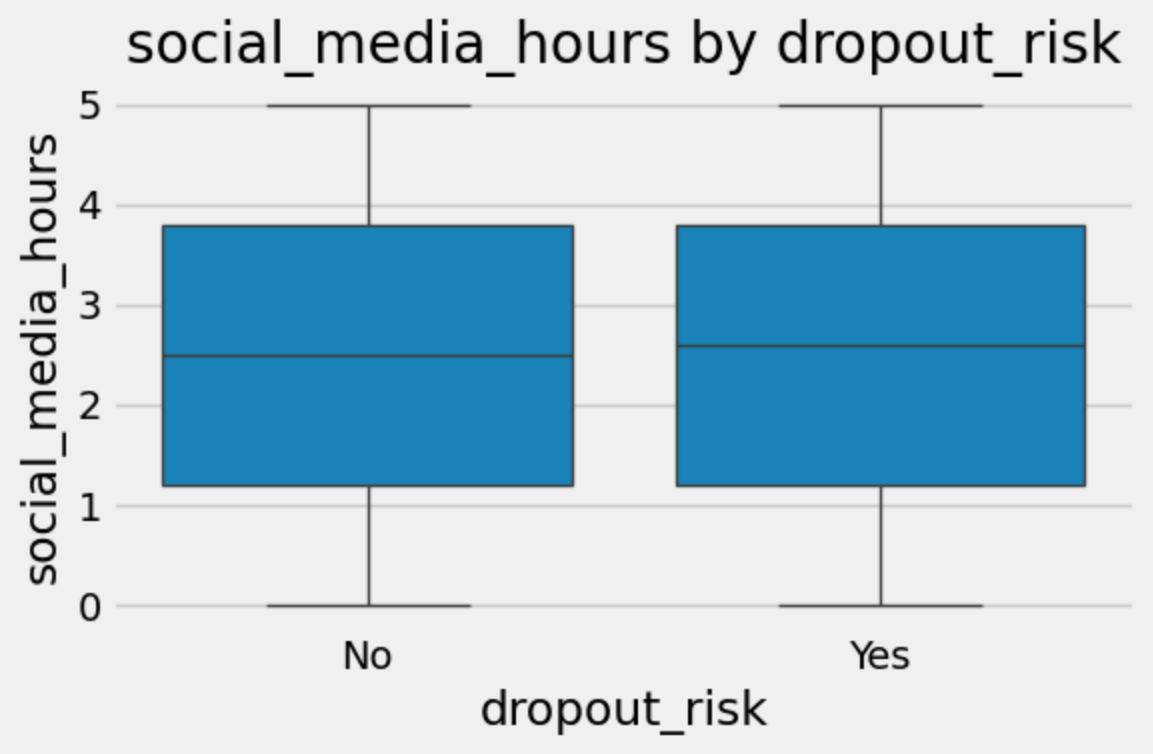

social_media_hours by part_time_job
social_media_hours
0
1
2
3
4
5
Yes
No
part_time_job

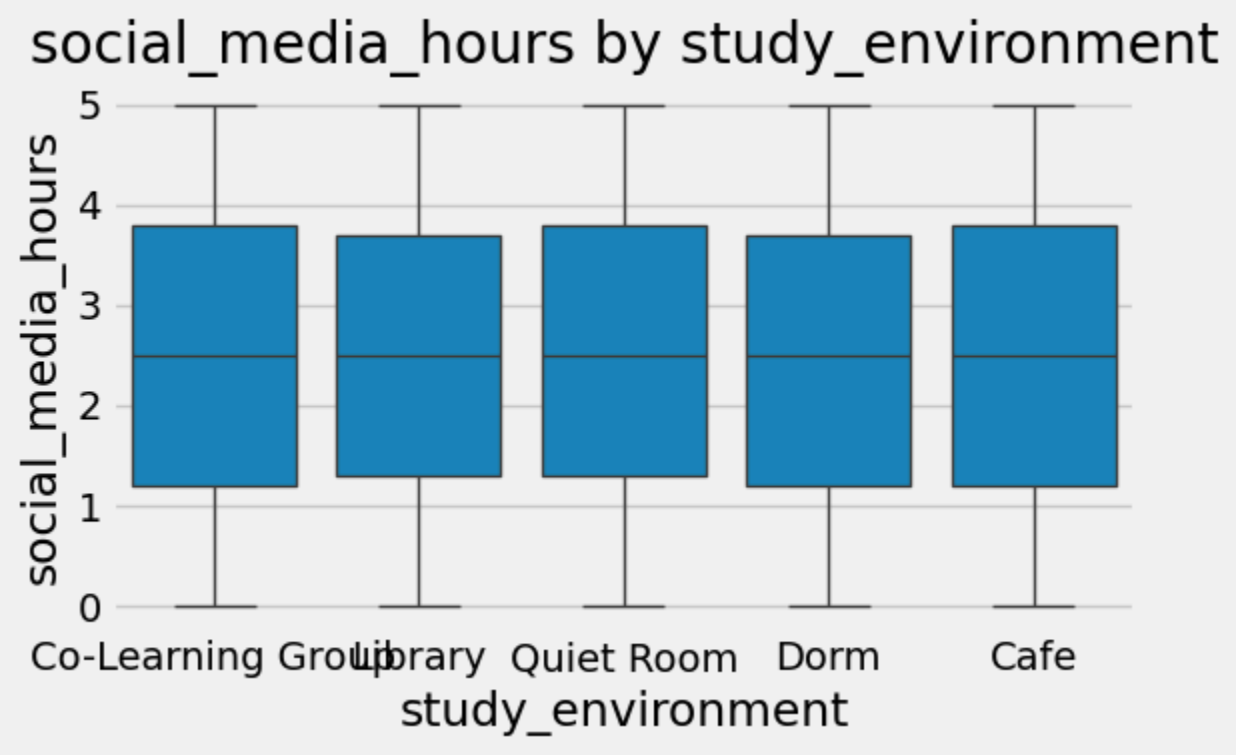

social_media_hours by diet_quality
social_media_hours
5
4
3
2
1
0
Poor
Good
Fair
diet_quality

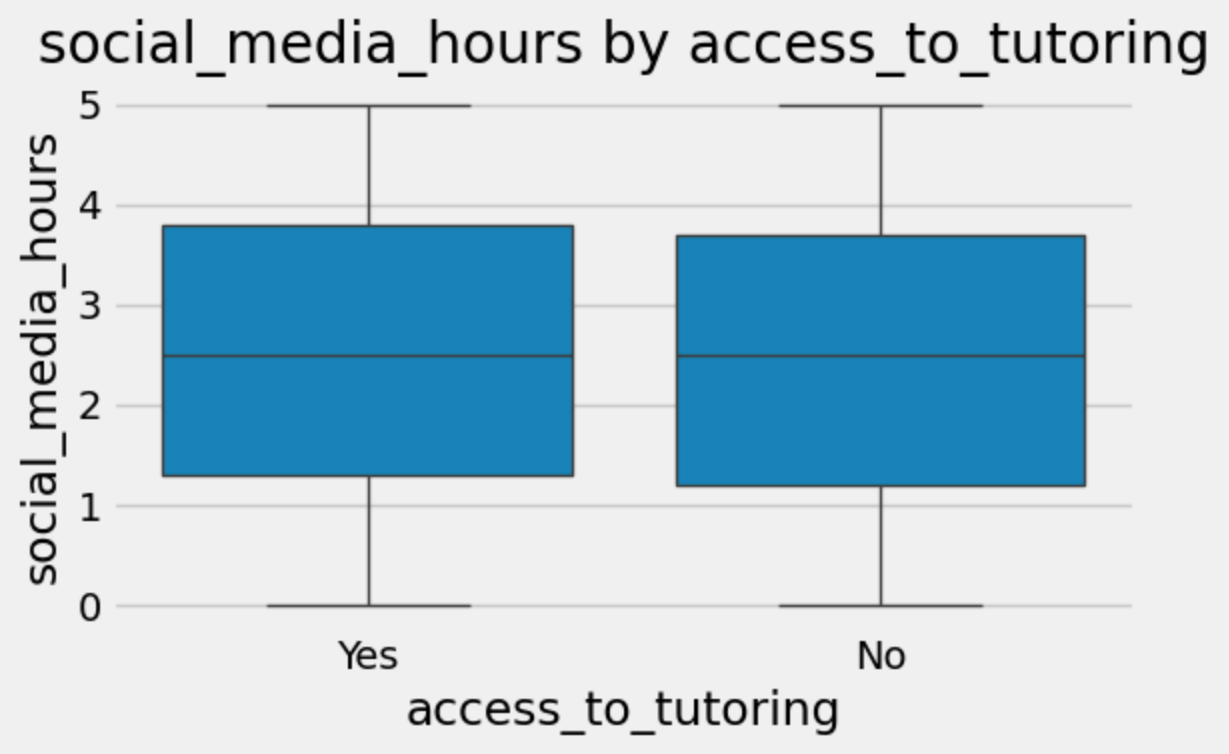

social_media_hours by parental_education_level
social_media_hours
5
4
3
2
1
0
Some College
PhD
High School
Master
Bachelor
parental_education_level

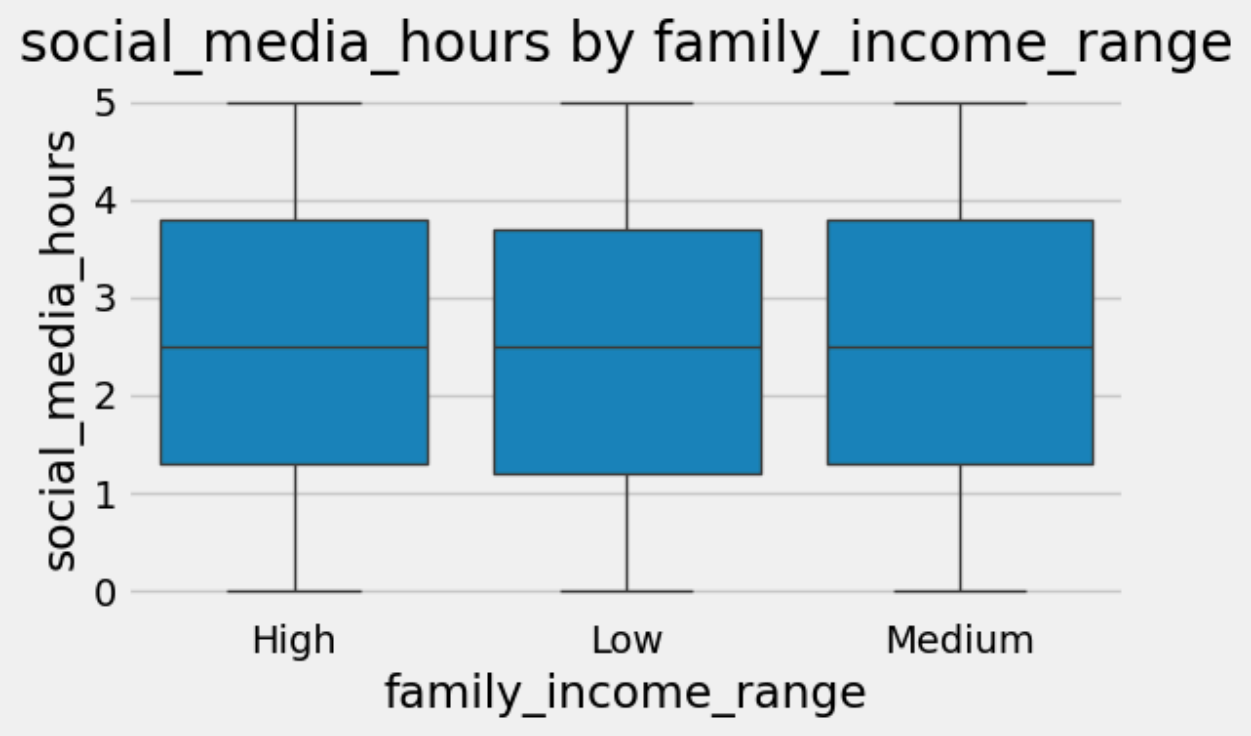

social_media_hours by internet_quality
social_media_hours
5
4
3
2
1
0
High
Low
Medium
internet_quality

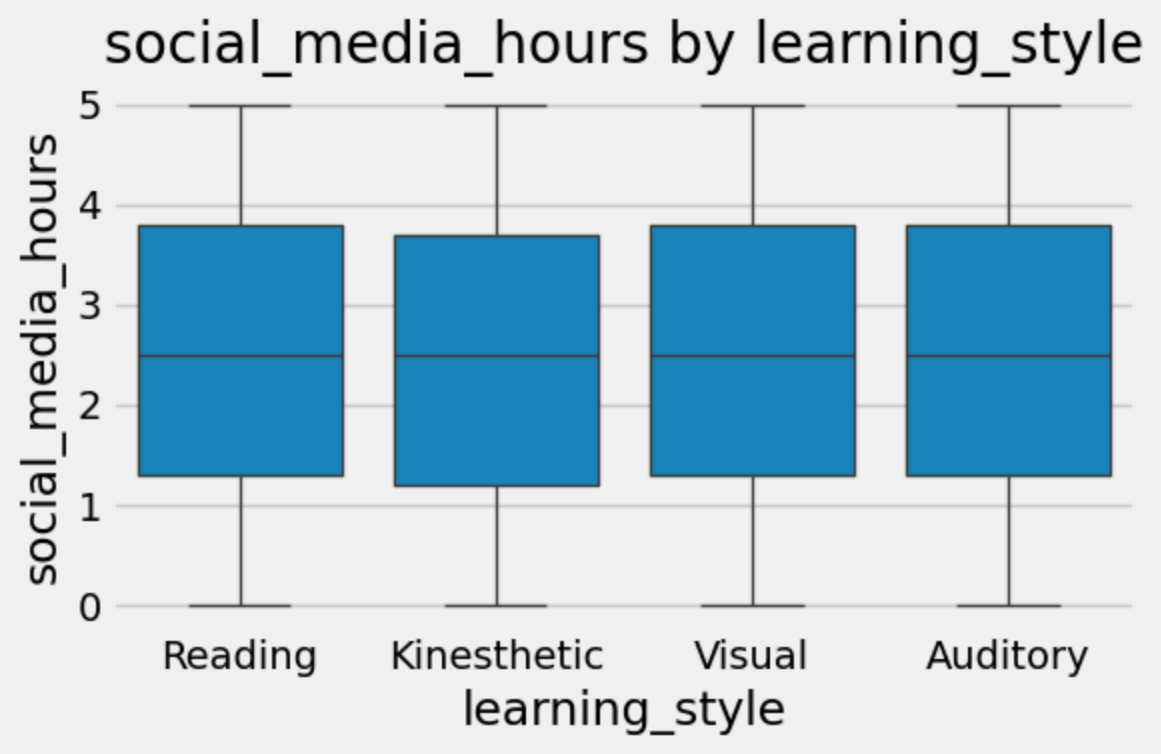

social_media_hours by extracurricular_participation
social_media_hours
5
4
3
2
1
0
Yes
No
extracurricular_participation

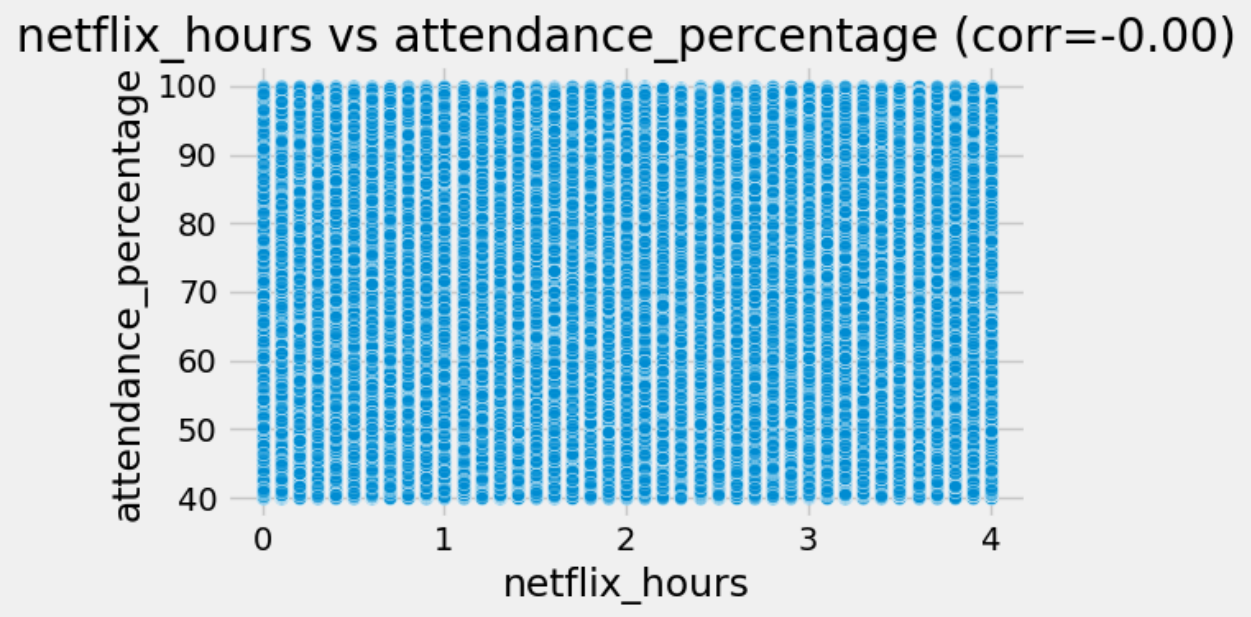

social_media_hours by dropout_risk
social_media_hours
5
4
3
2
1
0
No
Yes
dropout_risk

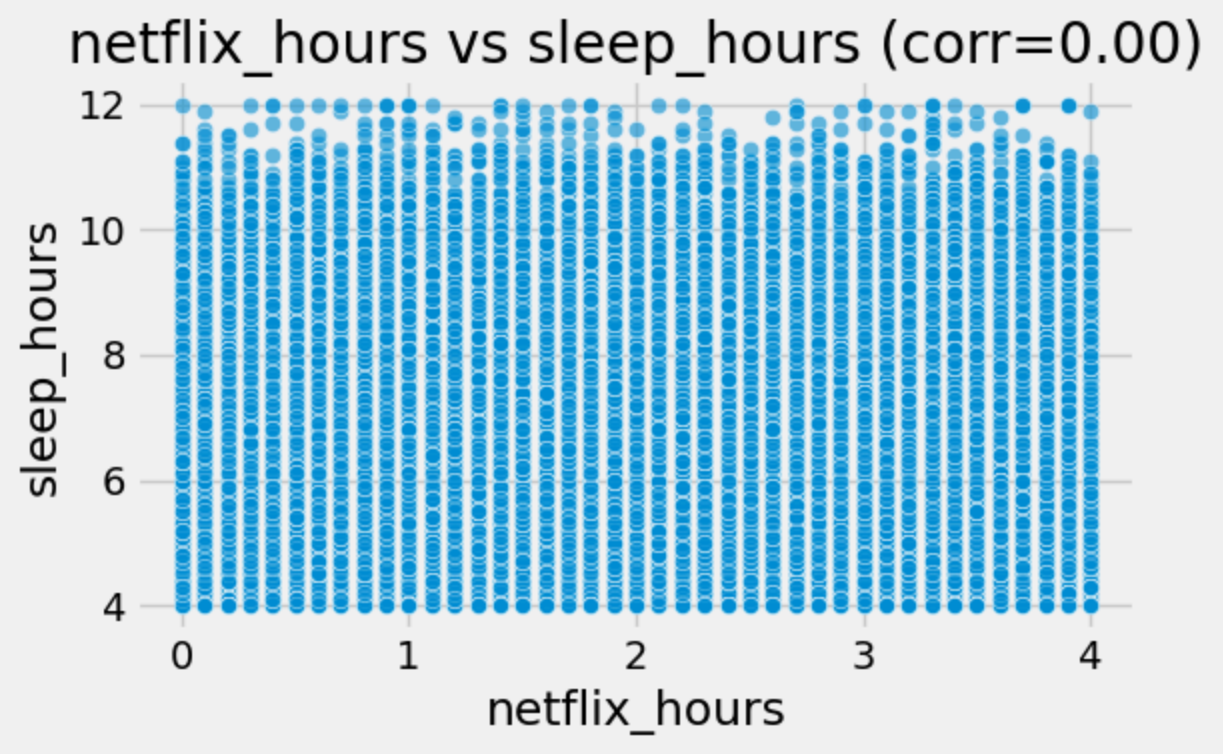

social_media_hours by study_environment
social_media_hours
5
4
3
2
1
0
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

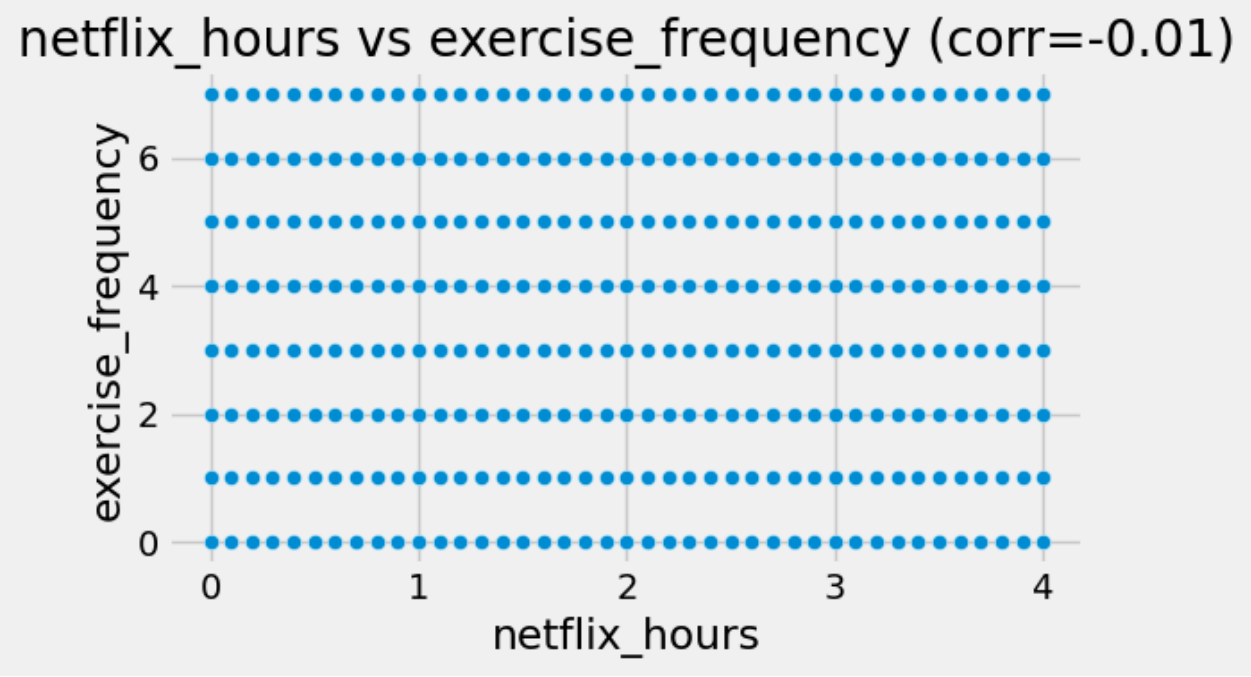

social_media_hours by access_to_tutoring
social_media_hours
5
4
3
2
1
0
Yes
No
access_to_tutoring

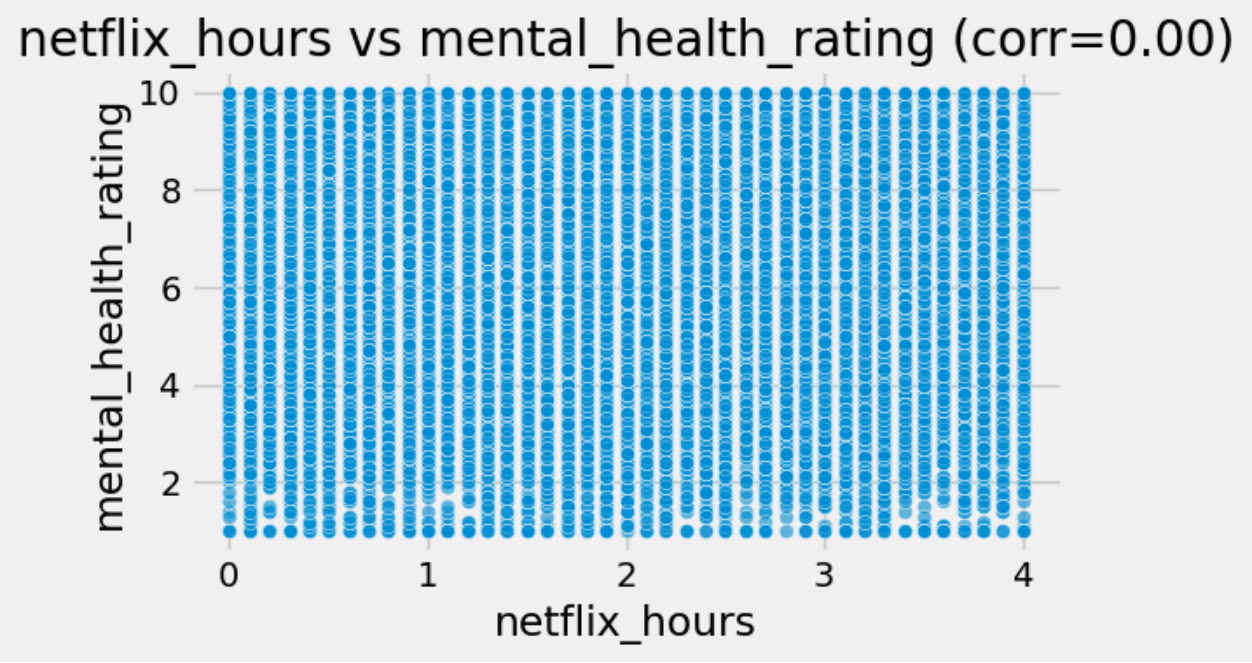

social_media_hours by family_income_range
social_media_hours
5
4
3
2
1
0
High
Low
Medium
family_income_range

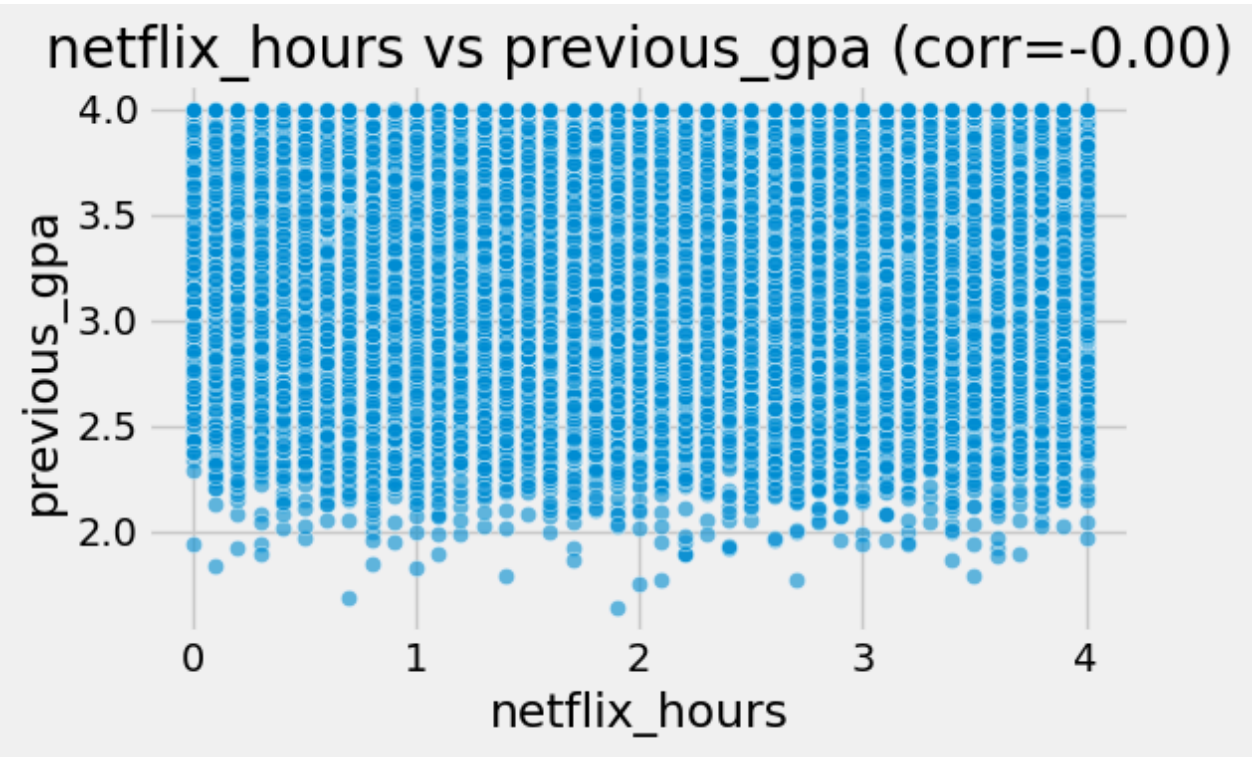

social_media_hours by learning_style
social_media_hours
0
1
2
3
4
5
Reading
Kinesthetic
Visual
Auditory
learning_style

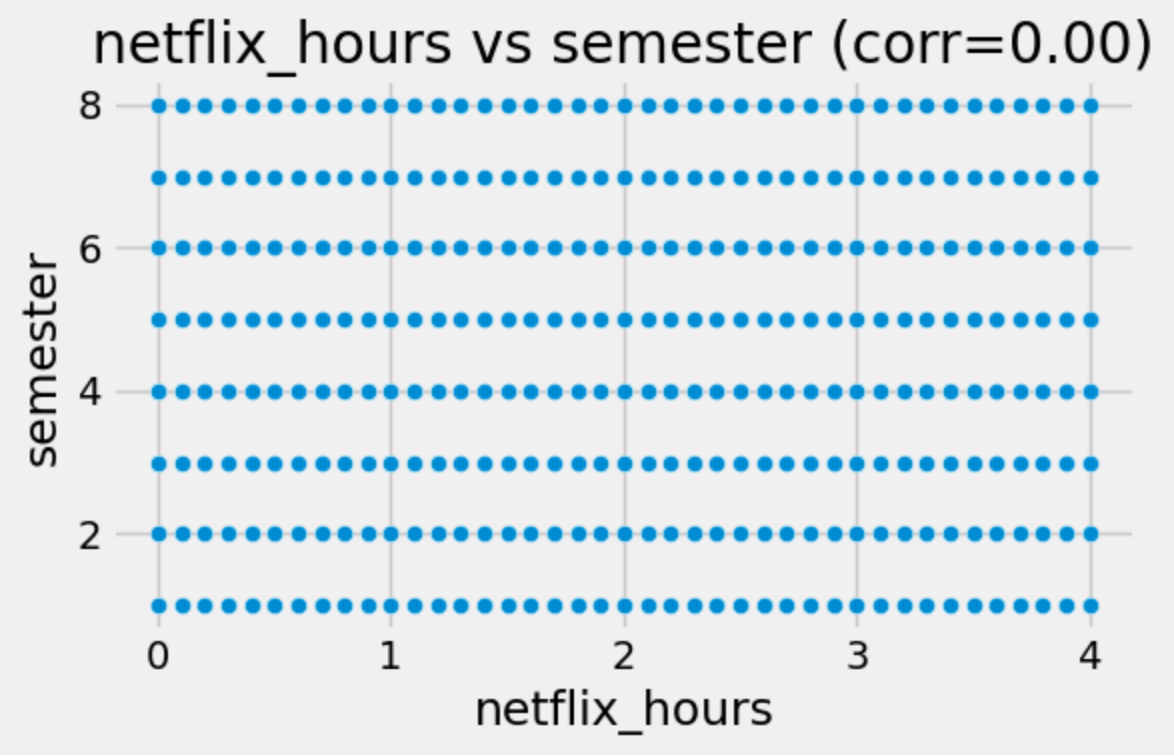

netflix_hours vs attendance_percentage (corr=-0.00)
attendance_percentage
100
90
80
70
60
50
40
0
1
2
3
4
netflix_hours

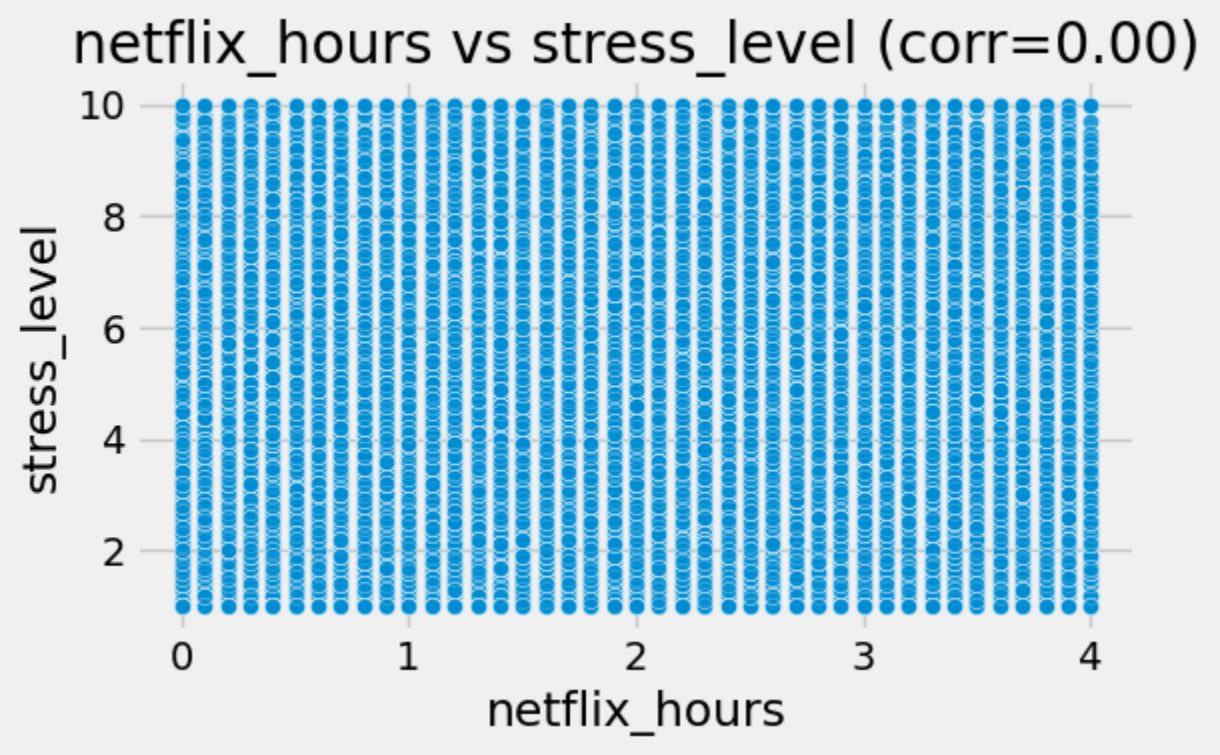

netflix_hours vs sleep_hours (corr=0.00)
sleep_hours
12
10
8
6
4
0
1
2
3
4
netflix_hours

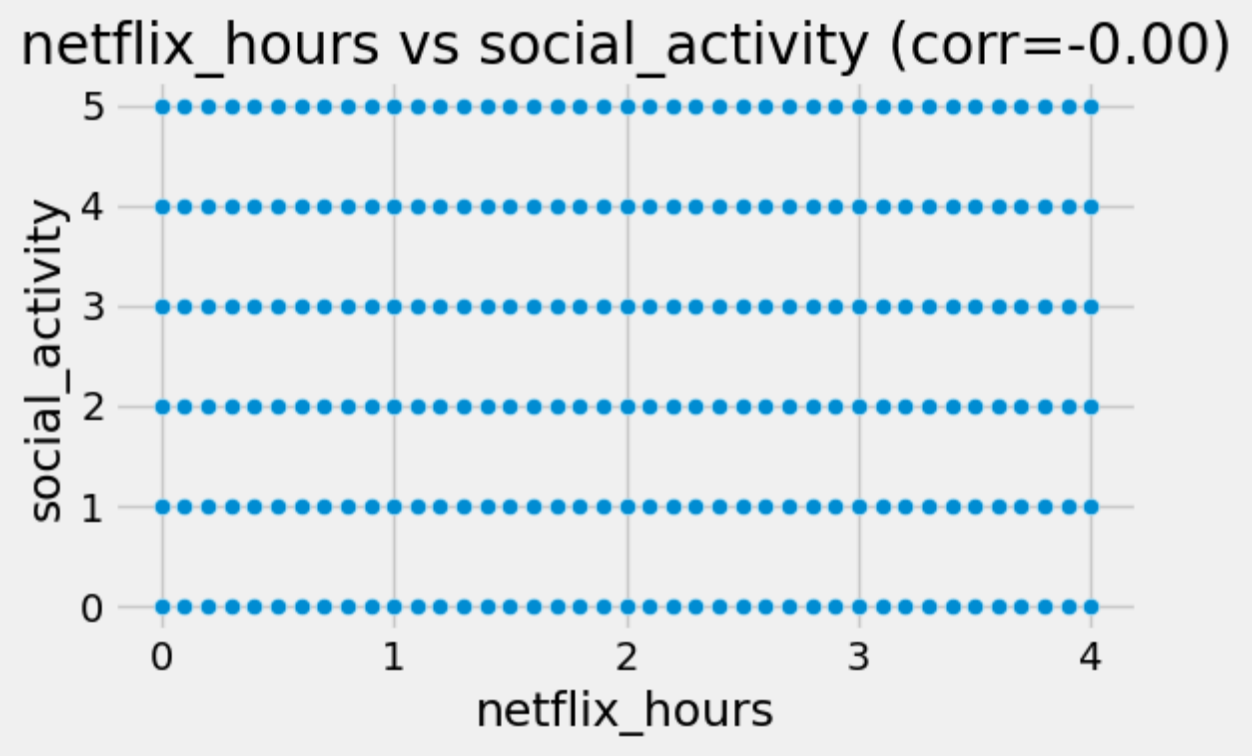

netflix_hours vs exercise_frequency (corr=-0.01)
exercise_frequency
6
4
2
0
0
1
2
3
4
netflix_hours

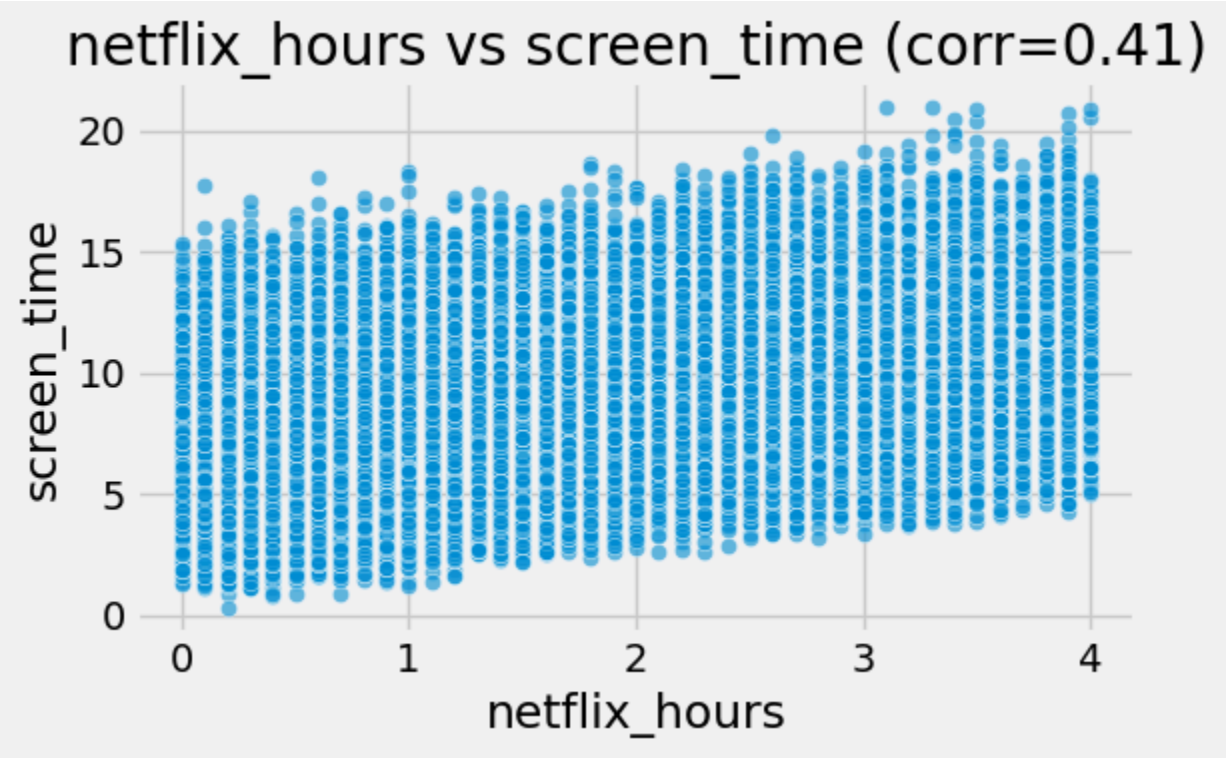

netflix_hours vs mental_health_rating (corr=0.00)
mental_health_rating
10
8
6
4
2
0
1
2
3
4
netflix_hours

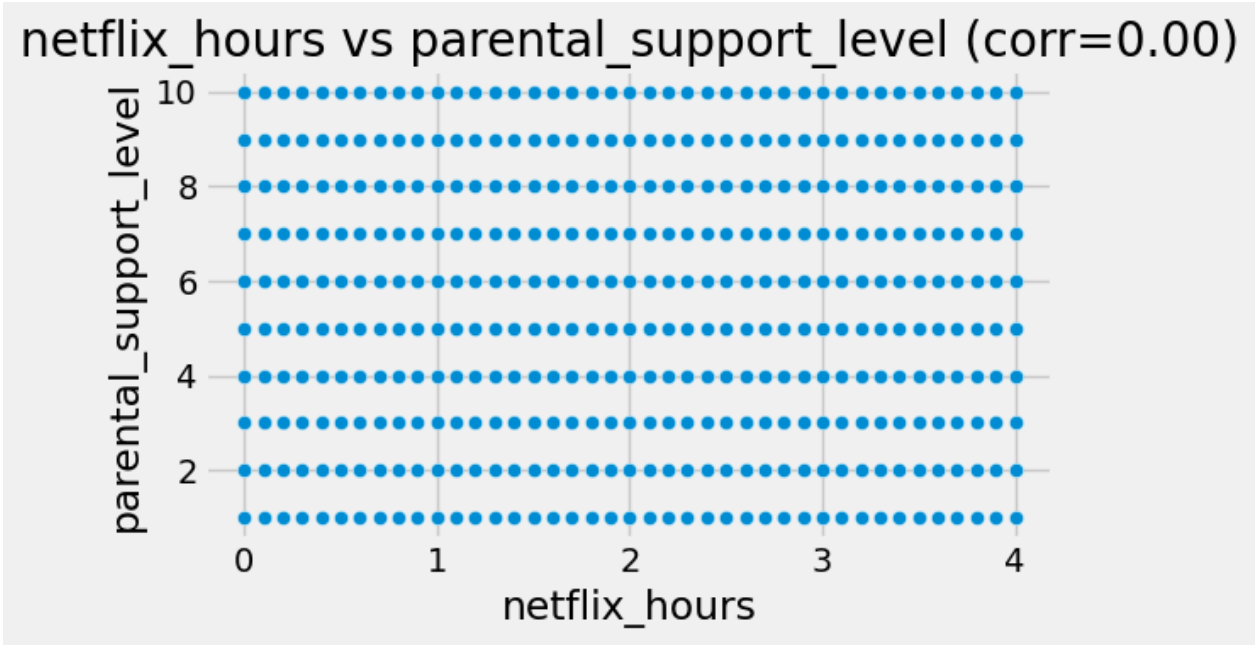

netflix_hours vs previous_gpa (corr=-0.00)
previous_gpa
4.0
3.5
3.0
2.5
2.0
0
1
2
3
4
netflix_hours

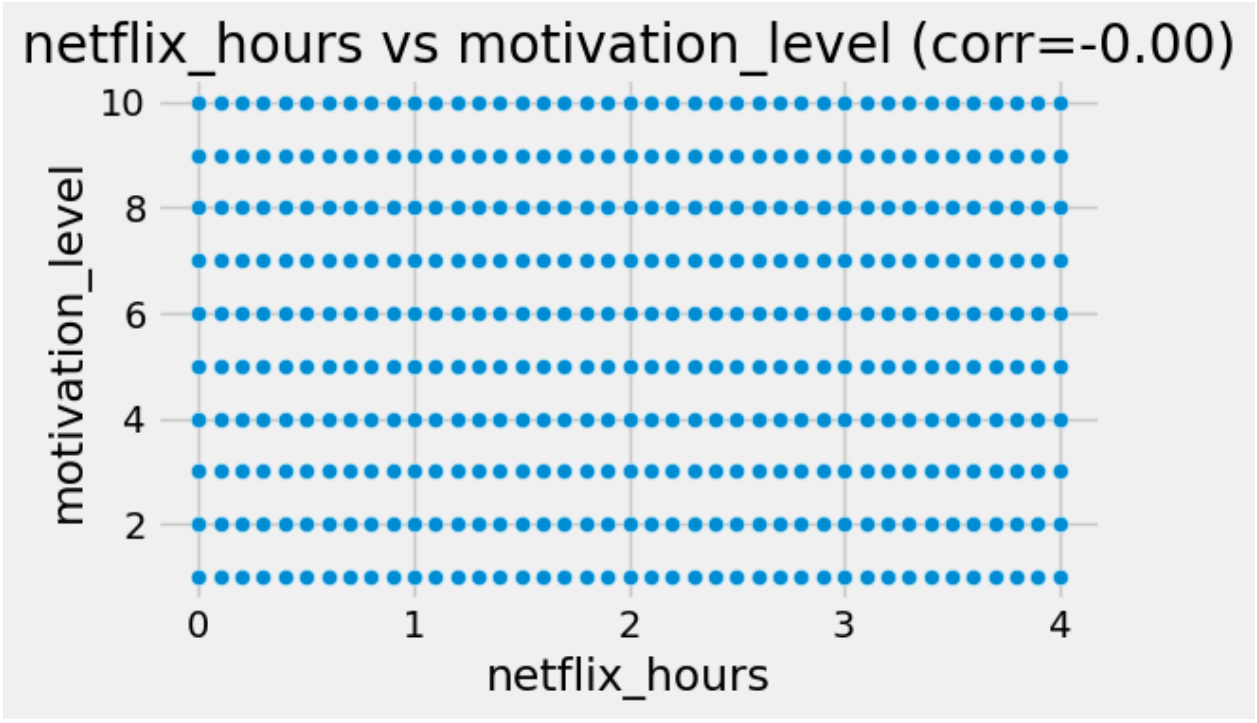

netflix_hours vs semester (corr=0.00)
semester
8
6
4
2
0
1
2
3
4
netflix_hours

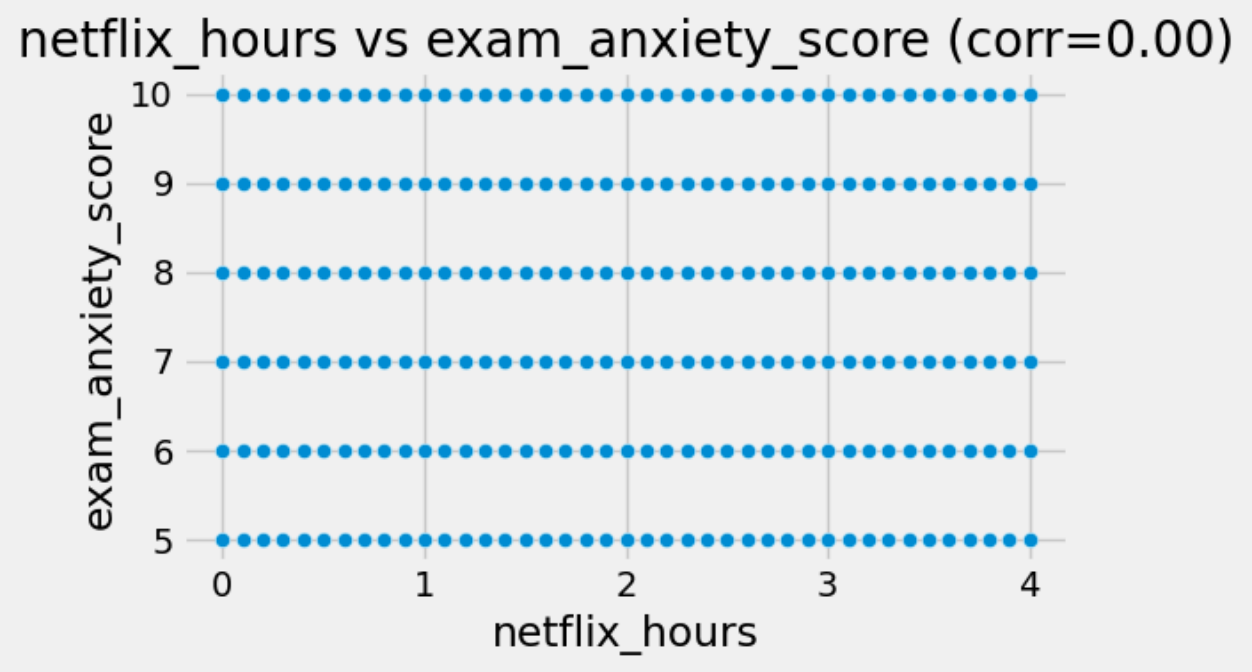

netflix_hours vs stress_level (corr=0.00)
stress_level
10
8
6
4
2
0
1
2
3
4
netflix_hours

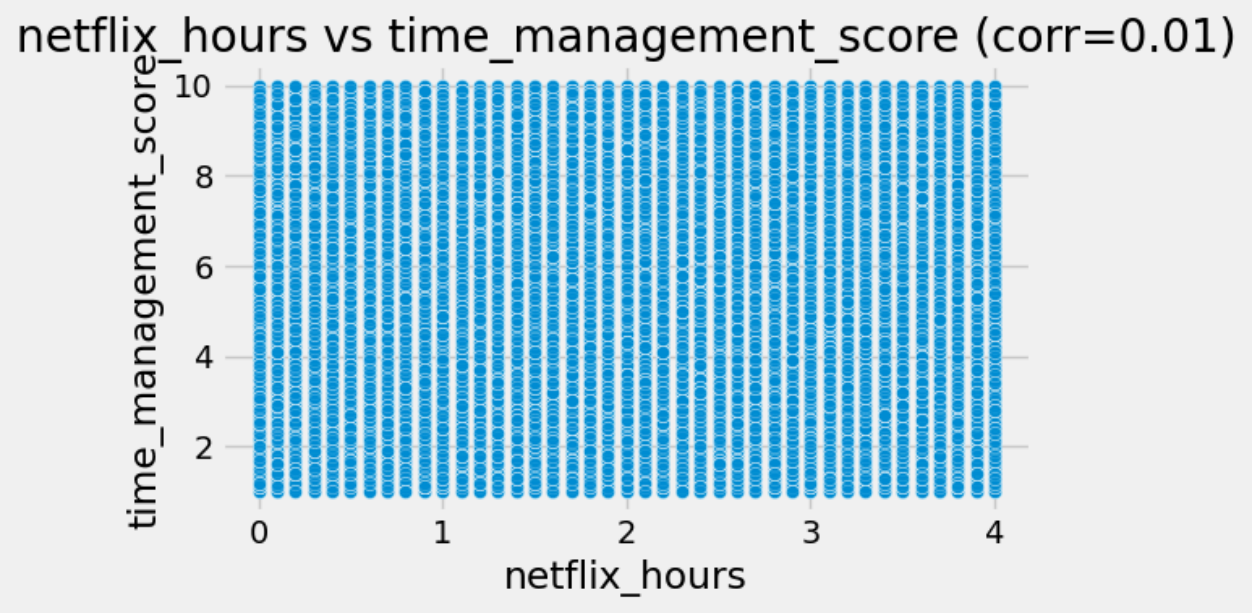

netflix_hours vs social_activity (corr=-0.00)
social_activity
0
1
2
3
4
5
0
1
2
3
4
netflix_hours

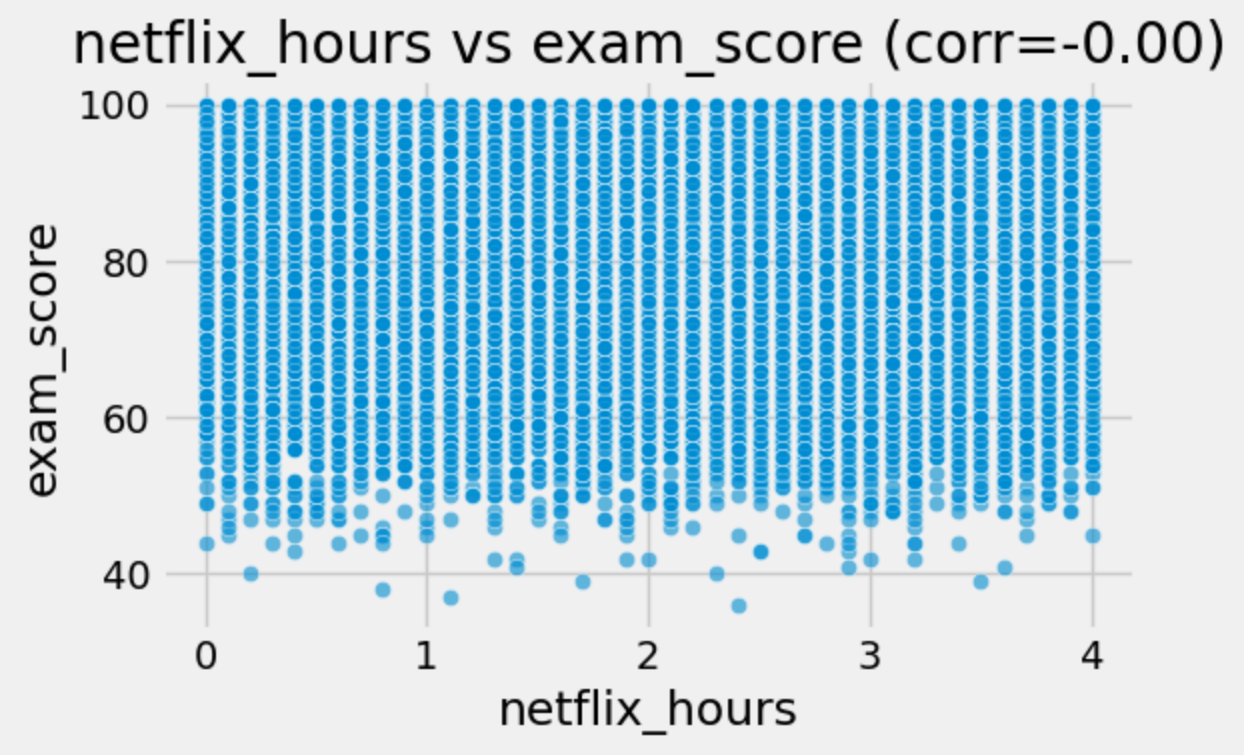

netflix_hours vs screen_time (corr=0.41)
screen_time
0
5
10
15
20
0
1
2
3
4
netflix_hours

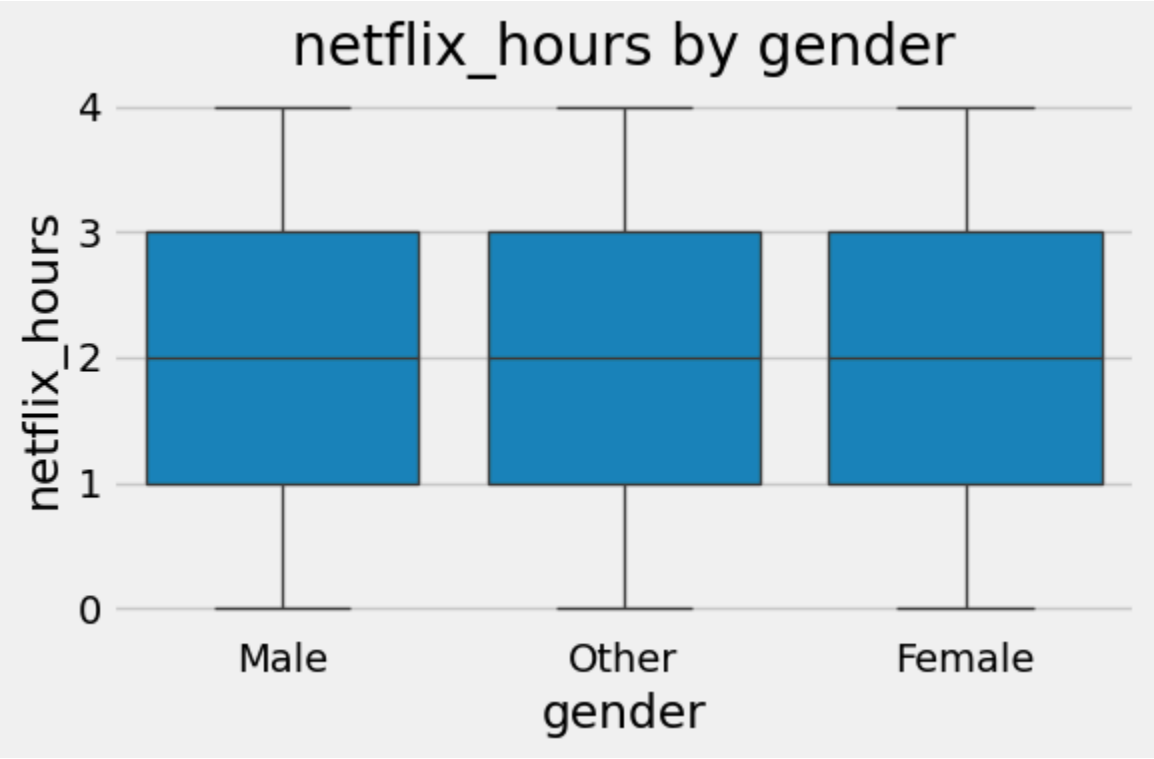

netflix_hours vs parental_support_level (corr=0.00)
parental_support_level
10
8
6
4
2
0
1
2
3
4
netflix_hours

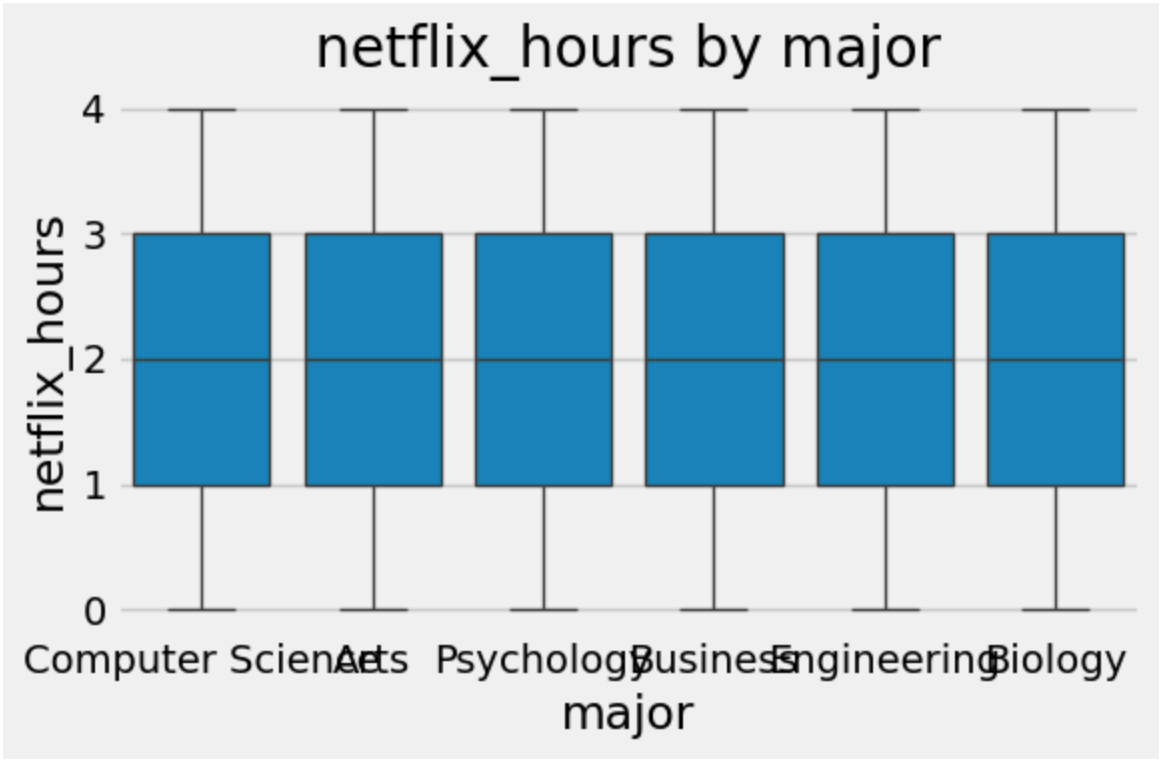

netflix_hours vs motivation_level (corr=-0.00)
motivation_level
10
8
6
4
2
0
1
2
3
4
netflix_hours

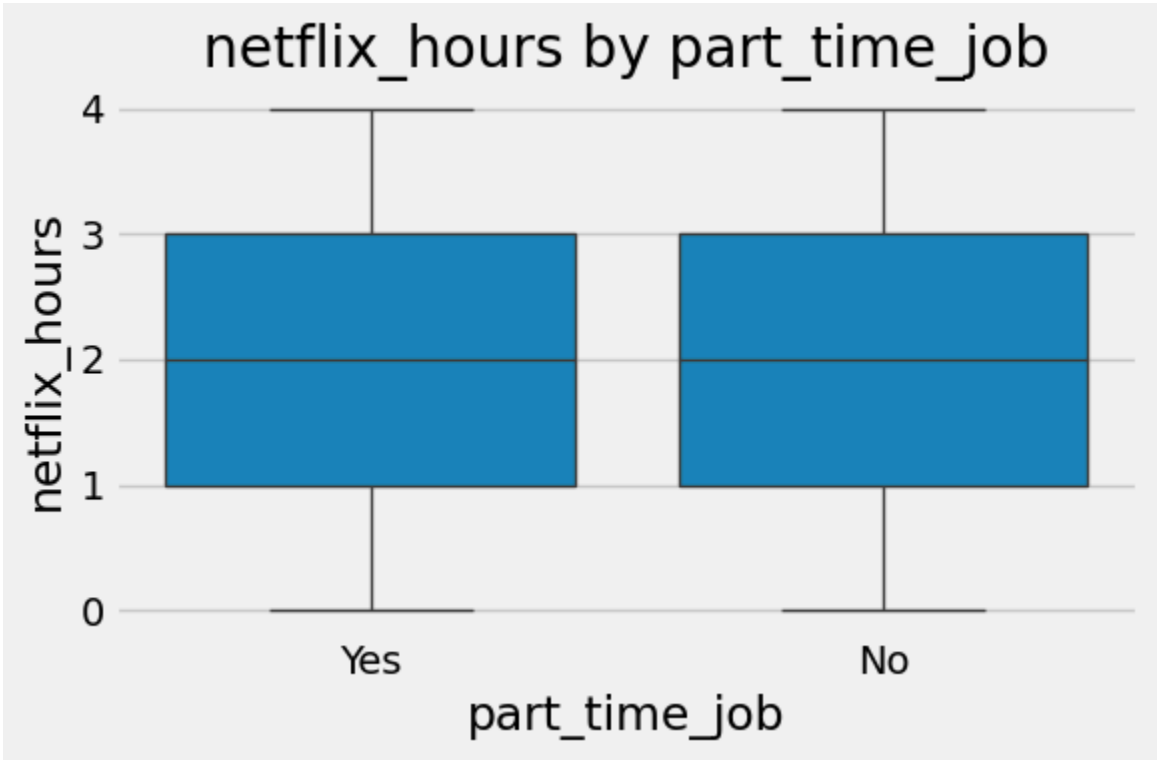

netflix_hours vs exam_anxiety_score (corr=0.00)
exam_anxiety_score
10
9
8
7
6
5
0
1
2
3
4
netflix_hours


netflix_hours vs time_management_score (corr=0.01)
time_management_score
10
8
6
4
2
0
1
2
3
4
netflix_hours

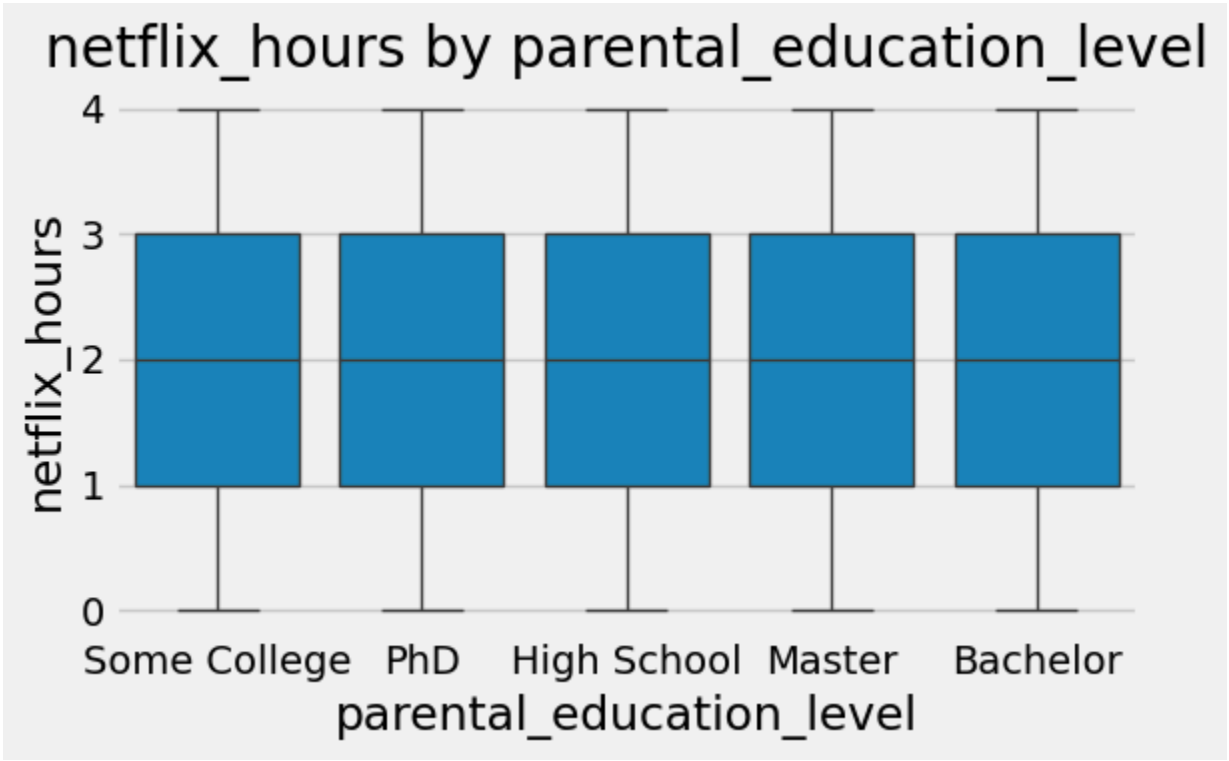

netflix_hours vs exam_score (corr=-0.00)
exam_score
100
80
60
40
0
1
2
3
4
netflix_hours

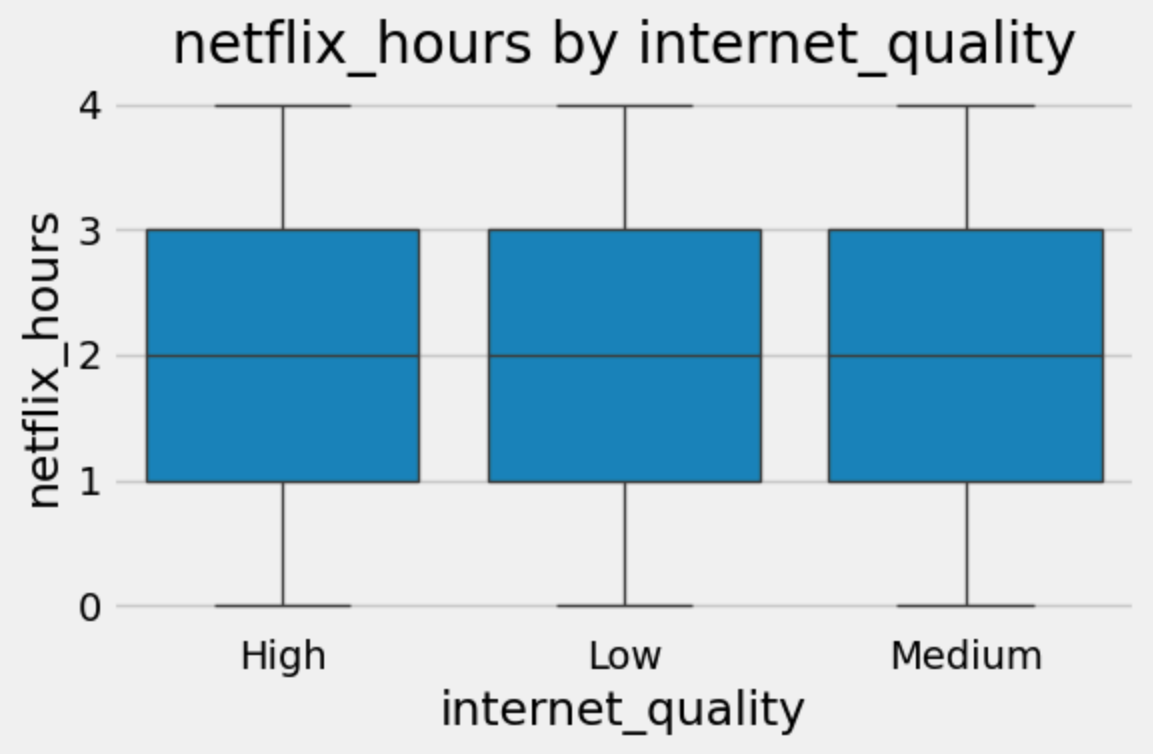

netflix_hours by gender
netflix_hours
4
3
2
1
0
Male
Other
Female
gender

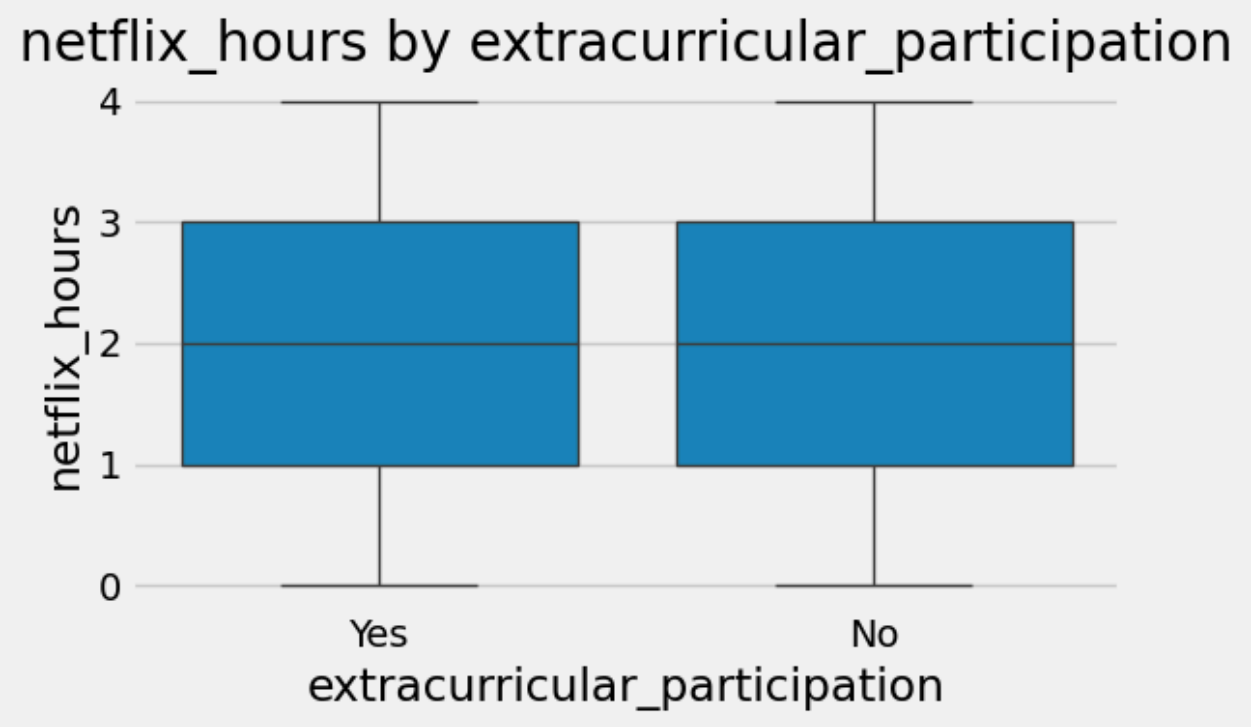

netflix_hours by major
netflix_hours
0
1
2
3
4
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

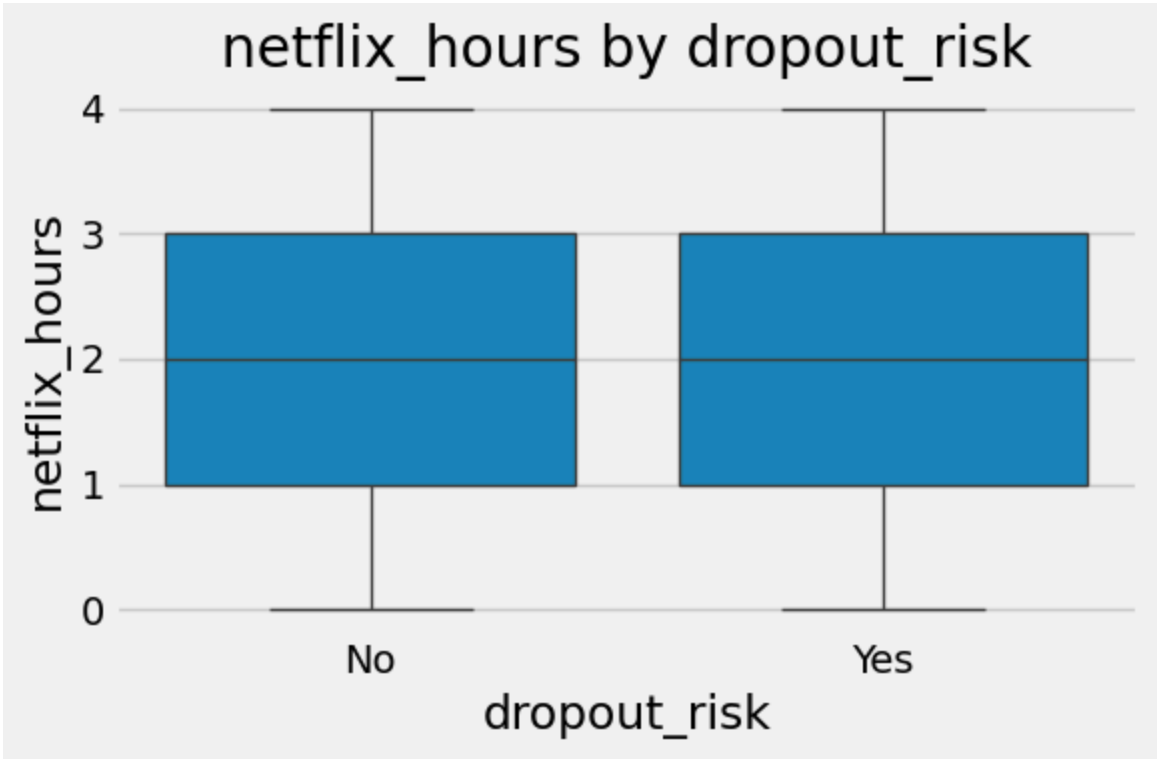

netflix_hours by part_time_job
netflix_hours
0
1
2
3
4
Yes
No
part_time_job

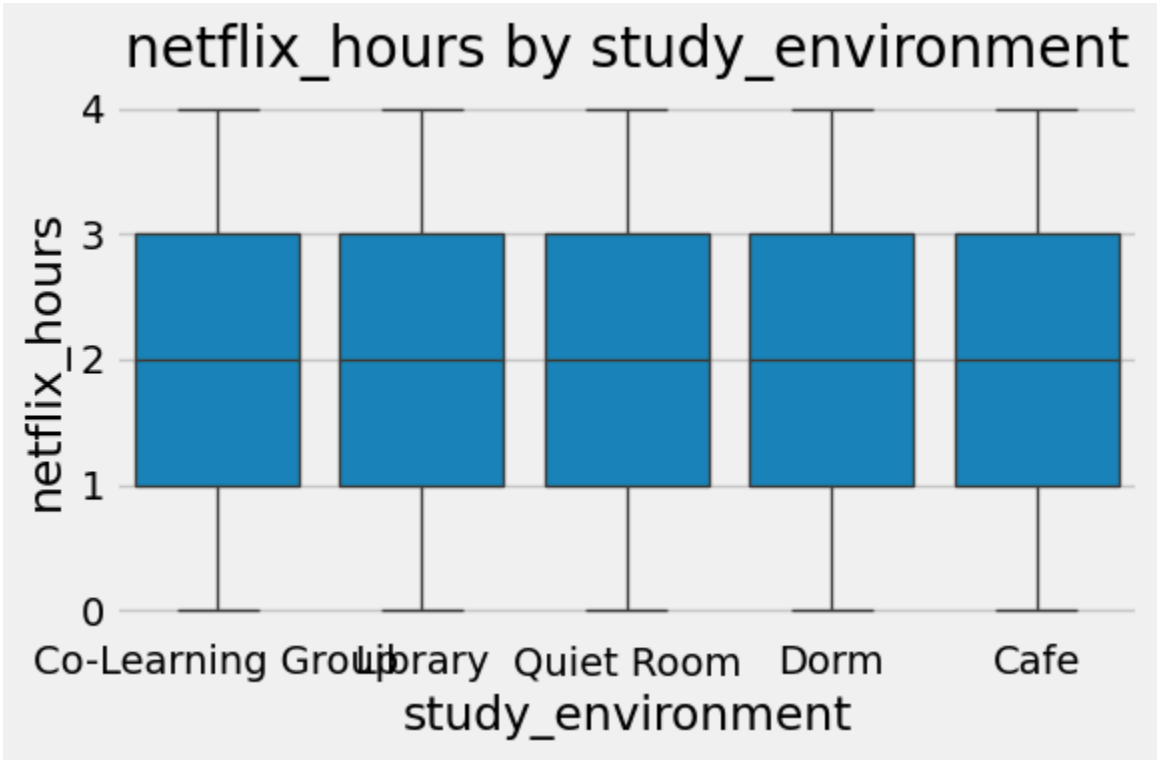

netflix_hours by diet_quality
netflix_hours
4
3
2
1
0
Poor
Good
Fair
diet_quality

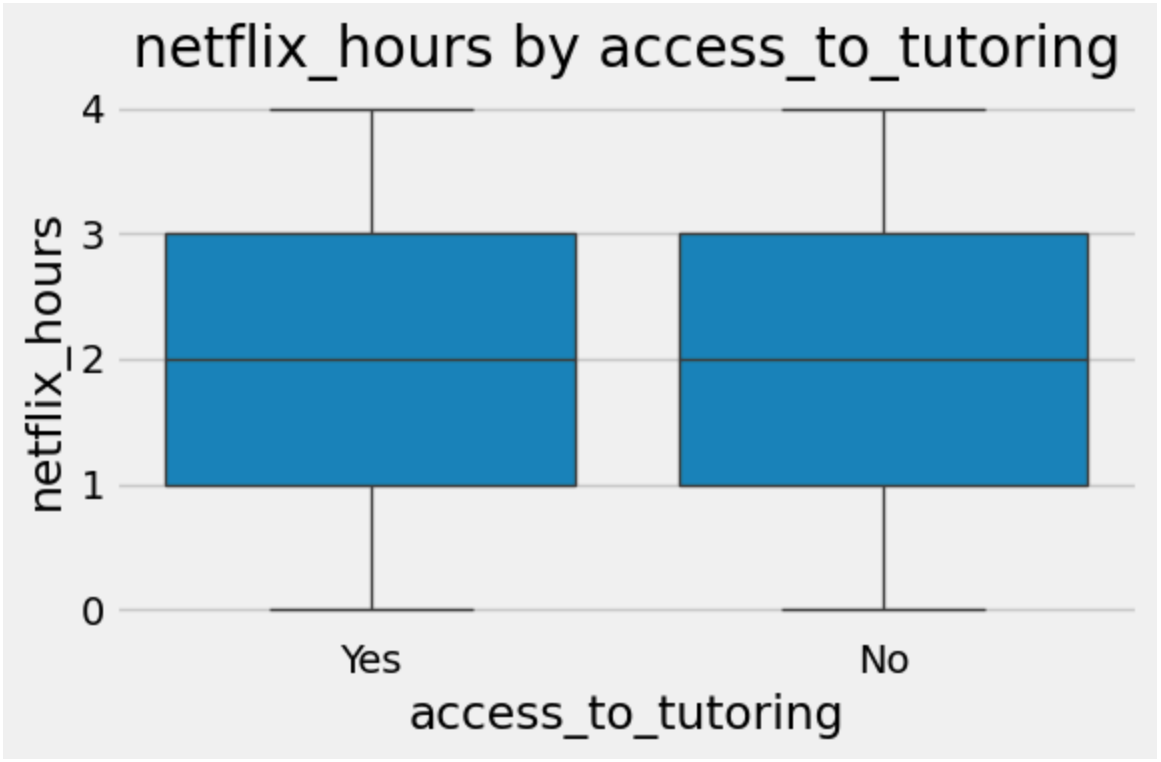

netflix_hours by parental_education_level
netflix_hours
4
3
2
1
0
Some College
PhD
High School
Master
Bachelor
parental_education_level

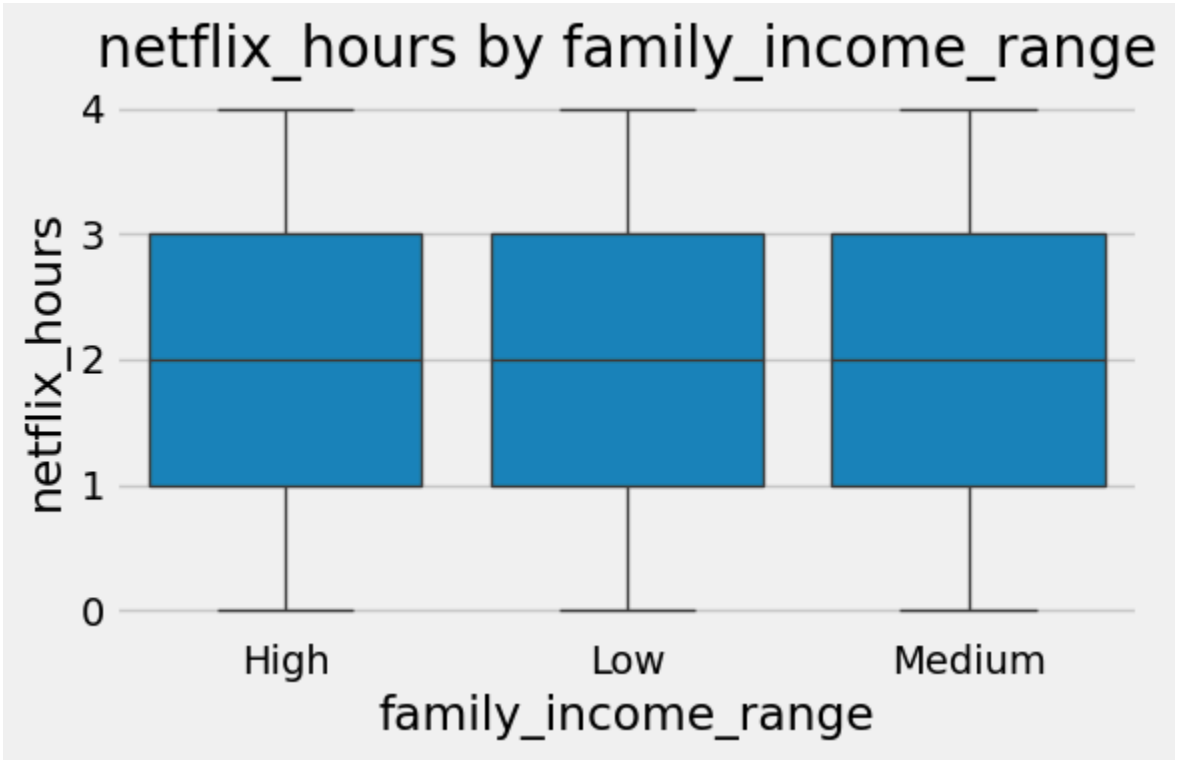

netflix_hours by internet_quality
netflix_hours
4
3
2
1
0
High
Low
Medium
internet_quality

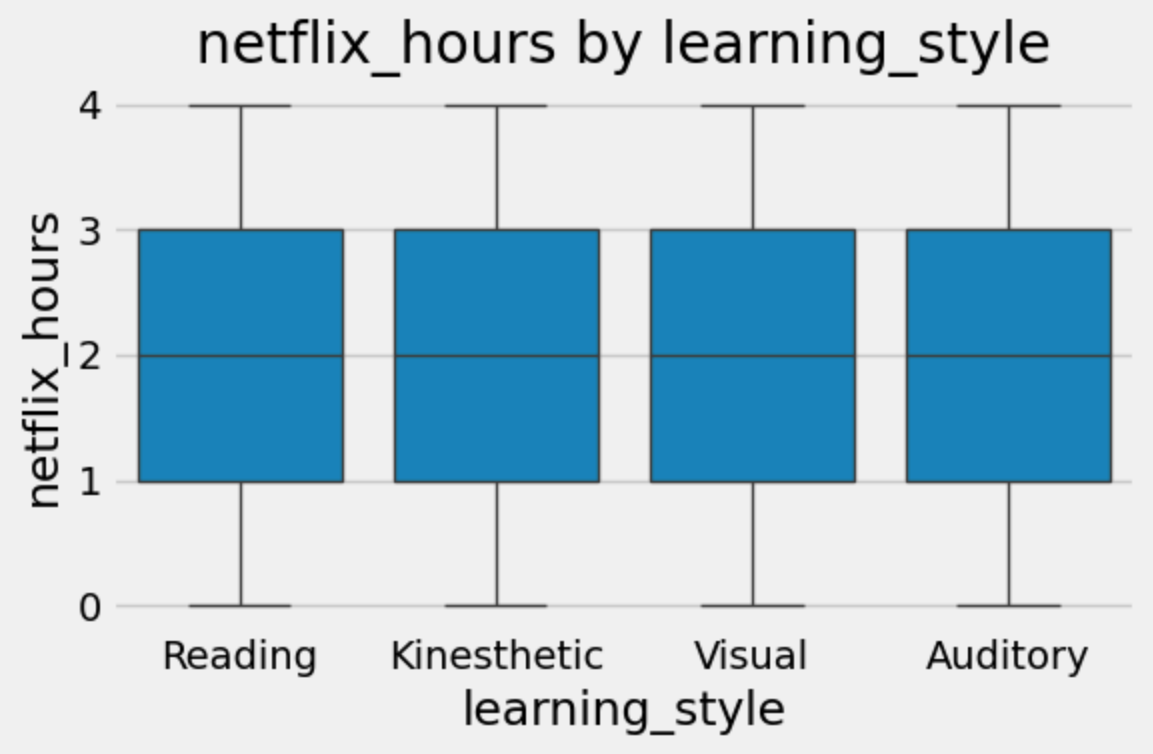

netflix_hours by extracurricular_participation
netflix_hours
4
3
2
1
0
Yes
No
extracurricular_participation

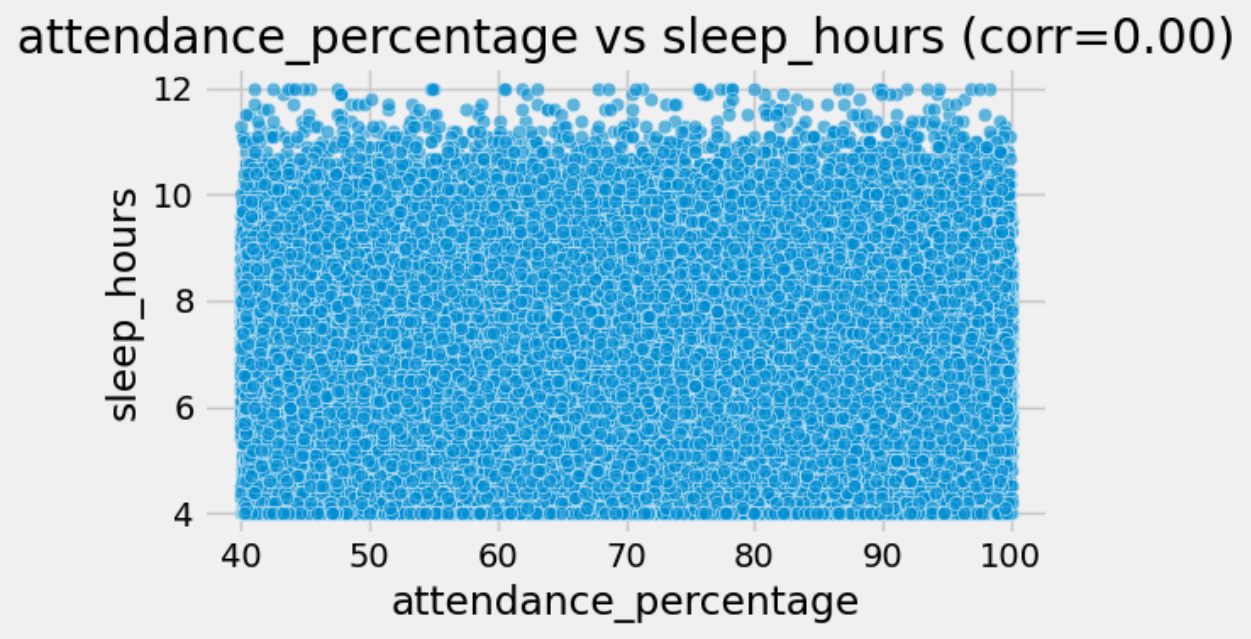

netflix_hours by dropout_risk
netflix_hours
4
3
2
1
0
No
Yes
dropout_risk

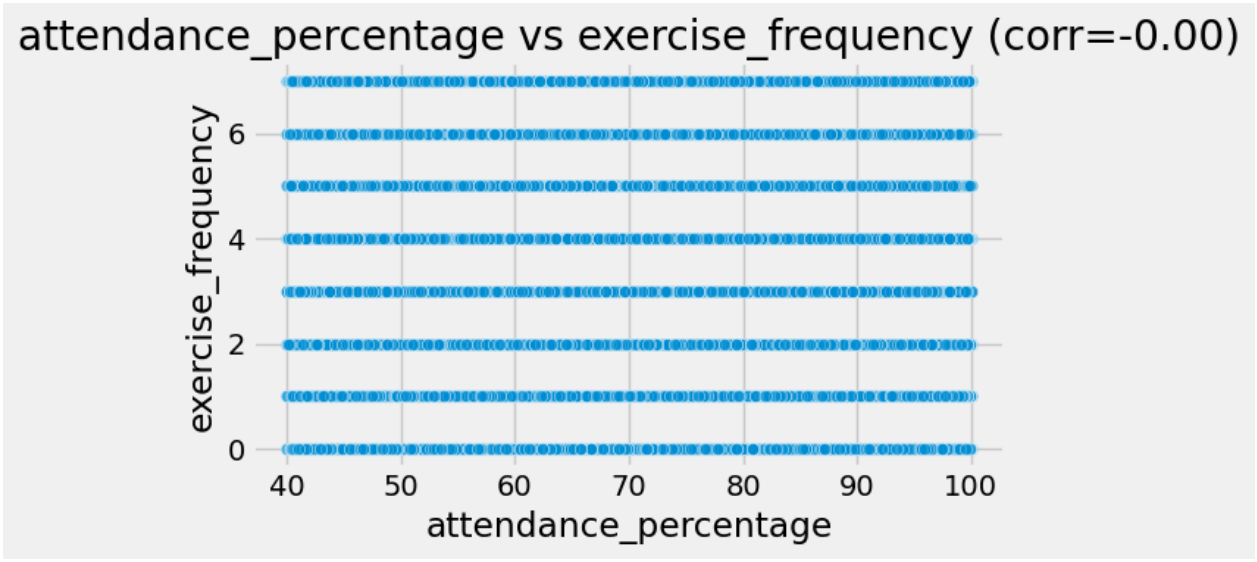

netflix_hours by study_environment
netflix_hours
4
3
2
1
0
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

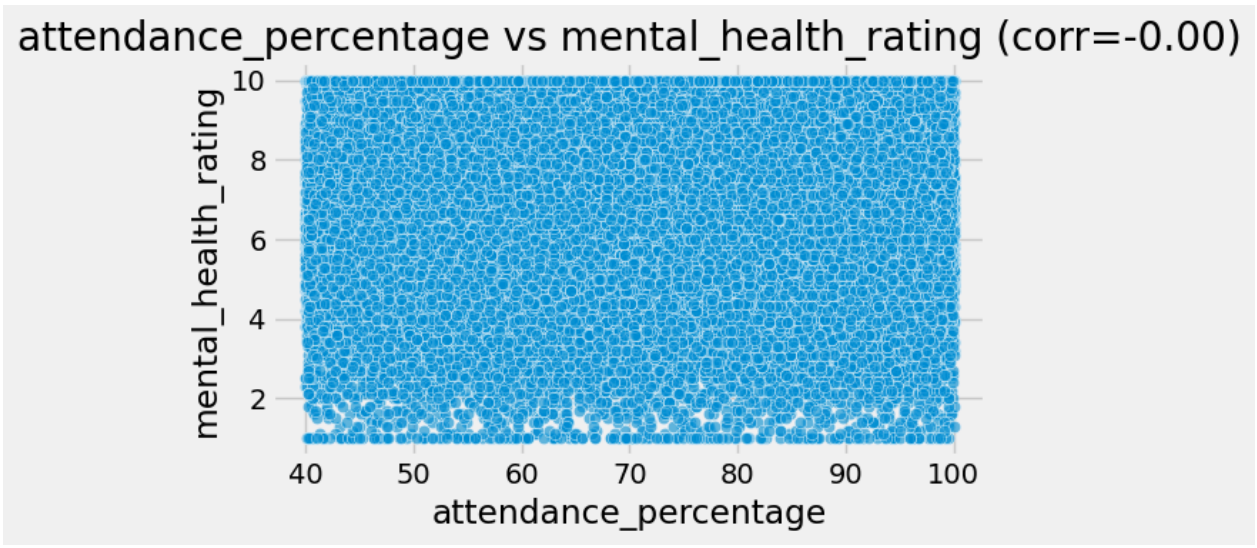

netflix_hours by access_to_tutoring
netflix_hours
4
3
2
1
0
Yes
No
access_to_tutoring

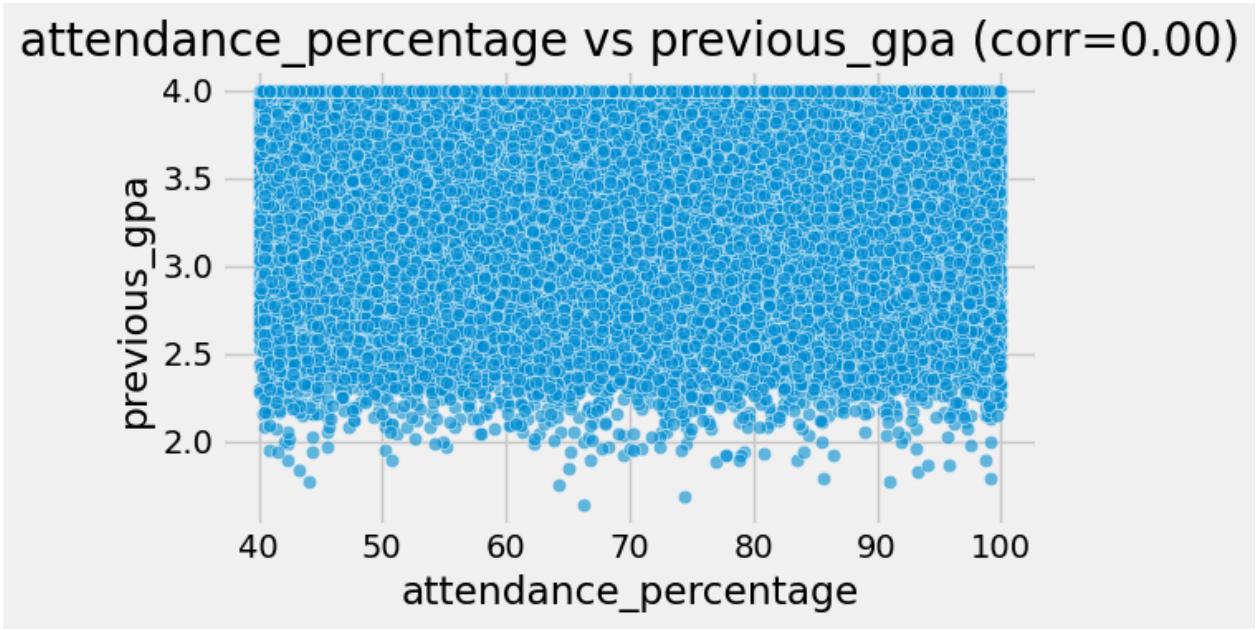

netflix_hours by family_income_range
netflix_hours
4
3
2
1
0
High
Low
Medium
family_income_range

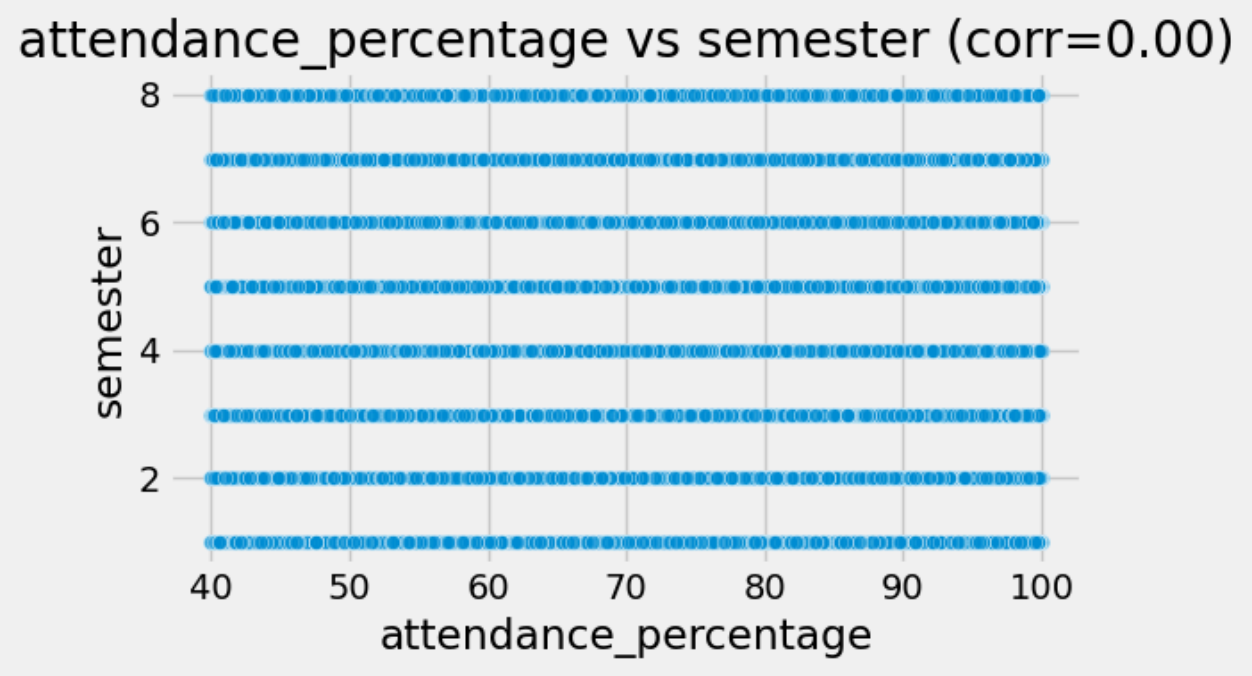

netflix_hours by learning_style
netflix_hours
4
3
2
1
0
Reading
Kinesthetic
Visual
Auditory
learning_style

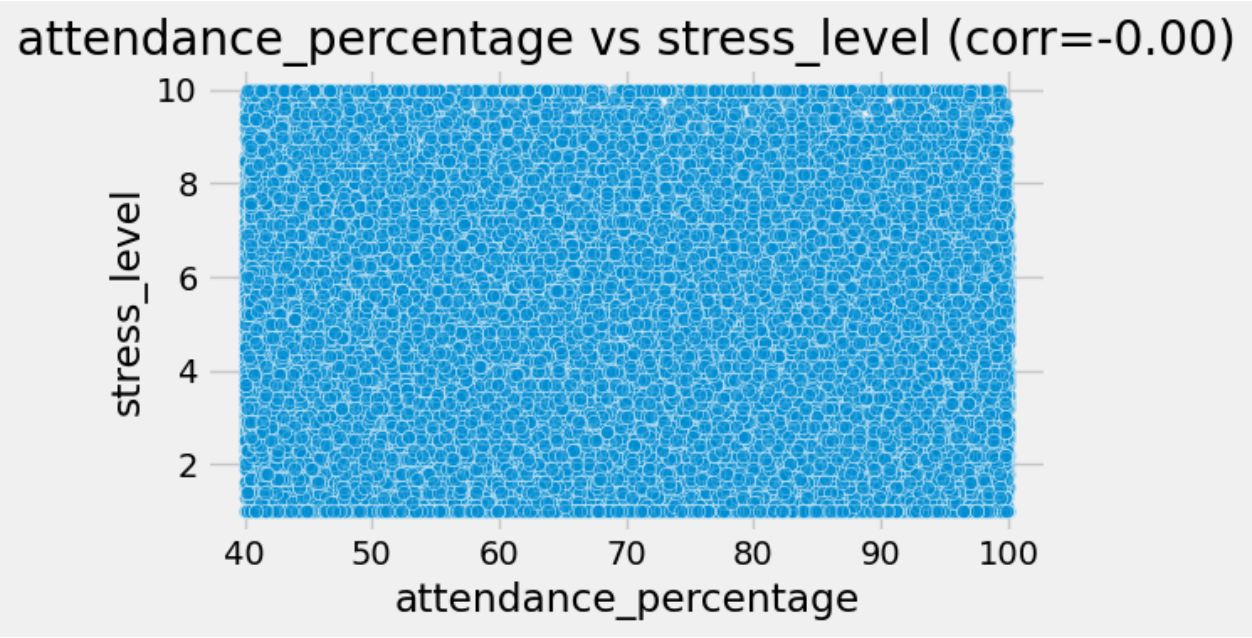

attendance_percentage vs sleep_hours (corr=0.00)
sleep_hours
12
10
8
6
4
40
50
60
70
80
90
100
attendance_percentage

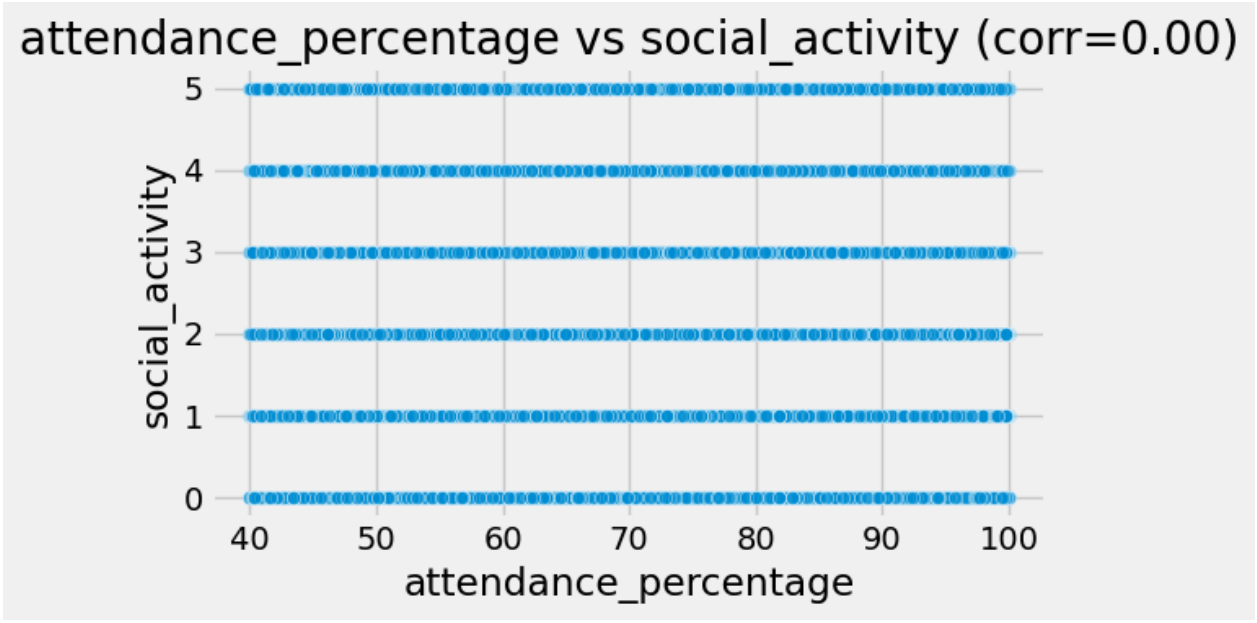

attendance_percentage vs exercise_frequency (corr=-0.00)
exercise_frequency
0
2
4
6
40
50
60
70
80
90
100
attendance_percentage

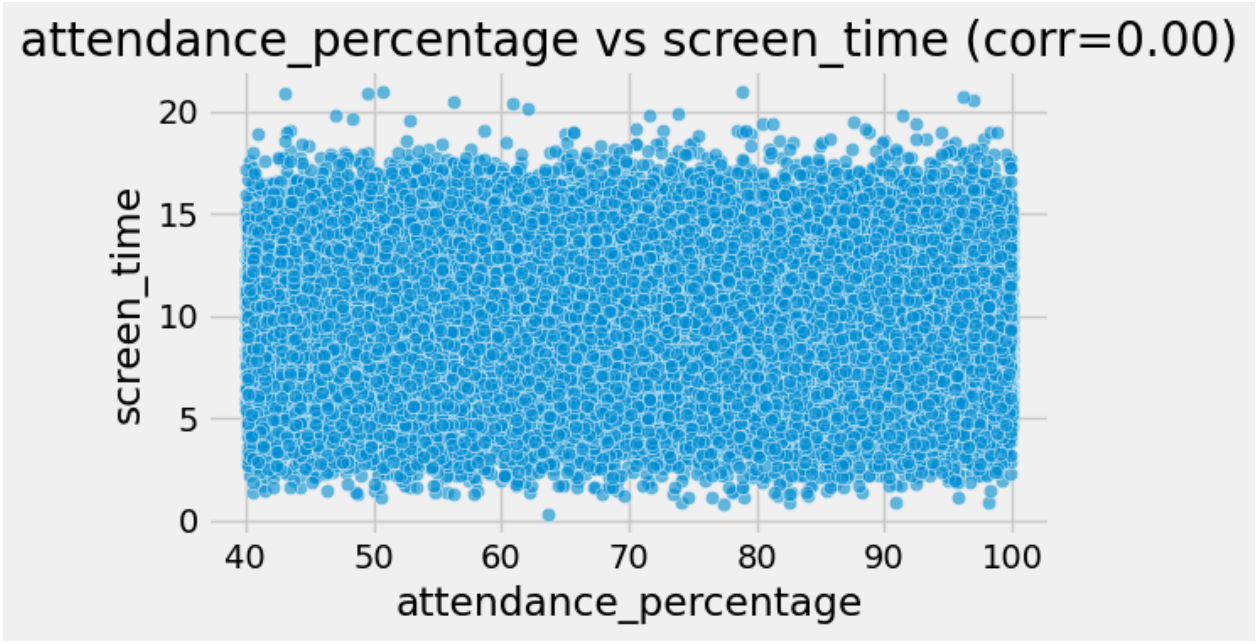

attendance_percentage vs mental_health_rating (corr=-0.00)
mental_health_rating
2
4
6
8
10
40
50
60
70
80
90
100
attendance_percentage

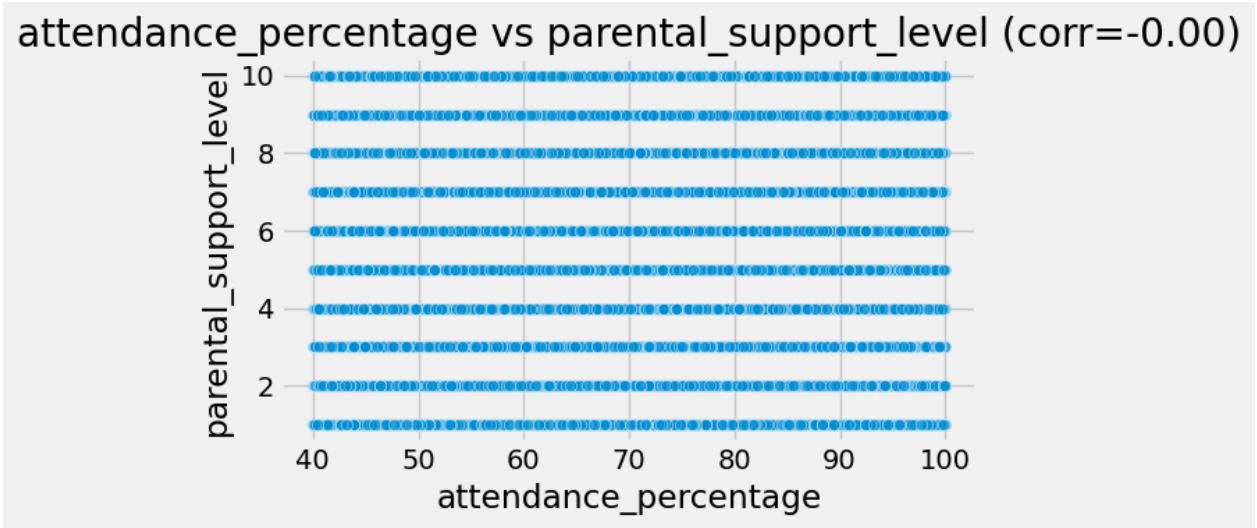

attendance_percentage vs previous_gpa (corr=0.00)
previous_gpa
2.0
2.5
3.0
3.5
4.0
40
50
60
70
80
90
100
attendance_percentage

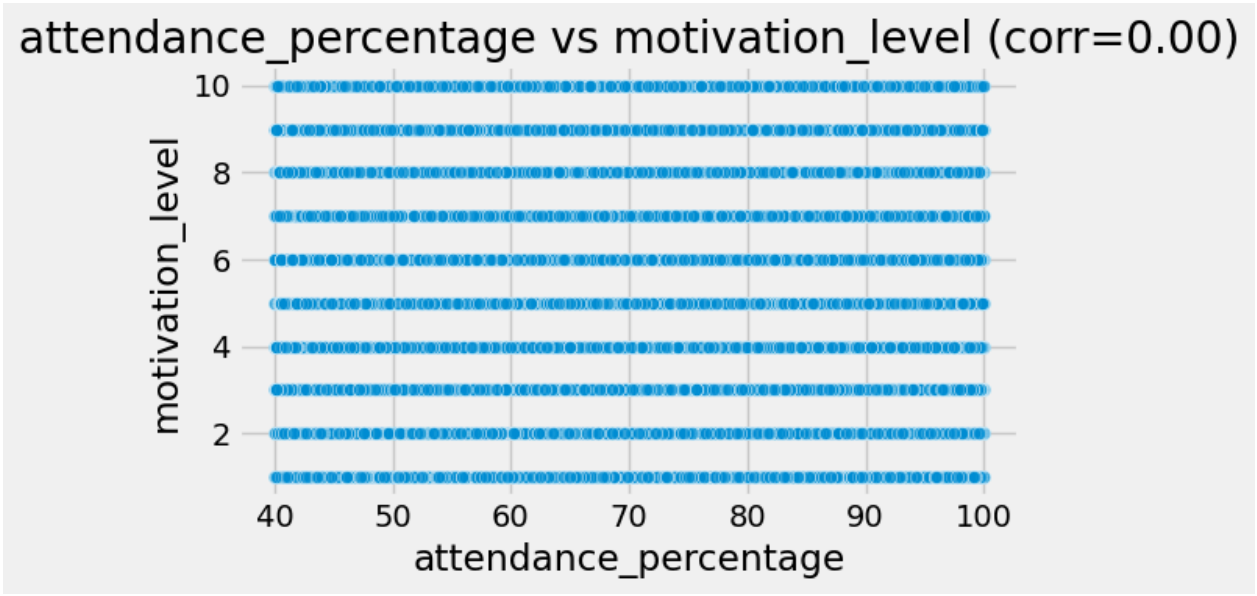

attendance_percentage vs semester (corr=0.00)
semester
8
6
4
2
40
50
60
70
80
90
100
attendance_percentage

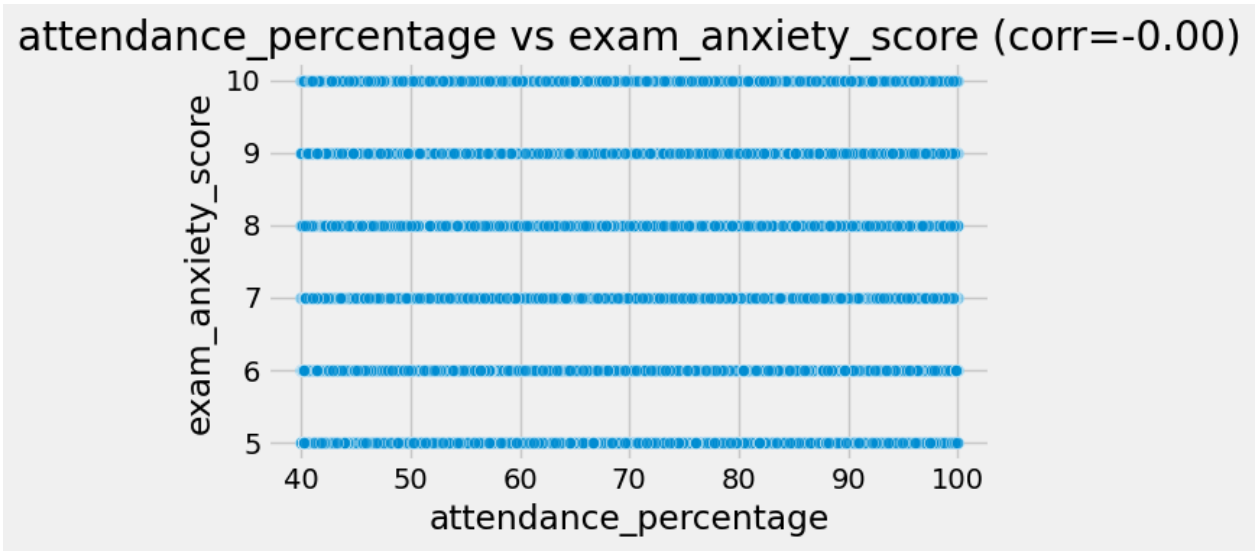

attendance_percentage vs stress_level (corr=-0.00)
stress_level
10
8
6
4
2
40
50
60
70
80
90
100
attendance_percentage

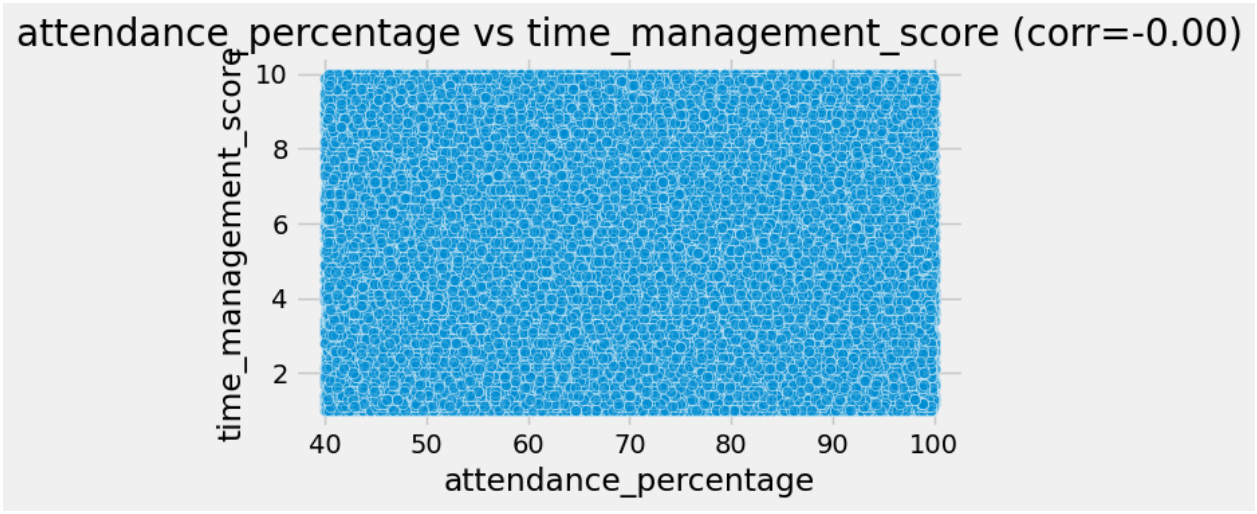

attendance_percentage vs social_activity (corr=0.00)
social_activity
0
1
2
3
4
5
40
50
60
70
80
90
100
attendance_percentage

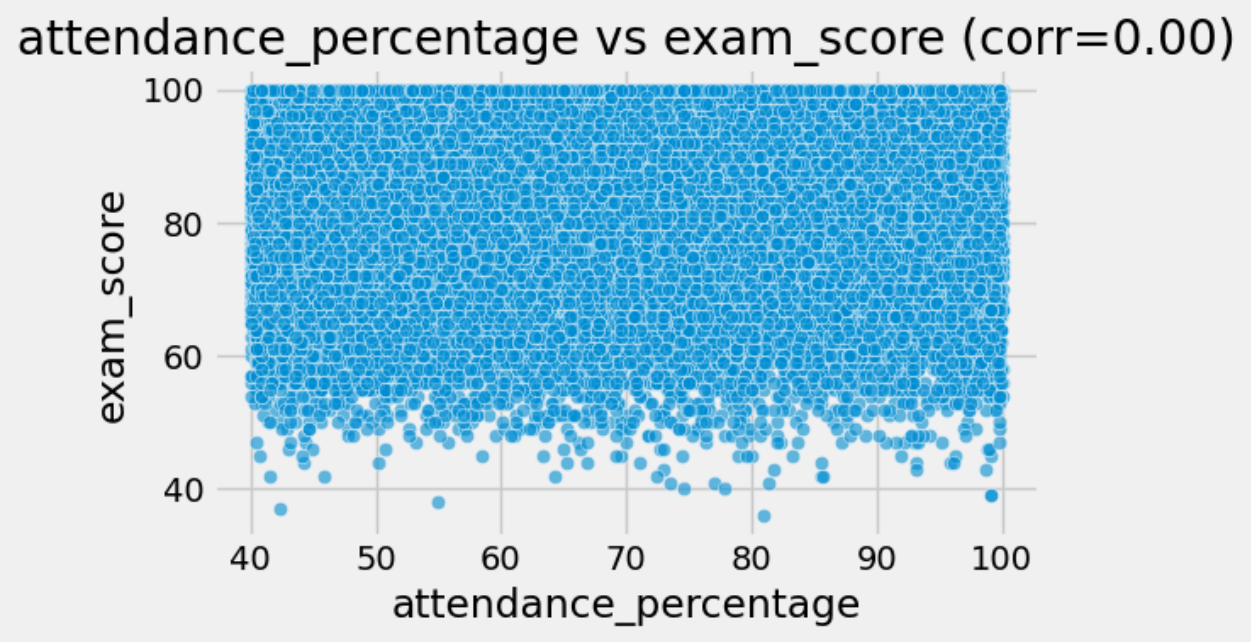

attendance_percentage vs screen_time (corr=0.00)
screen_time
0
5
10
15
20
40
50
60
70
80
90
100
attendance_percentage

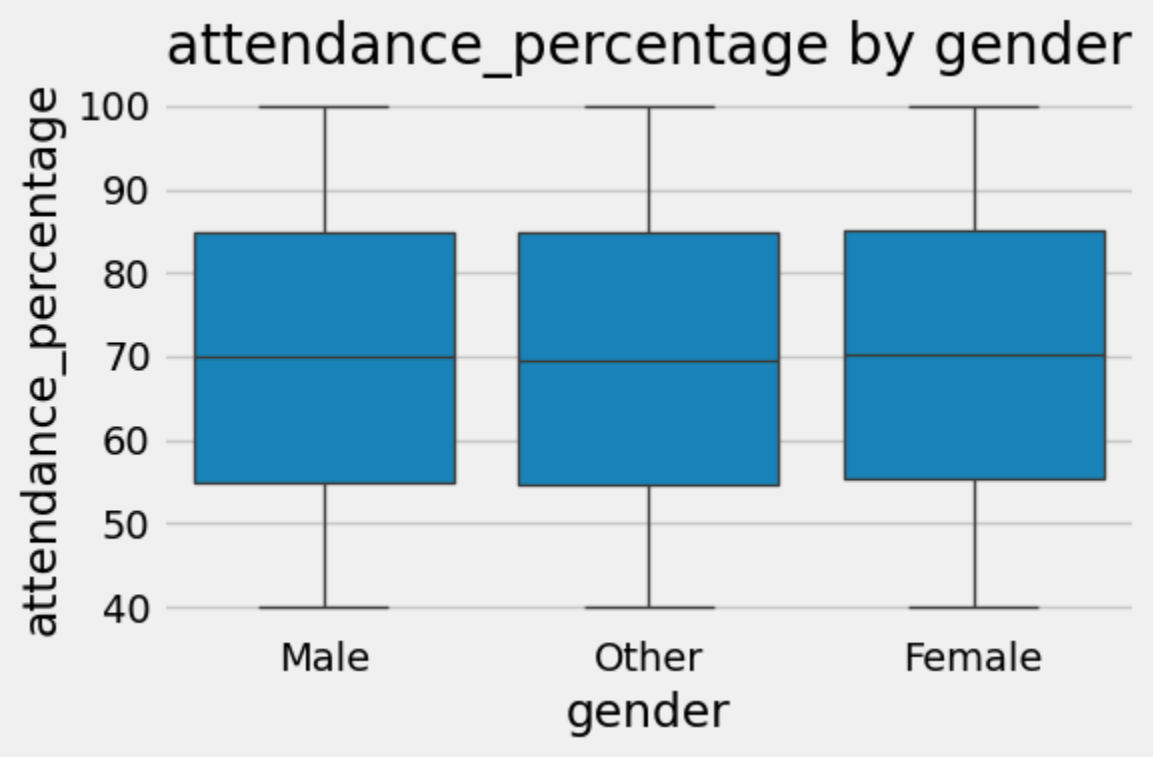

attendance_percentage vs parental_support_level (corr=-0.00)
parental_support_level
2
4
6
8
10
40
50
60
70
80
90
100
attendance_percentage

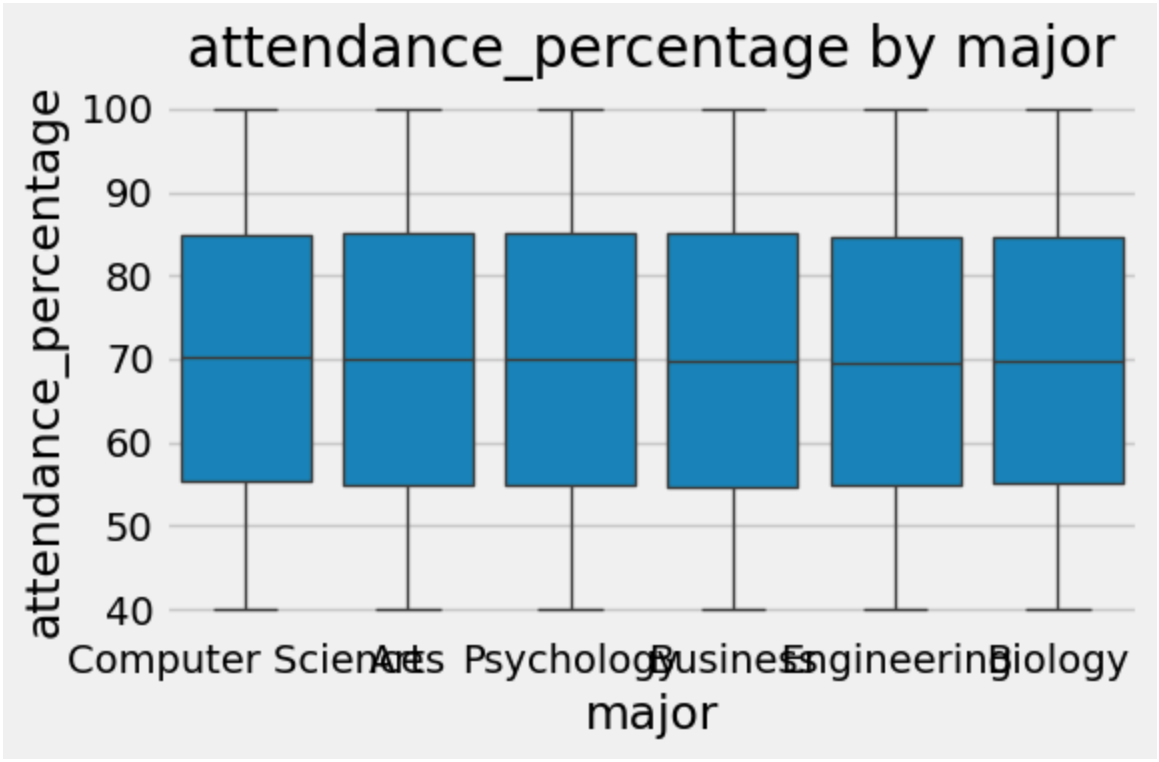

attendance_percentage vs motivation_level (corr=0.00)
motivation_level
10
8
6
4
2
40
50
60
70
80
90
100
attendance_percentage

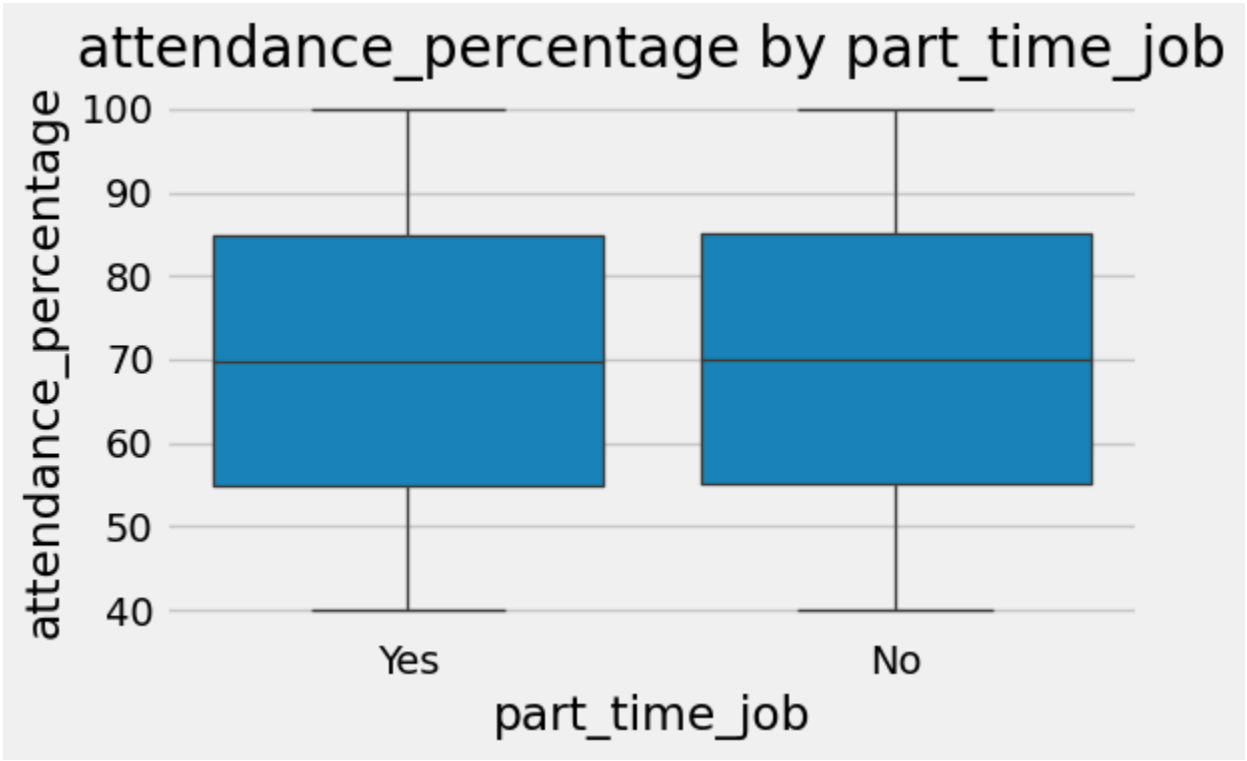

attendance_percentage vs exam_anxiety_score (corr=-0.00)
exam_anxiety_score
10
9
8
7
6
5
40
50
60
70
80
90
100
attendance_percentage

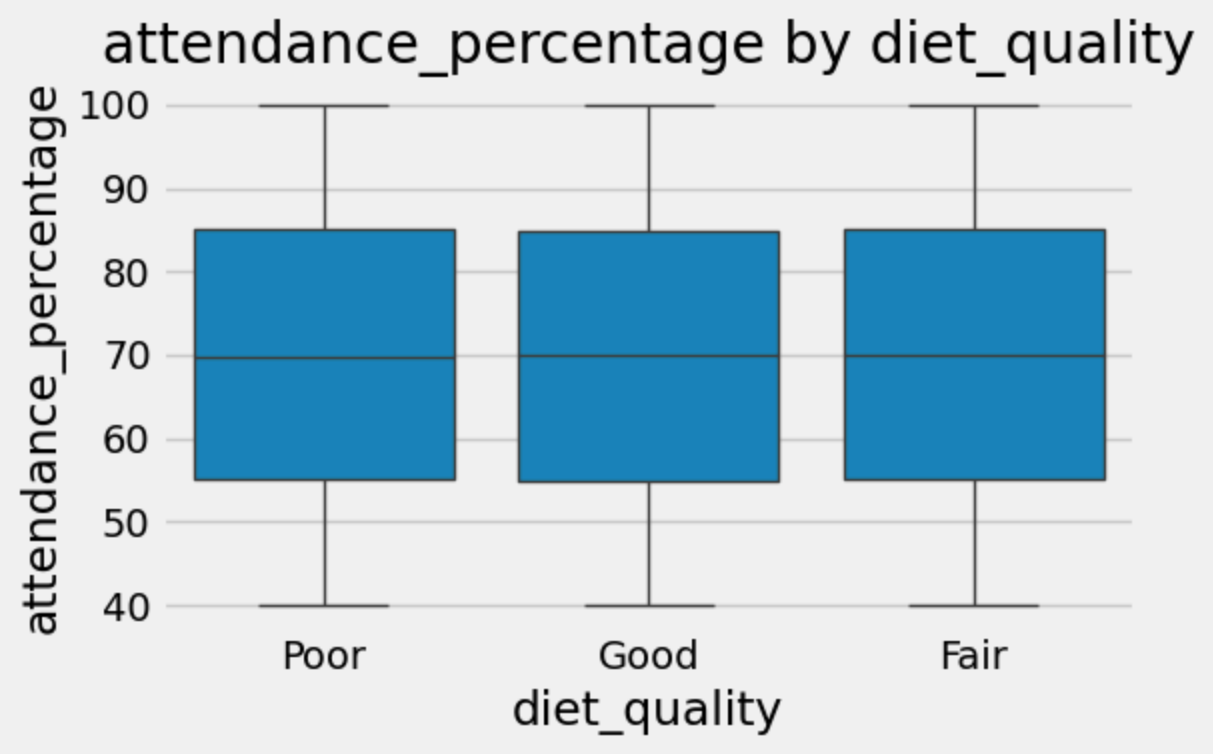

attendance_percentage vs time_management_score (corr=-0.00)
time_management_score
10
8
6
4
2
40
50
60
70
80
90
100
attendance_percentage

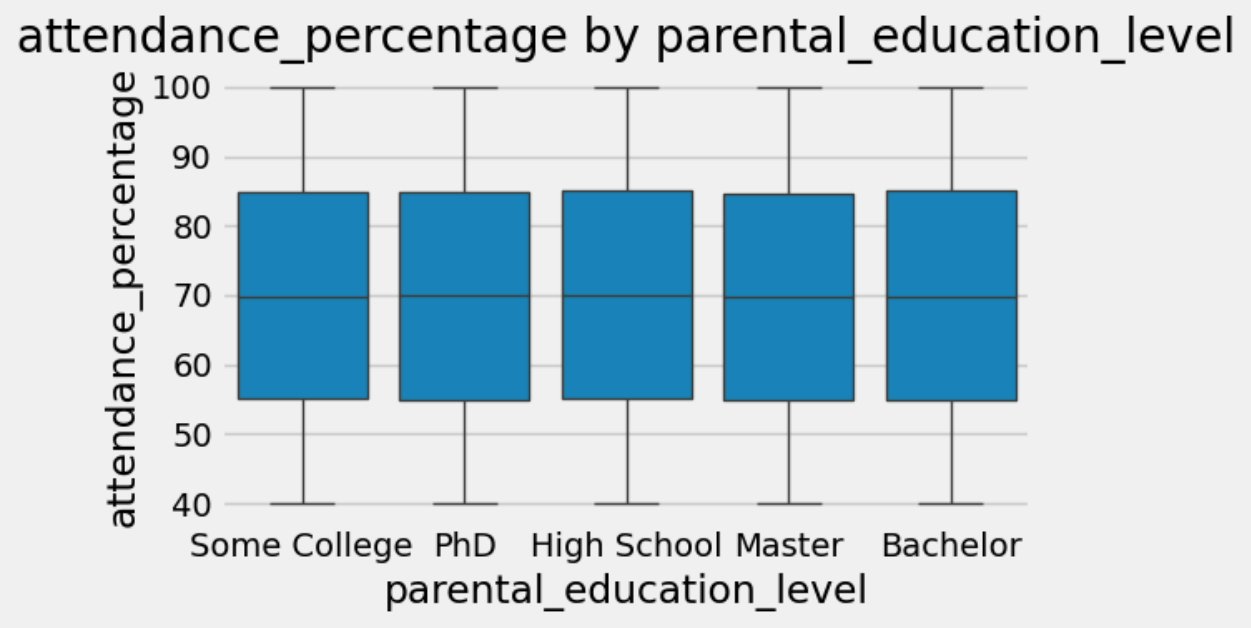

attendance_percentage vs exam_score (corr=0.00)
exam_score
100
80
60
40
40
50
60
70
80
90
100
attendance_percentage

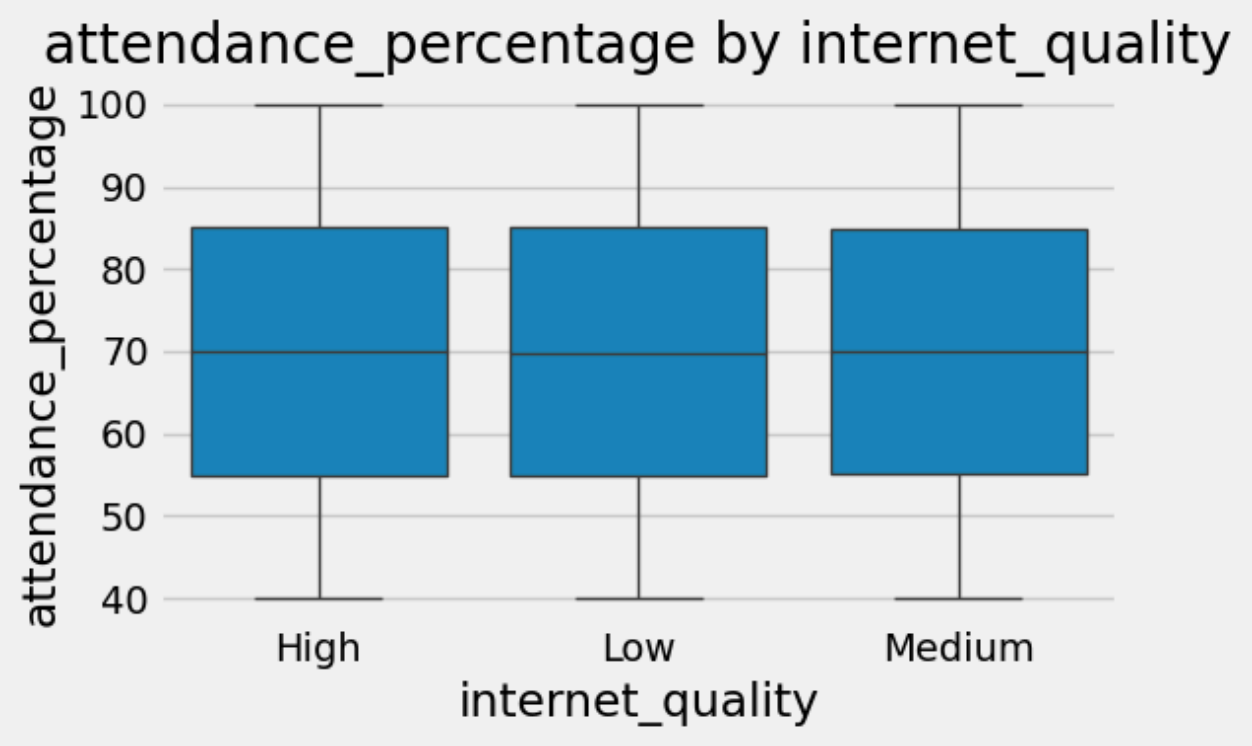

attendance_percentage by gender
attendance_percentage
100
90
80
70
60
50
40
Male
Other
Female
gender

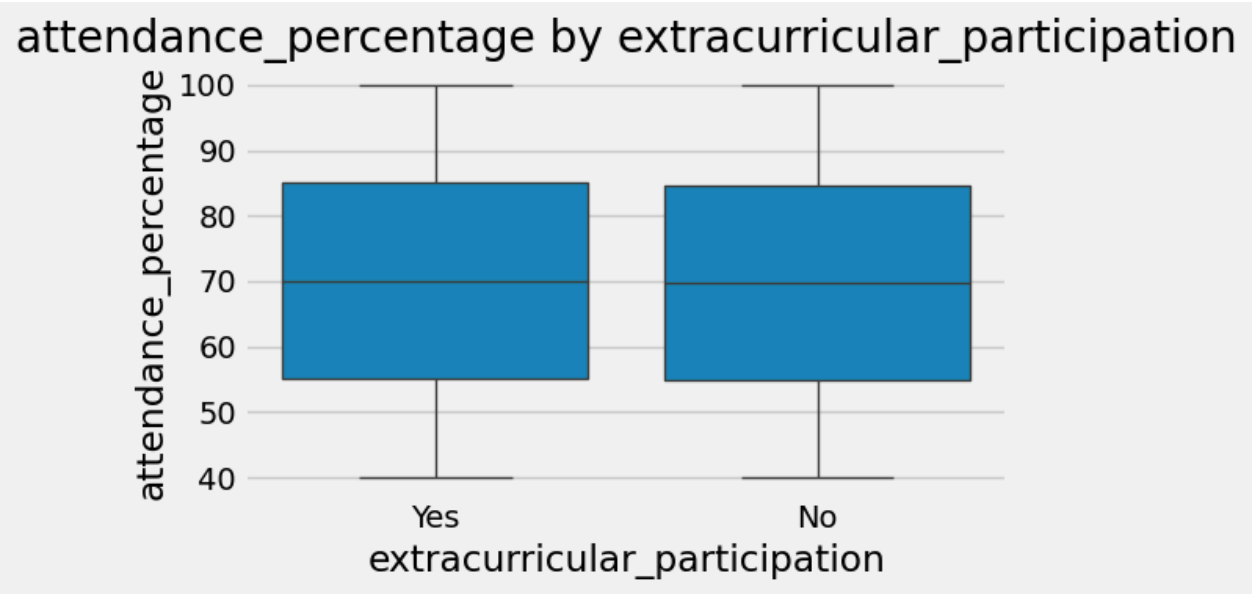

attendance_percentage by major
attendance_percentage
100
90
80
70
60
50
40
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

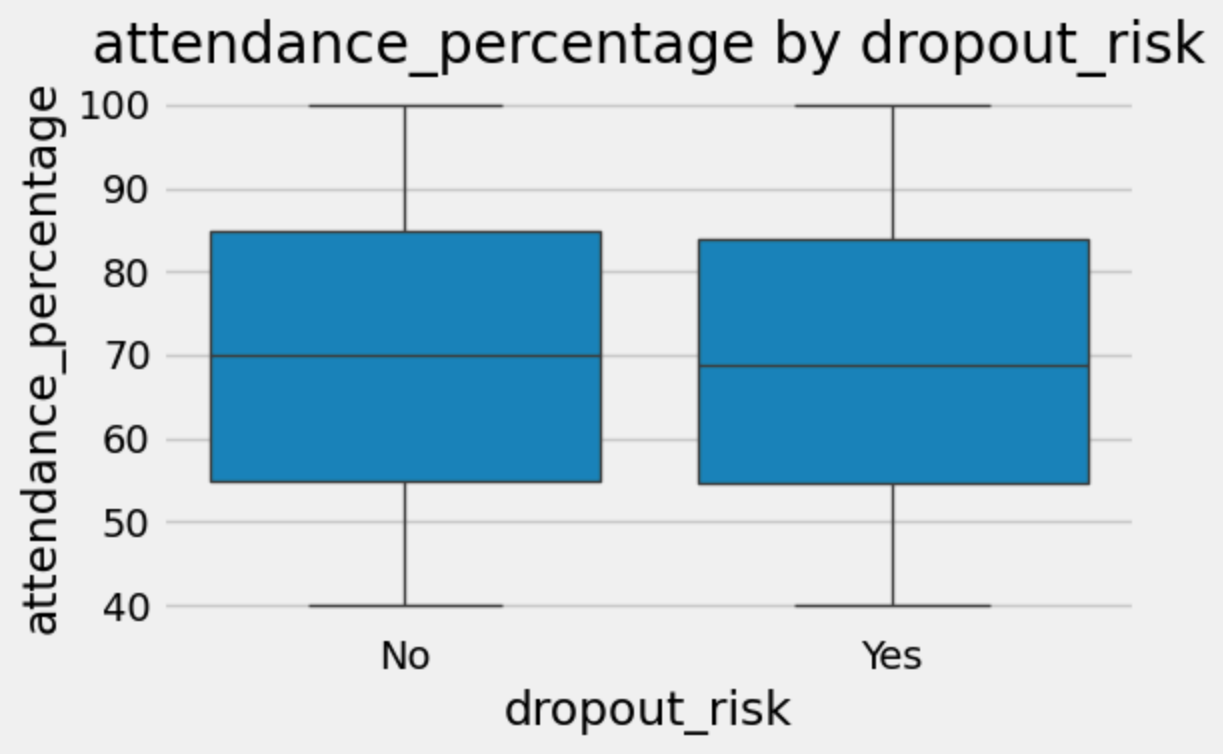

attendance_percentage by part_time_job
attendance_percentage
100
90
80
70
60
50
40
Yes
No
part_time_job

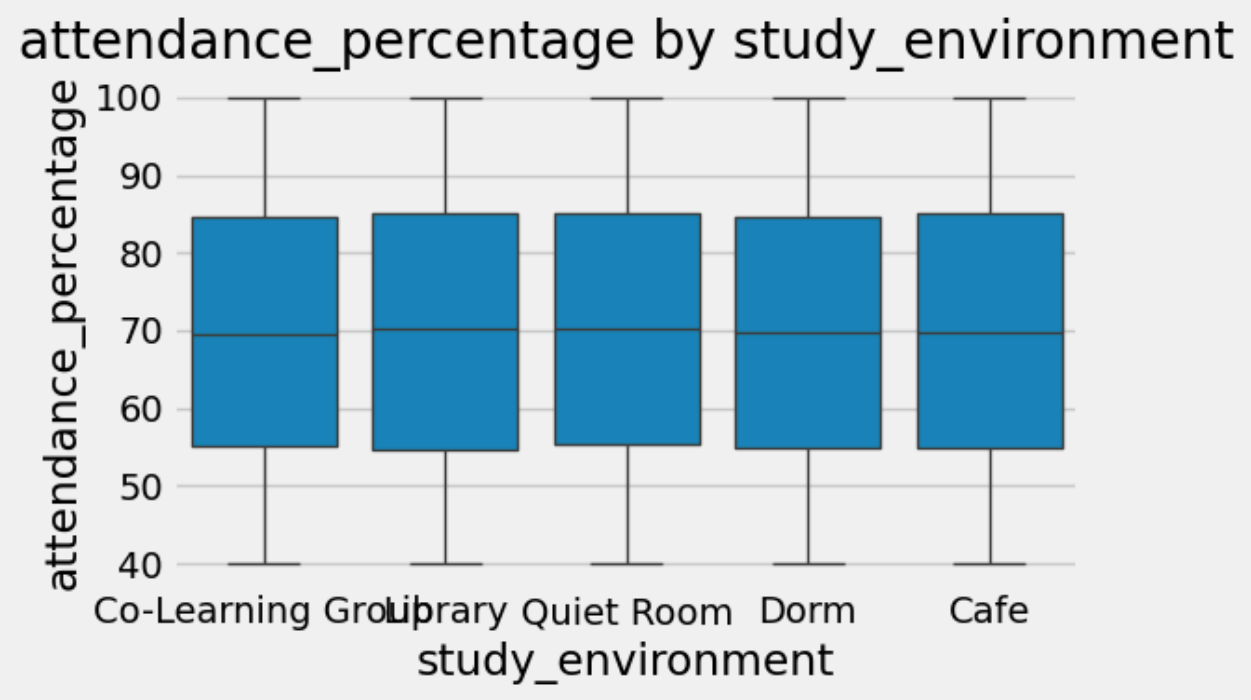

attendance_percentage by diet_quality
attendance_percentage
100
90
80
70
60
50
40
Poor
Good
Fair
diet_quality

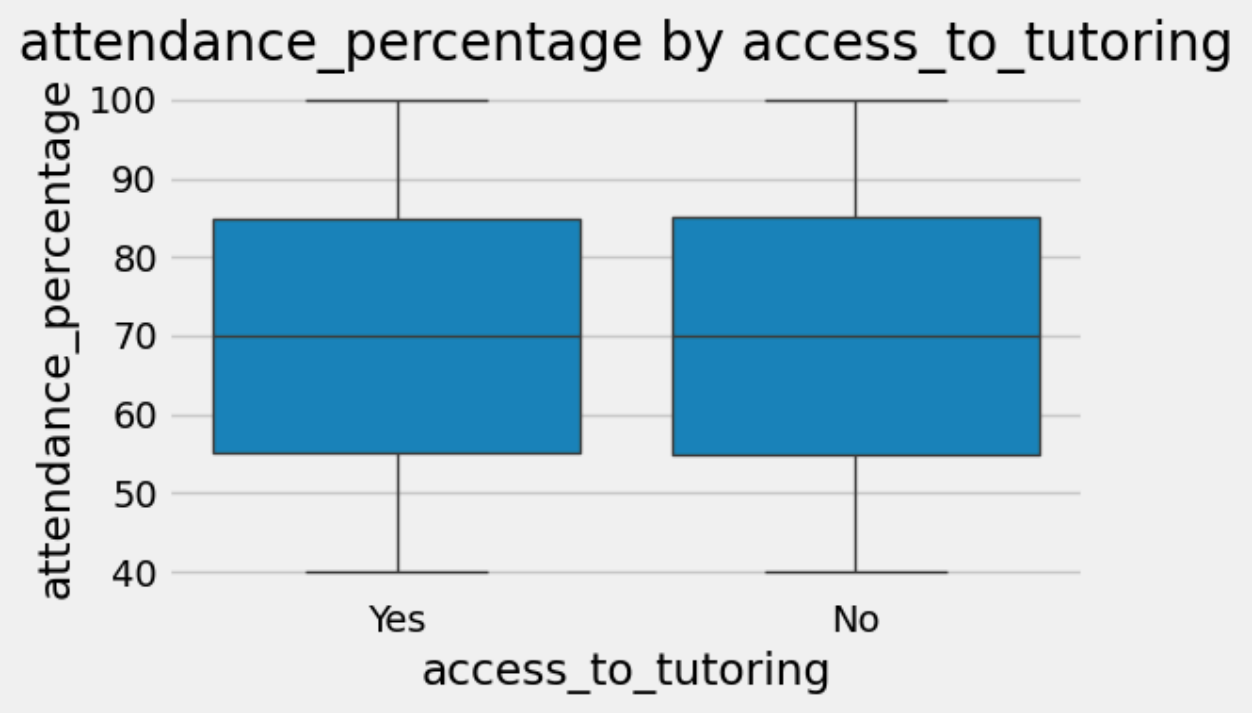

attendance_percentage by parental_education_level
attendance_percentage
100
90
80
70
60
50
40
Some College
PhD
High School
Master
Bachelor
parental_education_level

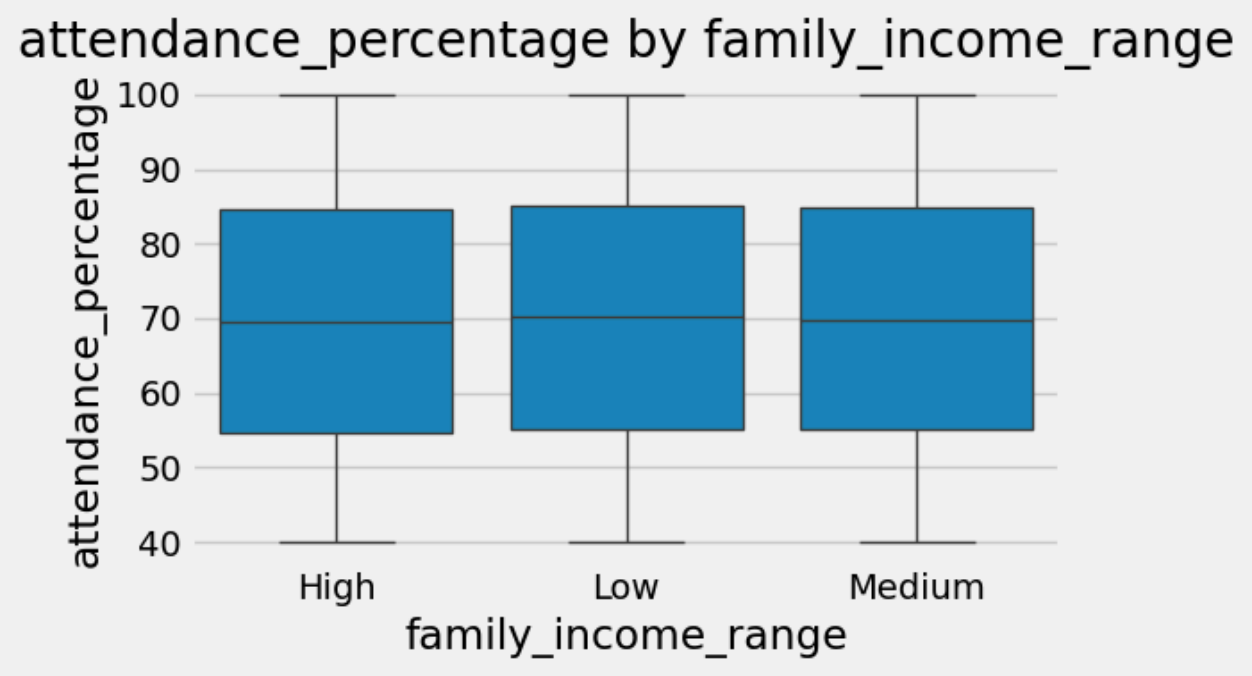

attendance_percentage by internet_quality
attendance_percentage
100
90
80
70
60
50
40
High
Low
Medium
internet_quality

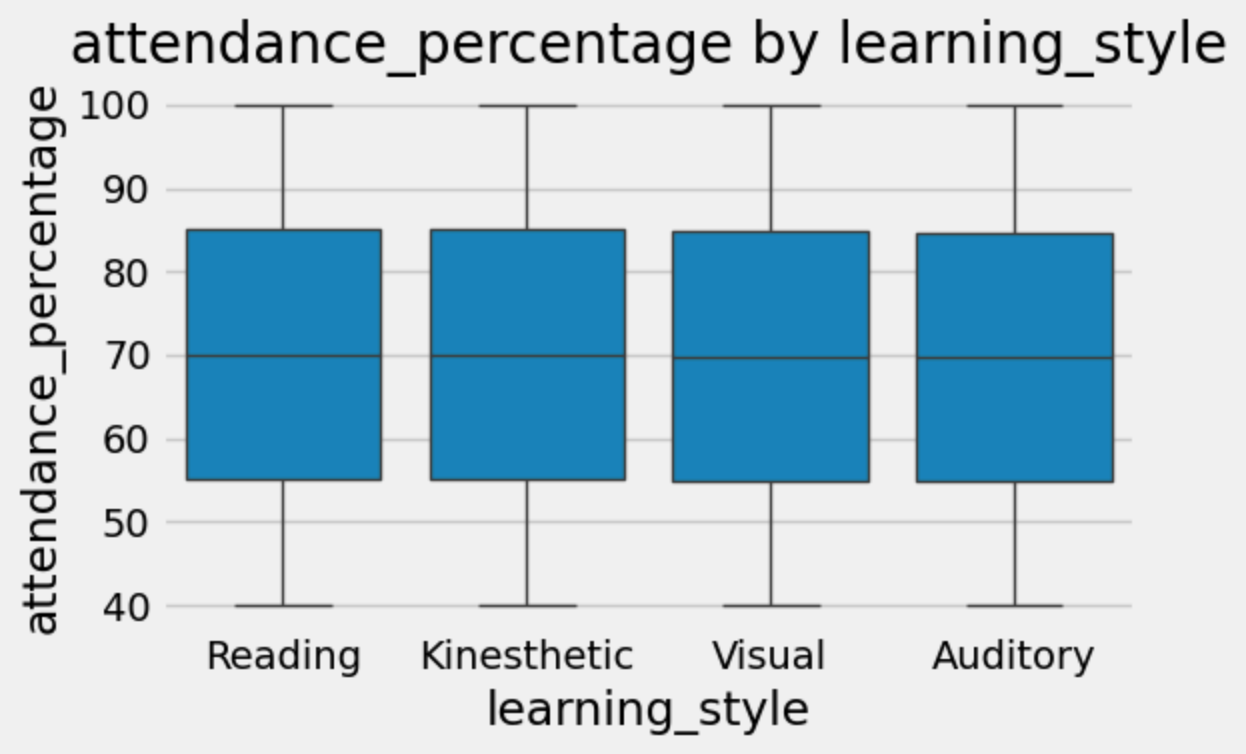

attendance_percentage by extracurricular_participation
attendance_percentage
100
90
80
70
60
50
40
Yes
No
extracurricular_participation

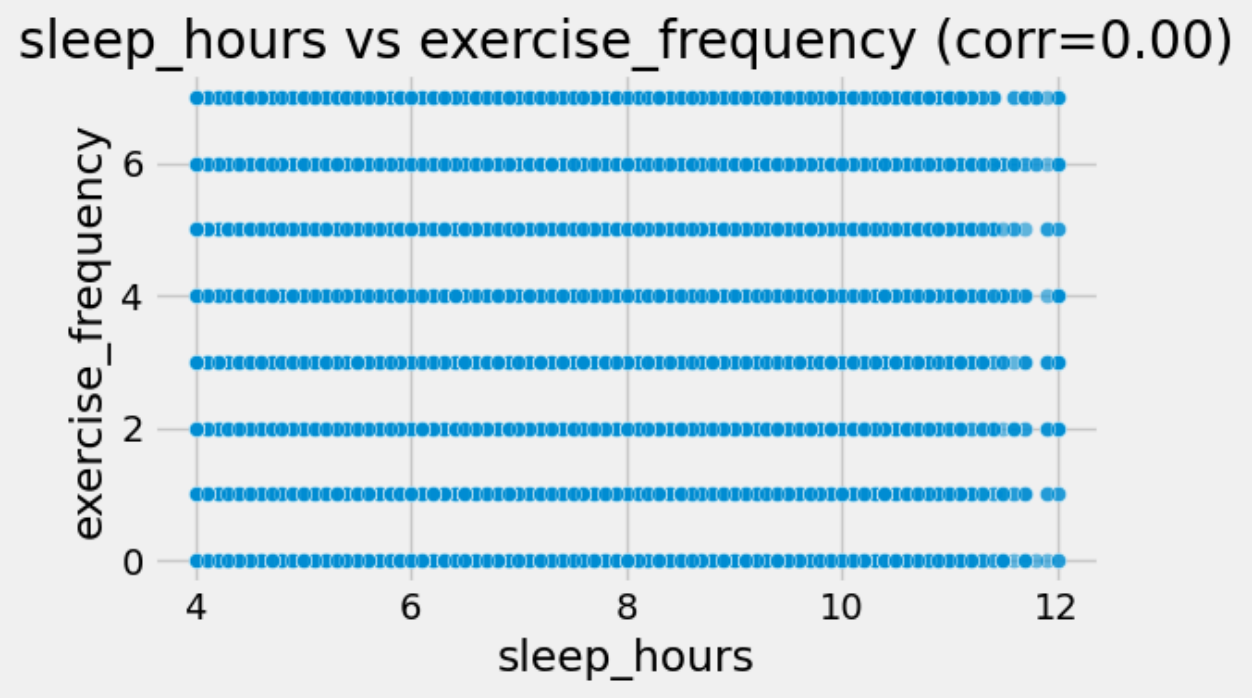

attendance_percentage by dropout_risk
attendance_percentage
100
90
80
70
60
50
40
No
Yes
dropout_risk

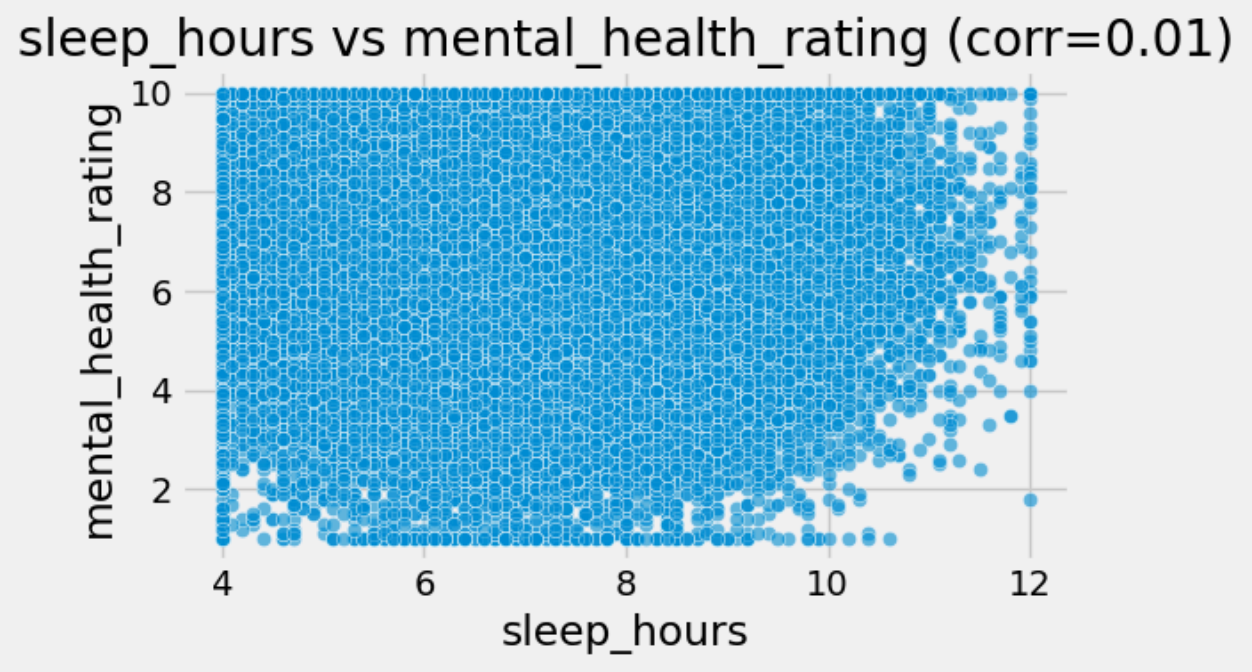

attendance_percentage by study_environment
attendance_percentage
100
90
80
70
60
50
40
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

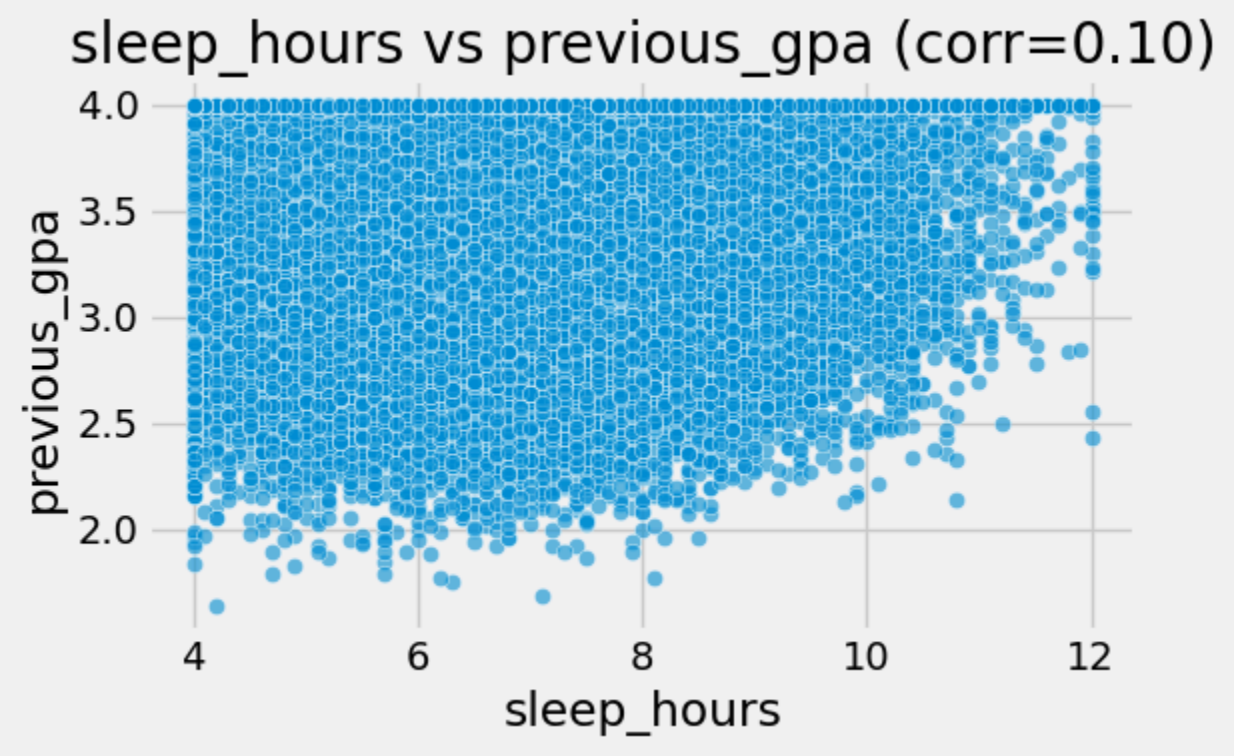

attendance_percentage by access_to_tutoring
attendance_percentage
100
90
80
70
60
50
40
Yes
No
access_to_tutoring

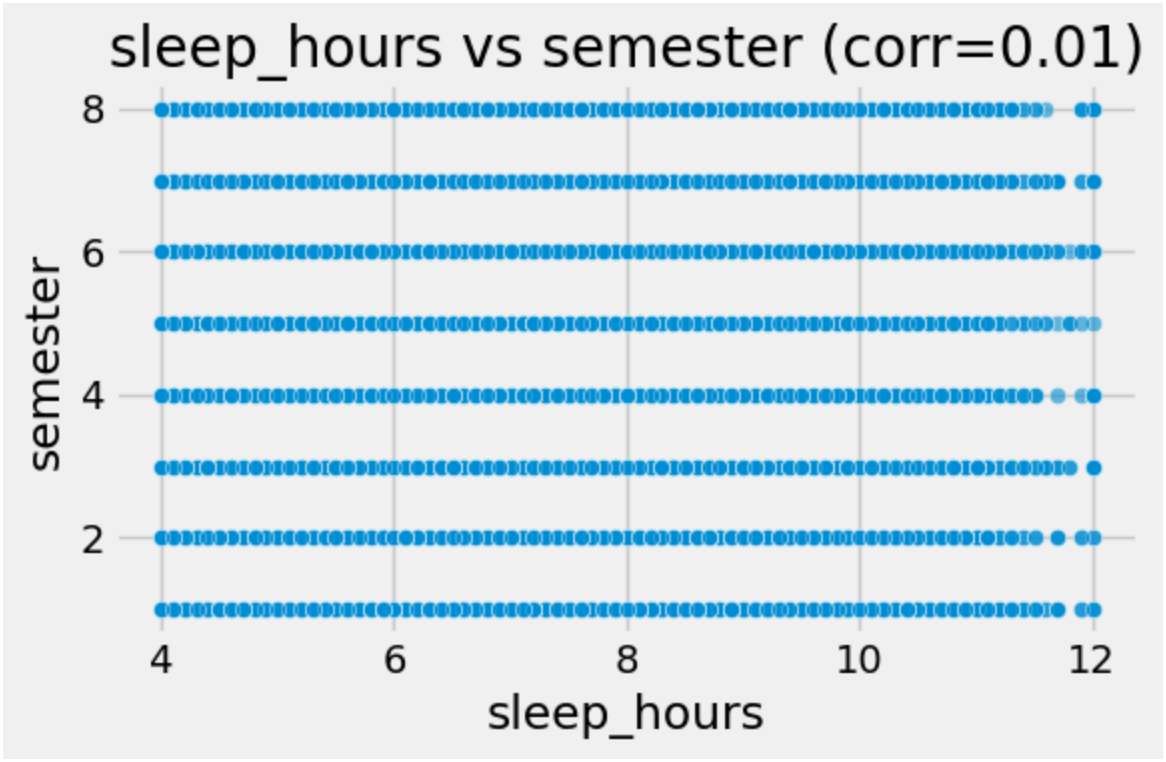

attendance_percentage by family_income_range
attendance_percentage
100
90
80
70
60
50
40
High
Low
Medium
family_income_range

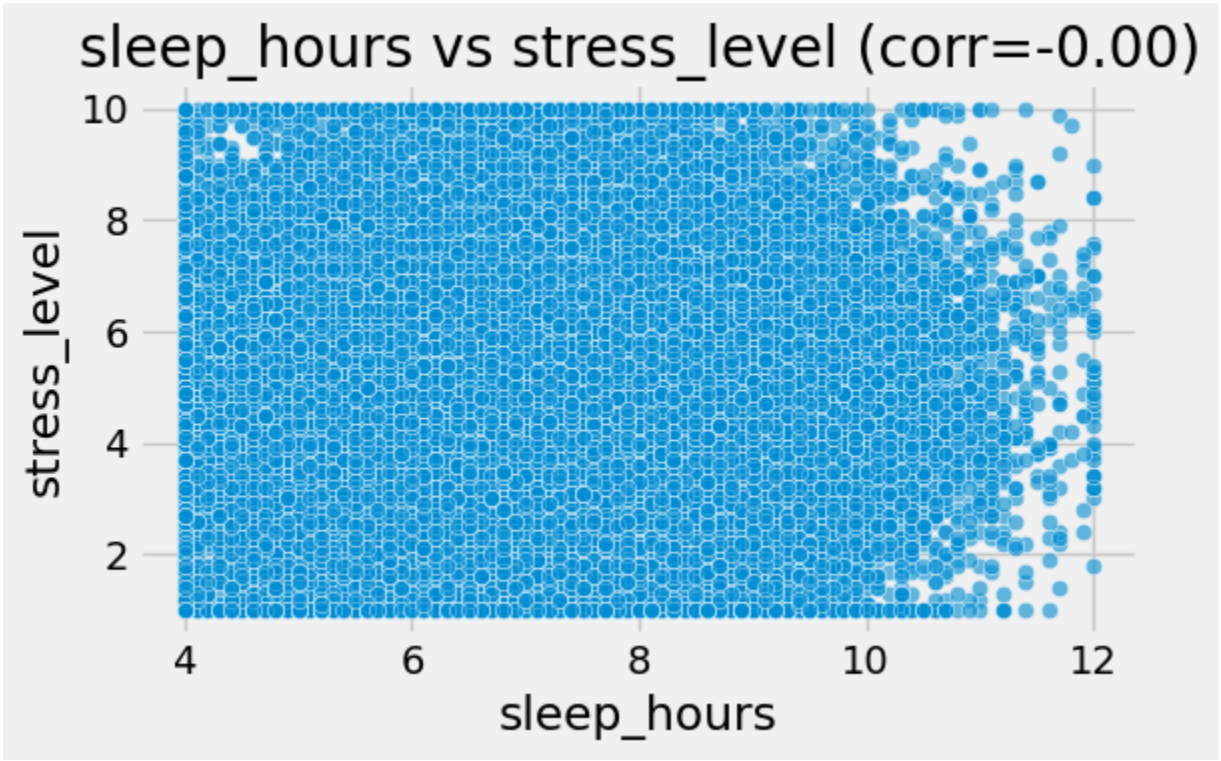

attendance_percentage by learning_style
attendance_percentage
100
90
80
70
60
50
40
Reading
Kinesthetic
Visual
Auditory
learning_style

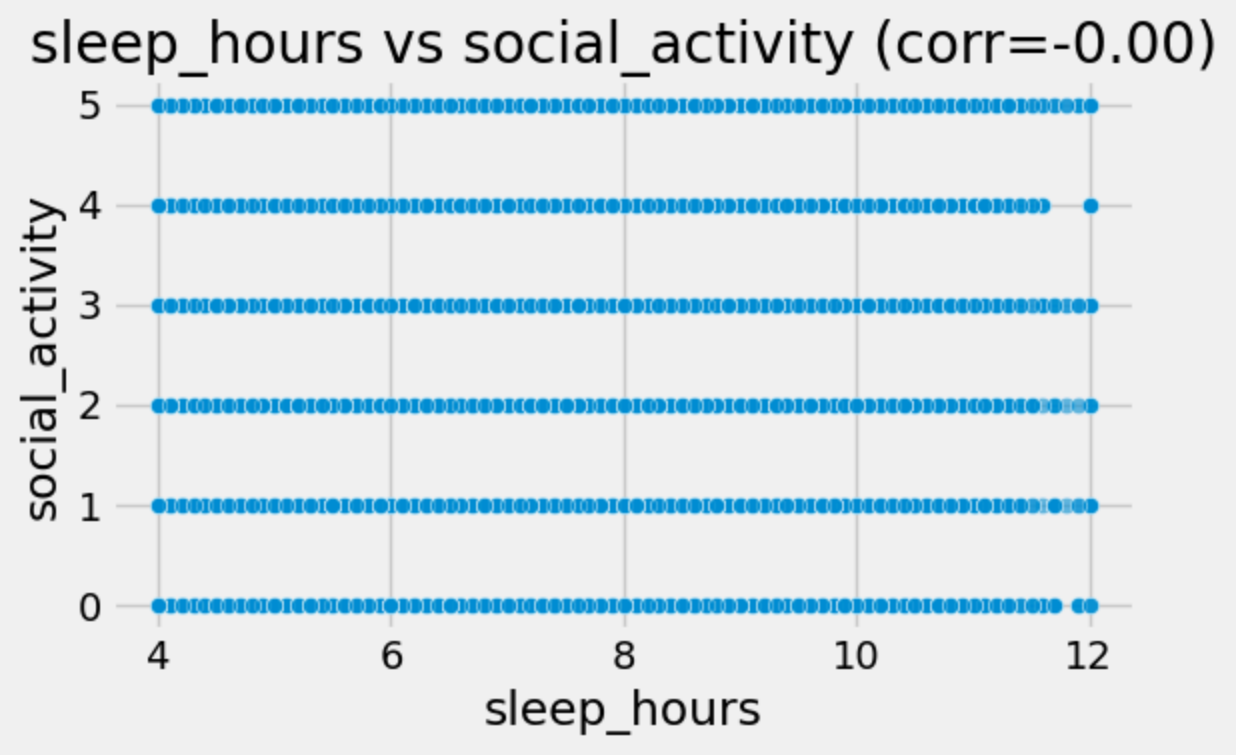

sleep_hours vs exercise_frequency (corr=0.00)
exercise_frequency
6
4
2
0
4
6
8
10
12
sleep_hours

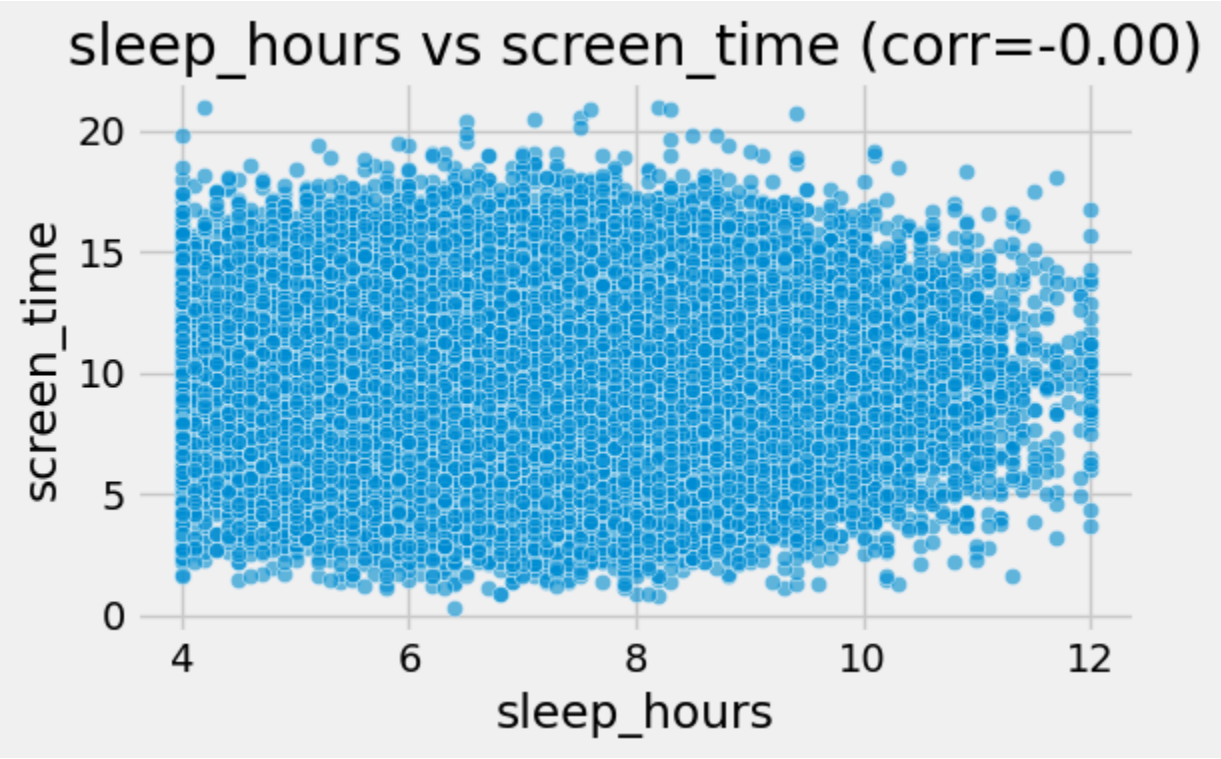

sleep_hours vs mental_health_rating (corr=0.01)
mental_health_rating
10
8
6
4
2
4
6
8
10
12
sleep_hours

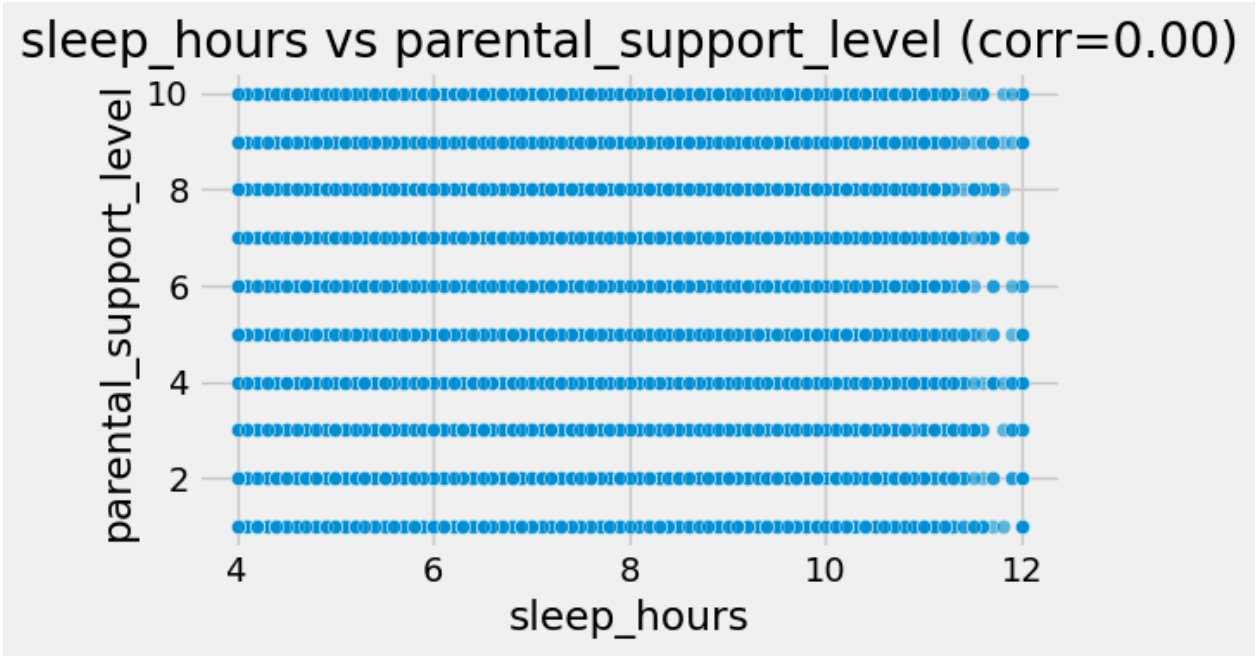

sleep_hours vs previous_gpa (corr=0.10)
previous_gpa
4.0
3.5
3.0
2.5
2.0
4
6
8
10
12
sleep_hours

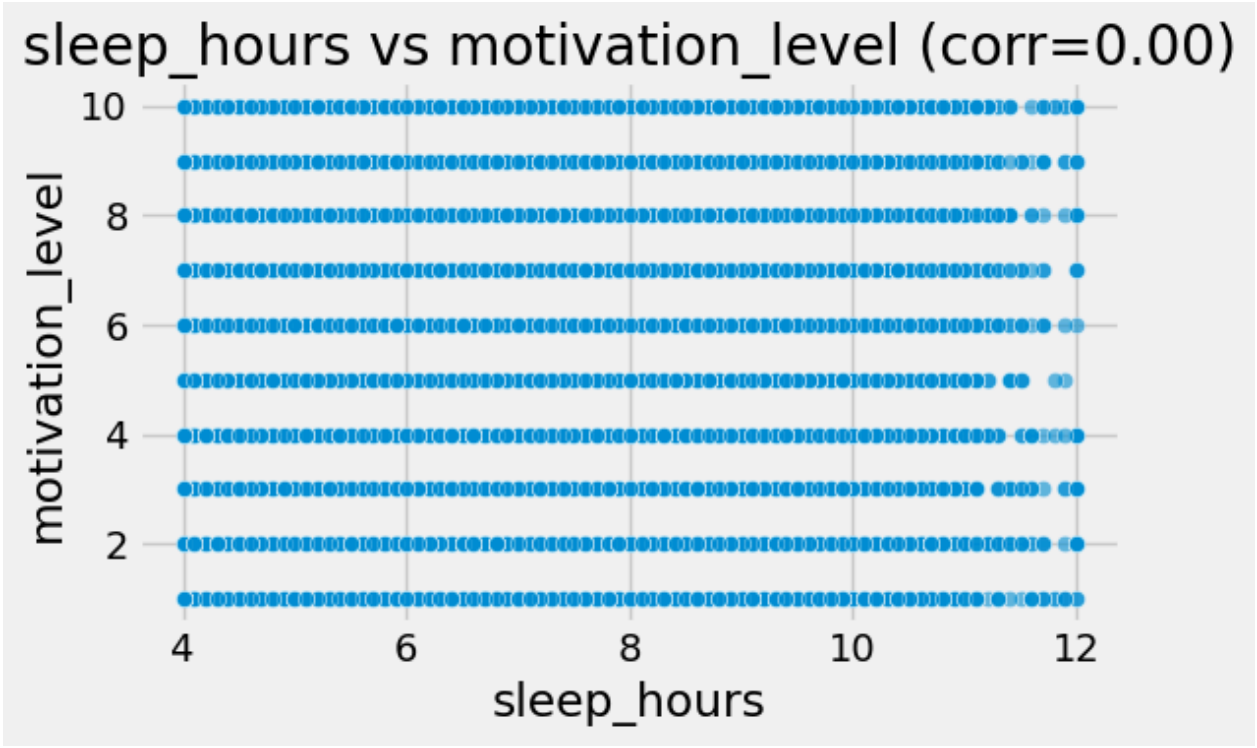

sleep_hours vs semester (corr=0.01)
semester
8
6
4
2
4
6
8
10
12
sleep_hours

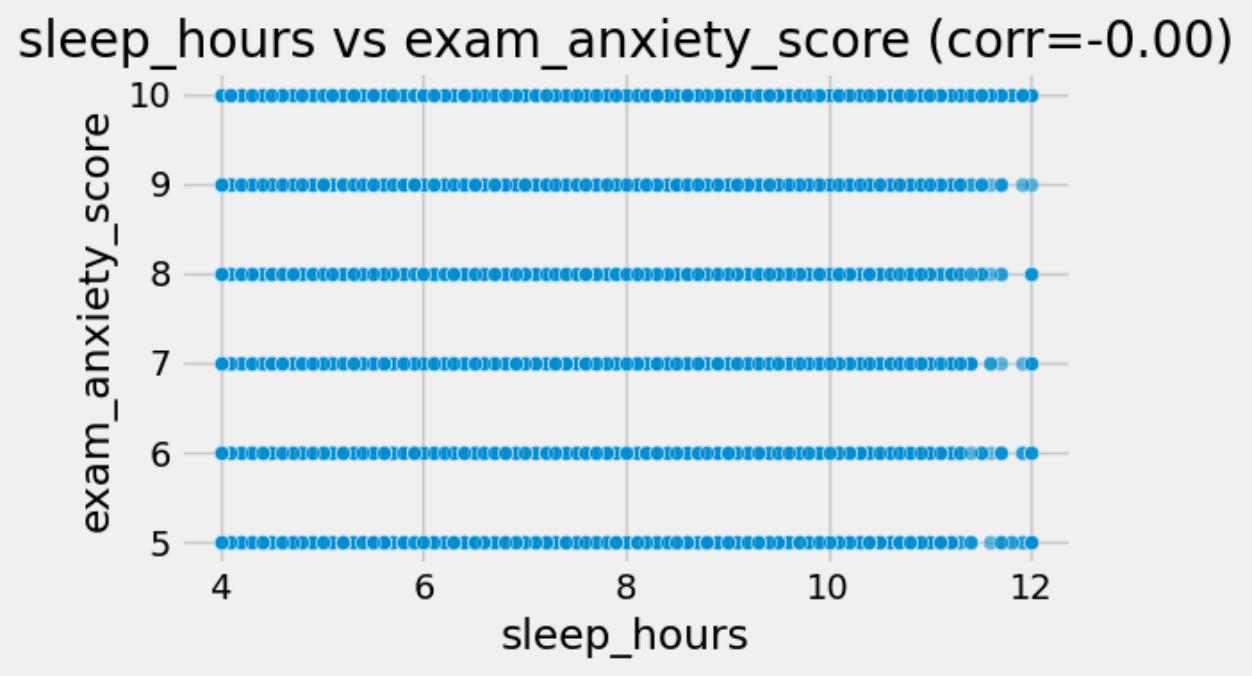

sleep_hours vs stress_level (corr=-0.00)
stress_level
10
8
6
4
2
4
6
8
10
12
sleep_hours

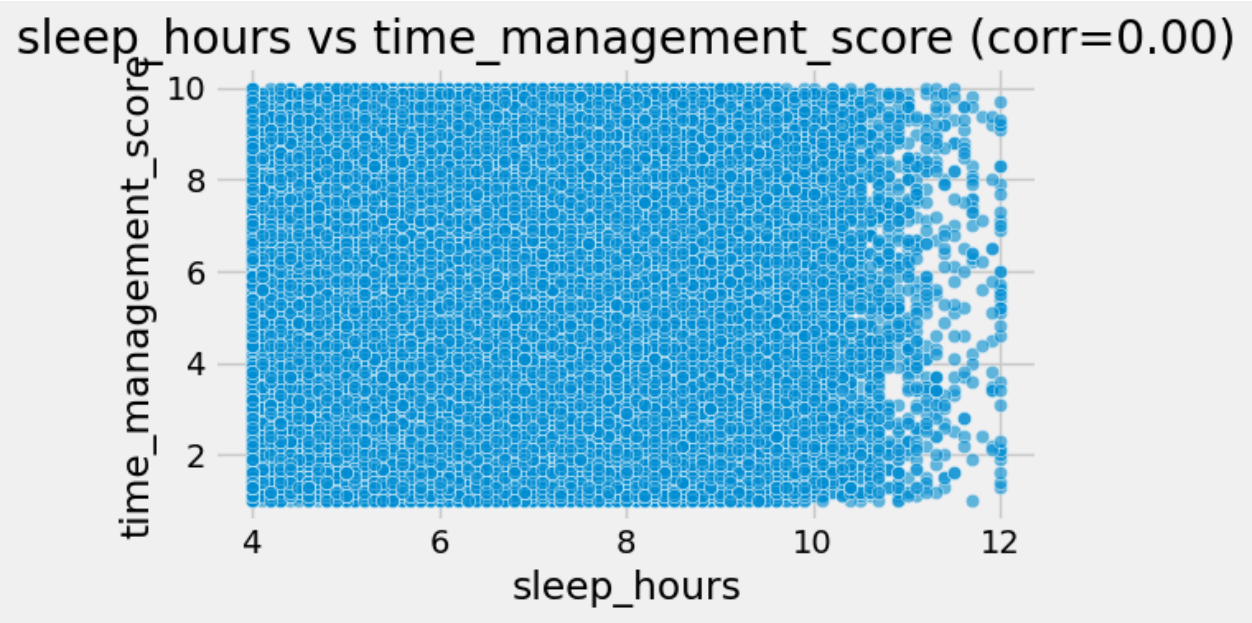

sleep_hours vs social_activity (corr=-0.00)
social_activity
sleep_hours
0
1
2
3
4
5
4
6
8
10
12

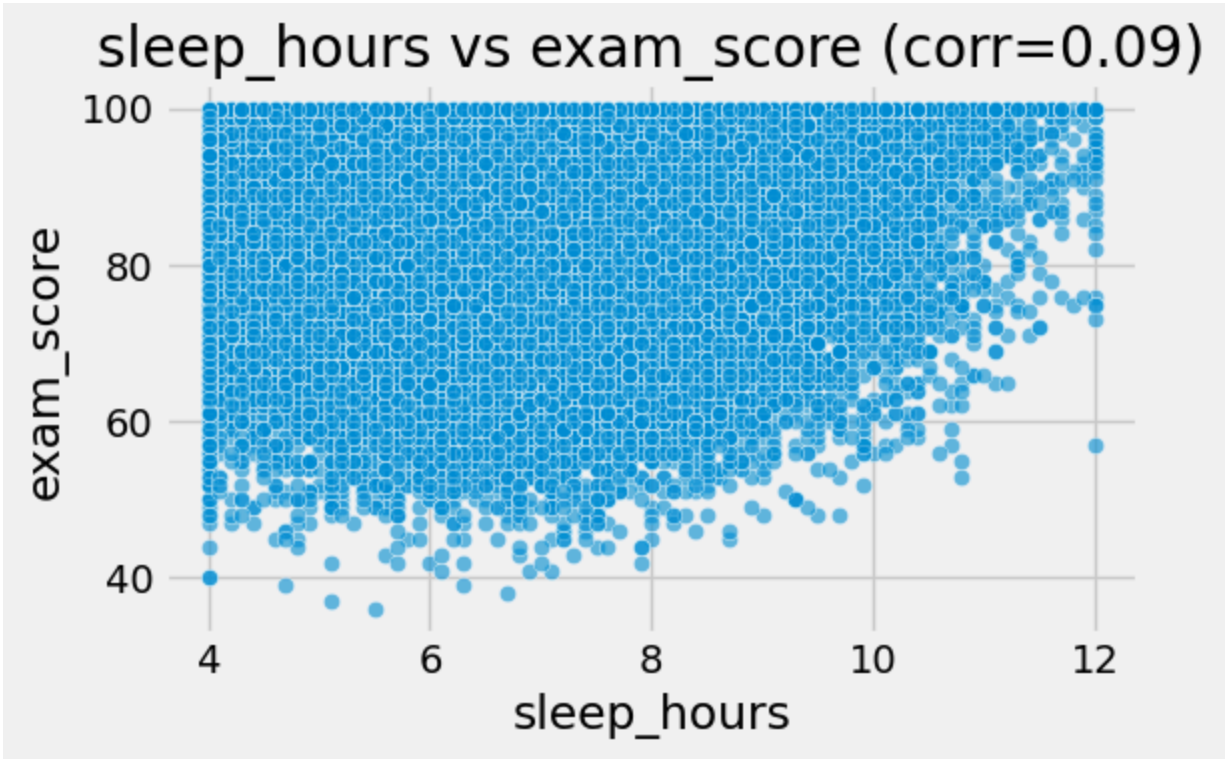

sleep_hours vs screen_time (corr=-0.00)
screen_time
sleep_hours
0
5
10
15
20
4
6
8
10
12

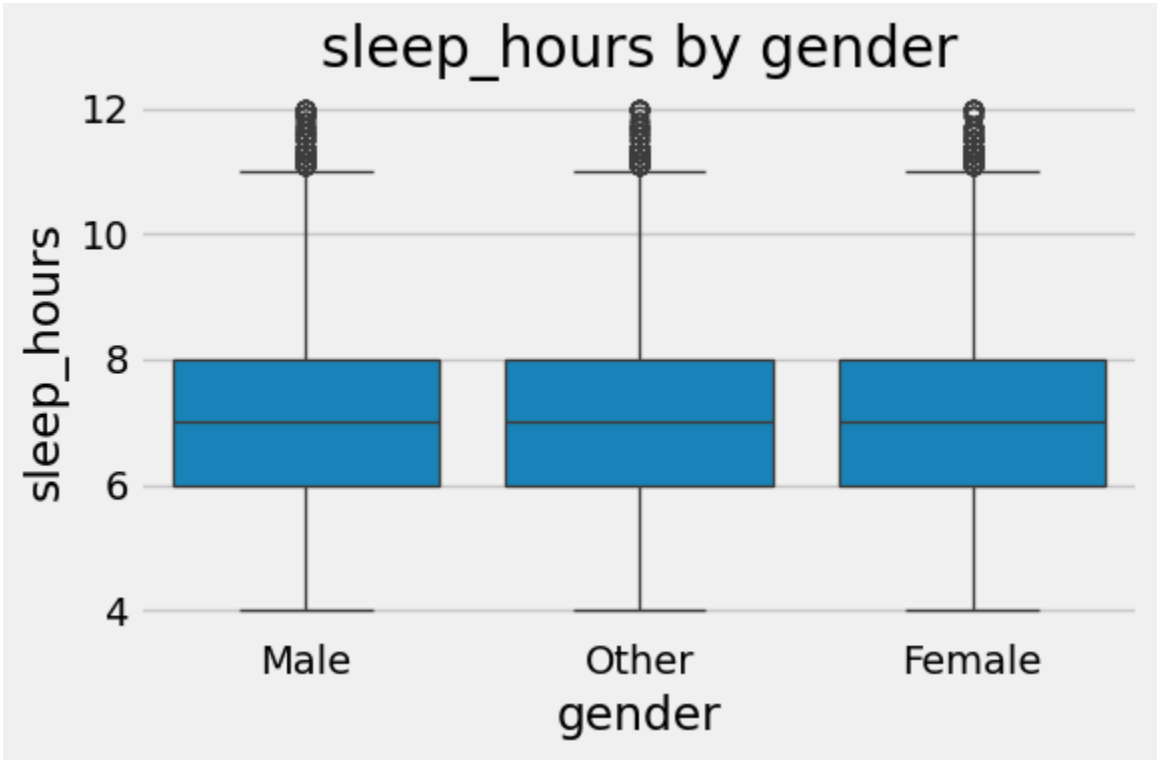

sleep_hours vs parental_support_level (corr=0.00)
parental_support_level
10
8
6
4
2
4
6
8
10
12
sleep_hours

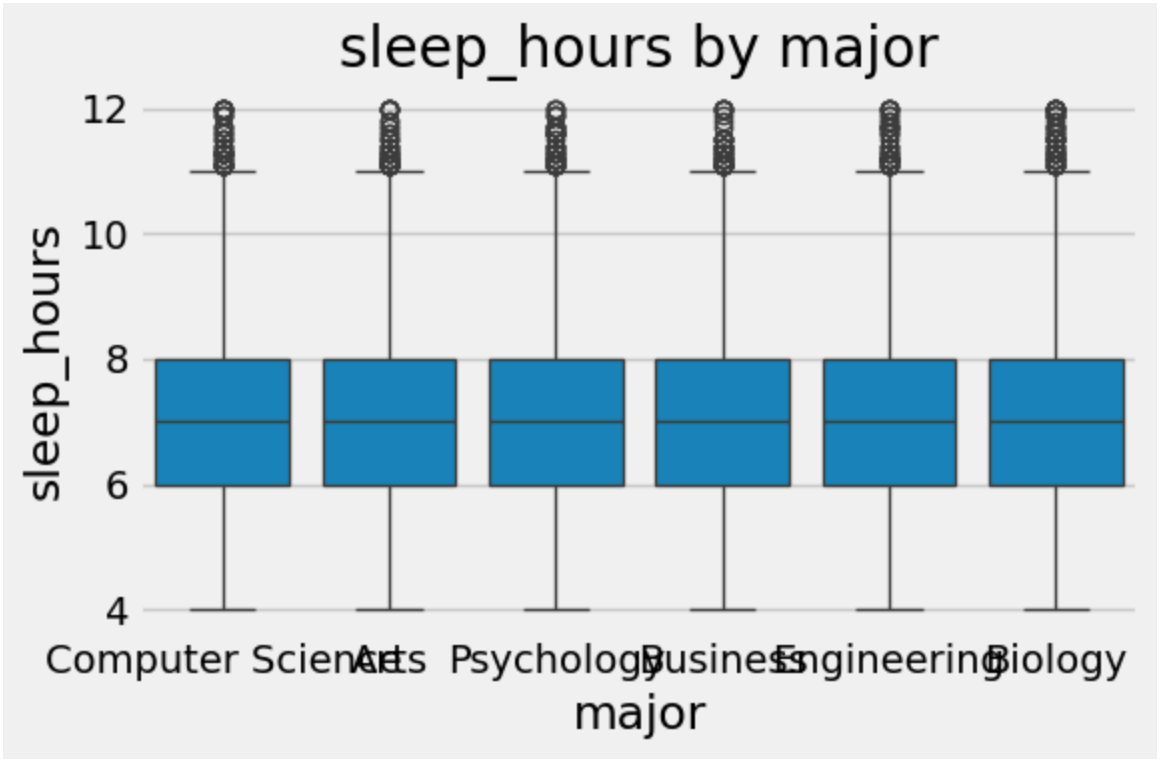

sleep_hours vs motivation_level (corr=0.00)
motivation_level
10
8
6
4
2
4
6
8
10
12
sleep_hours

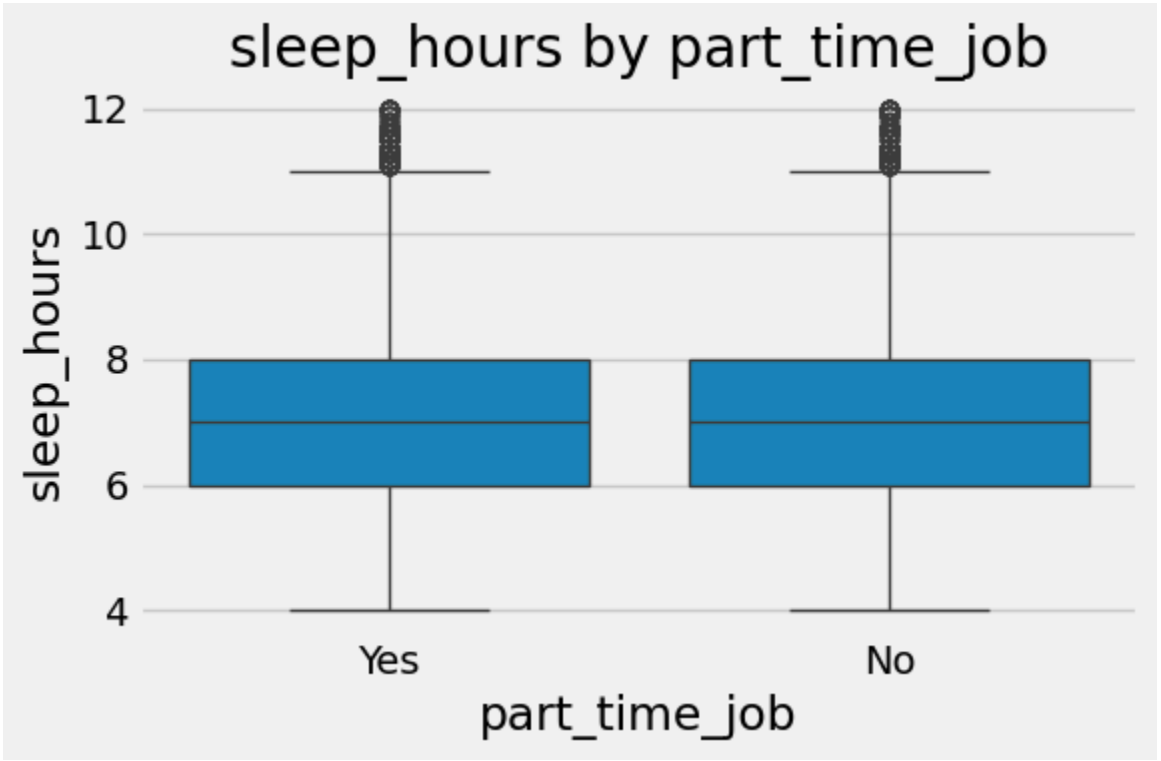

sleep_hours vs exam_anxiety_score (corr=-0.00)
exam_anxiety_score
10
9
8
7
6
5
4
6
8
10
12
sleep_hours


sleep_hours vs time_management_score (corr=0.00)
time_management_score
10
8
6
4
2
4
6
8
10
12
sleep_hours

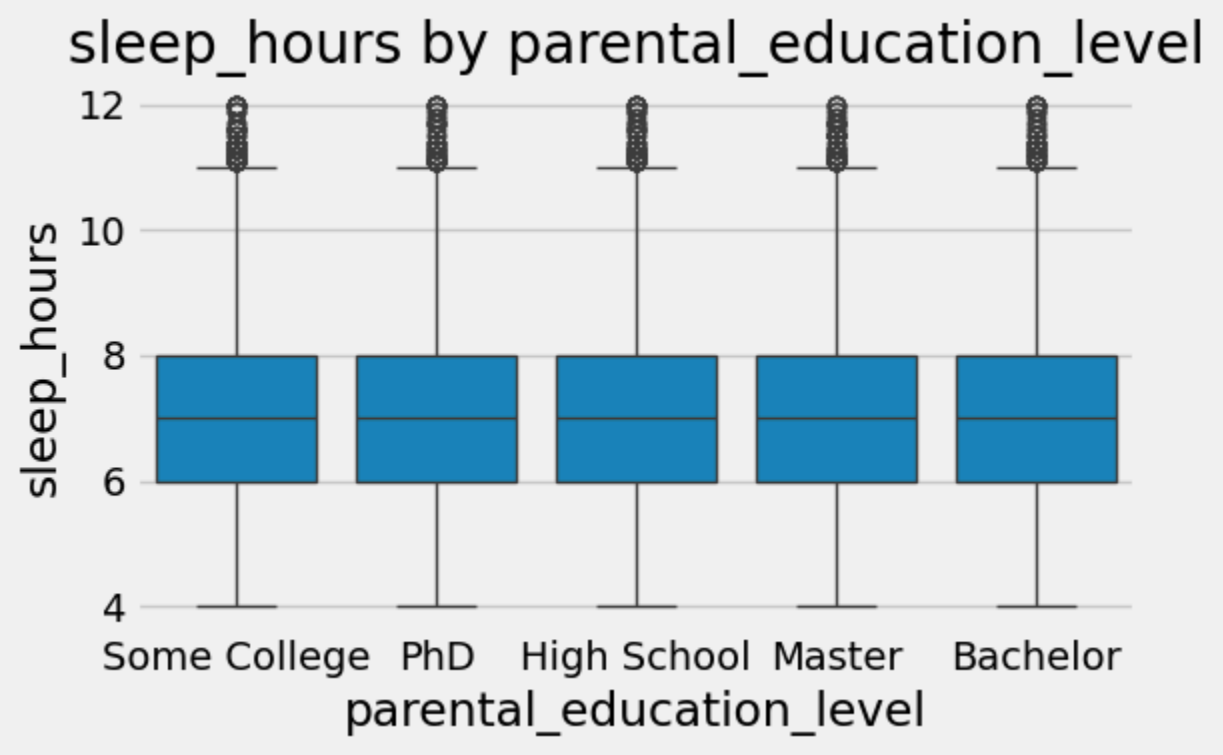

sleep_hours vs exam_score (corr=0.09)
exam_score
100
80
60
40
4
6
8
10
12
sleep_hours

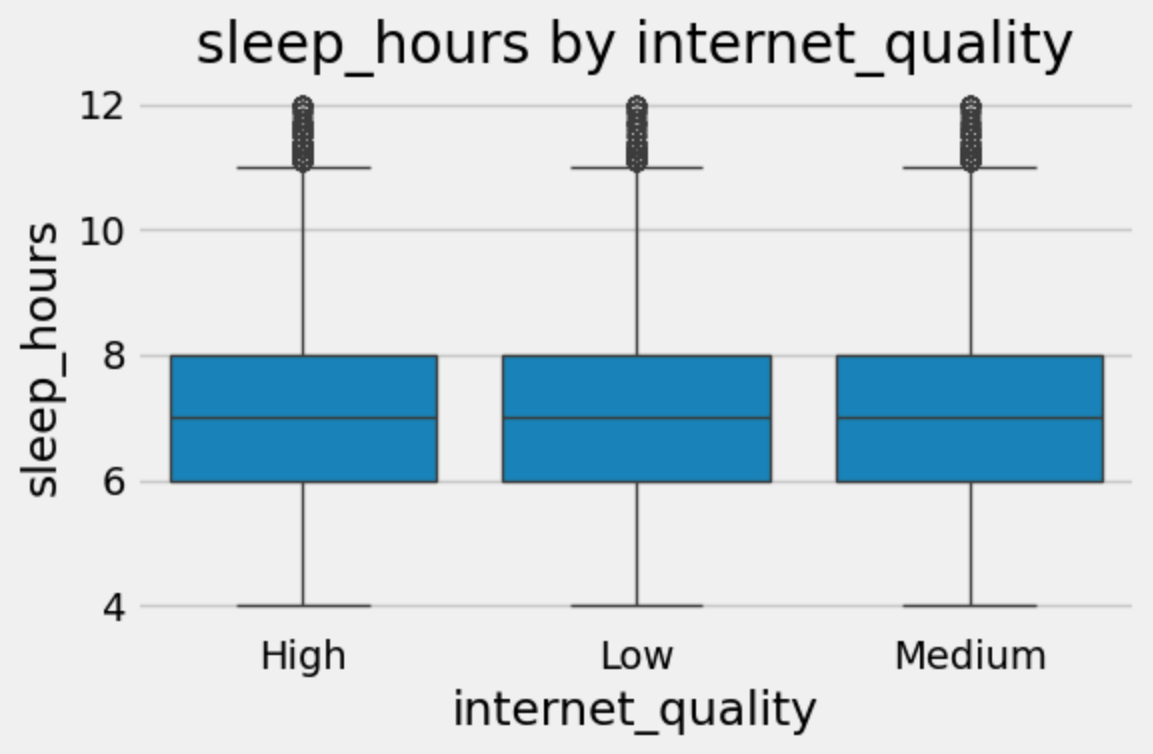

sleep_hours by gender
sleep_hours
12
10
8
6
4
Male
Other
Female
gender

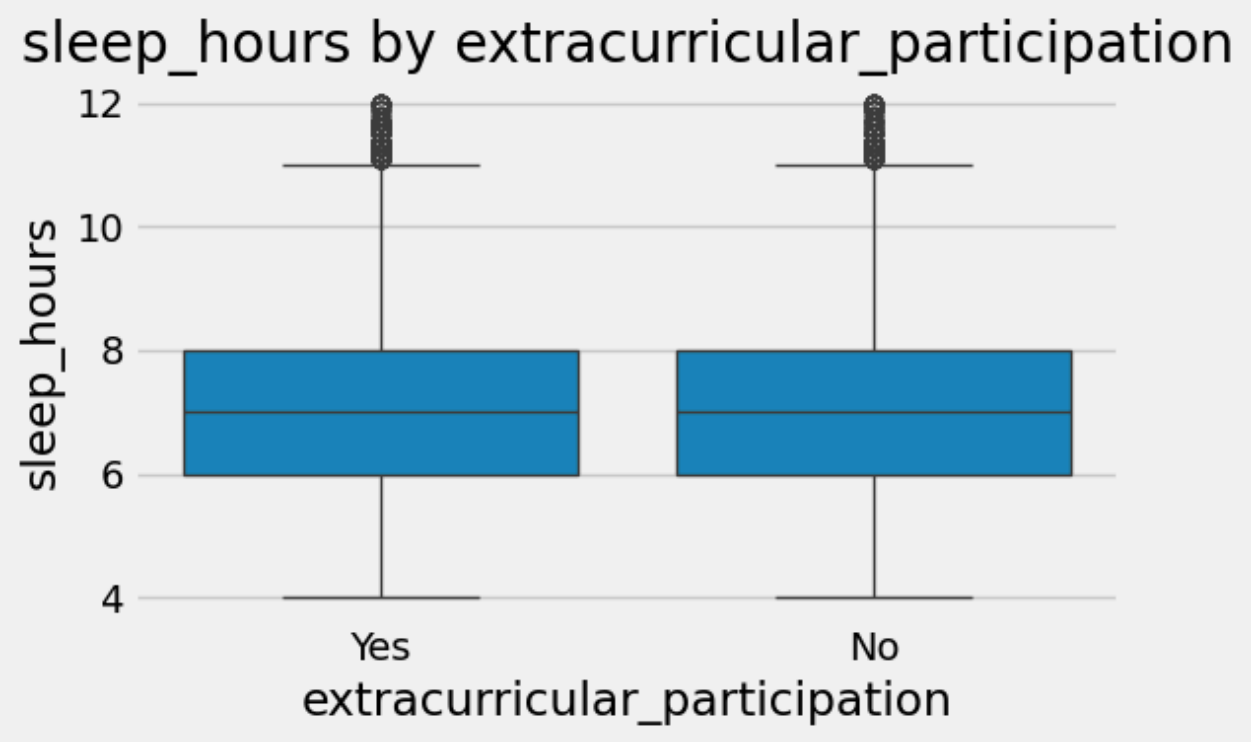

sleep_hours by major
sleep_hours
12
10
8
6
4
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

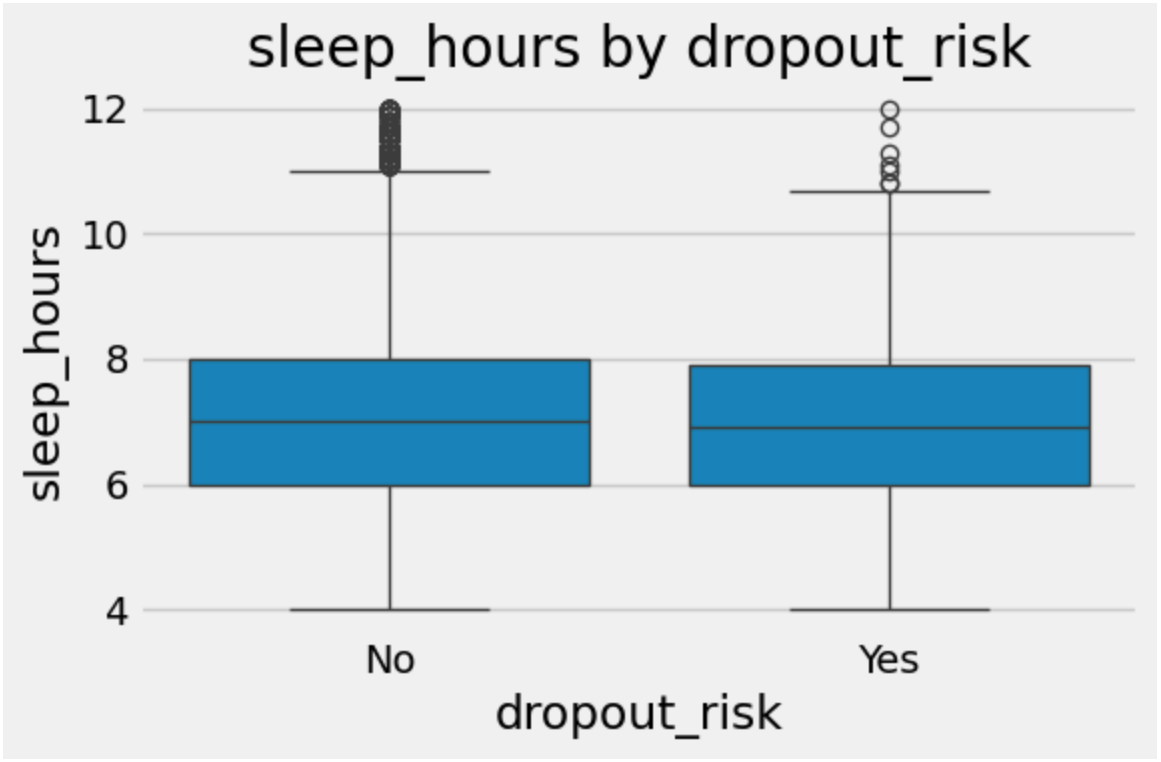

sleep_hours by part_time_job
sleep_hours
12
10
8
6
4
Yes
No
part_time_job

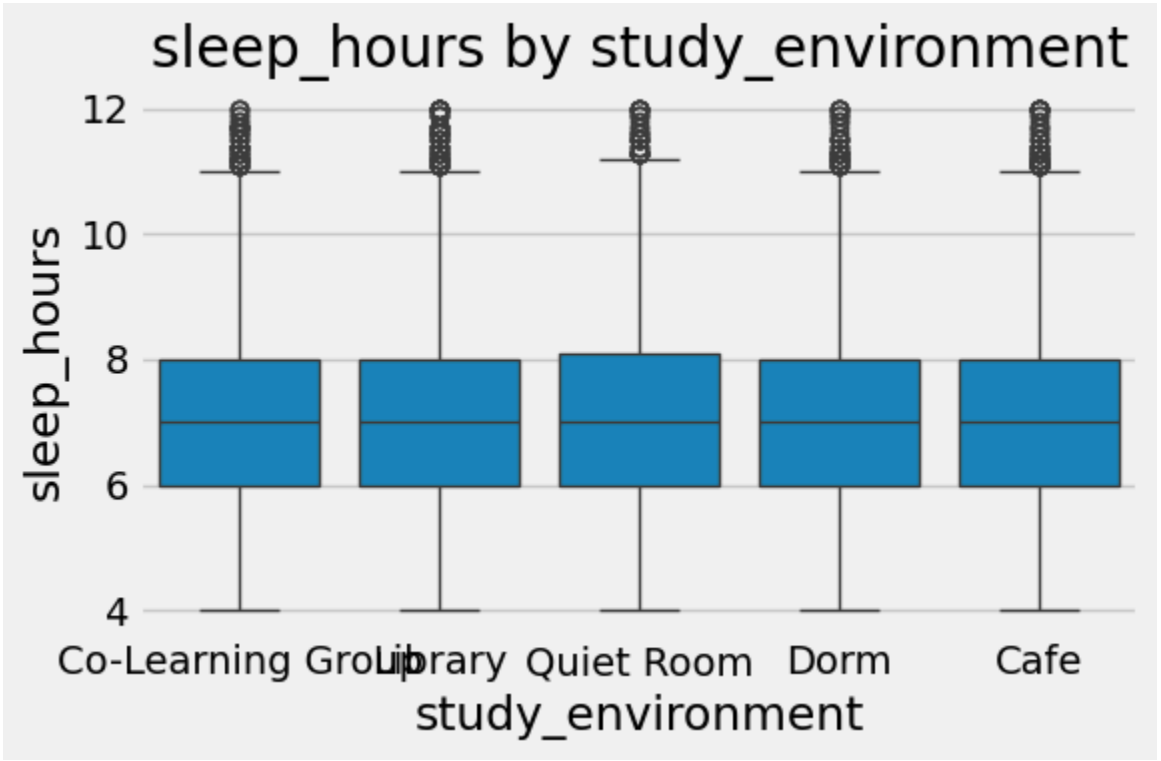

sleep_hours by diet_quality
sleep_hours
12
10
8
6
4
Poor
Good
Fair
diet_quality

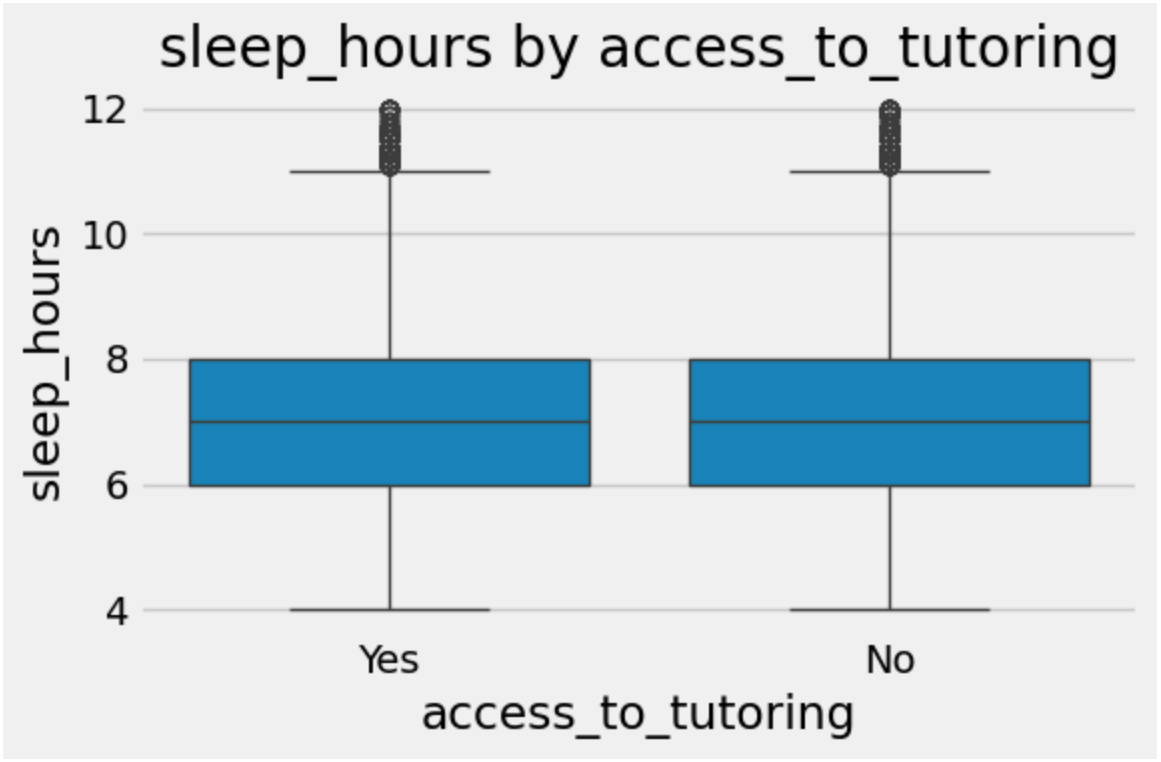

sleep_hours by parental_education_level
sleep_hours
12
10
8
6
4
Some College
PhD
High School
Master
Bachelor
parental_education_level

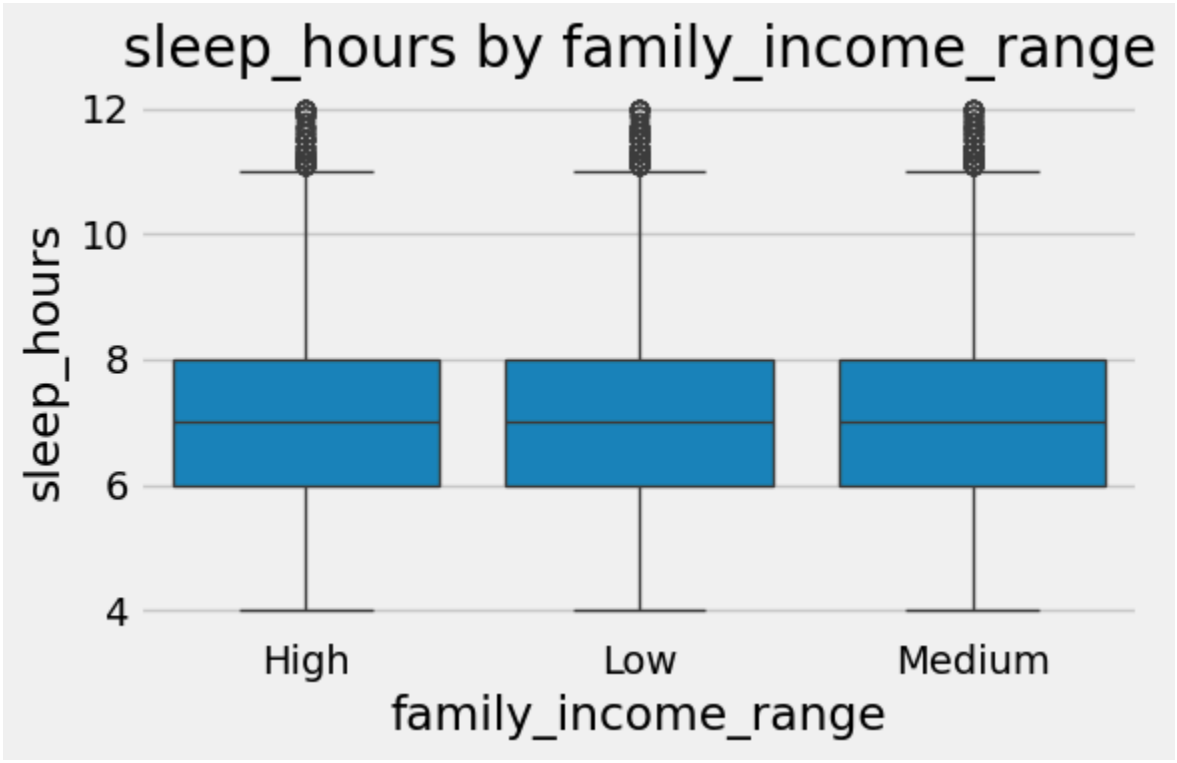

sleep_hours by internet_quality
12
10
8
6
4
sleep_hours
High
Low
Medium
internet_quality

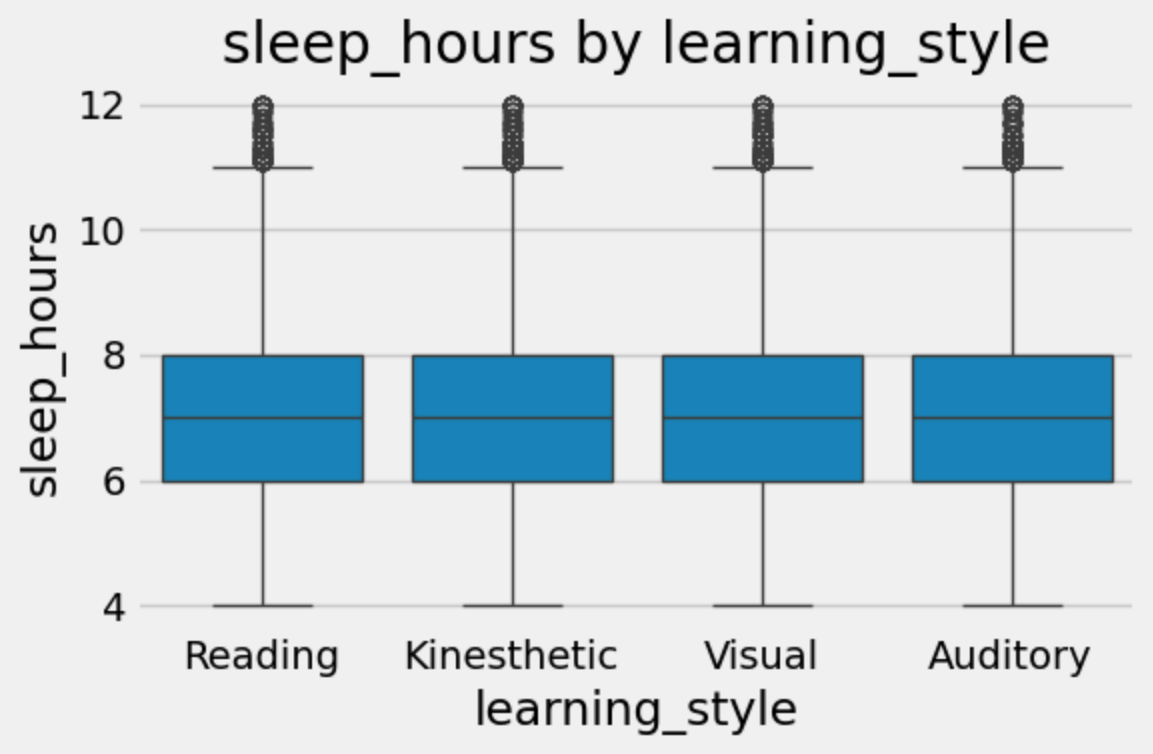

sleep_hours by extracurricular_participation
12
10
8
6
4
sleep_hours
Yes
No
extracurricular_participation

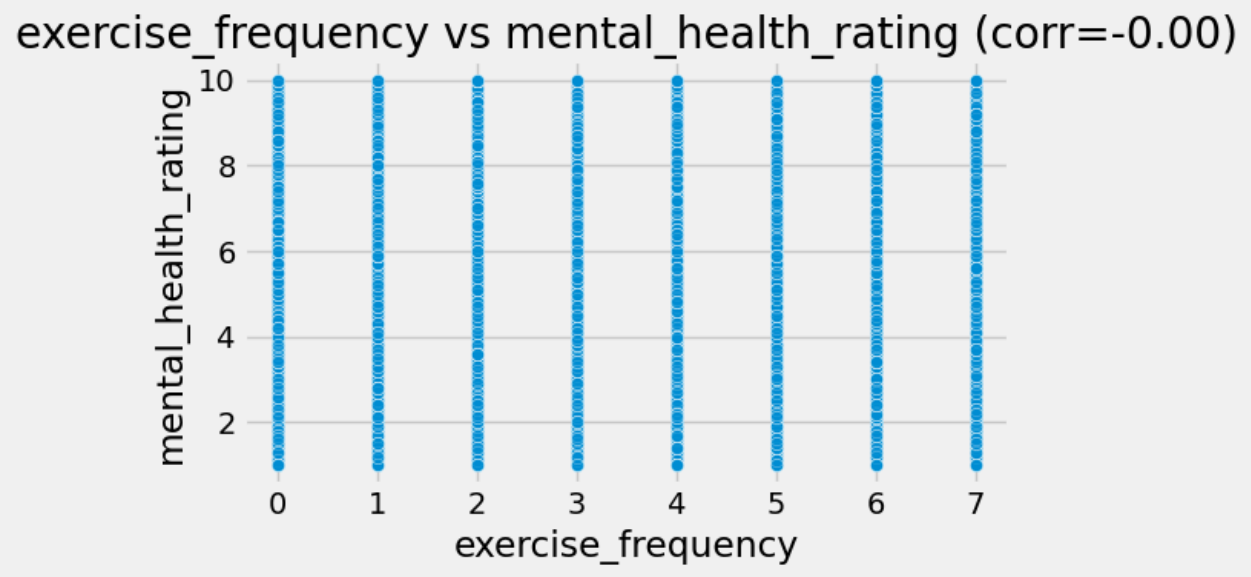

sleep_hours by dropout_risk
sleep_hours
12
10
8
6
4
No
Yes
dropout_risk

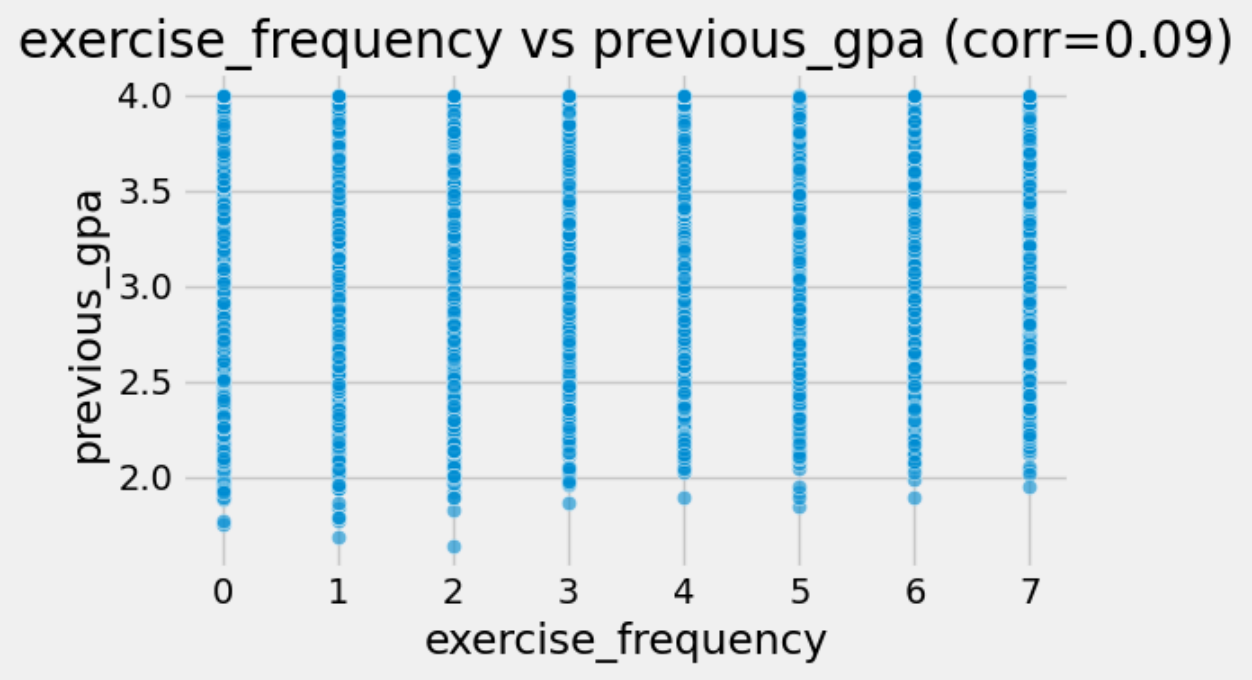

sleep_hours by study_environment
sleep_hours
12
10
8
6
4
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

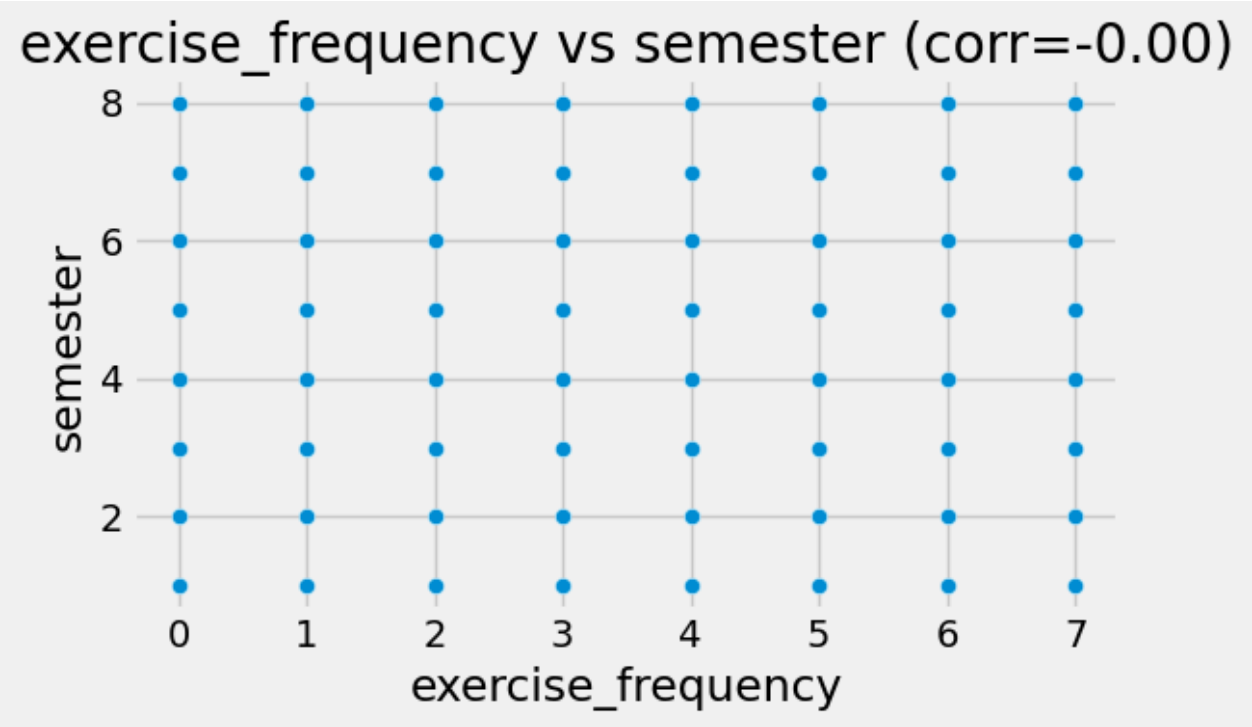

sleep_hours by access_to_tutoring
sleep_hours
12
10
8
6
4
Yes
No
access_to_tutoring

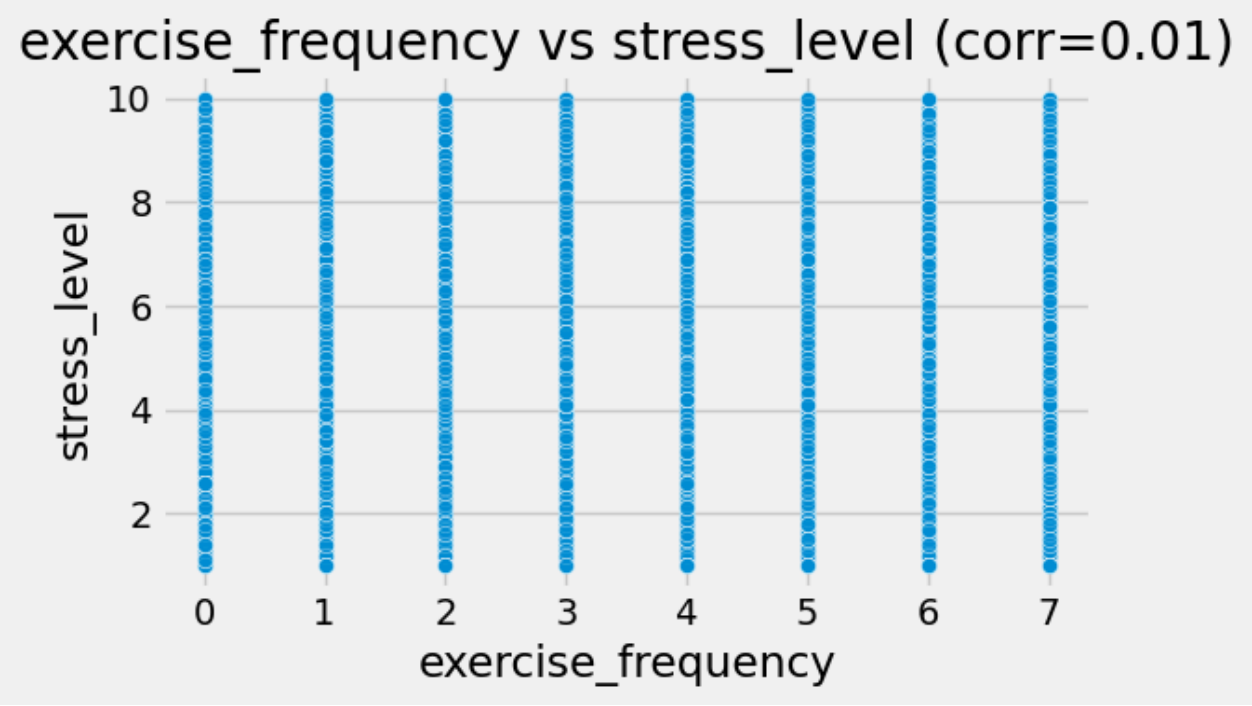

sleep_hours by family_income_range
sleep_hours
12
10
8
6
4
High
Low
Medium
family_income_range

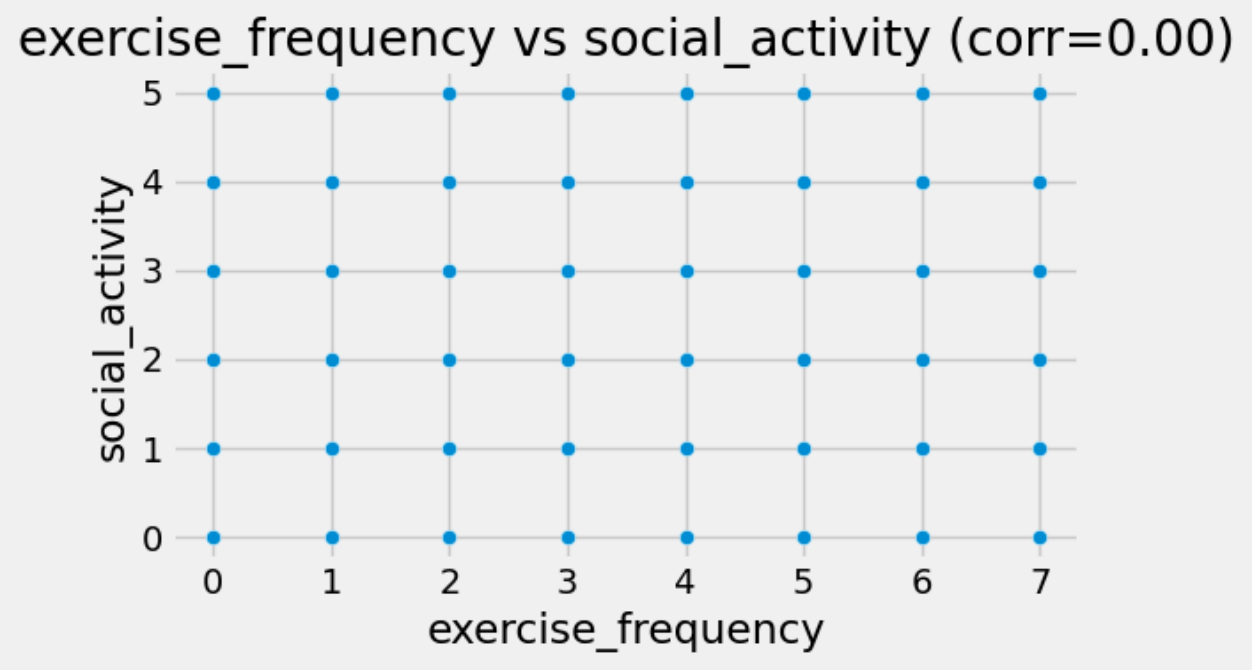

sleep_hours by learning_style
sleep_hours
12
10
8
6
4
Reading
Kinesthetic
Visual
Auditory
learning_style

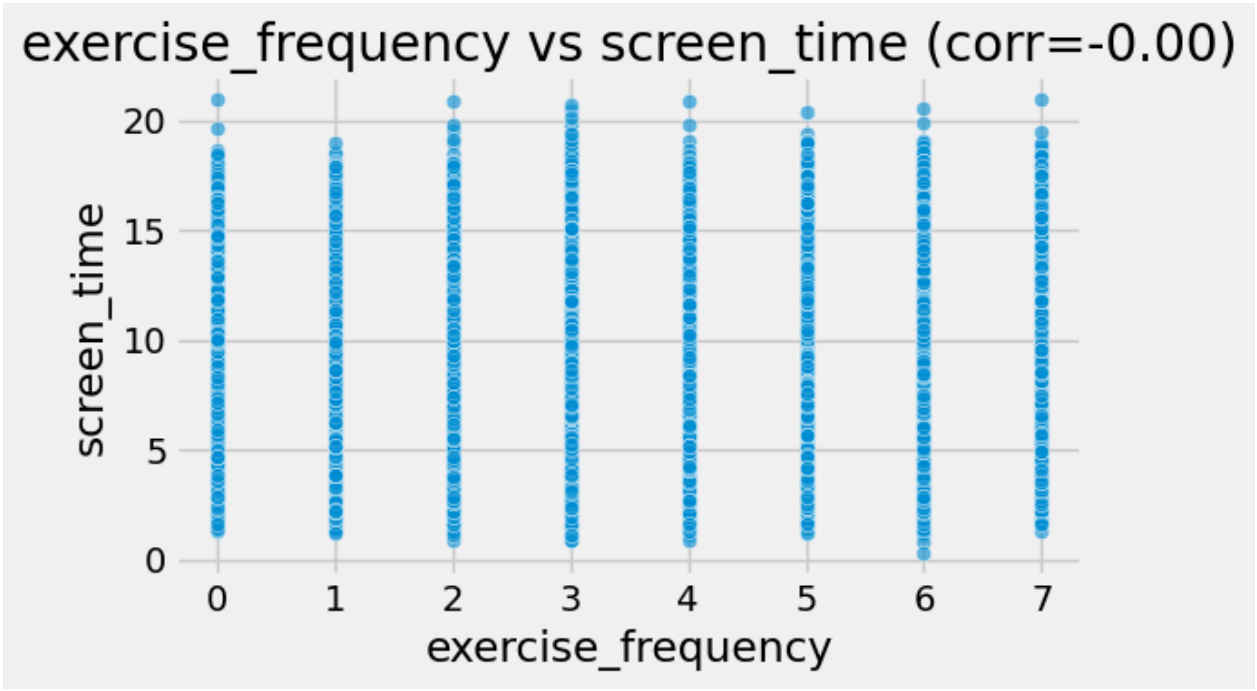

exercise_frequency vs mental_health_rating (corr=-0.00)
mental_health_rating
10
8
6
4
2
0
1
2
3
4
5
6
7
exercise_frequency

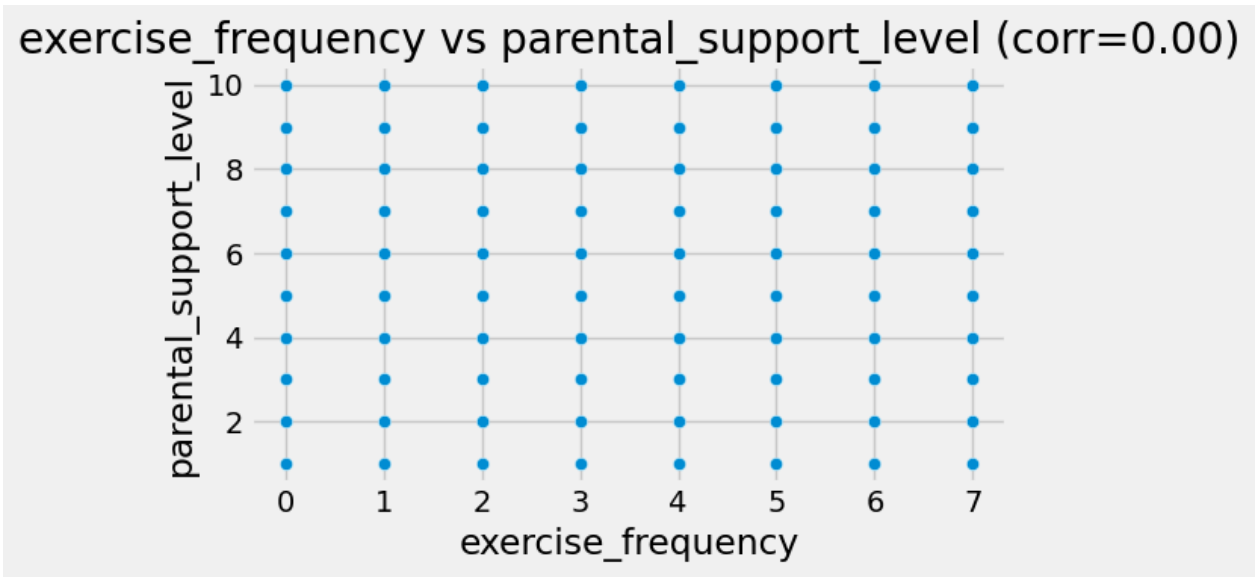

exercise_frequency vs previous_gpa (corr=0.09)
previous_gpa
4.0
3.5
3.0
2.5
2.0
0
1
2
3
4
5
6
7
exercise_frequency

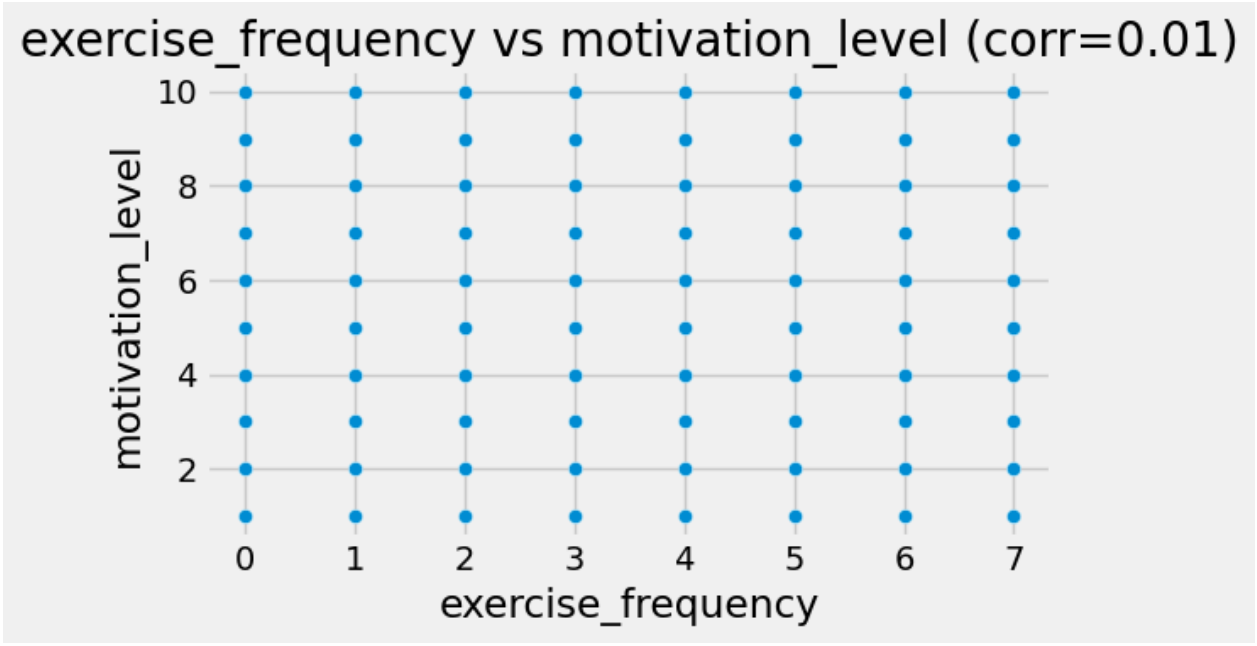

exercise_frequency vs semester (corr=-0.00)
semester
8
6
4
2
0
1
2
3
4
5
6
7
exercise_frequency

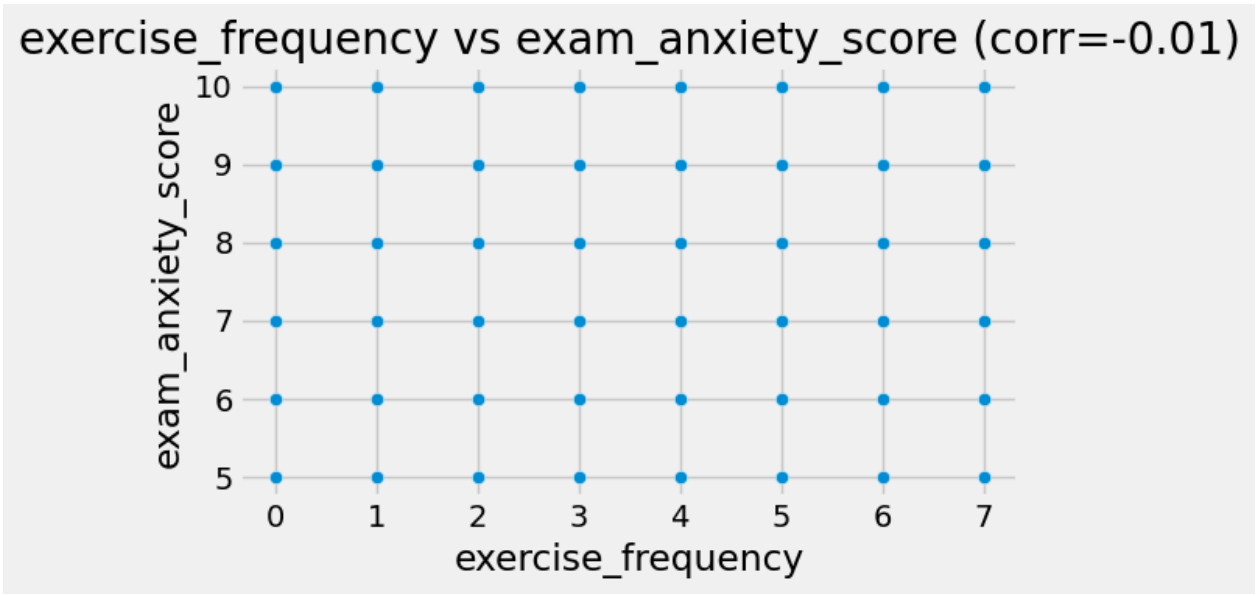

exercise_frequency vs stress_level (corr=0.01)
stress_level
10
8
6
4
2
0
1
2
3
4
5
6
7
exercise_frequency

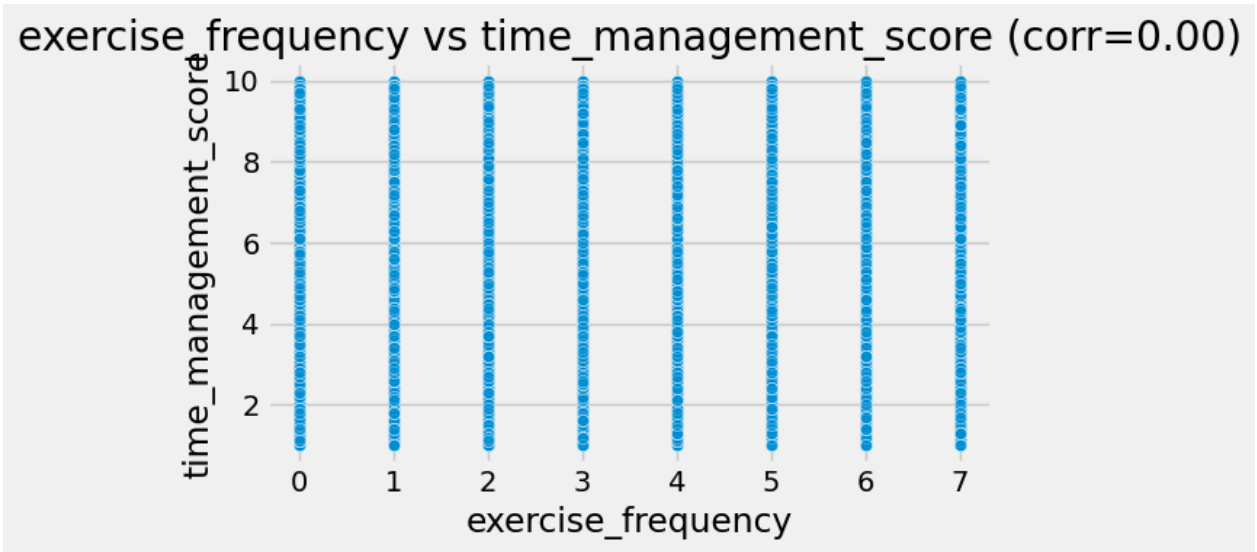

exercise_frequency vs social_activity (corr=0.00)
social_activity
5
4
3
2
1
0
0
1
2
3
4
5
6
7
exercise_frequency

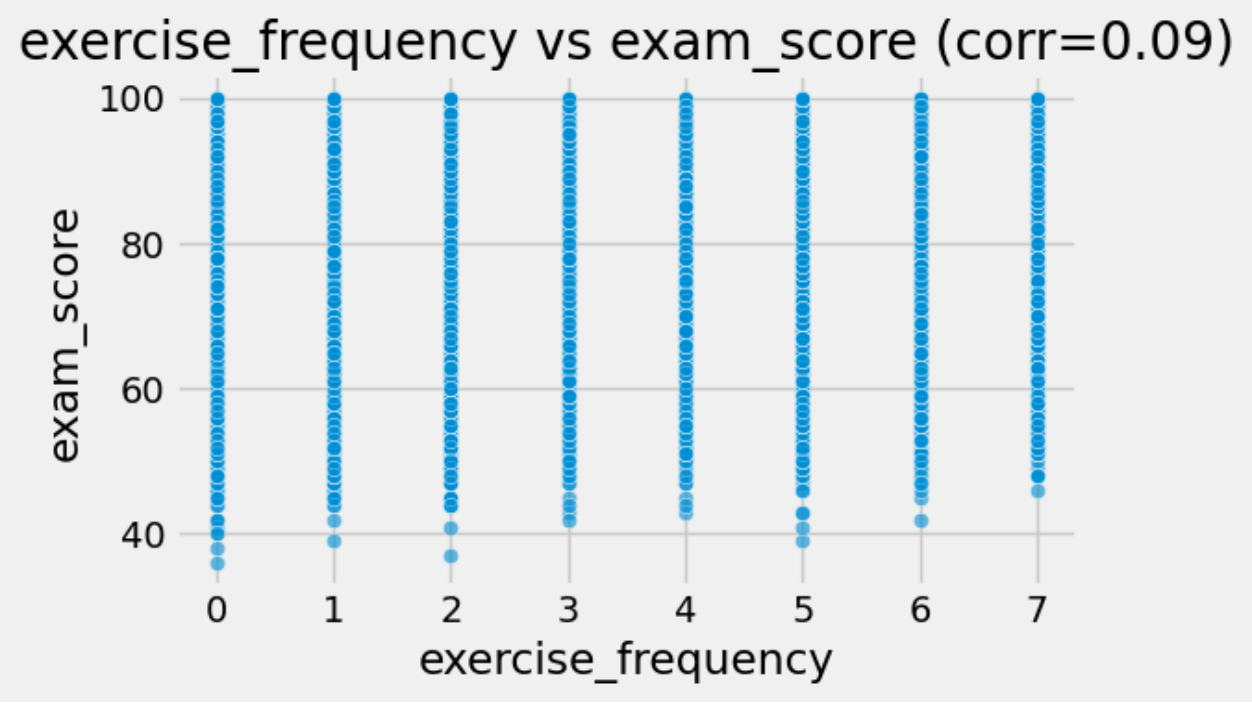

exercise_frequency vs screen_time (corr=-0.00)
screen_time
0
5
10
15
20
0
1
2
3
4
5
6
7
exercise_frequency

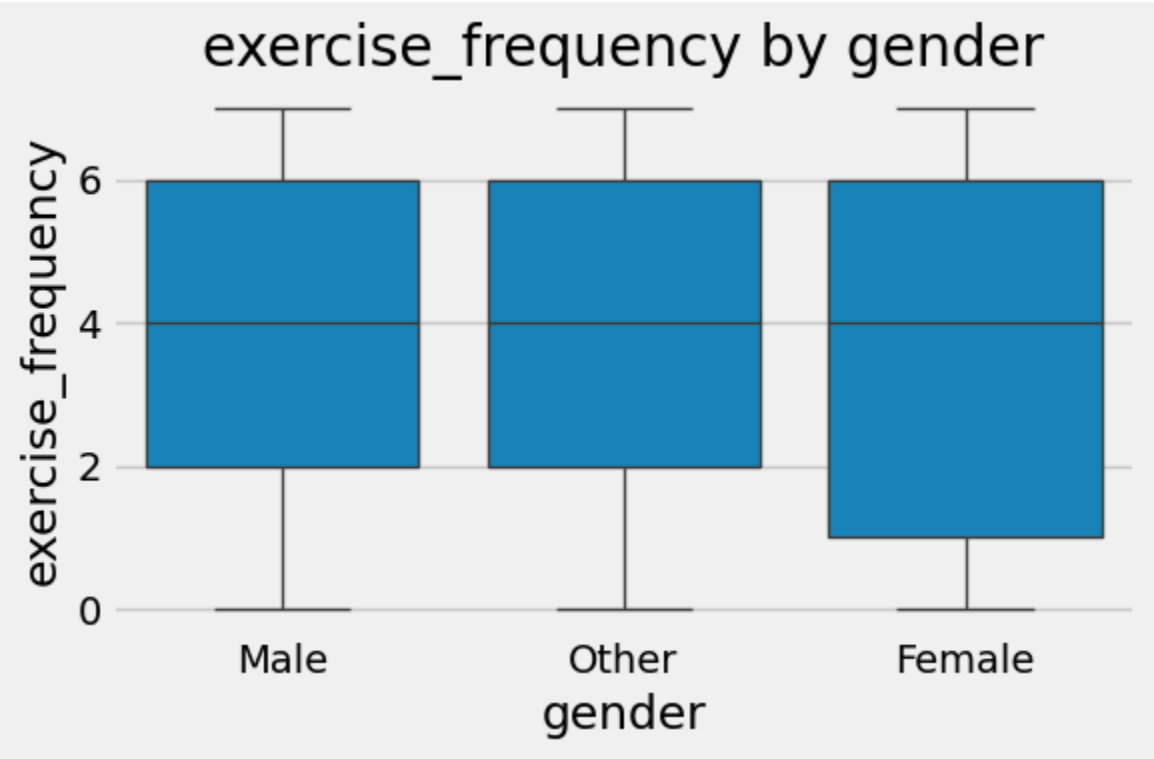

exercise_frequency vs parental_support_level (corr=0.00)
parental_support_level
2
4
6
8
10
0
1
2
3
4
5
6
7
exercise_frequency

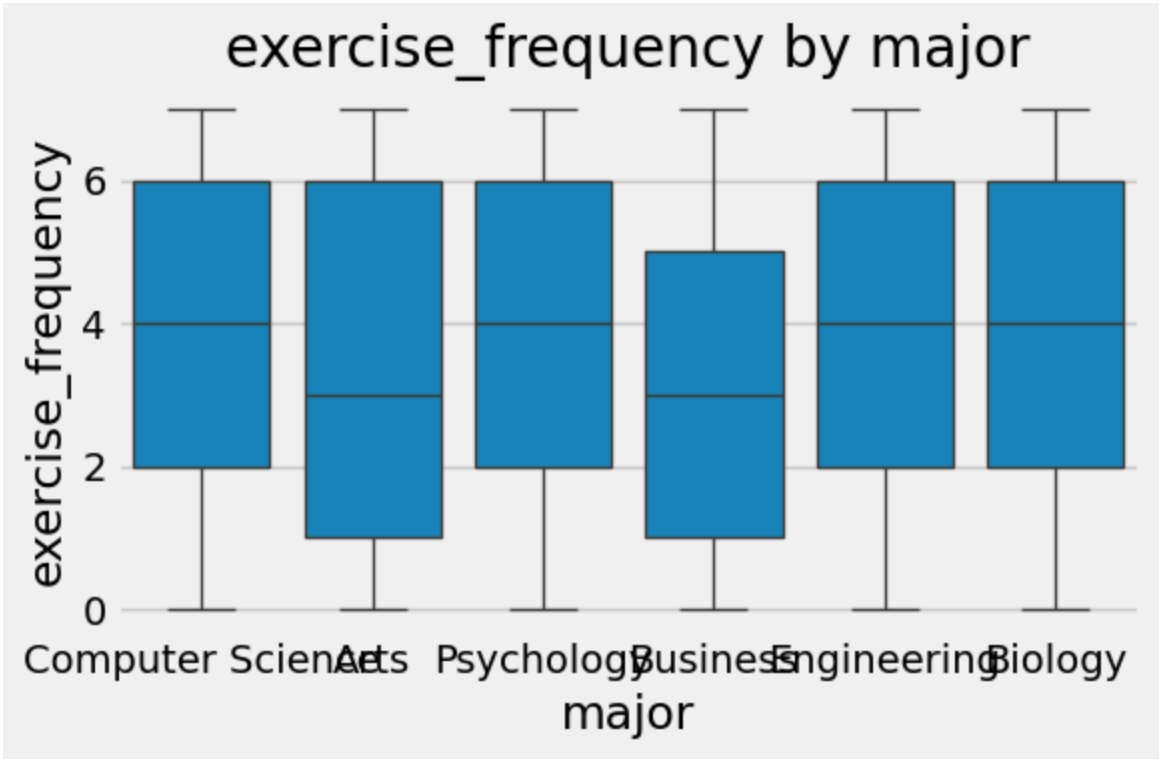

exercise_frequency vs motivation_level (corr=0.01)
motivation_level
10
8
6
4
2
0
1
2
3
4
5
6
7
exercise_frequency

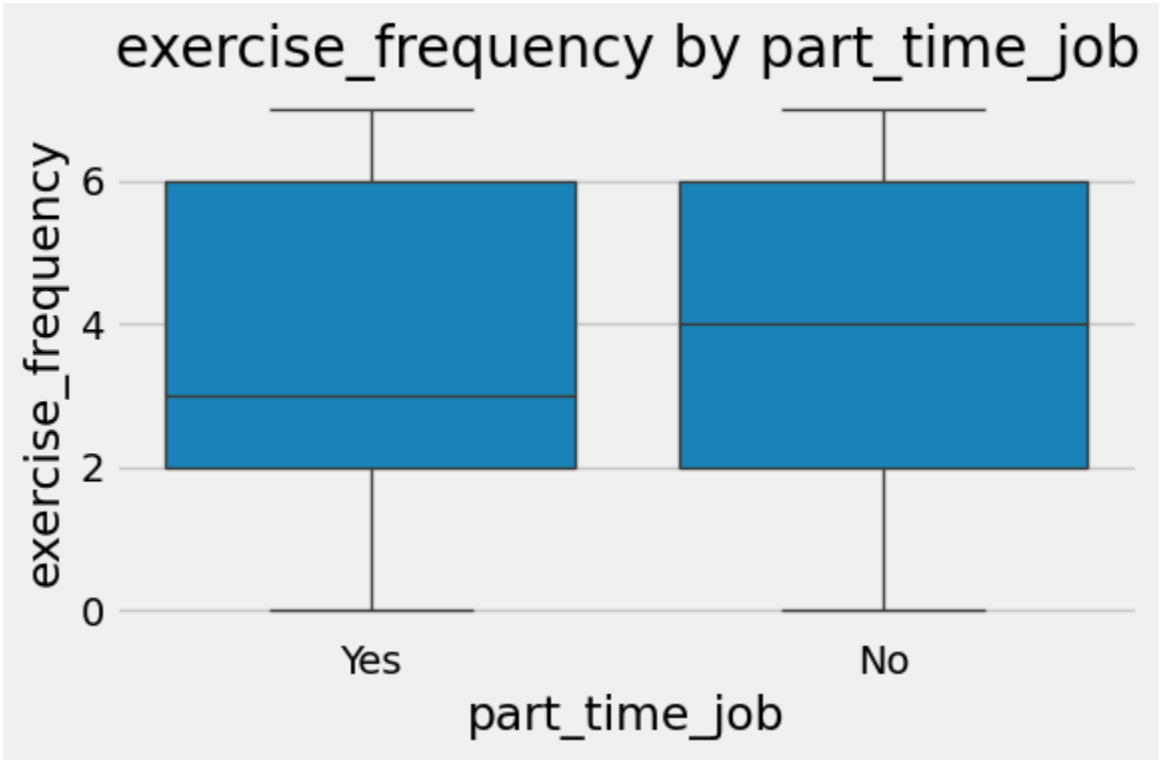

exercise_frequency vs exam_anxiety_score (corr=-0.01)
exam_anxiety_score
10
9
8
7
6
5
0
1
2
3
4
5
6
7
exercise_frequency

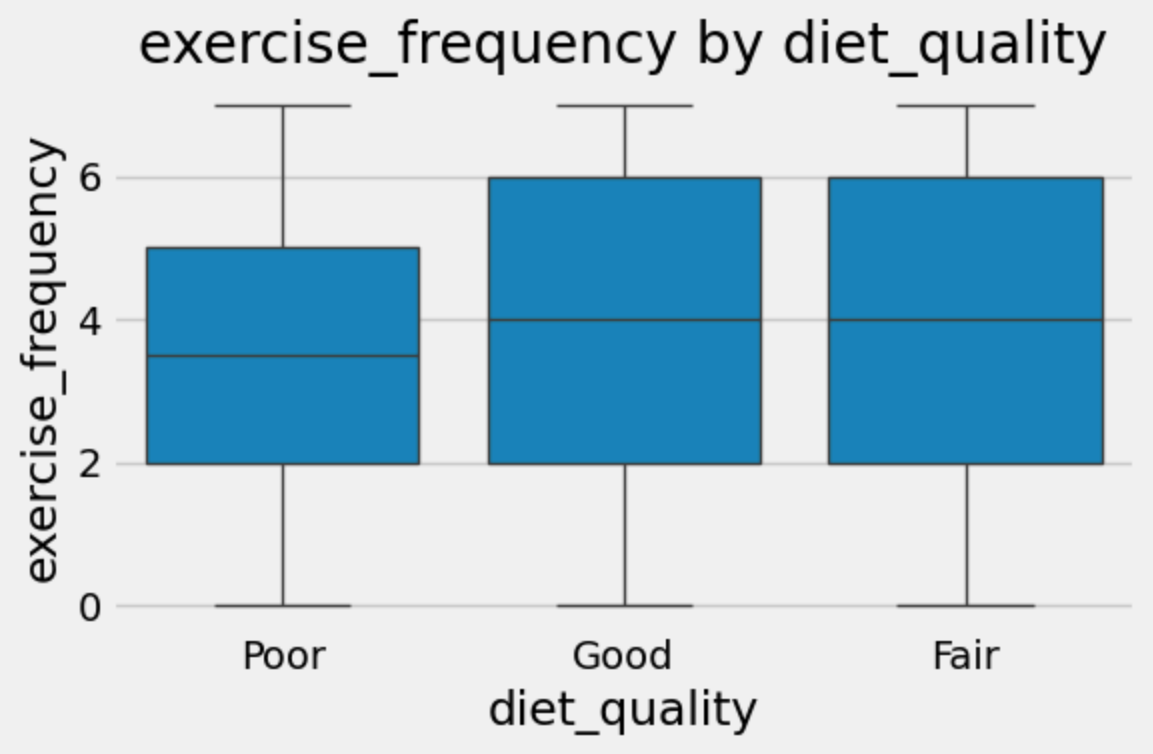

exercise_frequency vs time_management_score (corr=0.00)
time_management_score
10
8
6
4
2
0
1
2
3
4
5
6
7
exercise_frequency

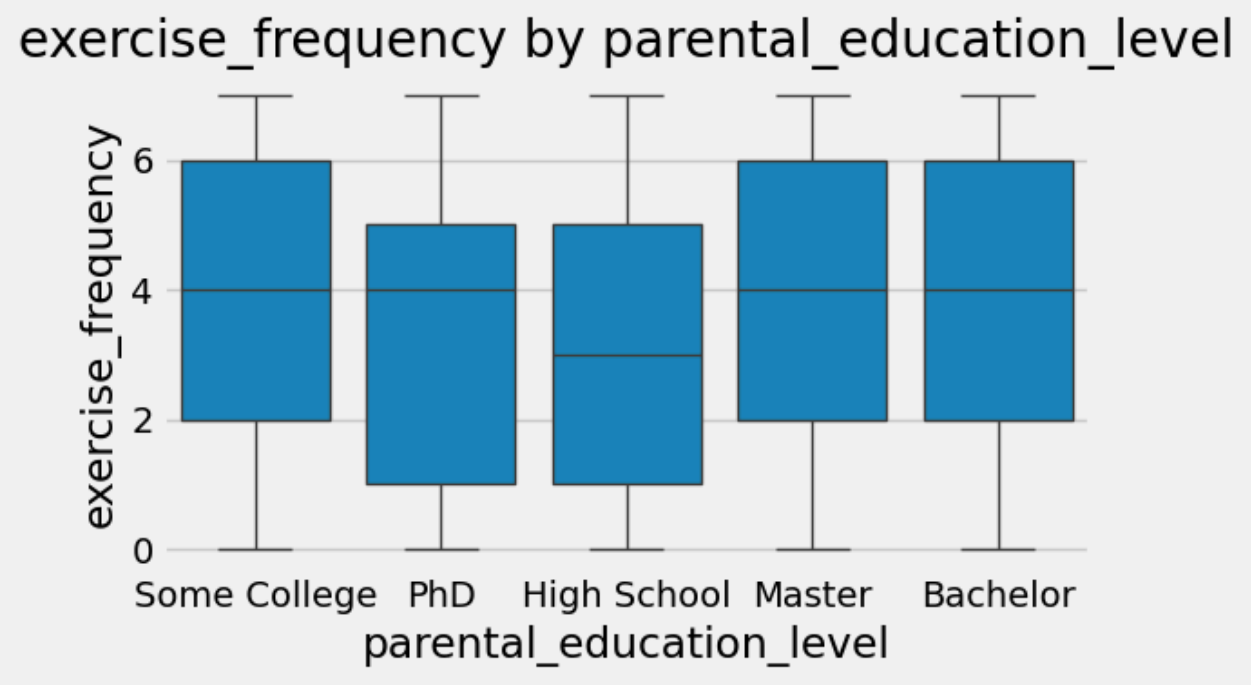

exercise_frequency vs exam_score (corr=0.09)
exam_score
100
80
60
40
0
1
2
3
4
5
6
7
exercise_frequency

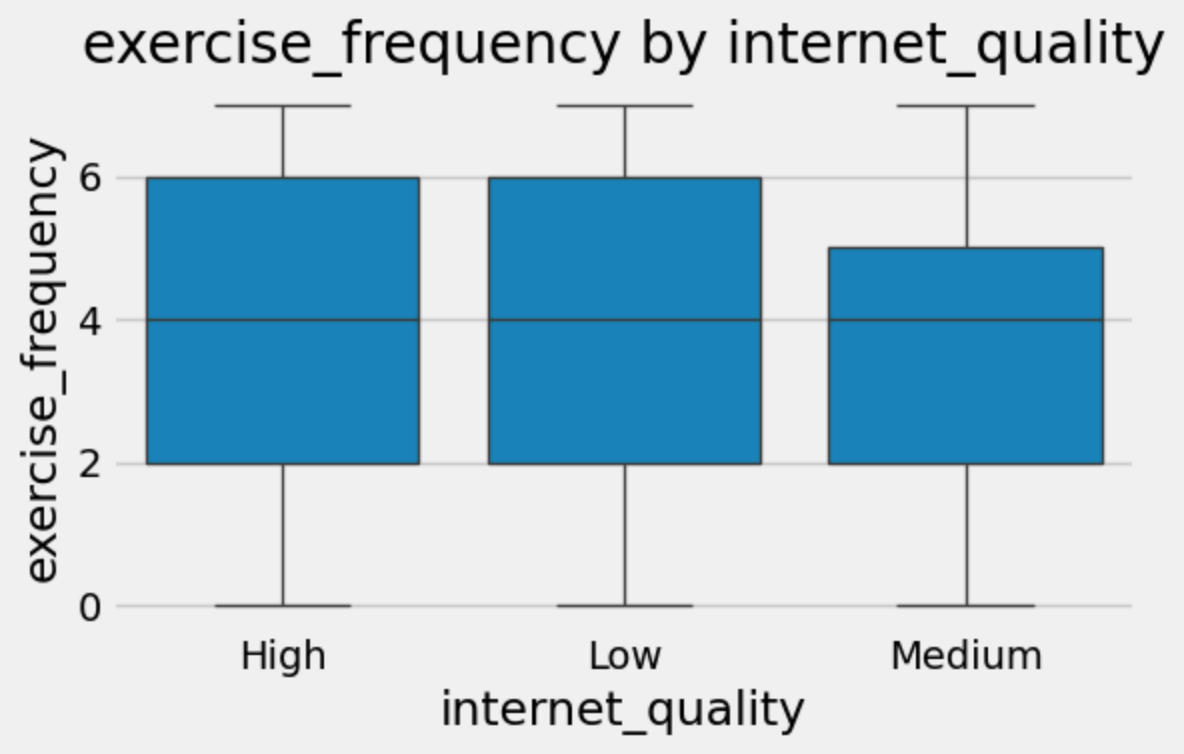

exercise_frequency by gender
exercise_frequency
6
4
2
0
Male
Other
Female
gender

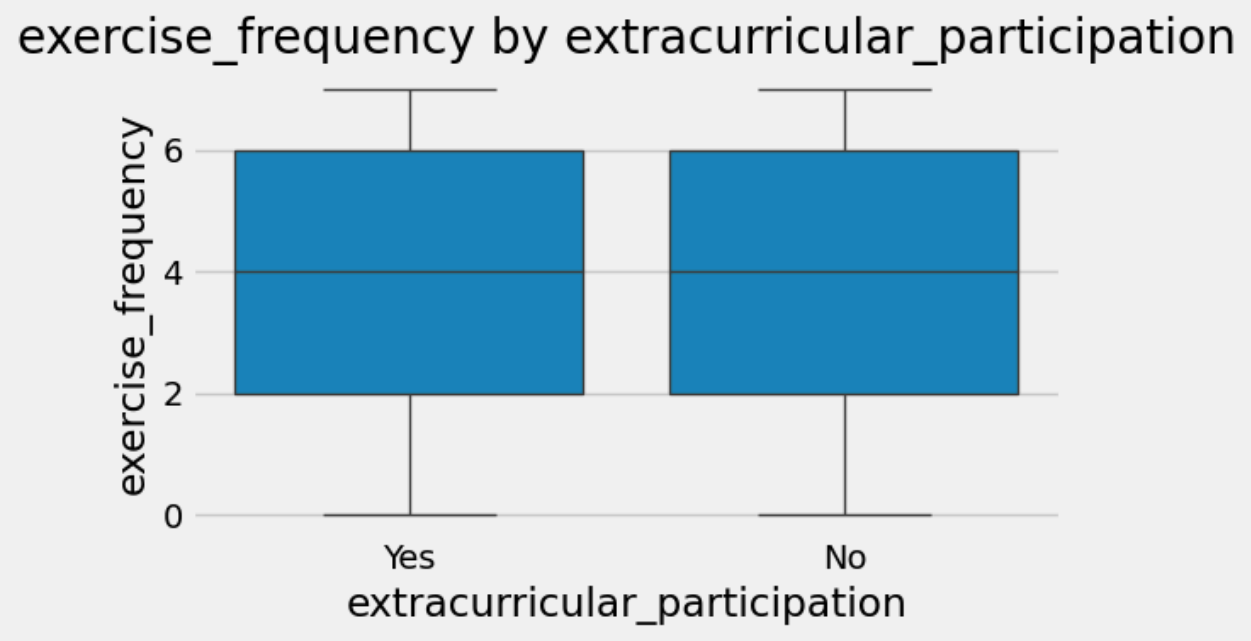

exercise_frequency by major
exercise_frequency
0
2
4
6
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

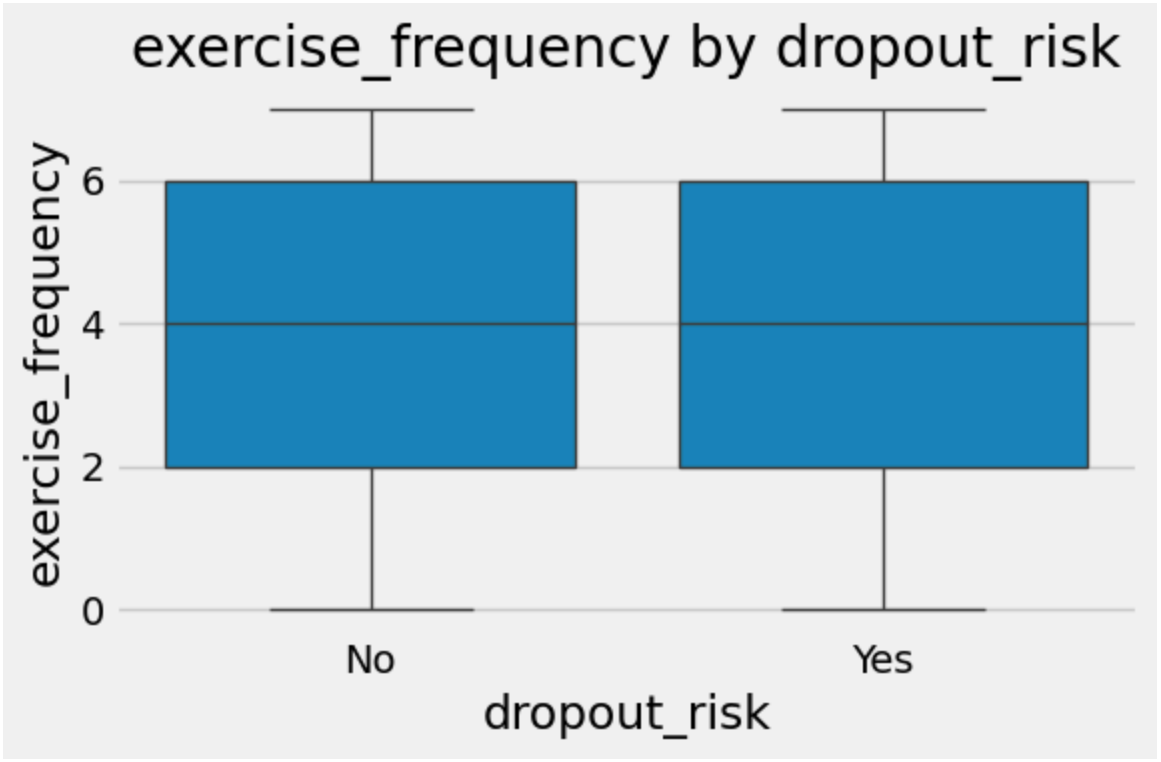

exercise_frequency by part_time_job
exercise_frequency
0
2
4
6
Yes
No
part_time_job

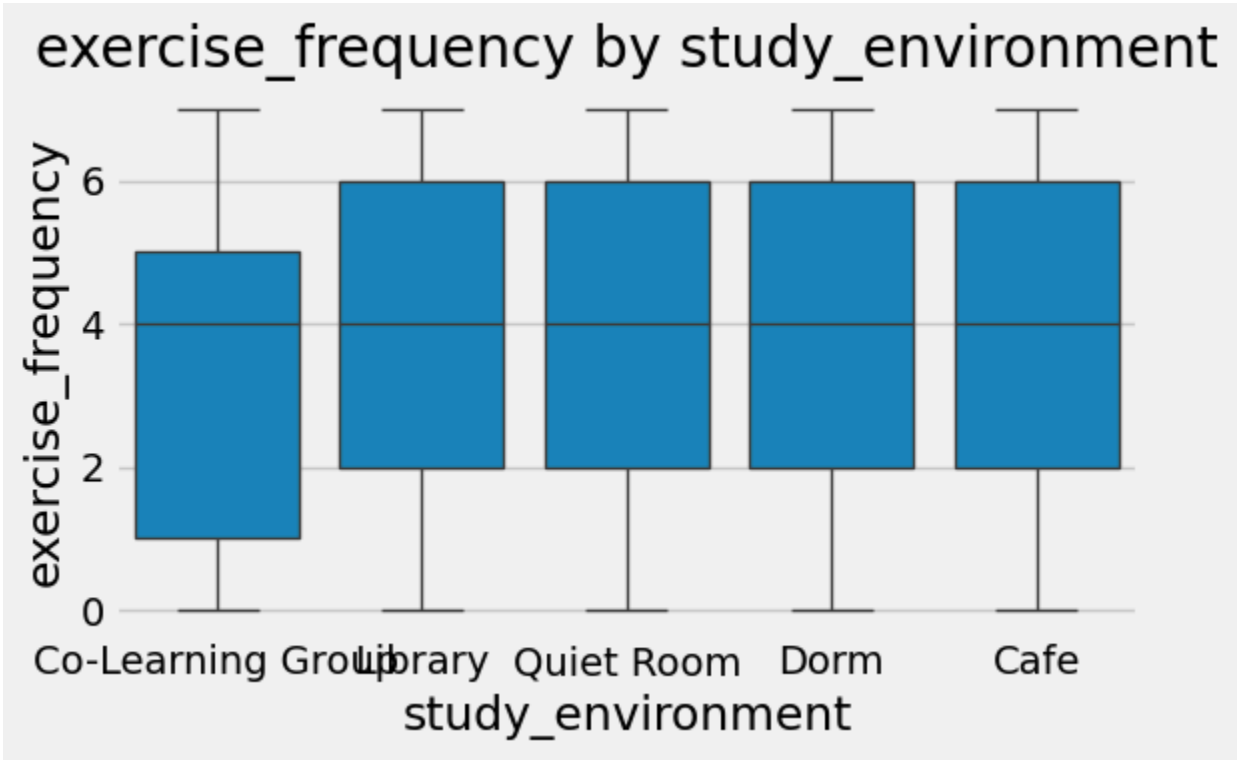

exercise_frequency by diet_quality
exercise_frequency
0
2
4
6
Poor
Good
Fair
diet_quality

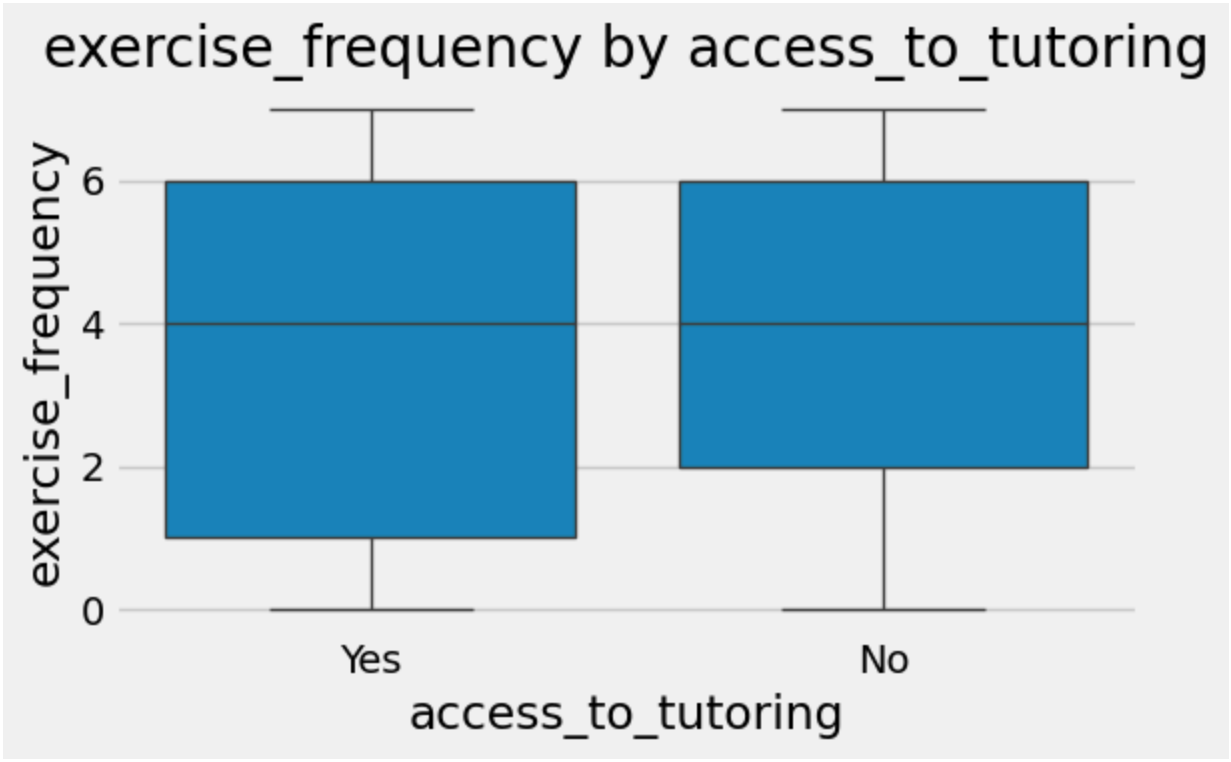

exercise_frequency by parental_education_level
exercise_frequency
0
2
4
6
Some College
PhD
High School
Master
Bachelor
parental_education_level

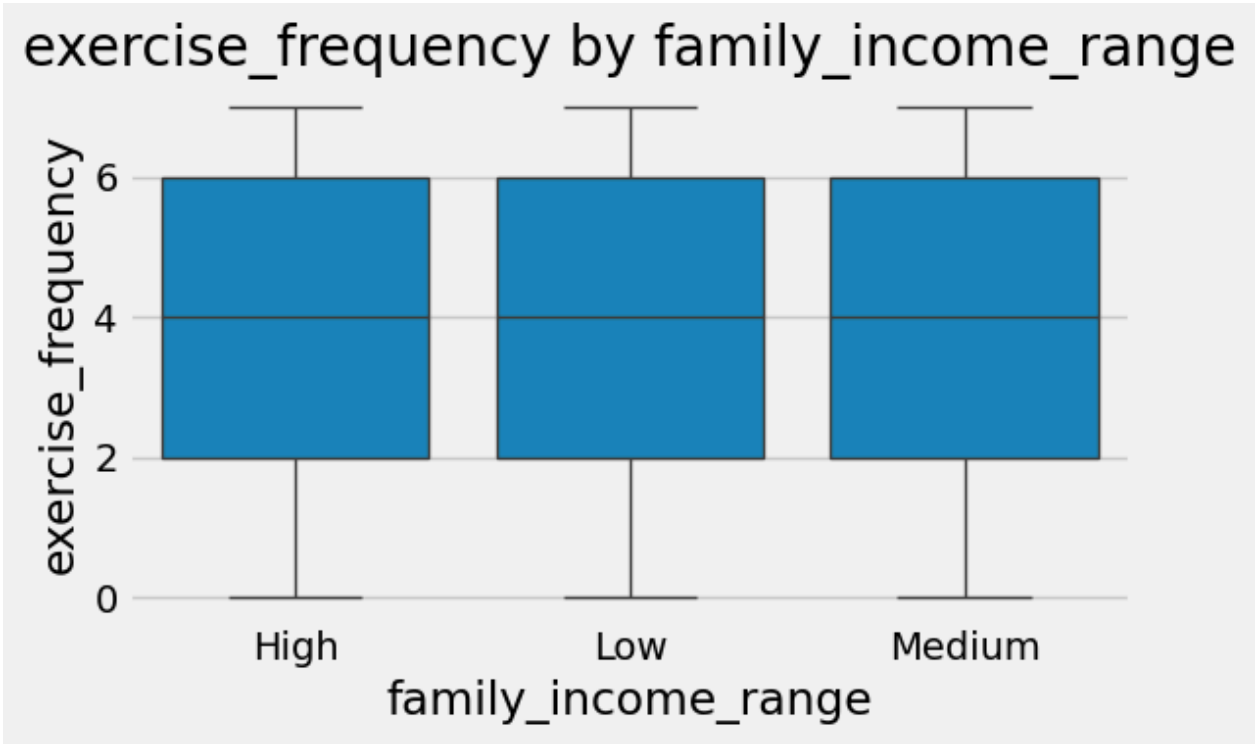

exercise_frequency by internet_quality
exercise_frequency
0
2
4
6
High
Low
Medium
internet_quality

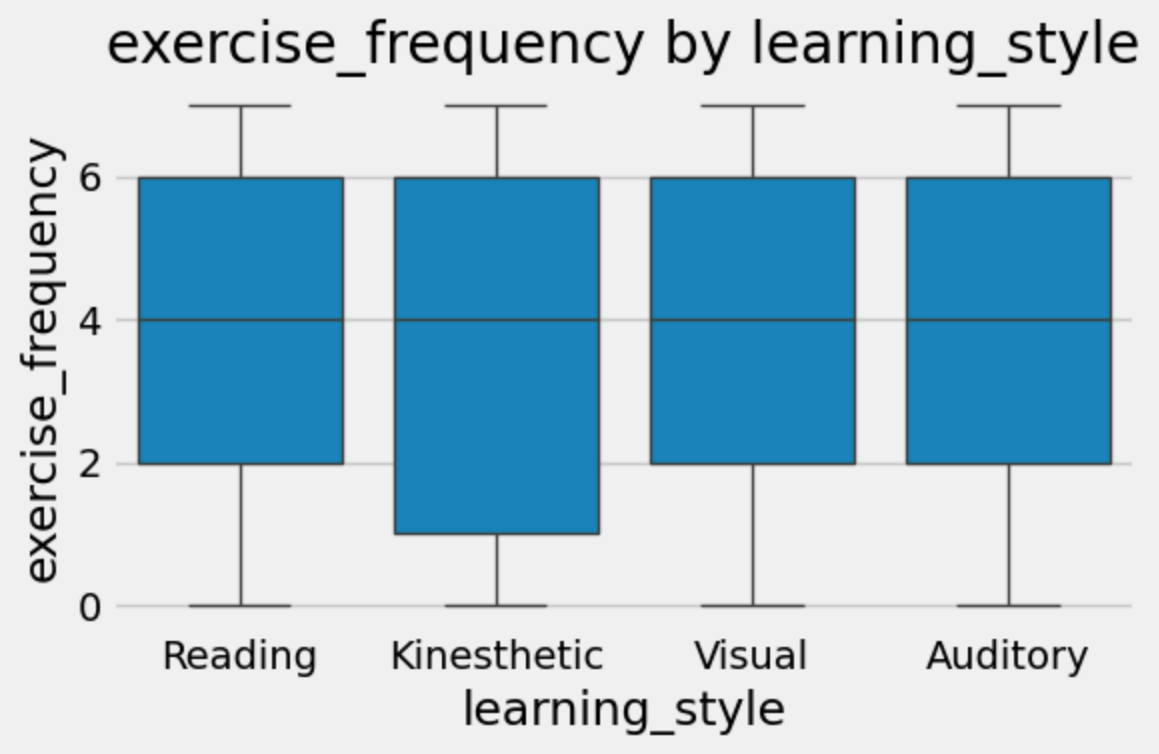

exercise_frequency by extracurricular_participation
exercise_frequency
0
2
4
6
Yes
No
extracurricular_participation

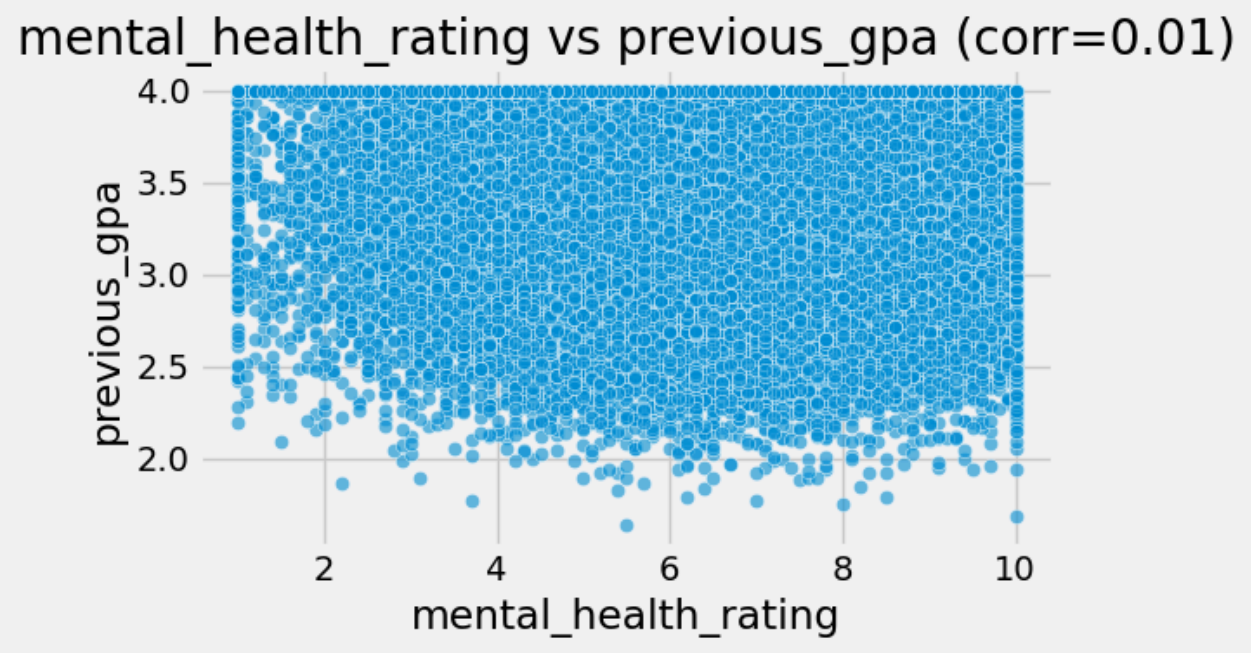

exercise_frequency by dropout_risk
exercise_frequency
0
2
4
6
No
Yes
dropout_risk

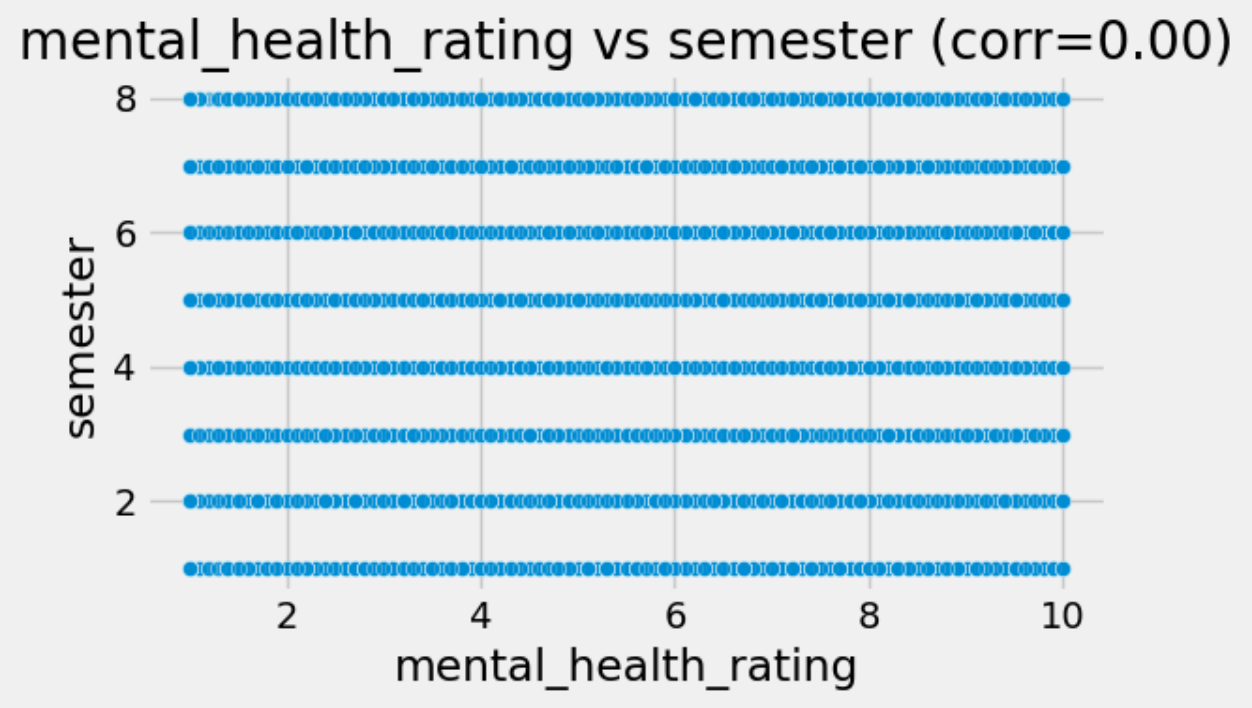

exercise_frequency by study_environment
exercise_frequency
0
2
4
6
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

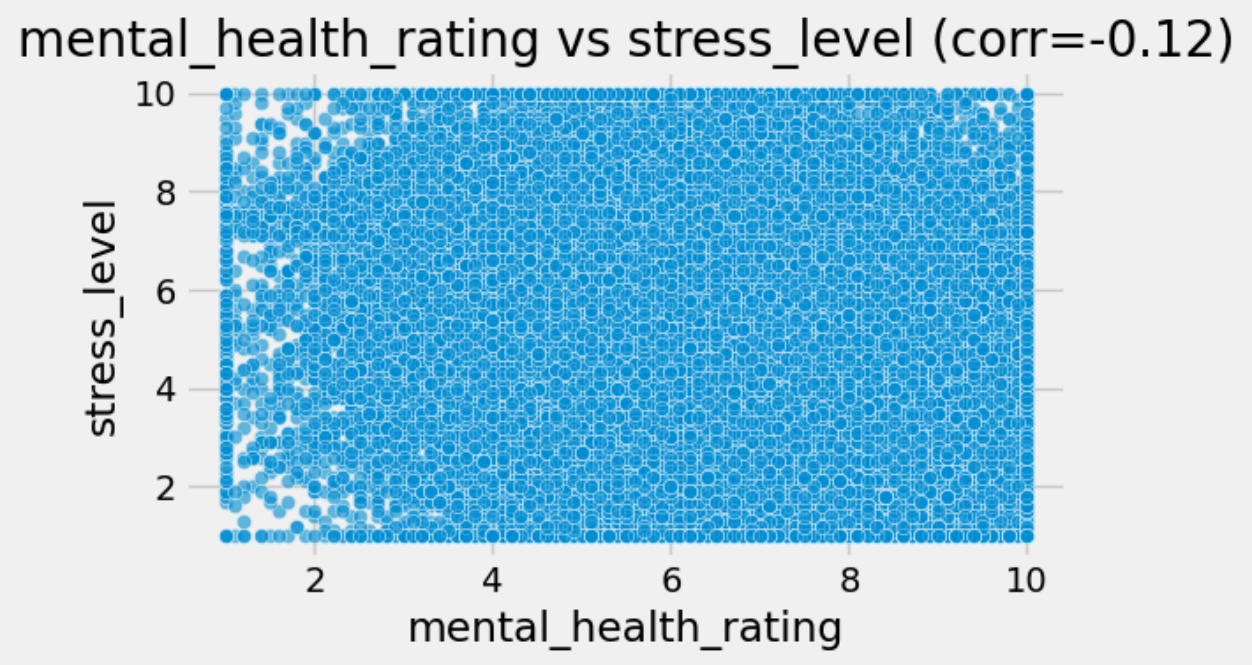

exercise_frequency by access_to_tutoring
exercise_frequency
6
4
2
0
Yes
No
access_to_tutoring

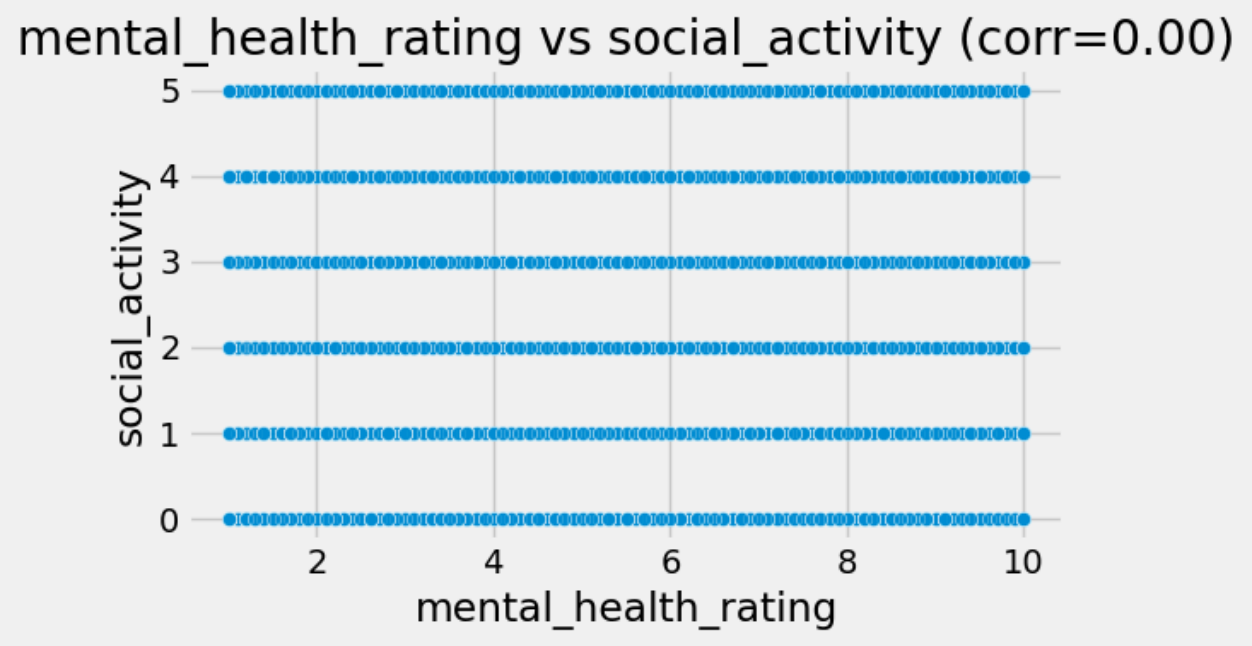

exercise_frequency by family_income_range
exercise_frequency
6
4
2
0
High
Low
Medium
family_income_range

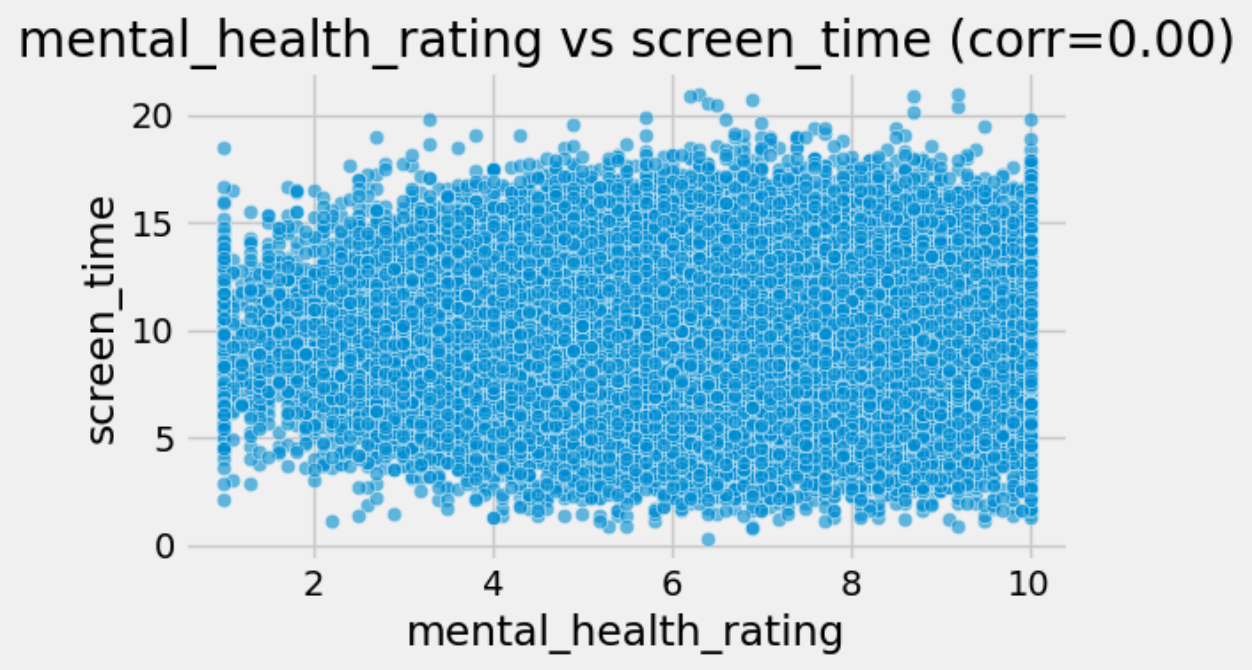

exercise_frequency by learning_style
exercise_frequency
0
2
4
6
Reading
Kinesthetic
Visual
Auditory
learning_style

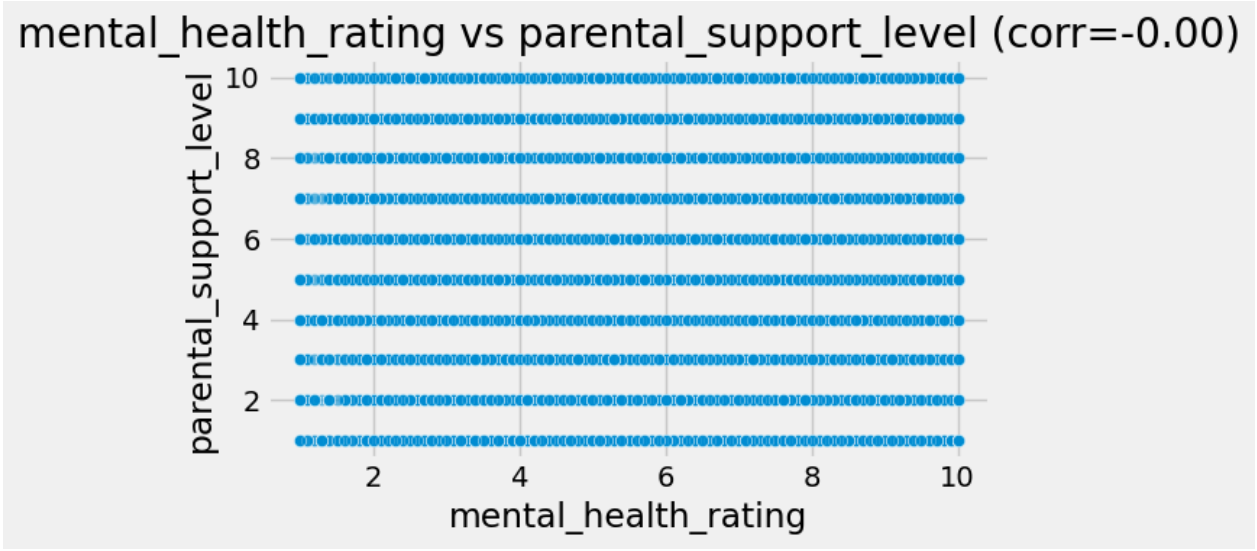

mental_health_rating vs previous_gpa (corr=0.01)
previous_gpa
2.0
2.5
3.0
3.5
4.0
2
4
6
8
10
mental_health_rating

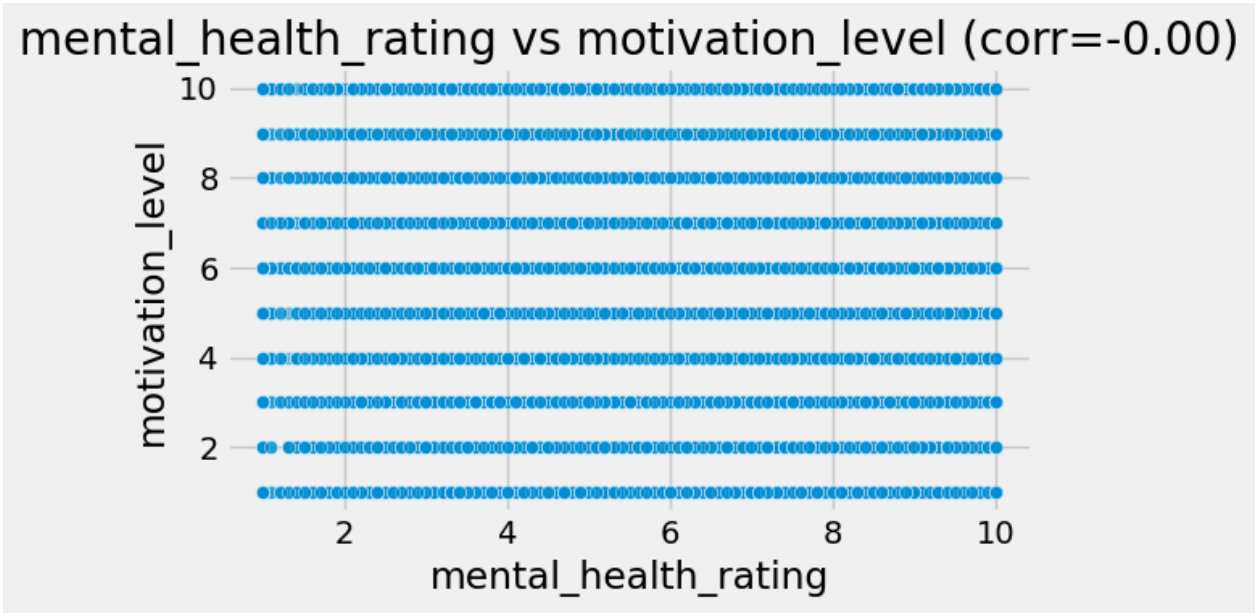

mental_health_rating vs semester (corr=0.00)
semester
mental_health_rating
2
4
6
8
10

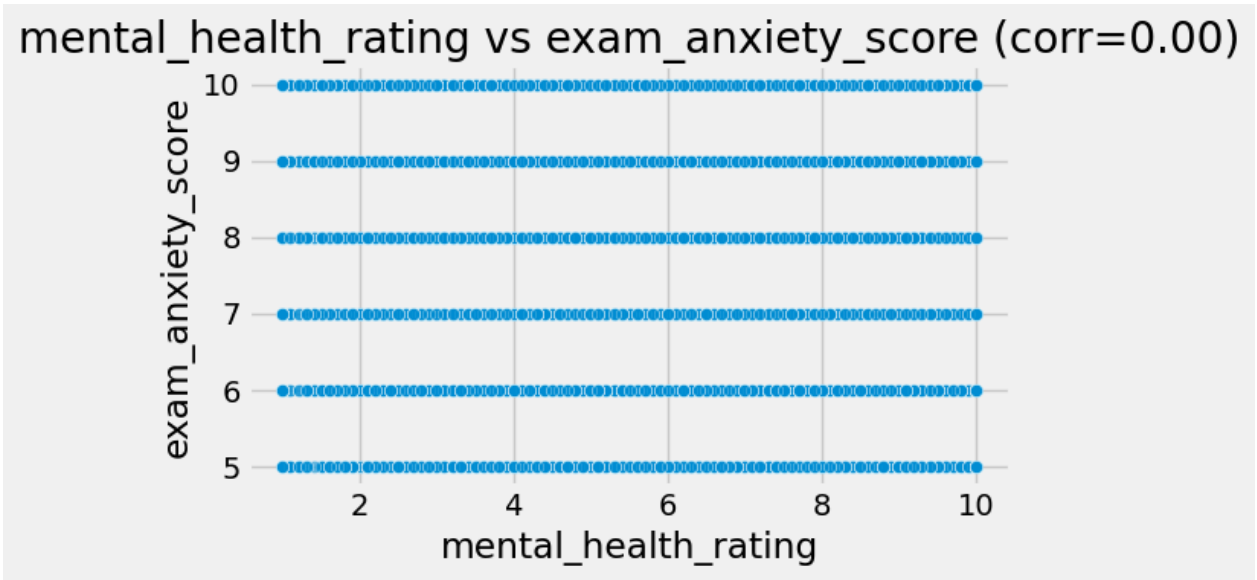

mental_health_rating vs stress_level (corr=-0.12)
stress_level
mental_health_rating
2
4
6
8
10

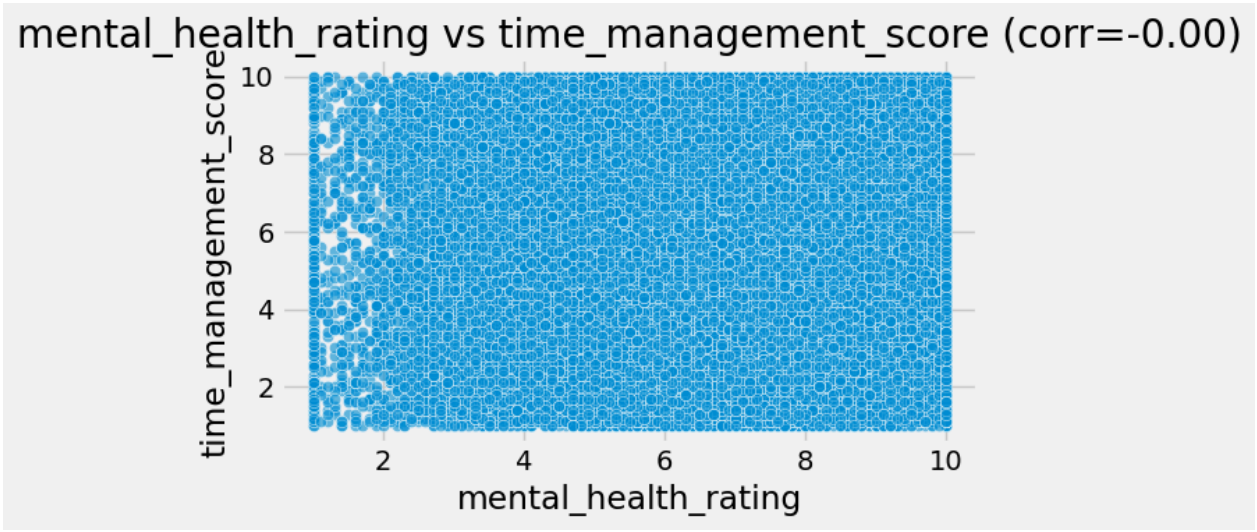

mental_health_rating vs social_activity (corr=0.00)
social_activity
mental_health_rating
0
1
2
3
4
5
2
4
6
8
10

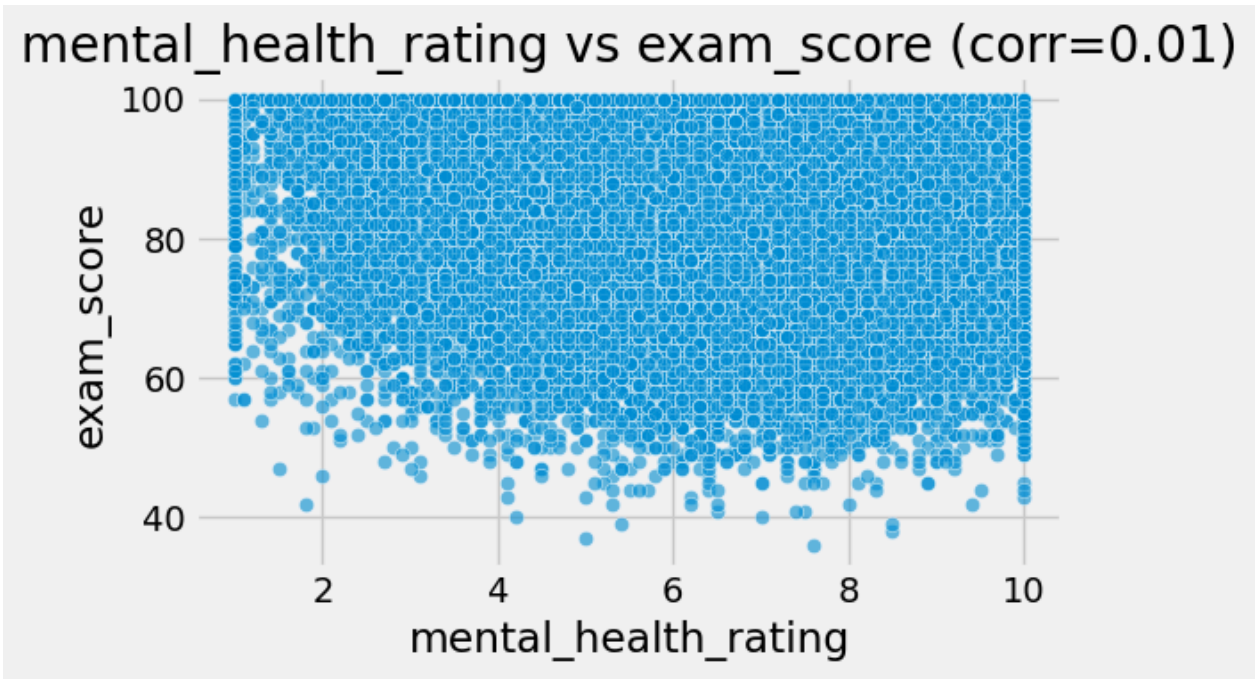

mental_health_rating vs screen_time (corr=0.00)
screen_time
mental_health_rating
0
5
10
15
20
2
4
6
8
10

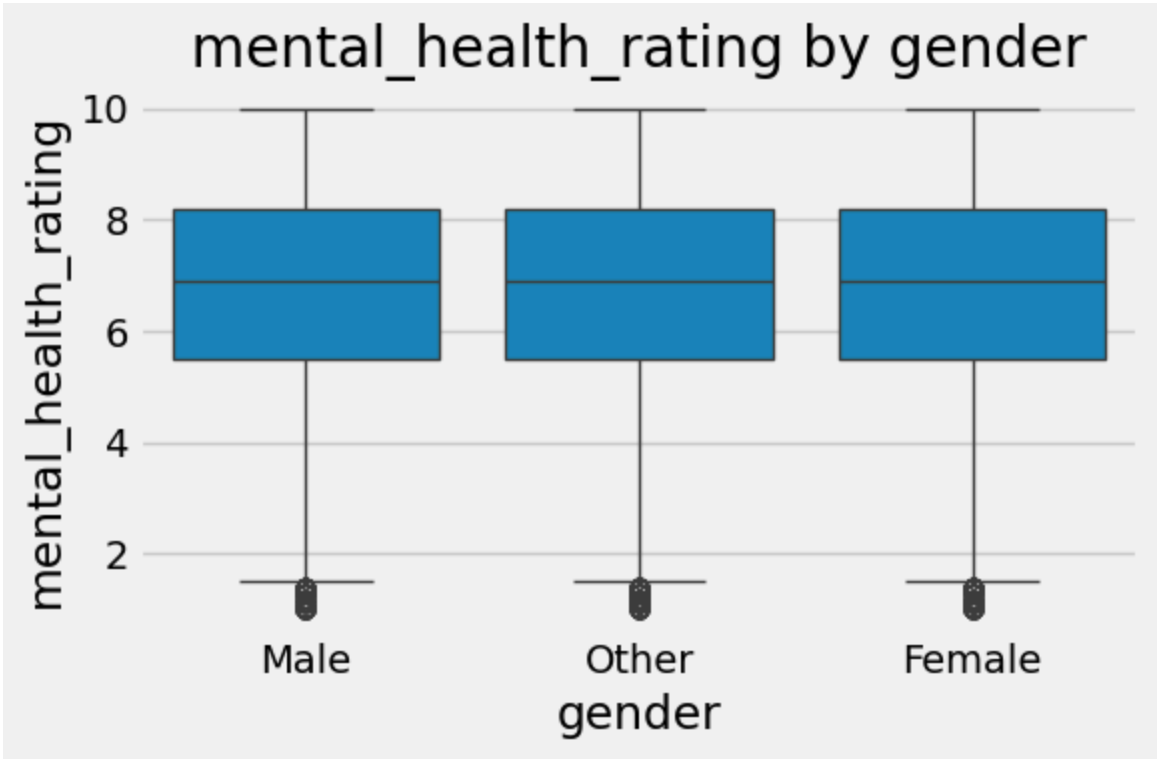

mental_health_rating vs parental_support_level (corr=-0.00)
parental_support_level
mental_health_rating
10
8
6
4
2
2
4
6
8
10

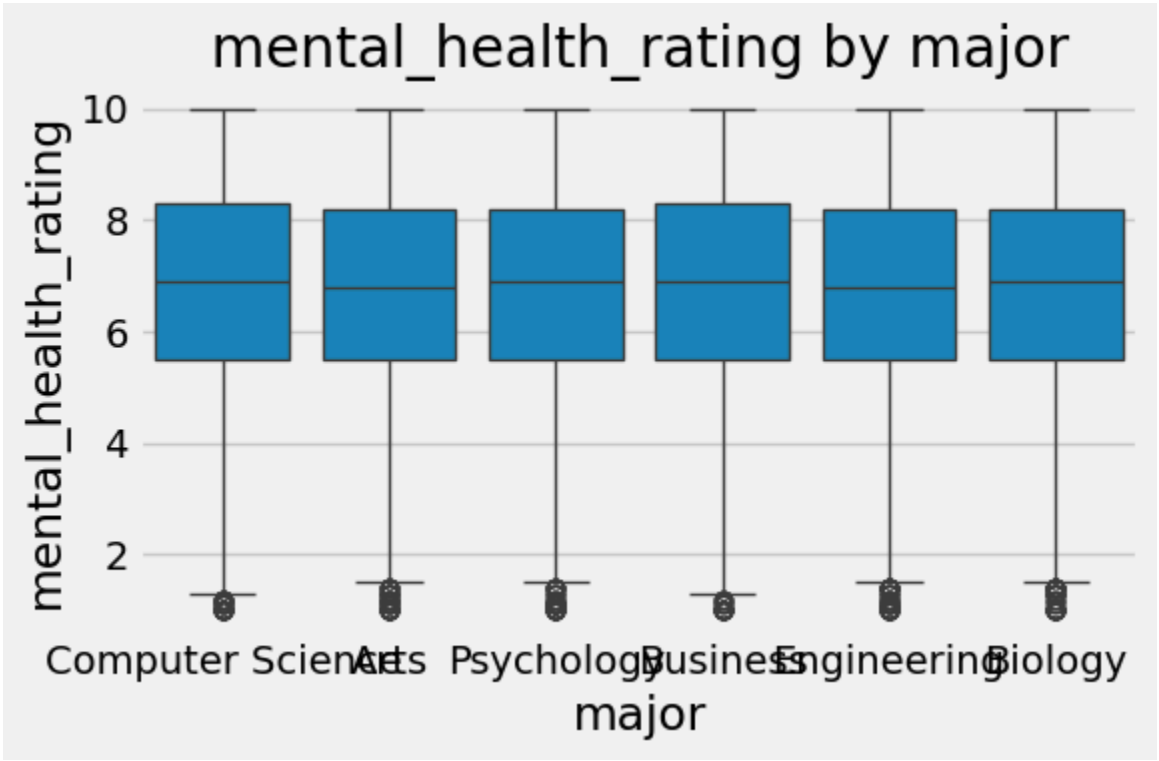

mental_health_rating vs motivation_level (corr=-0.00)
motivation_level
mental_health_rating
10
8
6
4
2
2
4
6
8
10

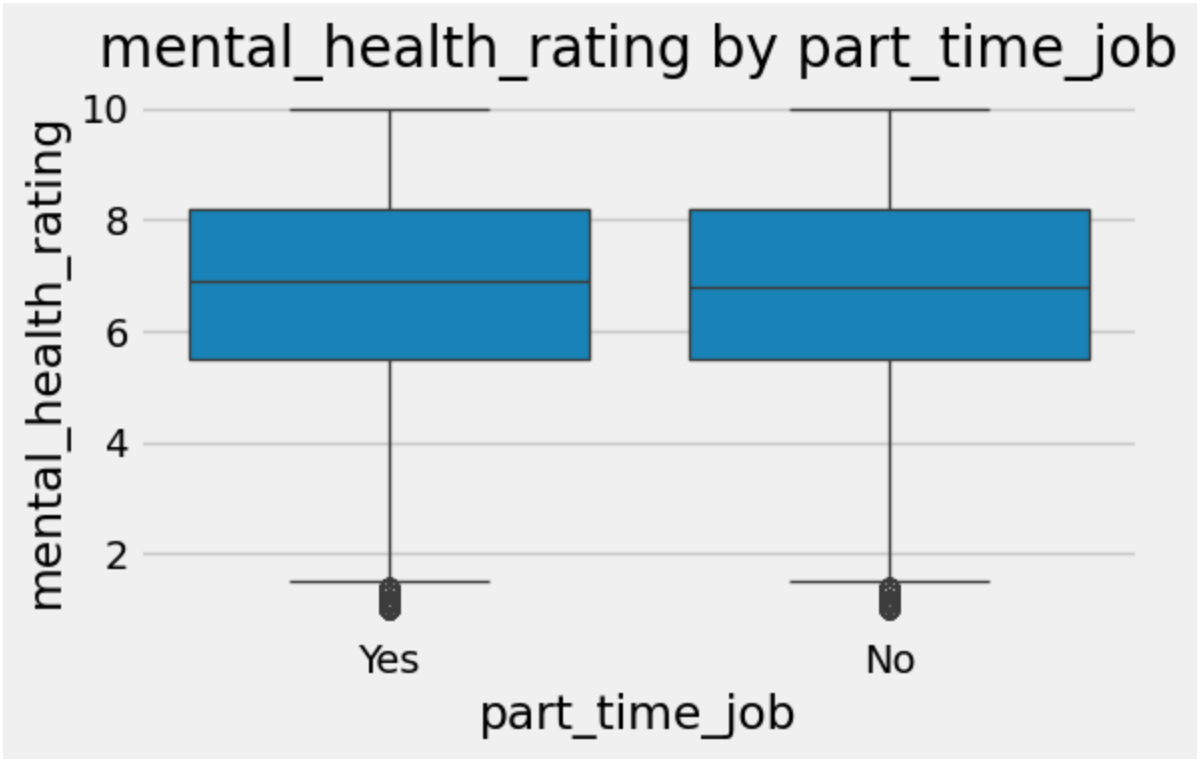

mental_health_rating vs exam_anxiety_score (corr=0.00)
exam_anxiety_score
mental_health_rating
10
9
8
7
6
5
2
4
6
8
10

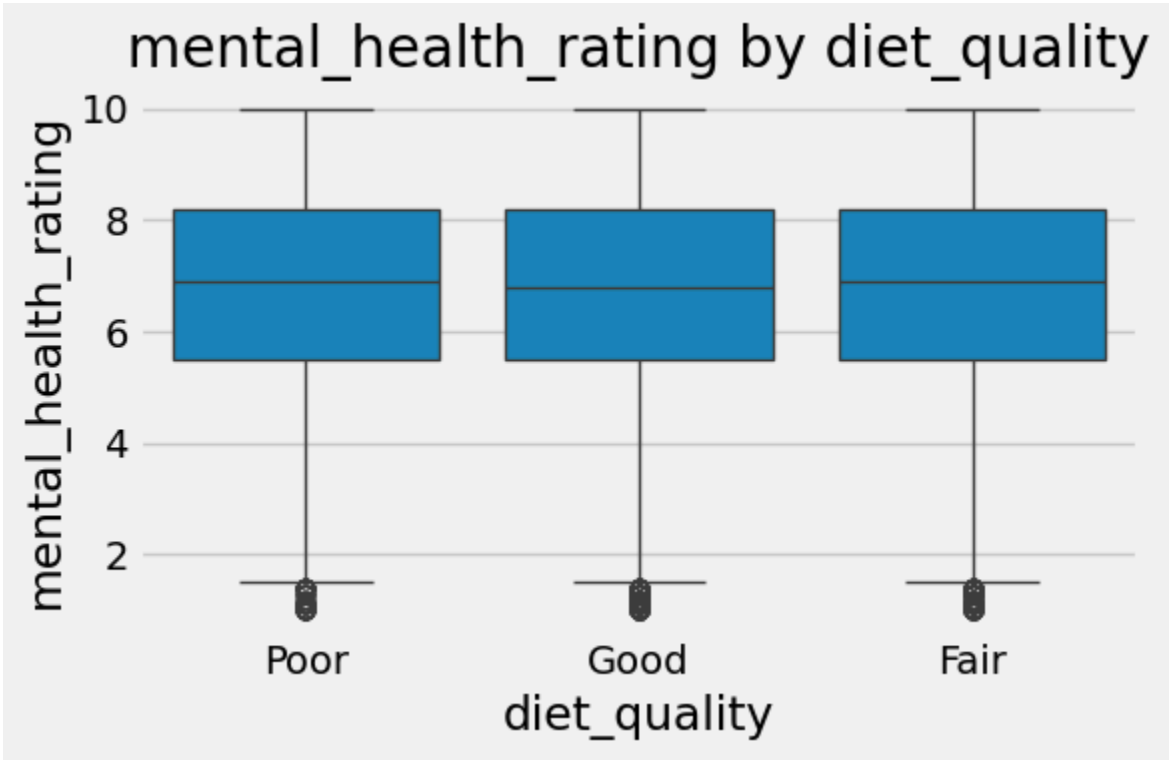

mental_health_rating vs time_management_score (corr=-0.00)
time_management_score
10
8
6
4
2
2
4
6
8
10
mental_health_rating

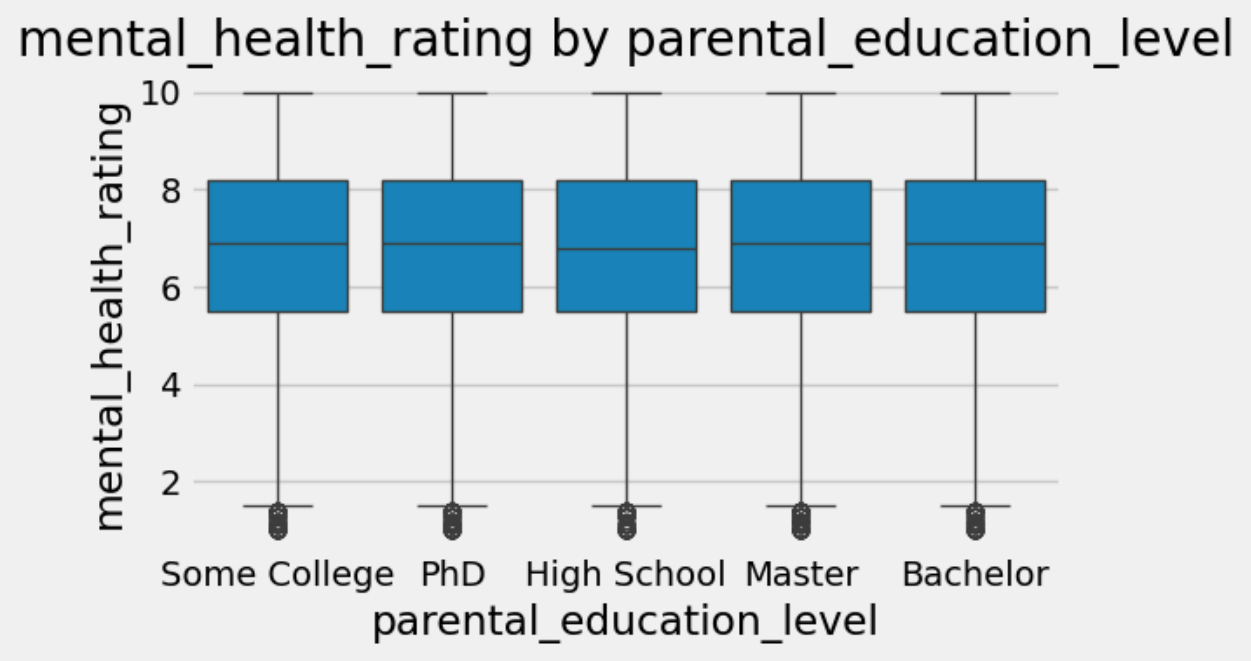

mental_health_rating vs exam_score (corr=0.01)
exam_score
100
80
60
40
2
4
6
8
10
mental_health_rating

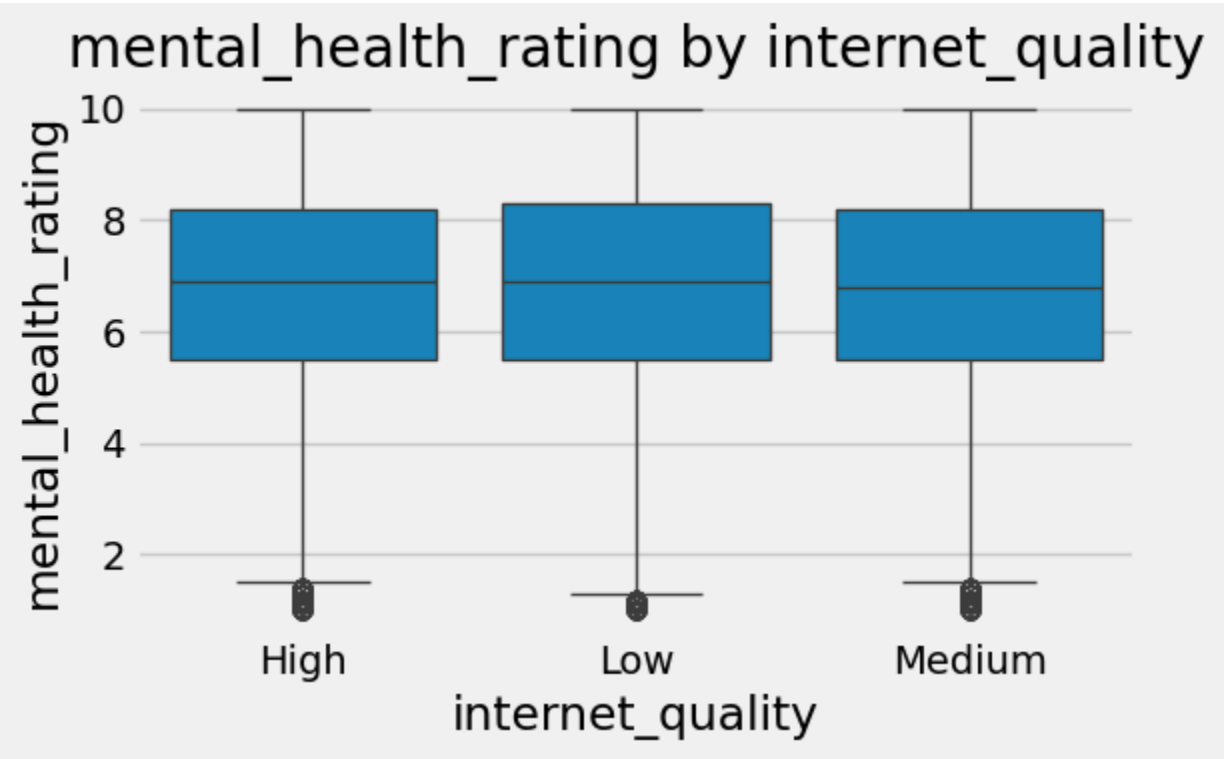

mental_health_rating by gender
mental_health_rating
10
8
6
4
2
Male
Other
Female
gender

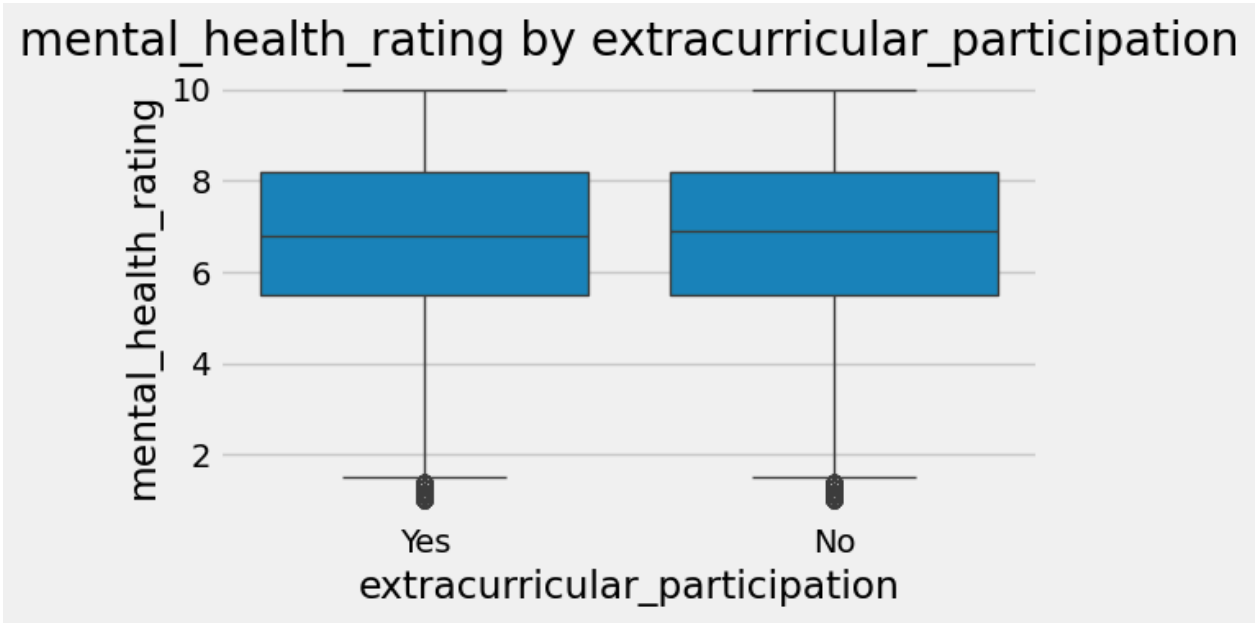

mental_health_rating by major
mental_health_rating
10
8
6
4
2
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

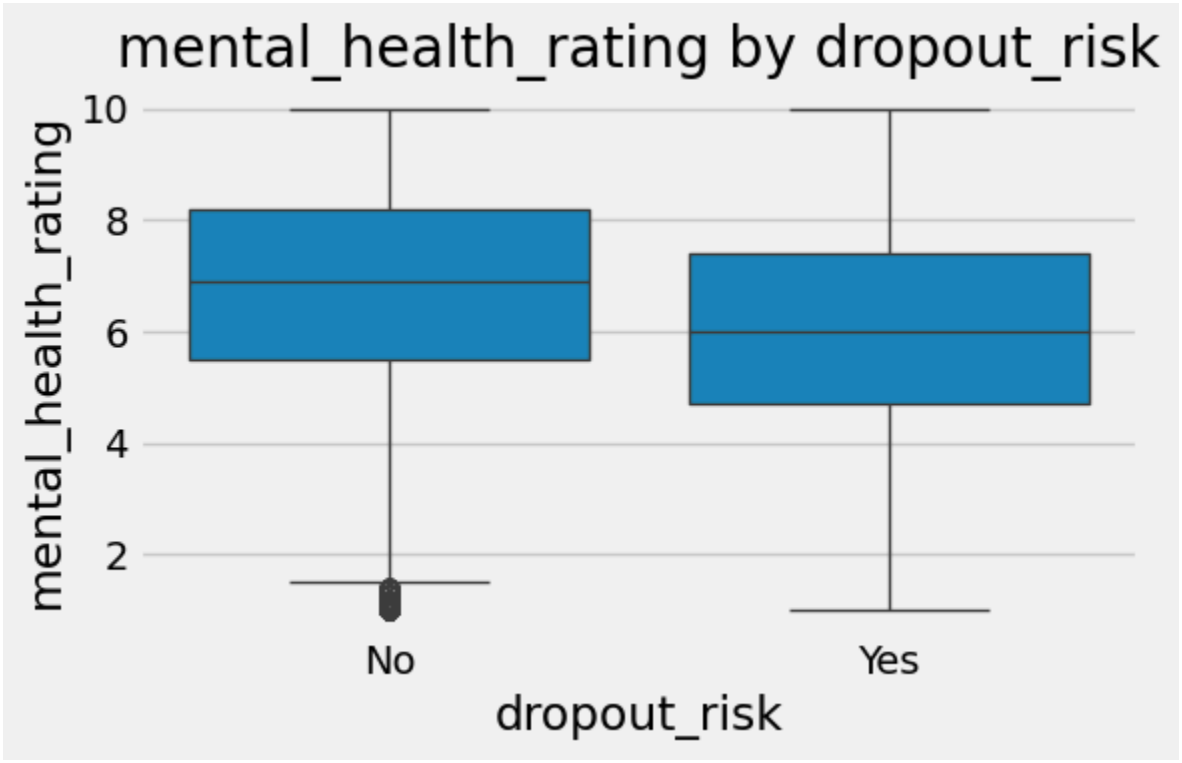

mental_health_rating by part_time_job
mental_health_rating
10
8
6
4
2
Yes
No
part_time_job

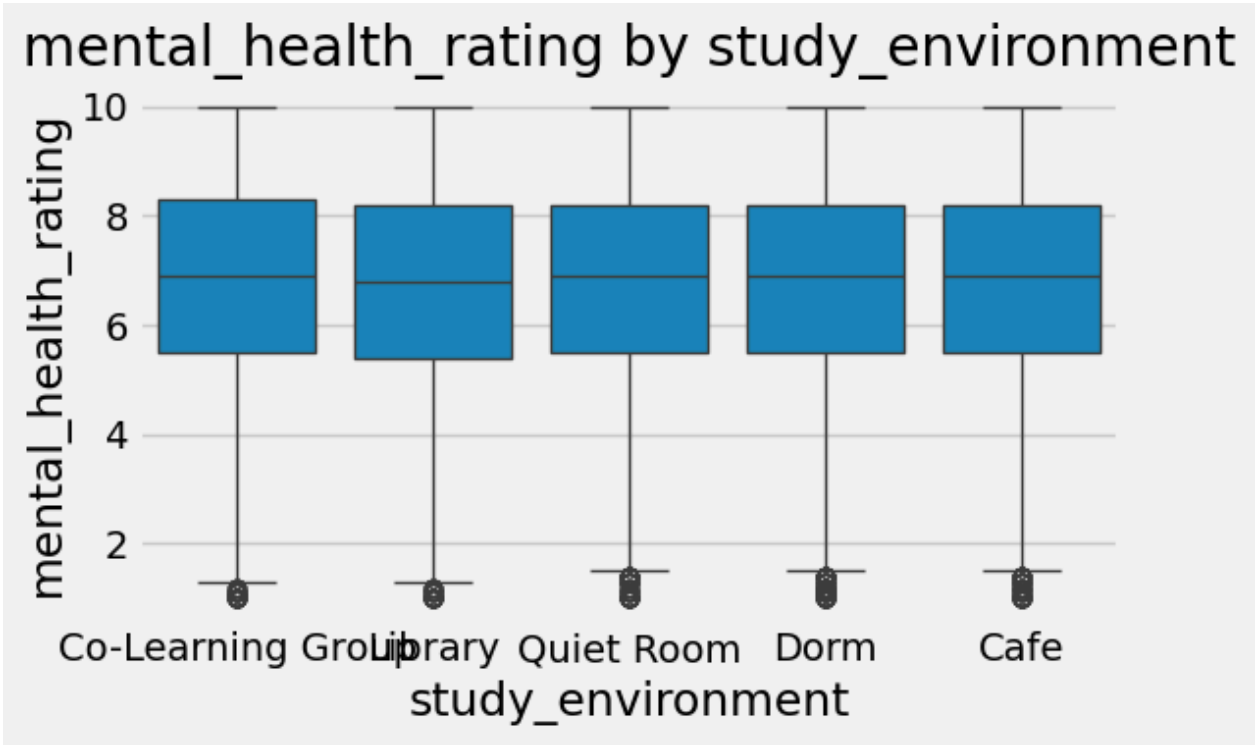

mental_health_rating by diet_quality
mental_health_rating
10
8
6
4
2
Poor
Good
Fair
diet_quality

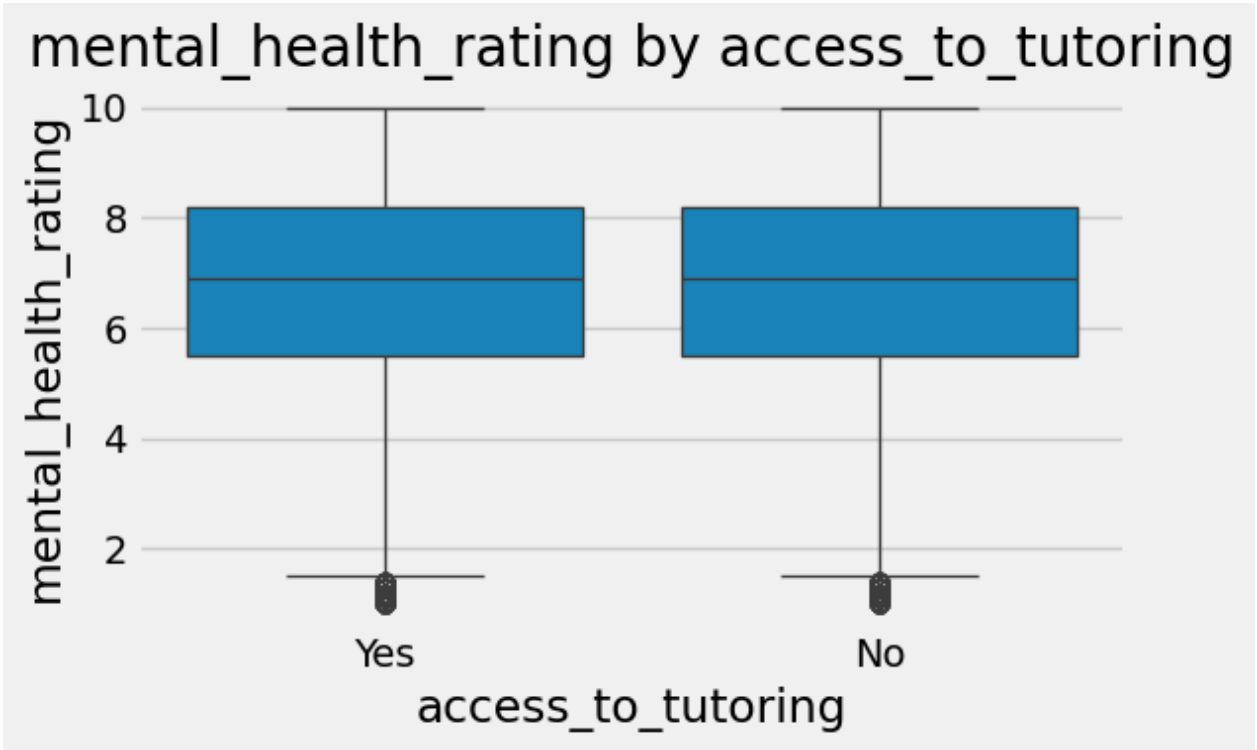

mental_health_rating by parental_education_level
mental_health_rating
10
8
6
4
2
Some College
PhD
High School
Master
Bachelor
parental_education_level

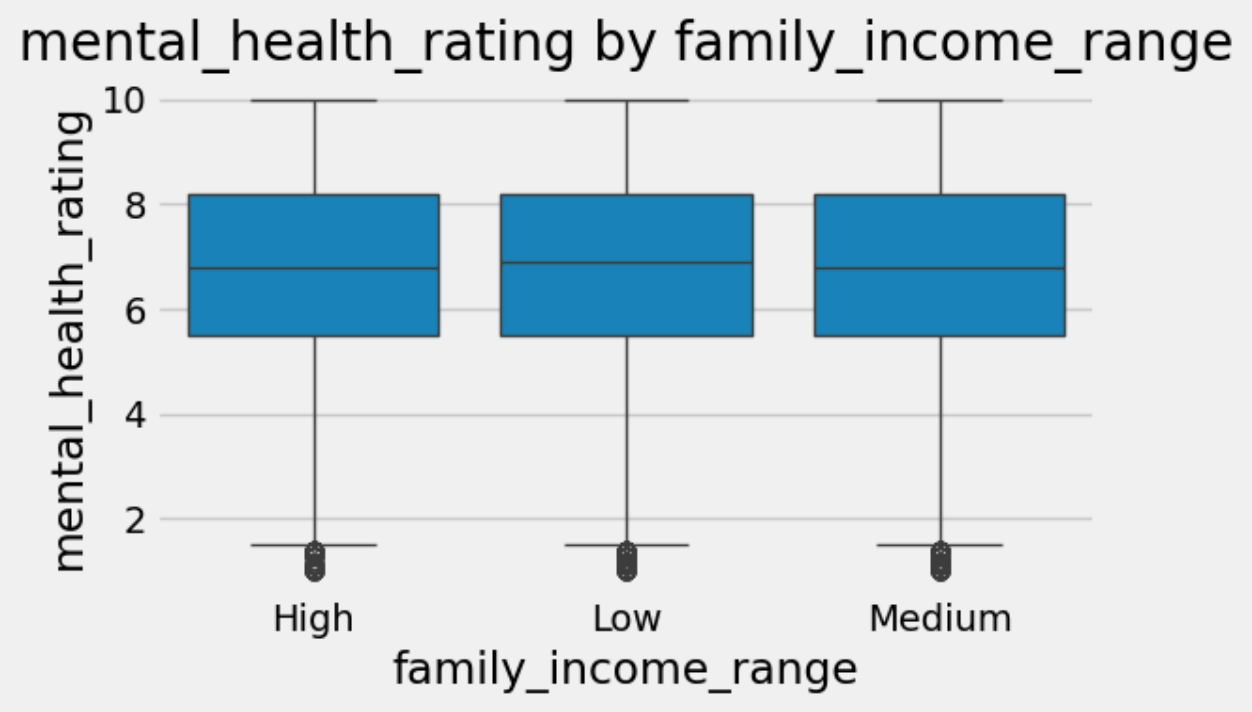

mental_health_rating by internet_quality
mental_health_rating
10
8
6
4
2
High
Low
Medium
internet_quality

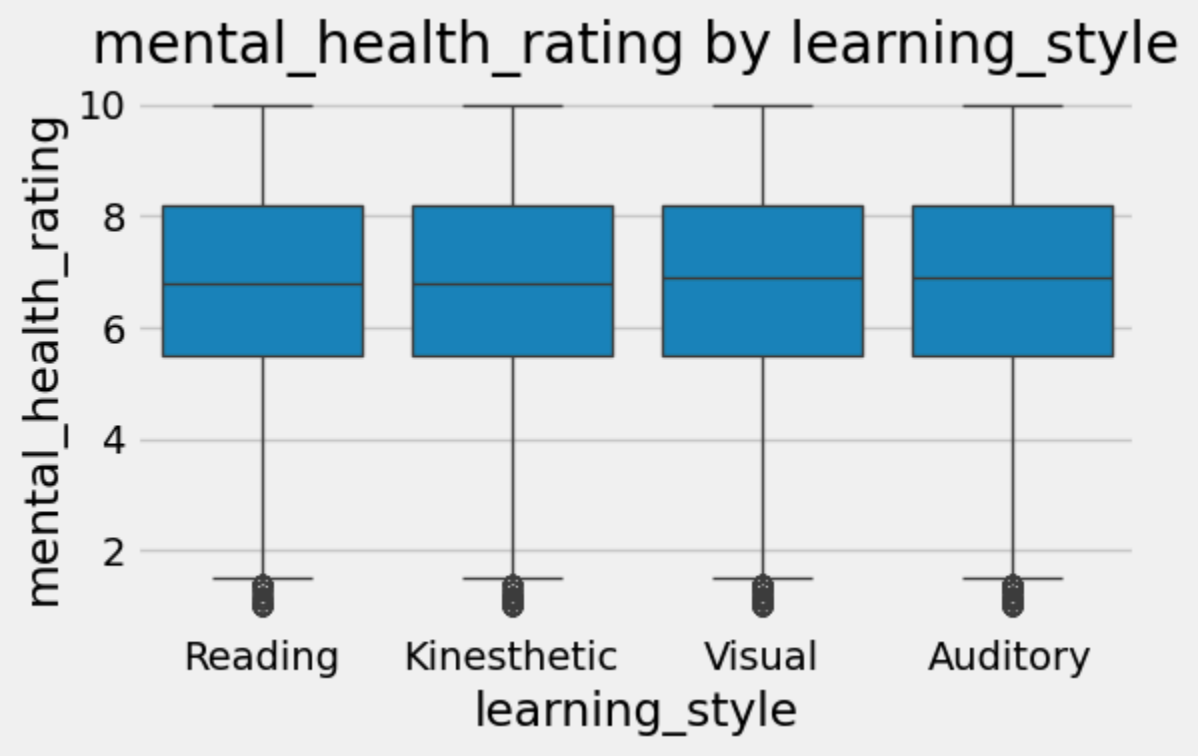

mental_health_rating by extracurricular_participation
mental_health_rating
10
8
6
4
2
Yes
No
extracurricular_participation

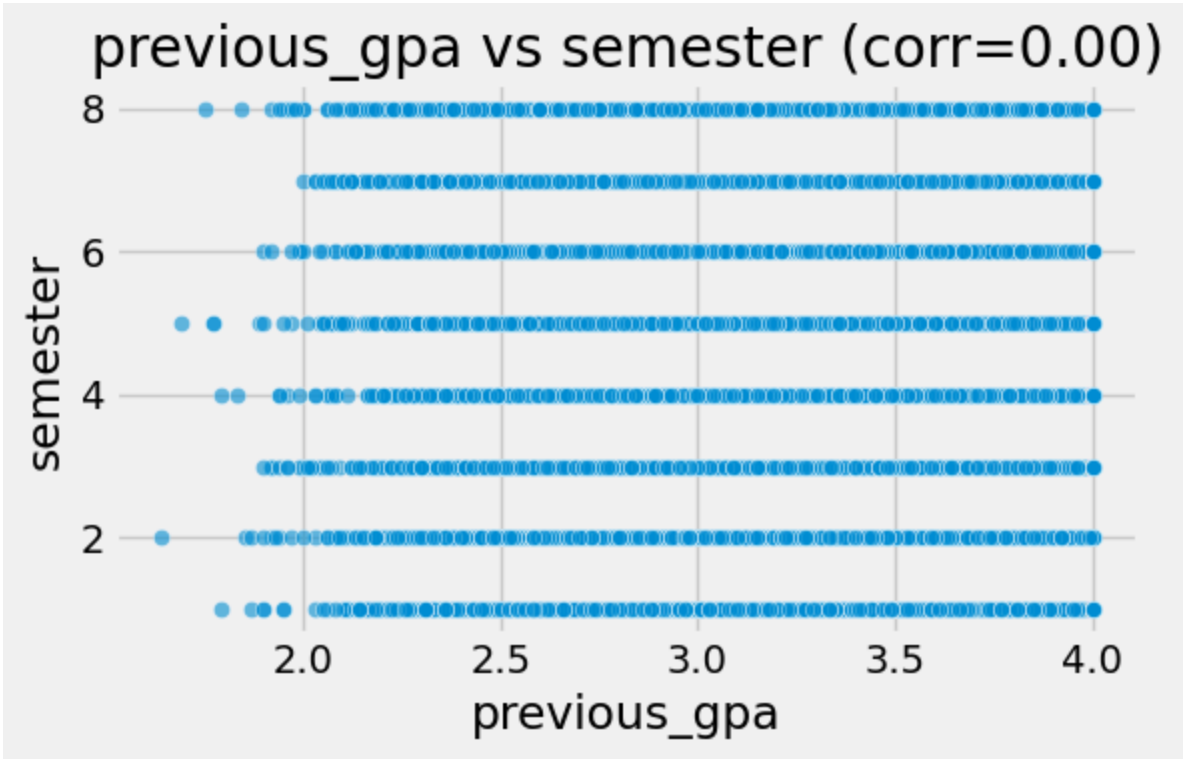

mental_health_rating by dropout_risk
mental_health_rating
10
8
6
4
2
No
Yes
dropout_risk

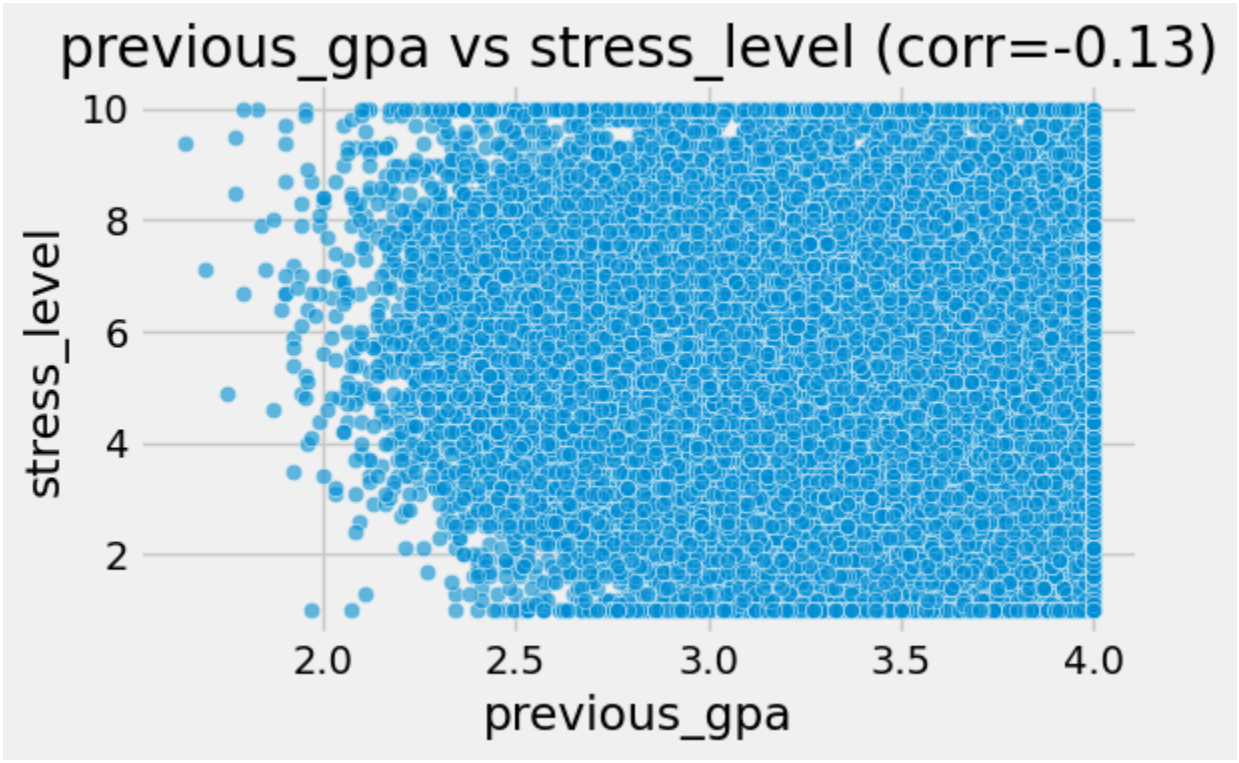

mental_health_rating by study_environment
mental_health_rating
10
8
6
4
2
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

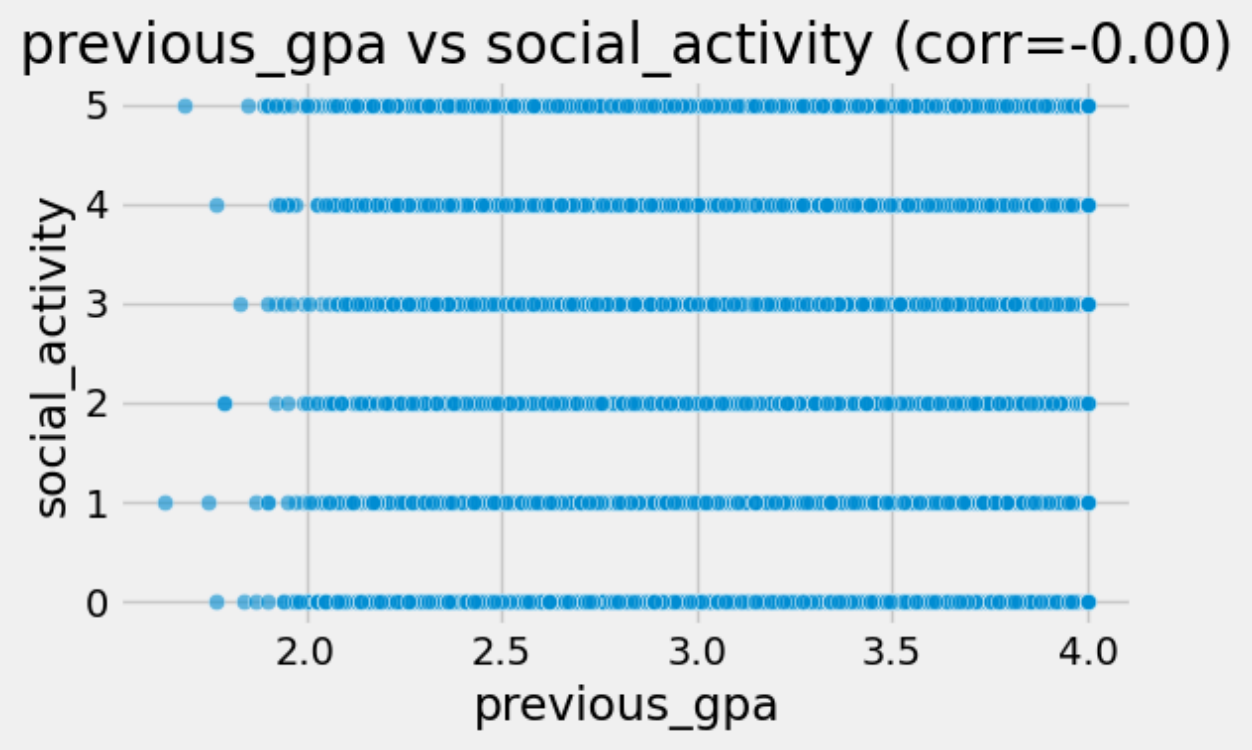

mental_health_rating by access_to_tutoring
mental_health_rating
10
8
6
4
2
Yes
No
access_to_tutoring

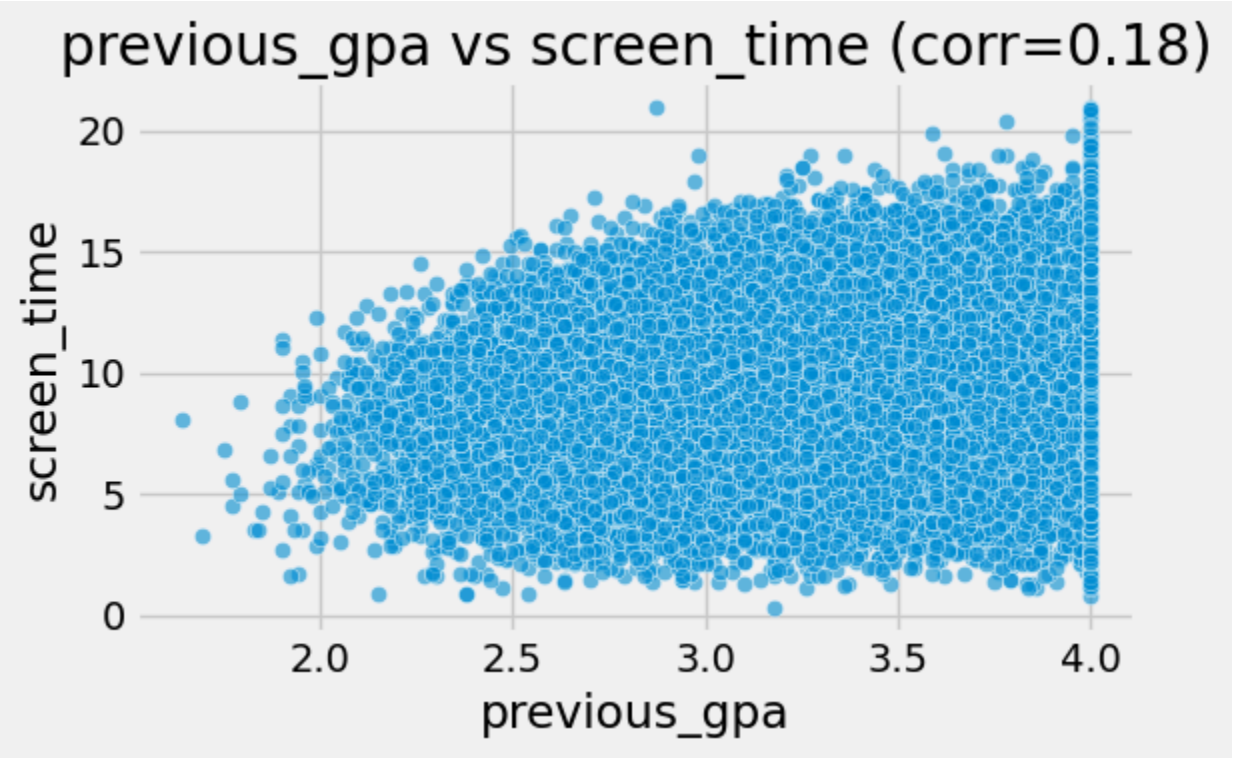

mental_health_rating by family_income_range
mental_health_rating
10
8
6
4
2
High
Low
Medium
family_income_range

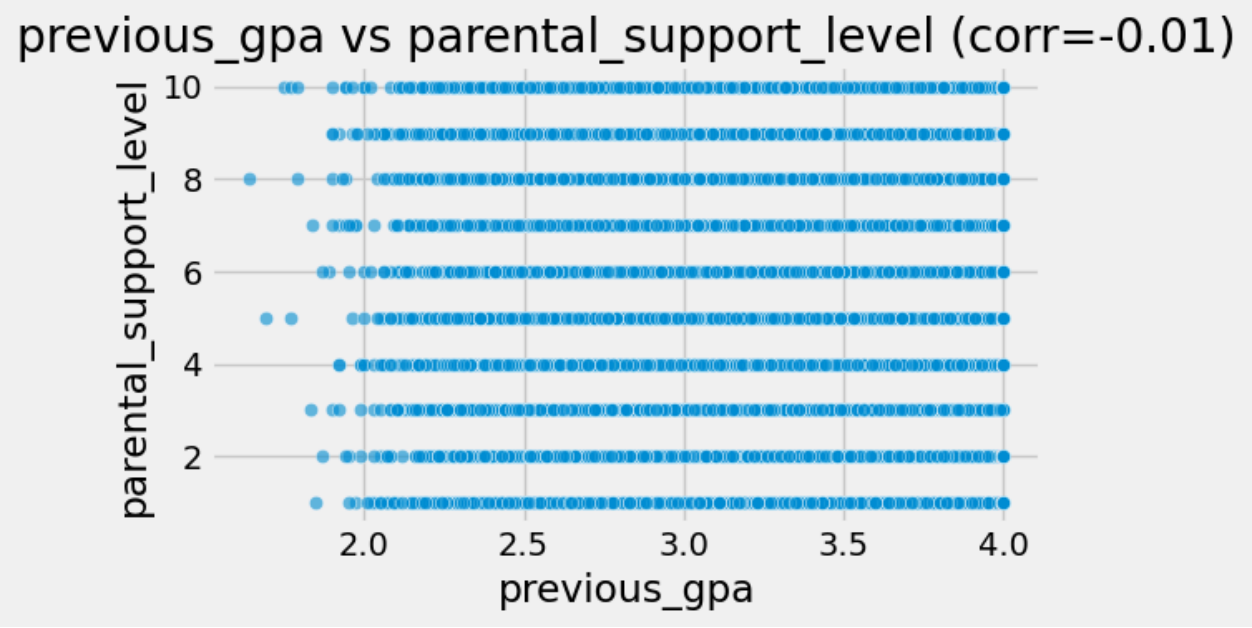

mental_health_rating by learning_style
mental_health_rating
10
8
6
4
2
Reading
Kinesthetic
Visual
Auditory
learning_style

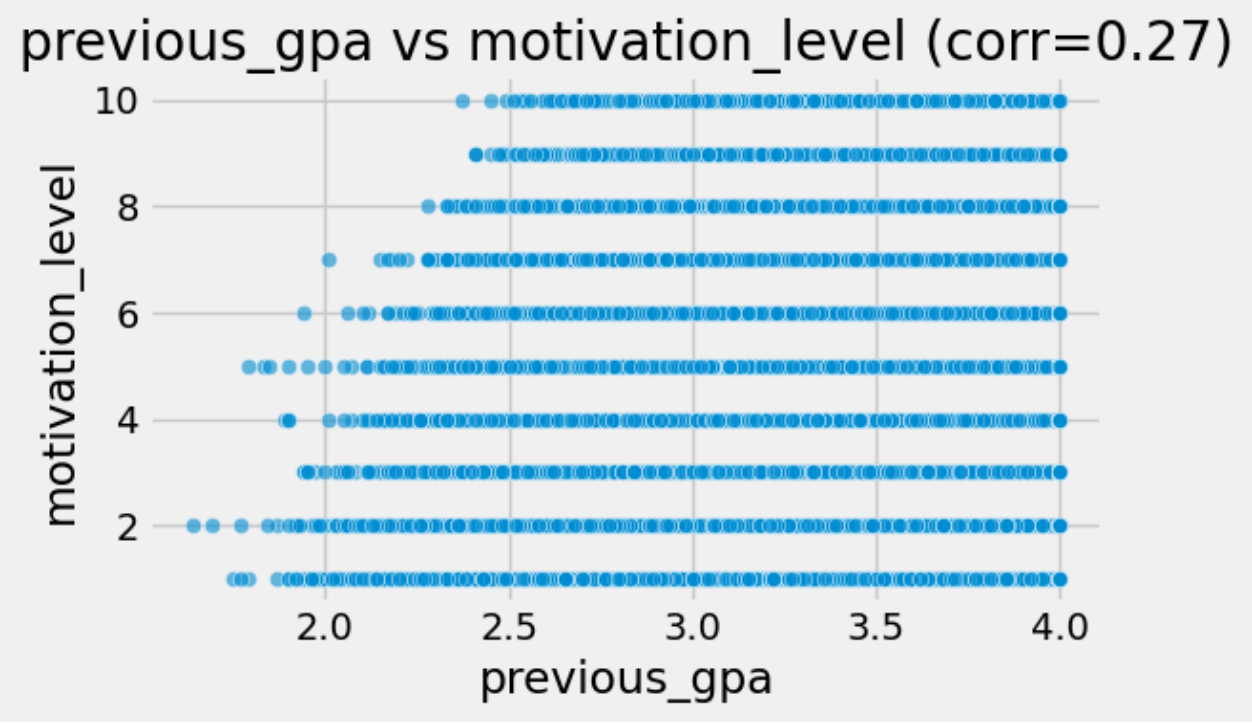

previous_gpa vs semester (corr=0.00)
semester
8
6
4
2
2.0
2.5
3.0
3.5
4.0
previous_gpa

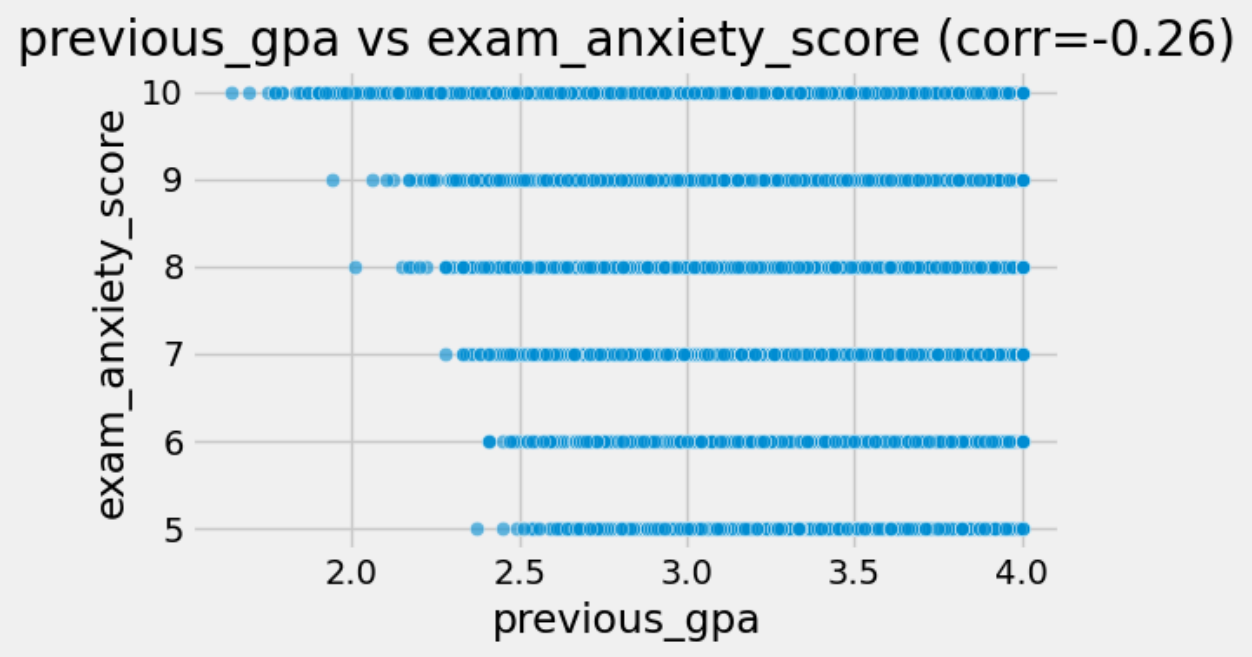

previous_gpa vs stress_level (corr=-0.13)
stress_level
10
8
6
4
2
2.0
2.5
3.0
3.5
4.0
previous_gpa

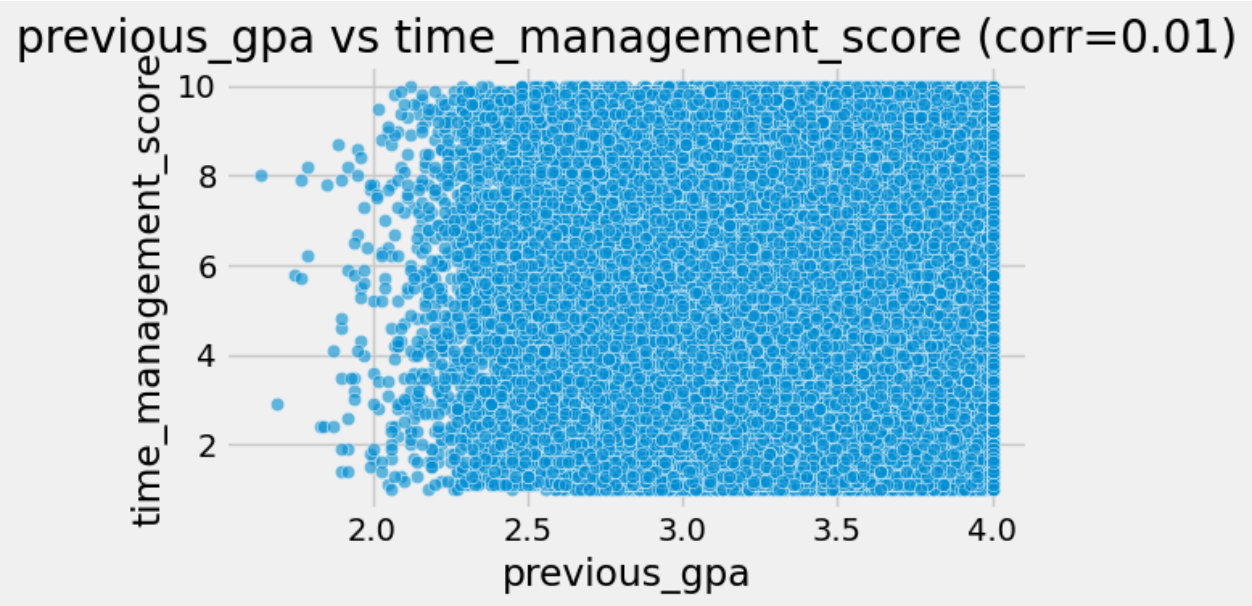

previous_gpa vs social_activity (corr=-0.00)
social_activity
5
4
3
2
1
0
2.0
2.5
3.0
3.5
4.0
previous_gpa

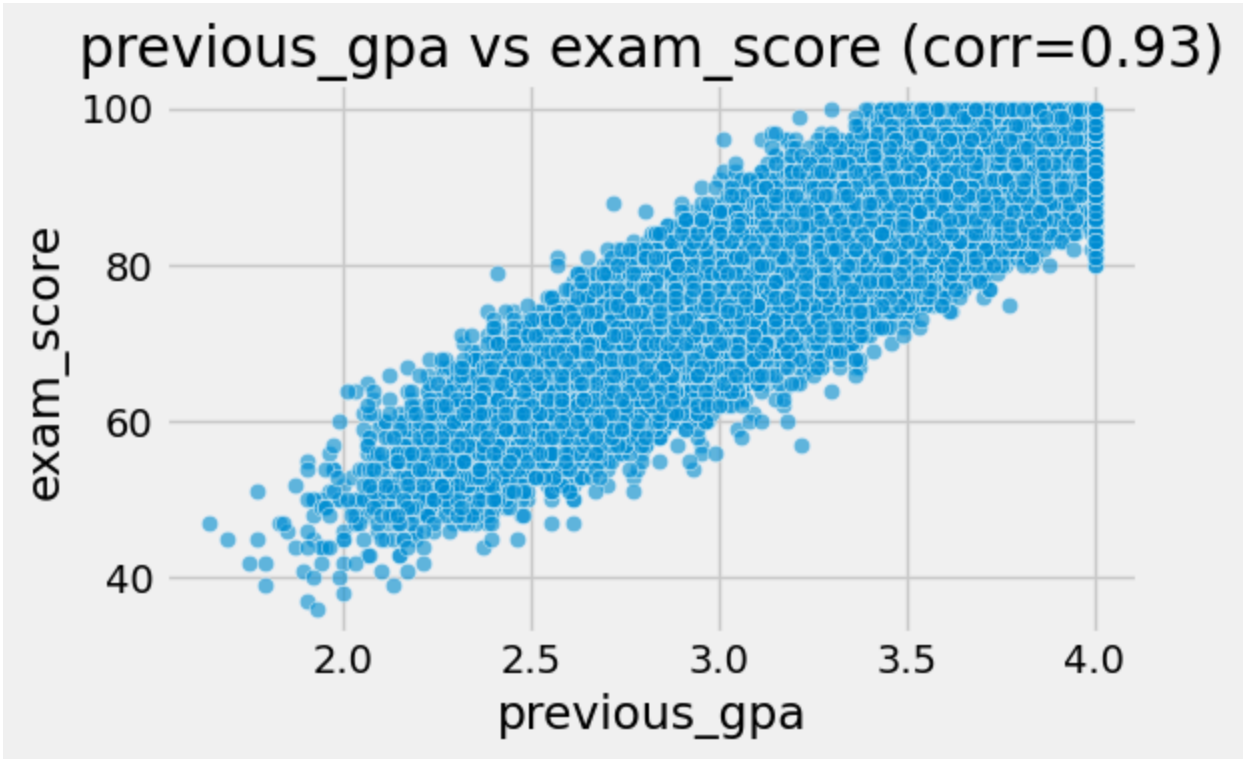

previous_gpa vs screen_time (corr=0.18)
screen_time
20
15
10
5
0
2.0
2.5
3.0
3.5
4.0
previous_gpa

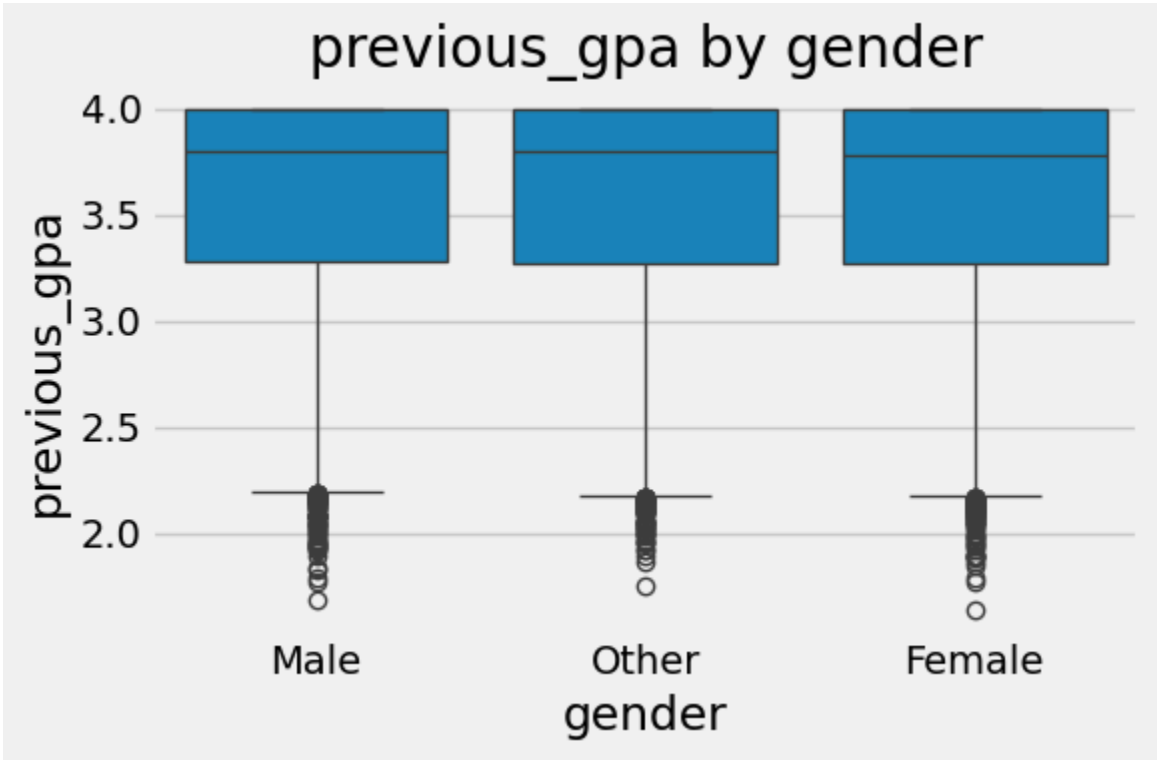

previous_gpa vs parental_support_level (corr=-0.01)
parental_support_level
10
8
6
4
2
2.0
2.5
3.0
3.5
4.0
previous_gpa

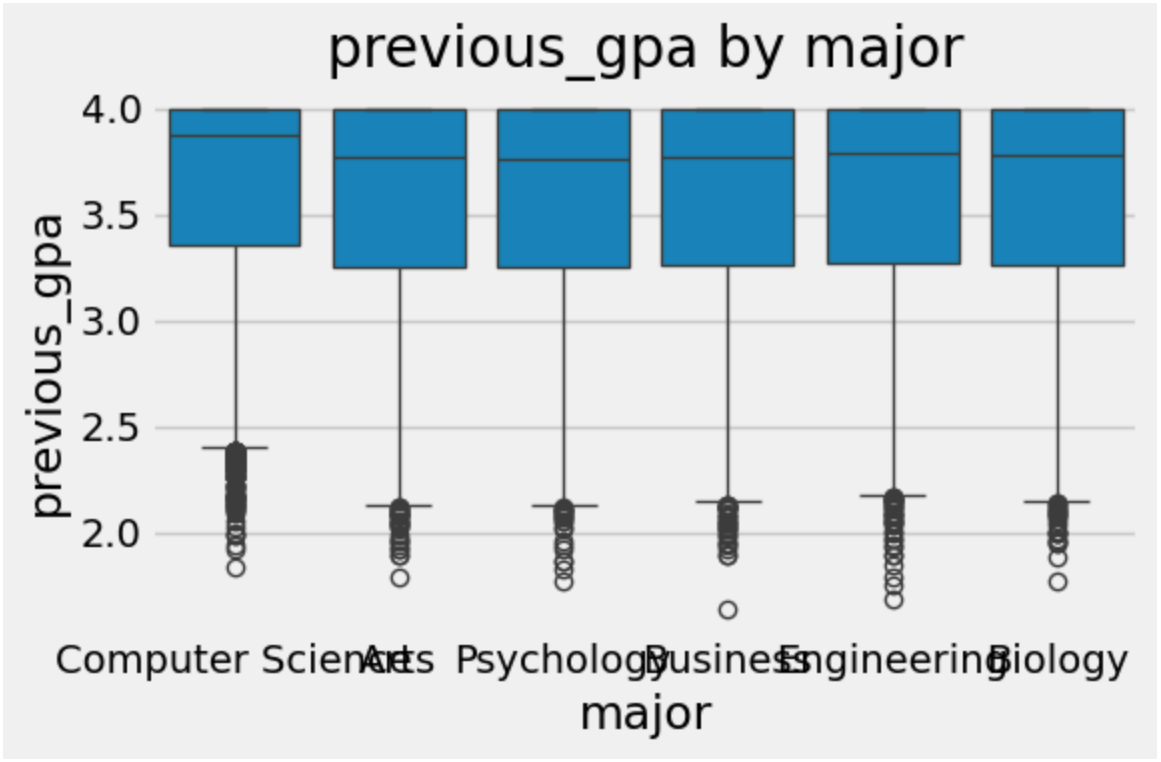

previous_gpa vs motivation_level (corr=0.27)
motivation_level
10
8
6
4
2
2.0
2.5
3.0
3.5
4.0
previous_gpa

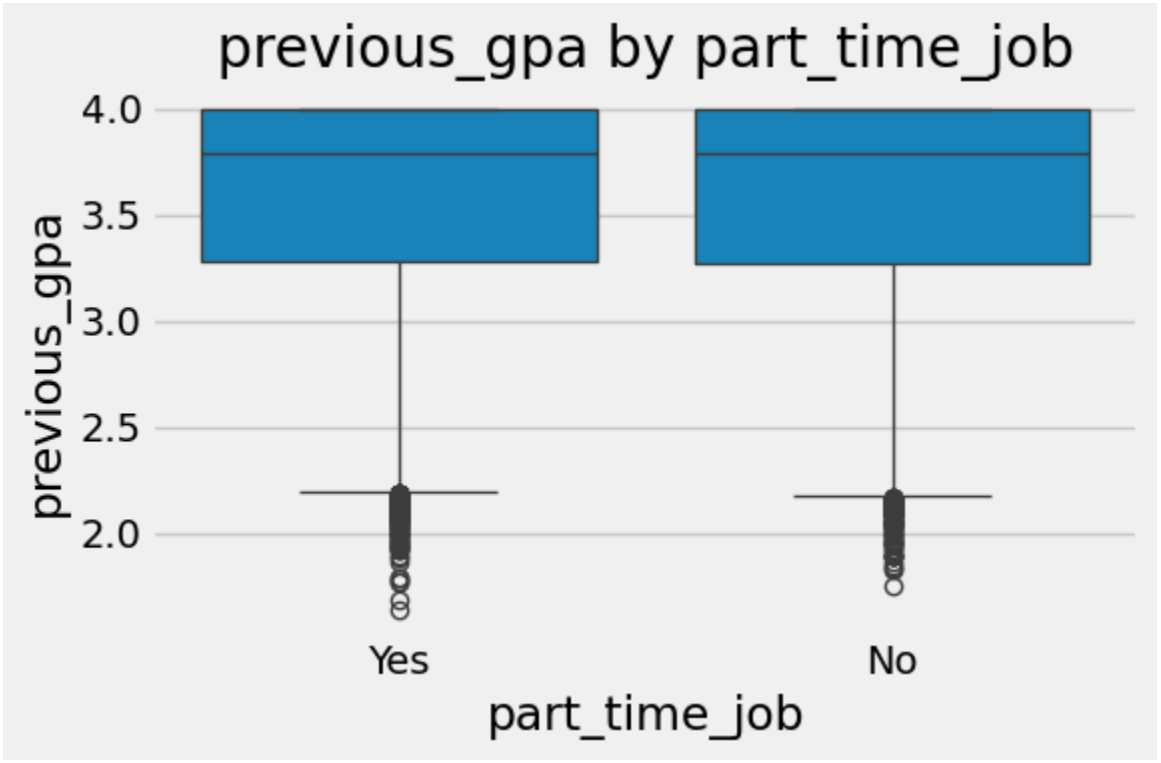

previous_gpa vs exam_anxiety_score (corr=-0.26)
exam_anxiety_score
10
9
8
7
6
5
2.0
2.5
3.0
3.5
4.0
previous_gpa


previous_gpa vs time_management_score (corr=0.01)
time_management_score
10
8
6
4
2
2.0
2.5
3.0
3.5
4.0
previous_gpa

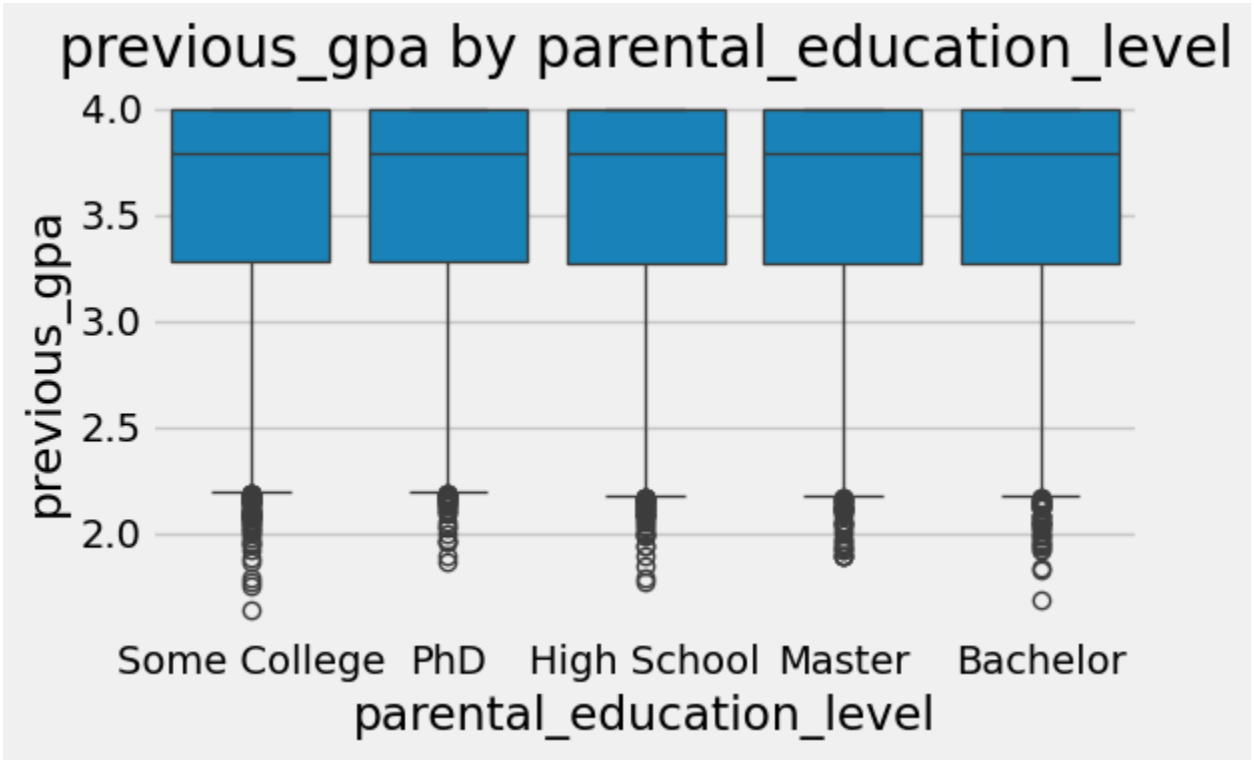

previous_gpa vs exam_score (corr=0.93)
exam_score
100
80
60
40
2.0
2.5
3.0
3.5
4.0
previous_gpa

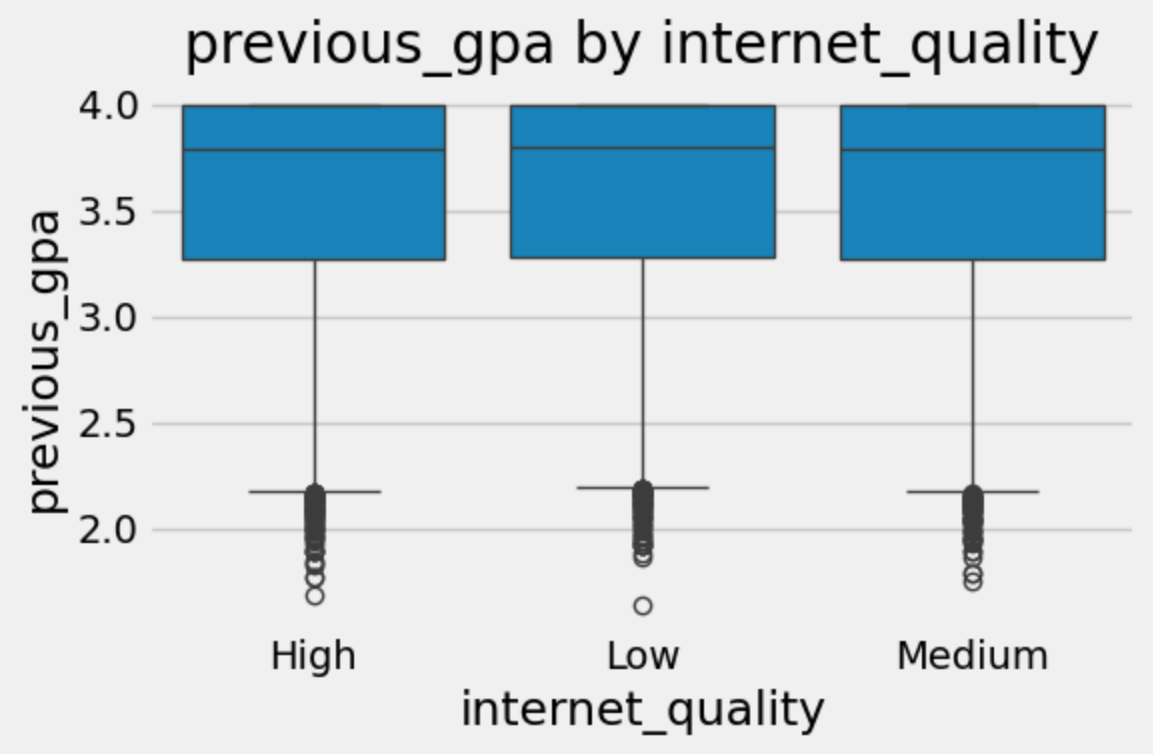

previous_gpa by gender
previous_gpa
4.0
3.5
3.0
2.5
2.0
Male
Other
Female
gender

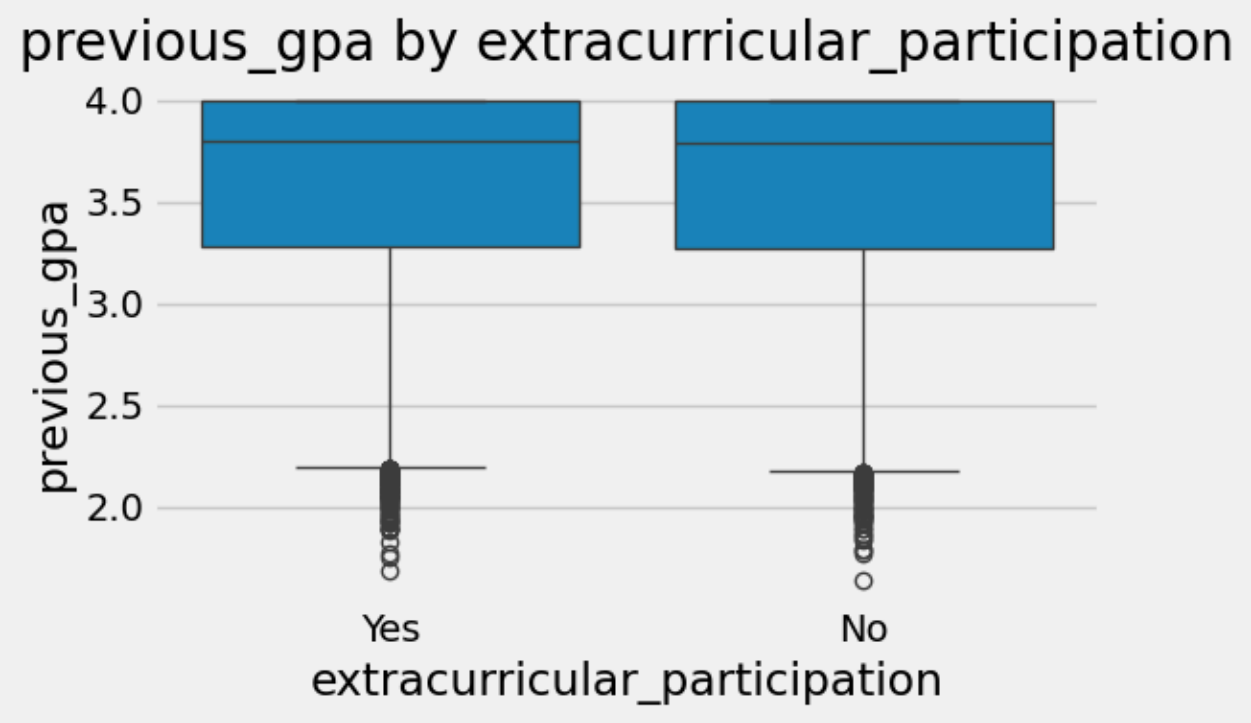

previous_gpa by major
previous_gpa
4.0
3.5
3.0
2.5
2.0
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

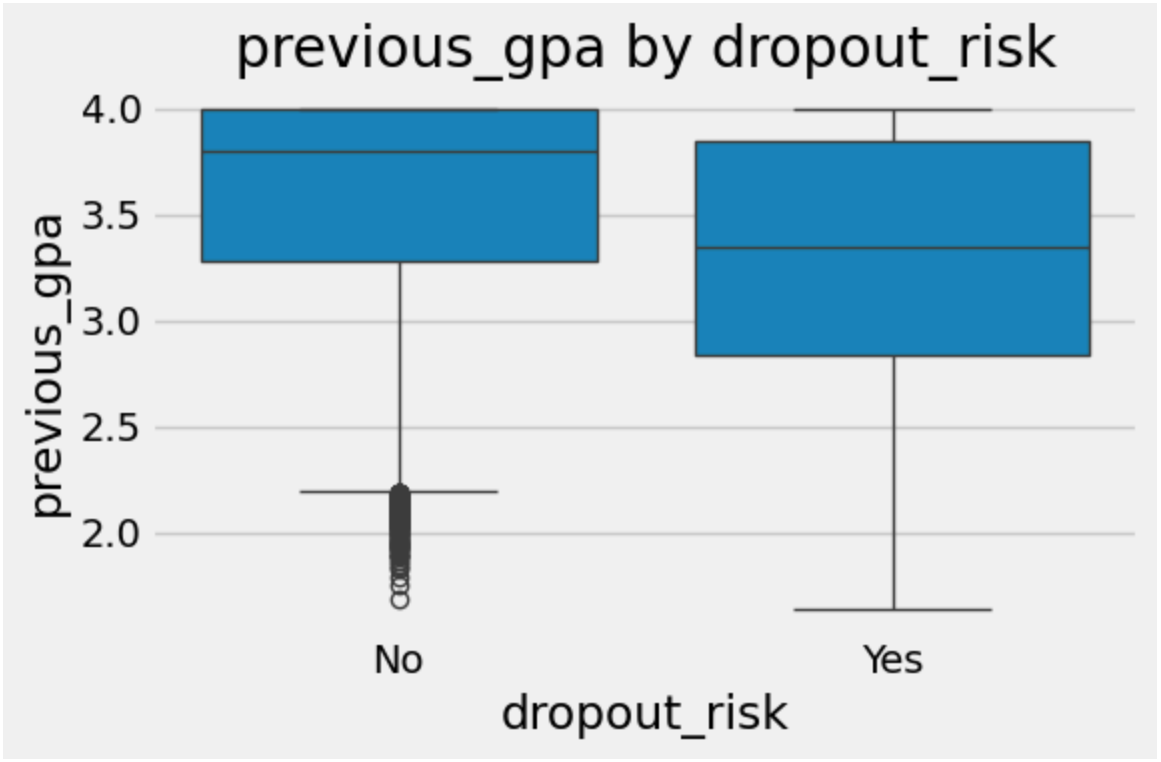

previous_gpa by part_time_job
previous_gpa
4.0
3.5
3.0
2.5
2.0
Yes
No
part_time_job

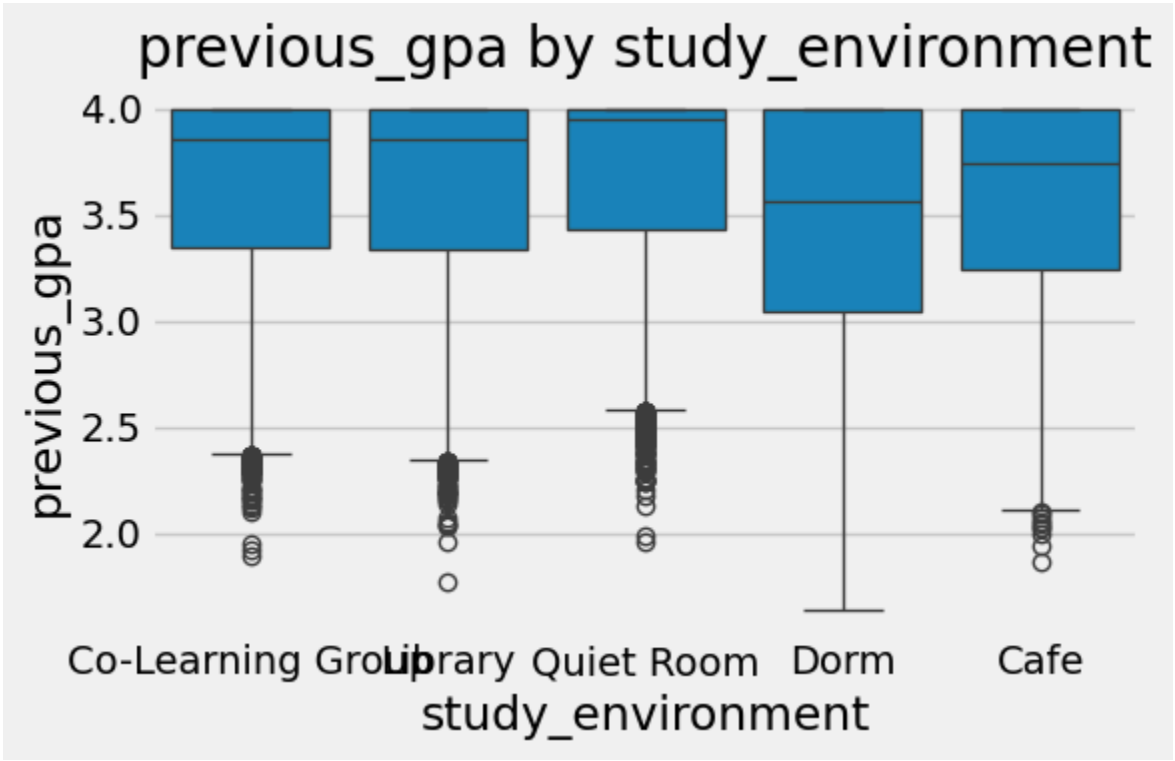

previous_gpa by diet_quality
previous_gpa
4.0
3.5
3.0
2.5
2.0
Poor
Good
Fair
diet_quality

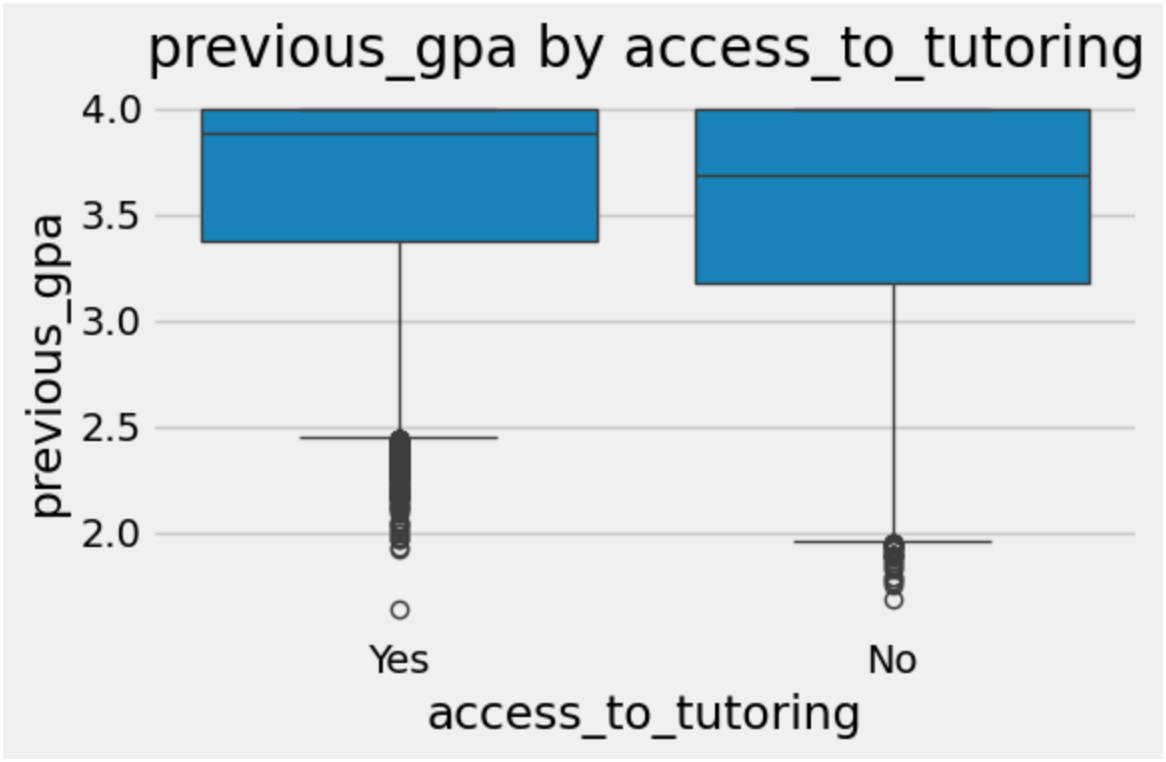

previous_gpa by parental_education_level
previous_gpa
4.0
3.5
3.0
2.5
2.0
Some College
PhD
High School
Master
Bachelor
parental_education_level

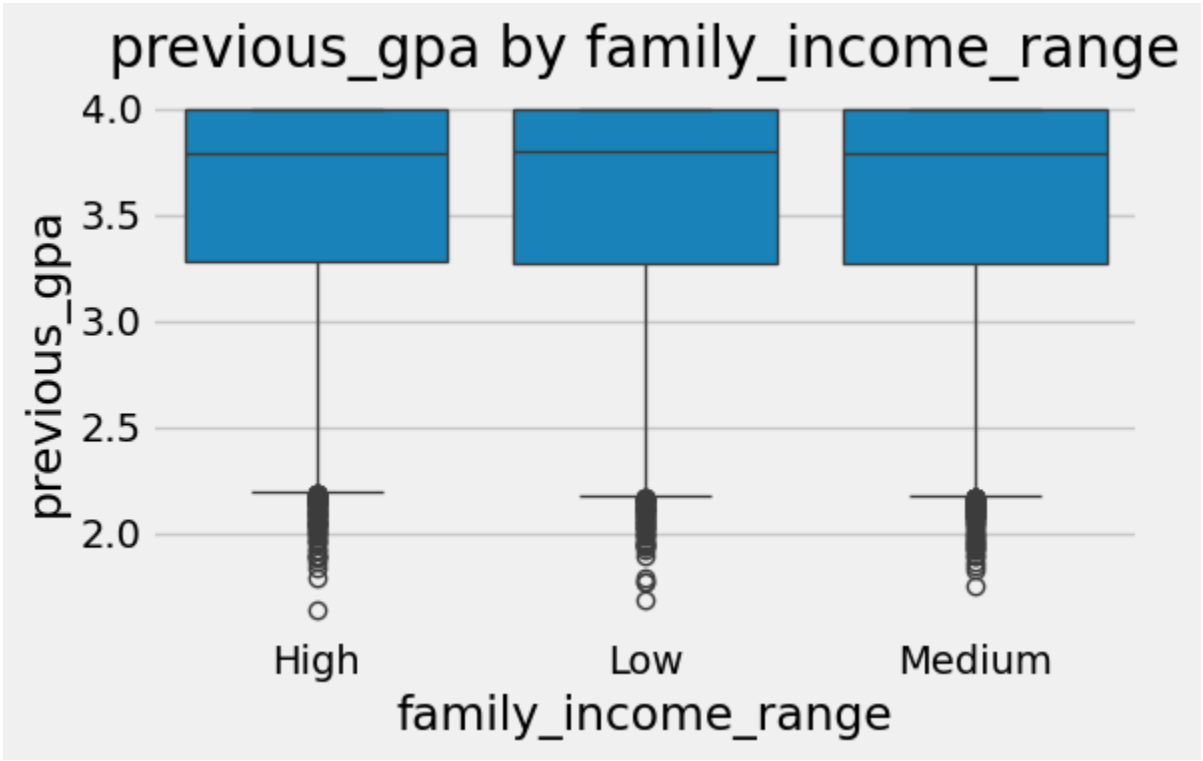

previous_gpa by internet_quality
previous_gpa
4.0
3.5
3.0
2.5
2.0
High
Low
Medium
internet_quality

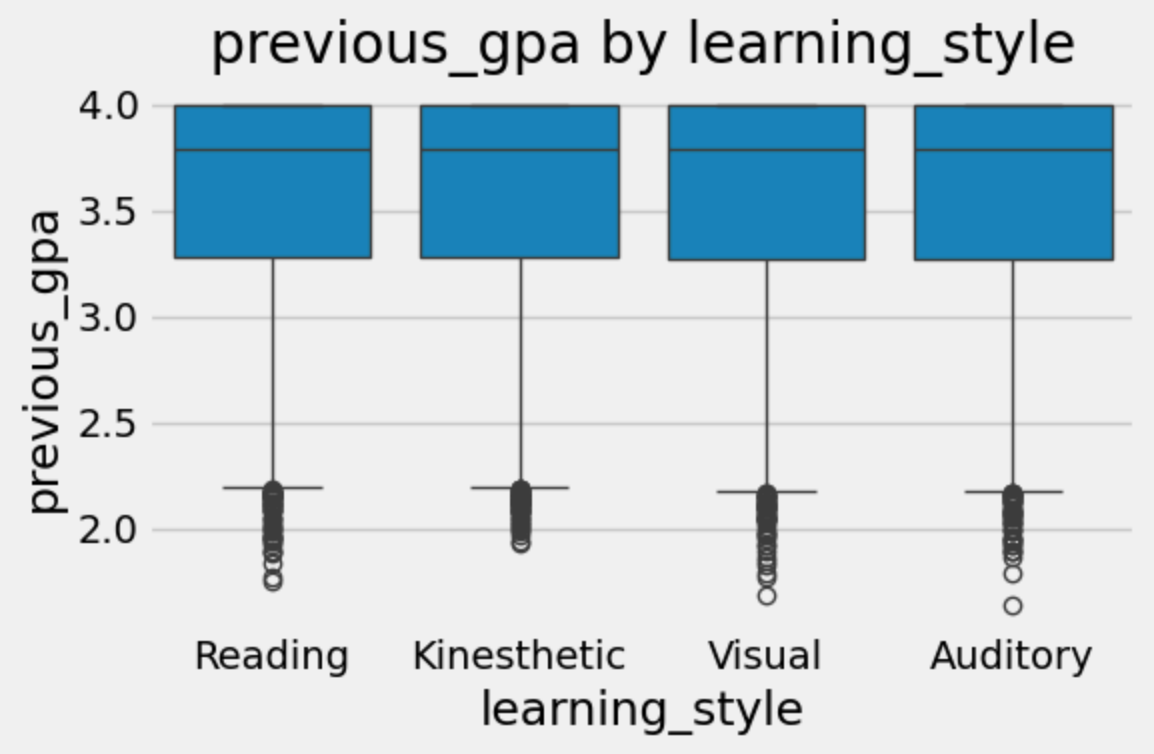

previous_gpa by extracurricular_participation
previous_gpa
4.0
3.5
3.0
2.5
2.0
Yes
No
extracurricular_participation

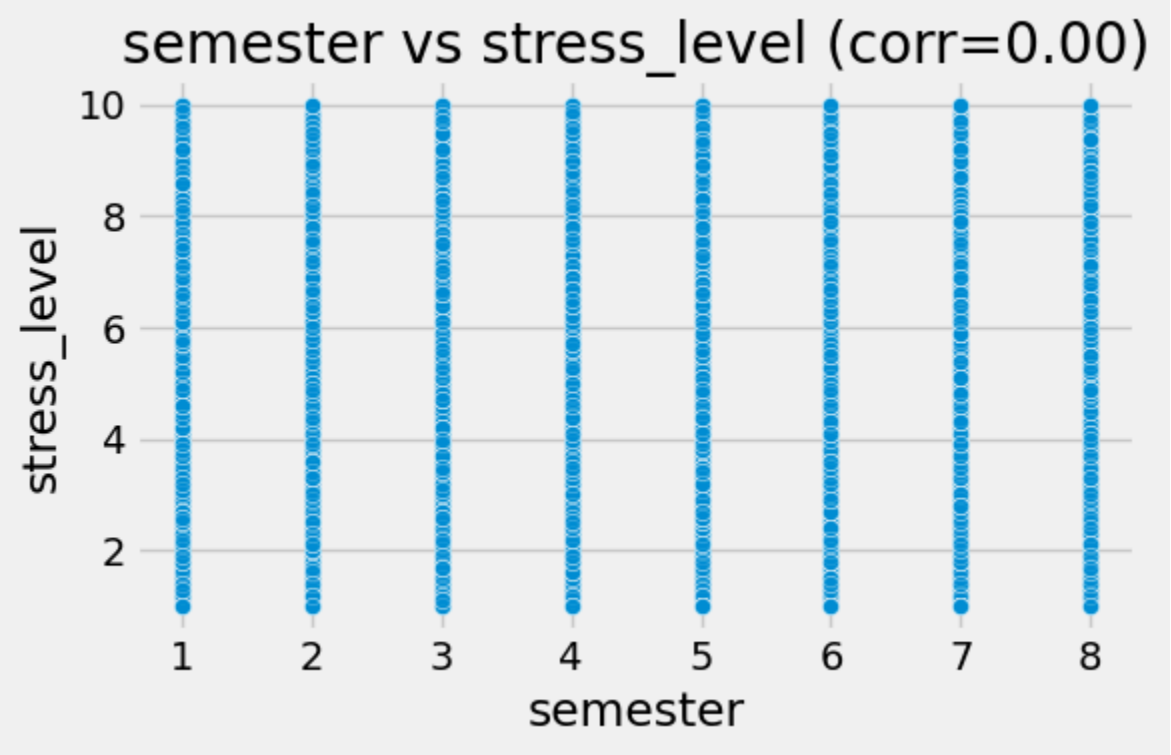

previous_gpa by dropout_risk
previous_gpa
4.0
3.5
3.0
2.5
2.0
No
Yes
dropout_risk

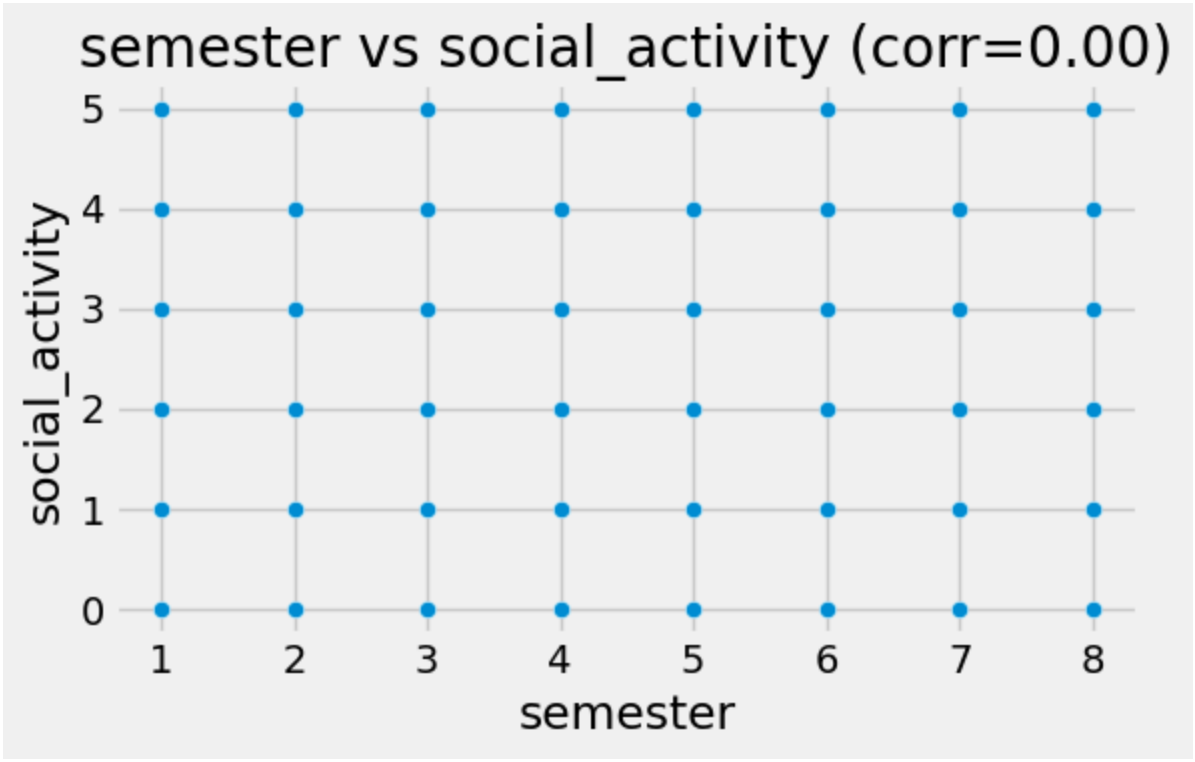

previous_gpa by study_environment
previous_gpa
4.0
3.5
3.0
2.5
2.0
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

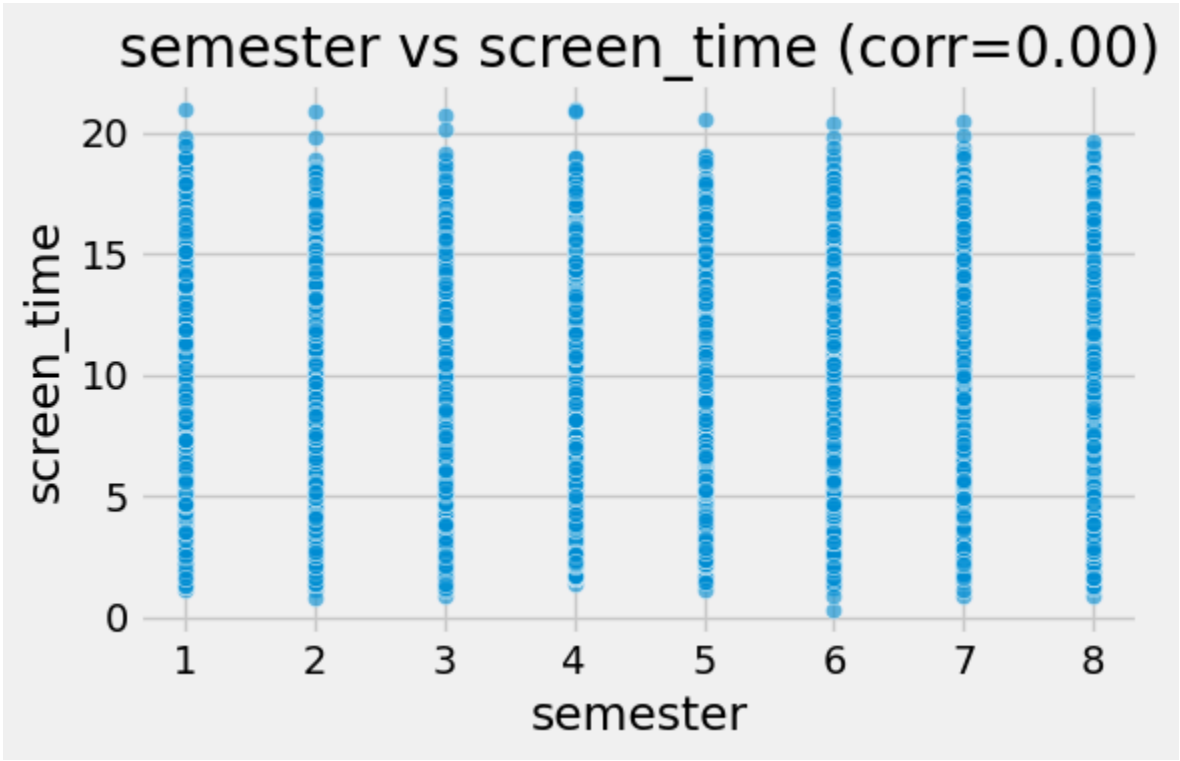

previous_gpa by access_to_tutoring
previous_gpa
4.0
3.5
3.0
2.5
2.0
Yes
No
access_to_tutoring

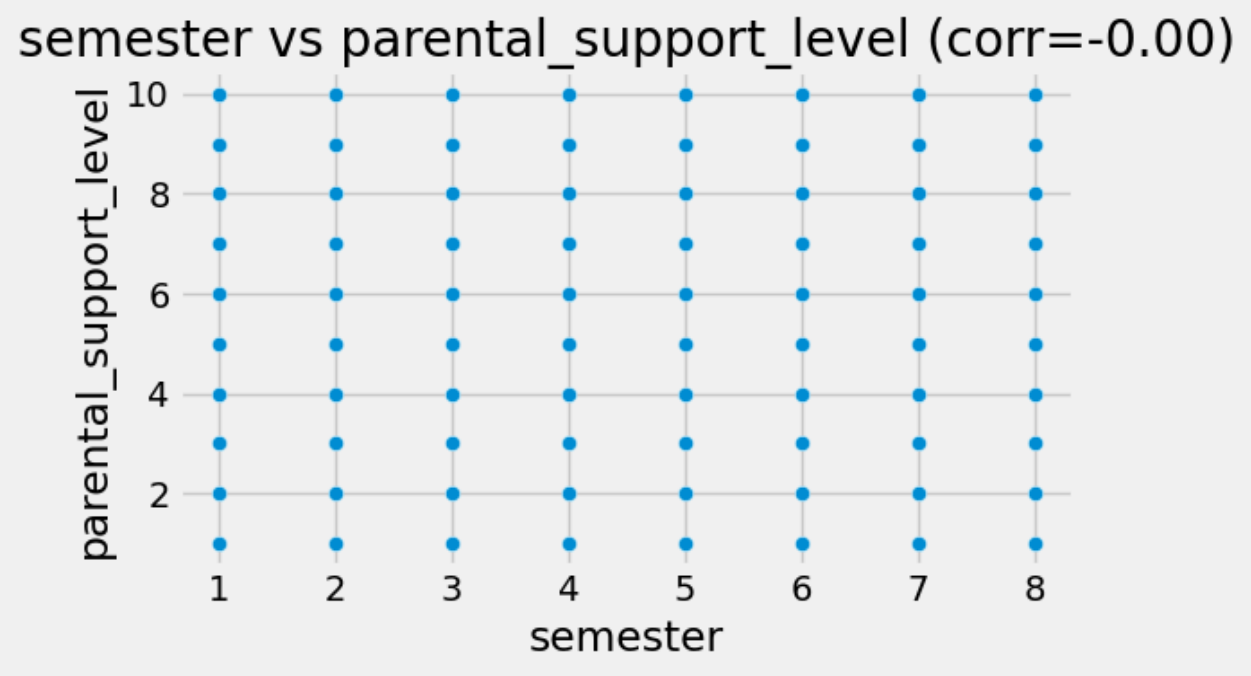

previous_gpa by family_income_range
previous_gpa
4.0
3.5
3.0
2.5
2.0
High
Low
Medium
family_income_range

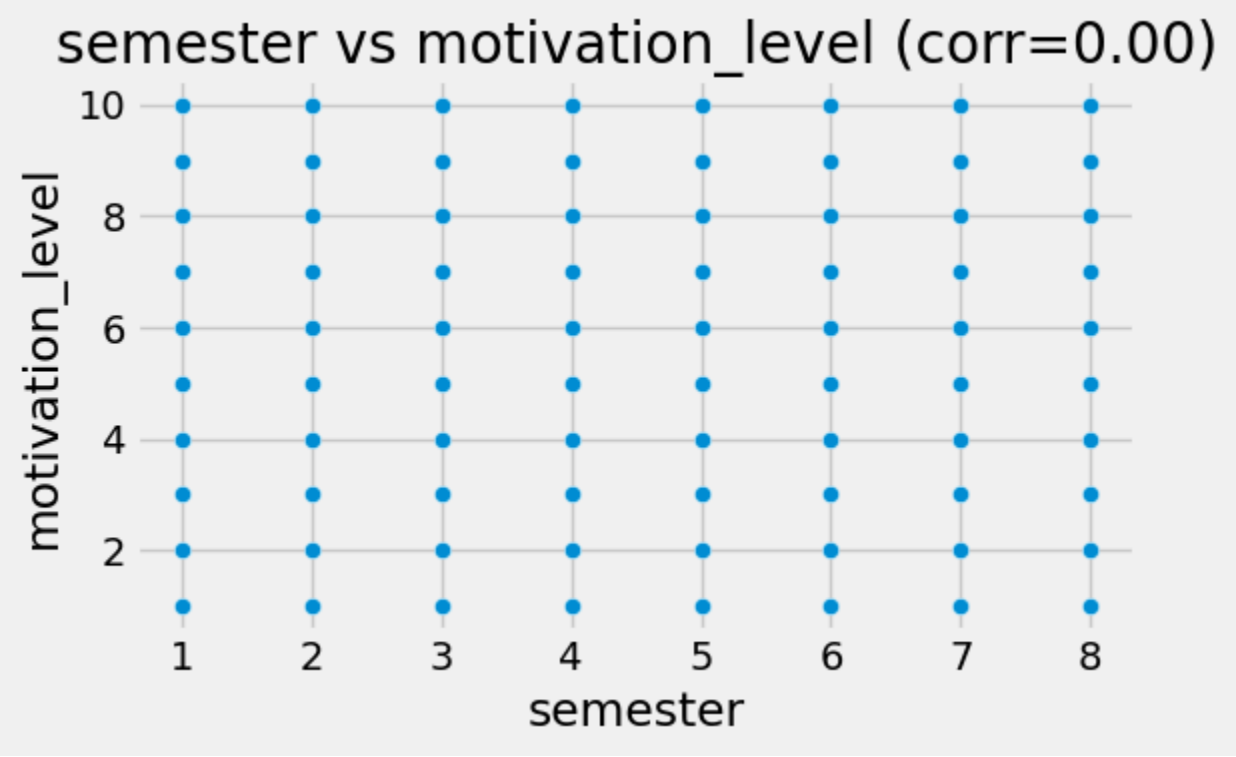

previous_gpa by learning_style
previous_gpa
4.0
3.5
3.0
2.5
2.0
Reading
Kinesthetic
Visual
Auditory
learning_style

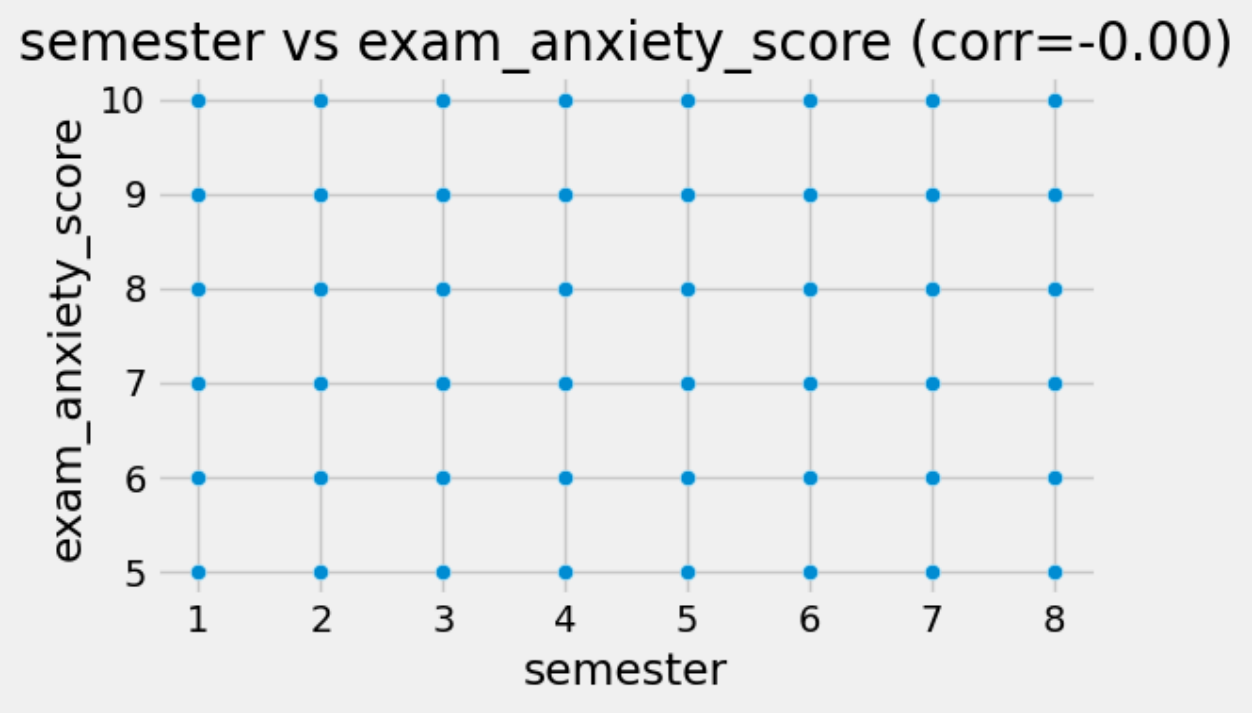

semester vs stress_level (corr=0.00)
stress_level
10
8
6
4
2
1
2
3
4
5
6
7
8
semester

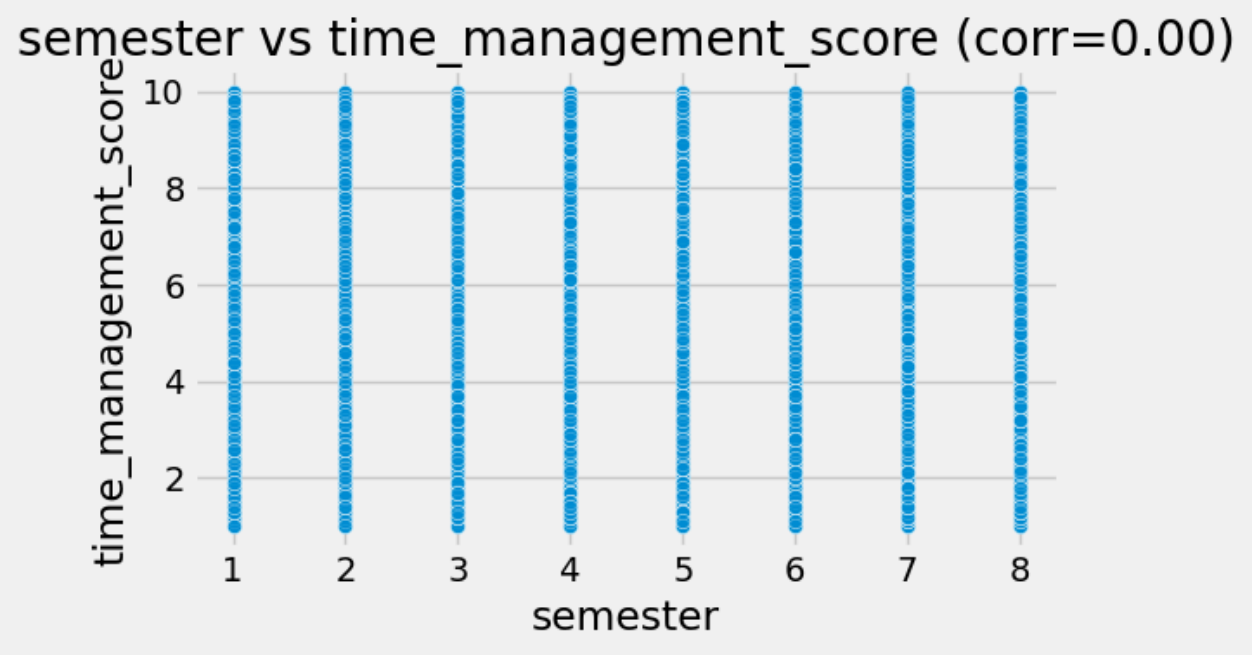

semester vs social_activity (corr=0.00)
social_activity
0
1
2
3
4
5
1
2
3
4
5
6
7
8
semester

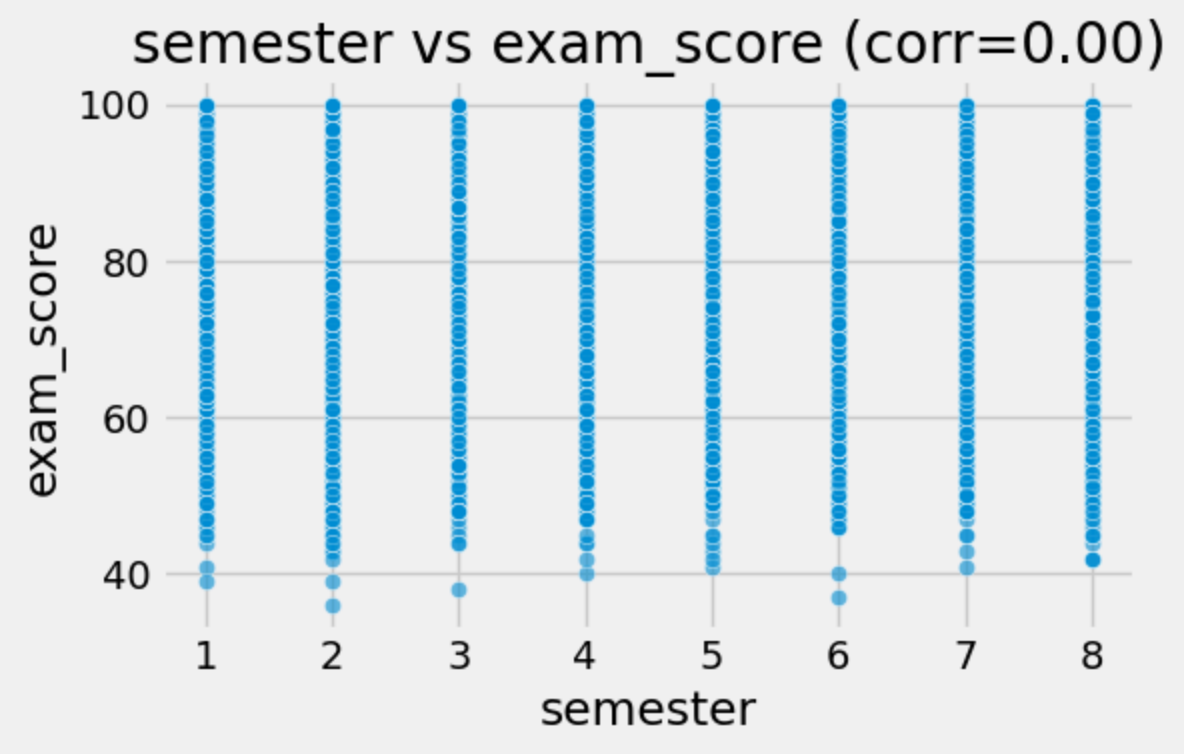

semester vs screen_time (corr=0.00)
screen_time
0
5
10
15
20
1
2
3
4
5
6
7
8
semester

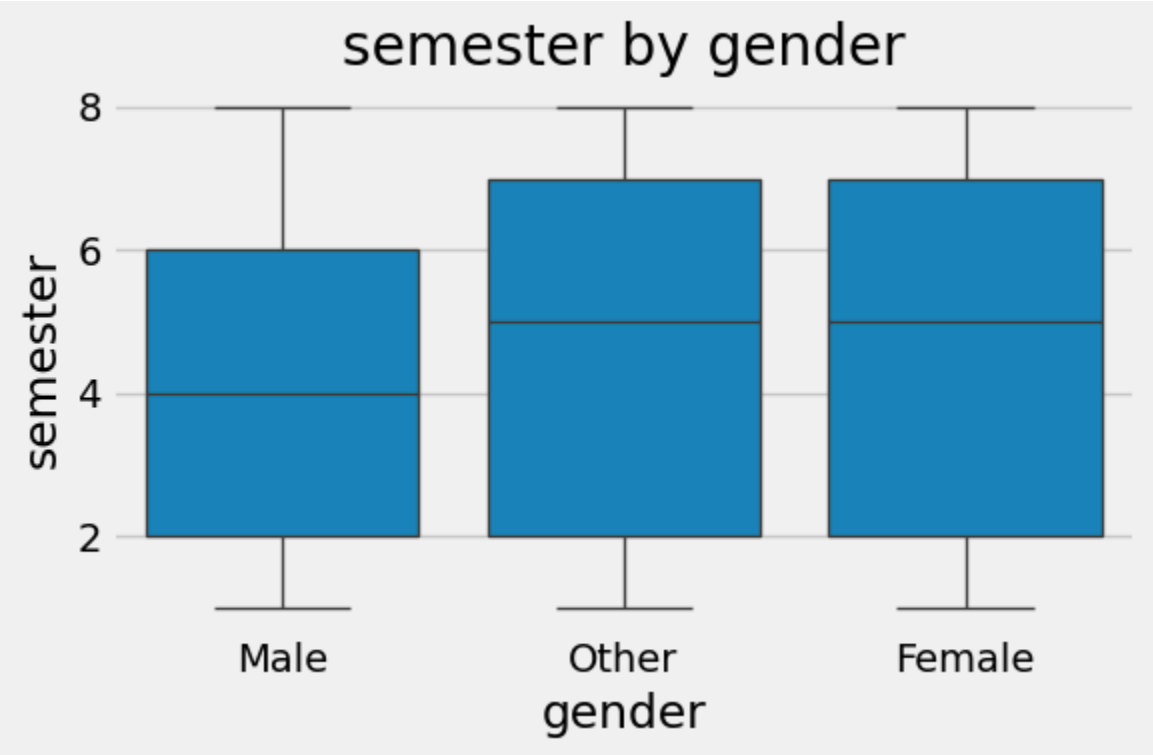

semester vs parental_support_level (corr=-0.00)
parental_support_level
10
8
6
4
2
1
2
3
4
5
6
7
8
semester

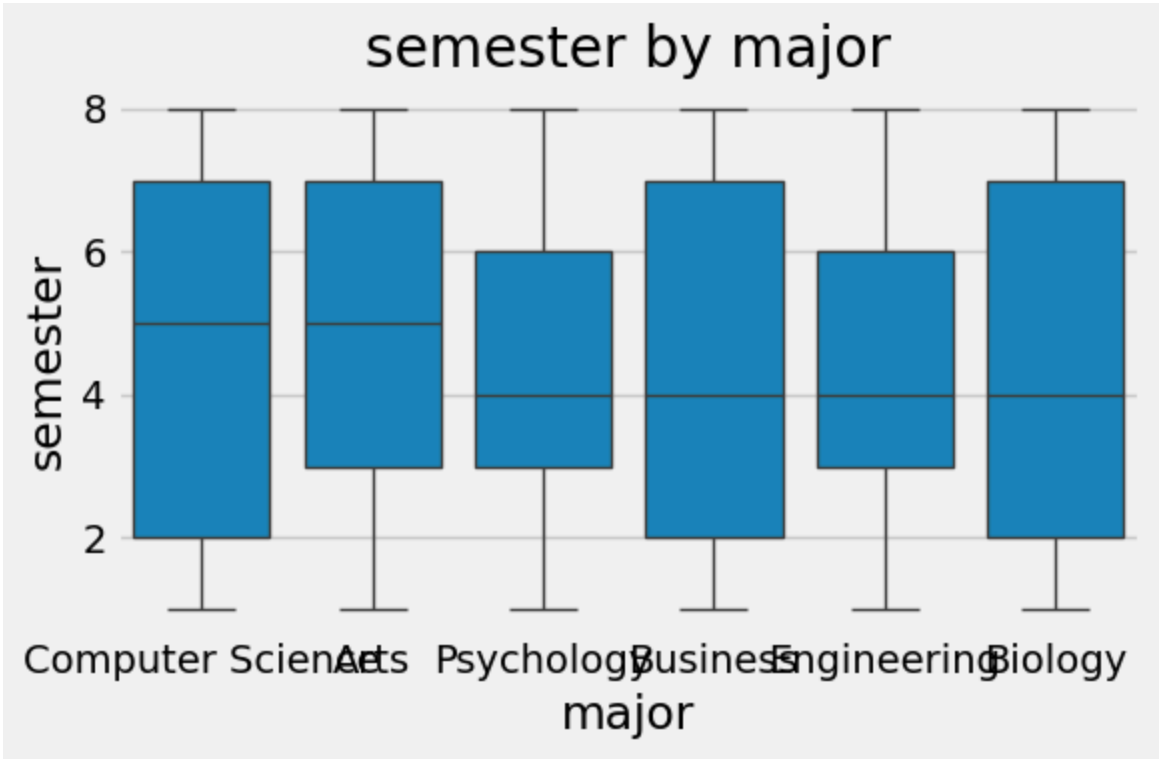

semester vs motivation_level (corr=0.00)
motivation_level
10
8
6
4
2
1
2
3
4
5
6
7
8
semester

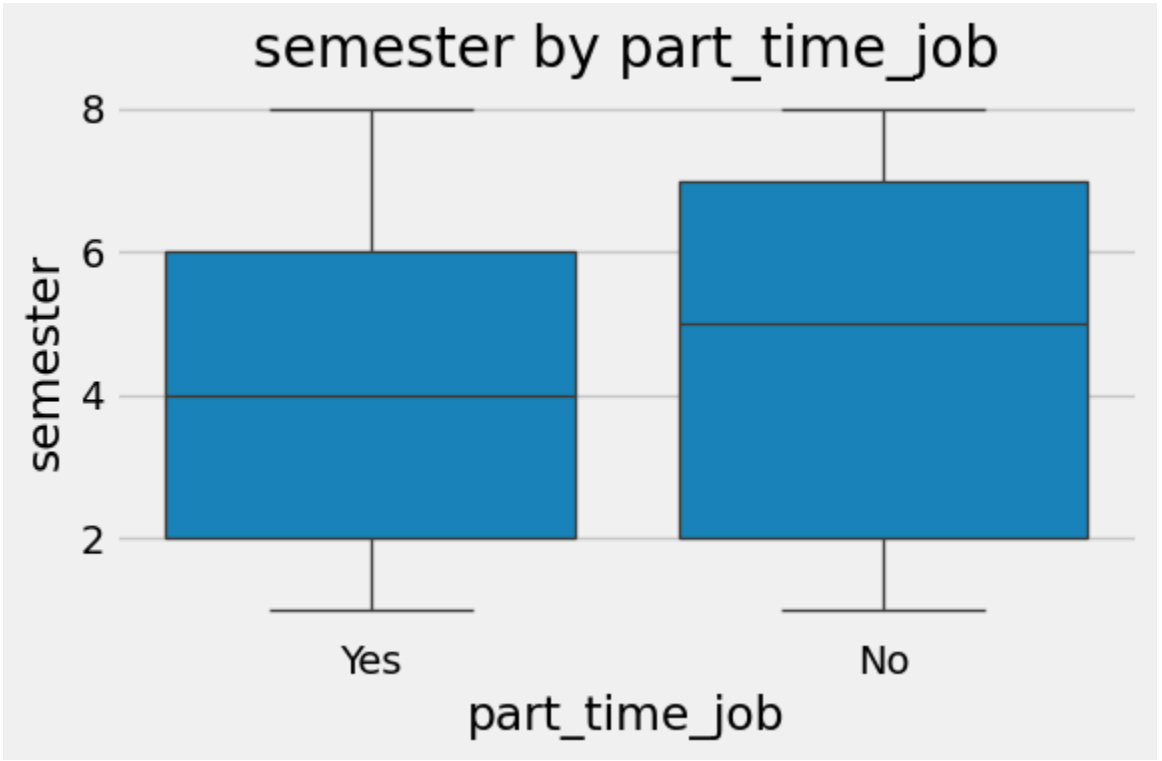

semester vs exam_anxiety_score (corr=-0.00)
exam_anxiety_score
10
9
8
7
6
5
1
2
3
4
5
6
7
8
semester


semester vs time_management_score (corr=0.00)
time_management_score
10
8
6
4
2
1
2
3
4
5
6
7
8
semester

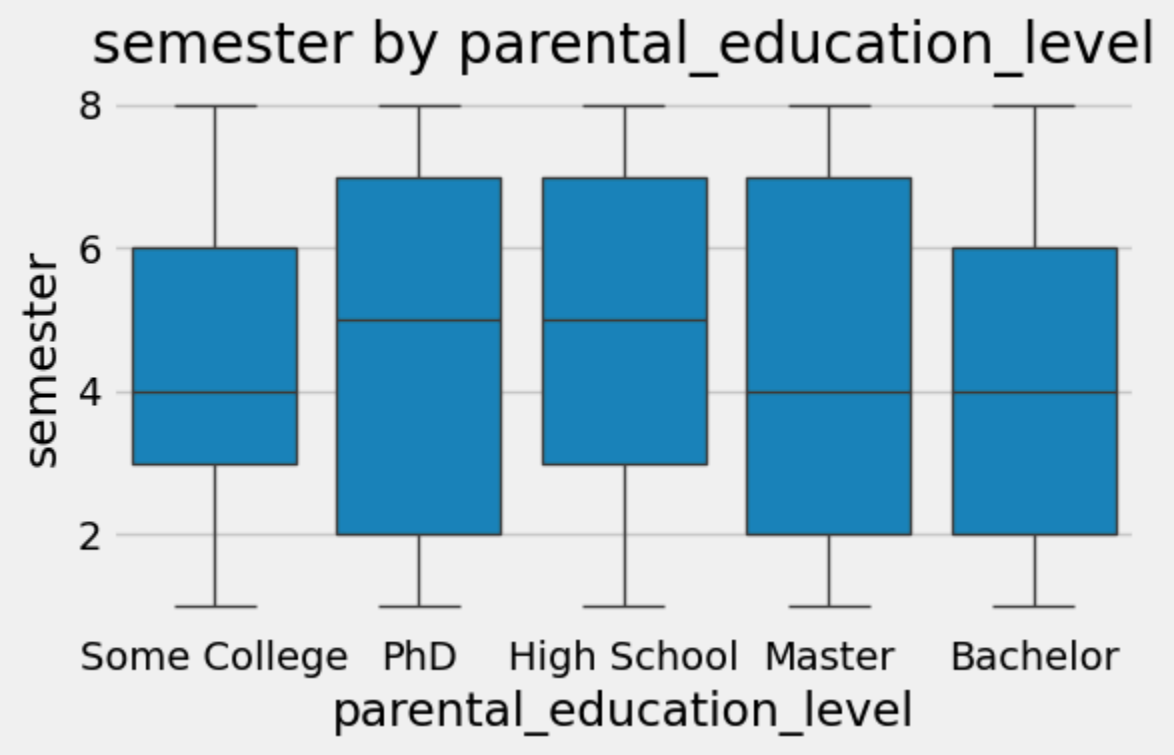

semester vs exam_score (corr=0.00)
exam_score
100
80
60
40
1
2
3
4
5
6
7
8
semester

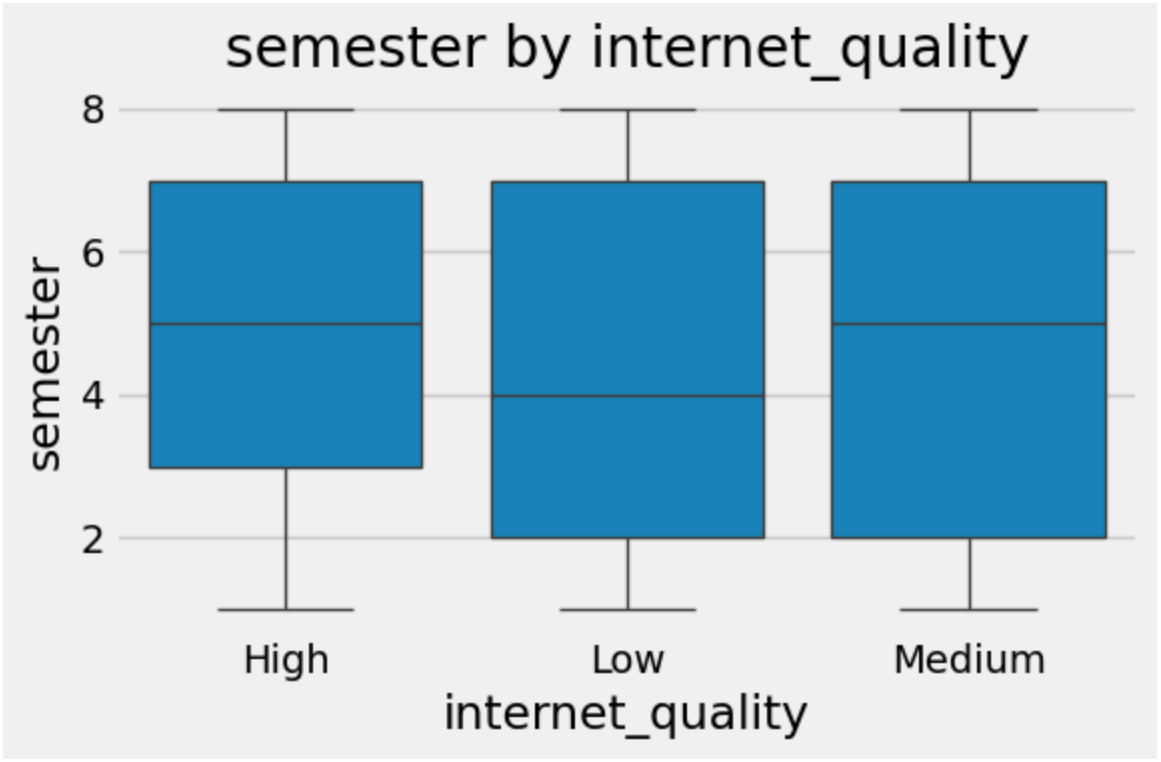

semester by gender
semester
8
6
4
2
Male
Other
Female
gender

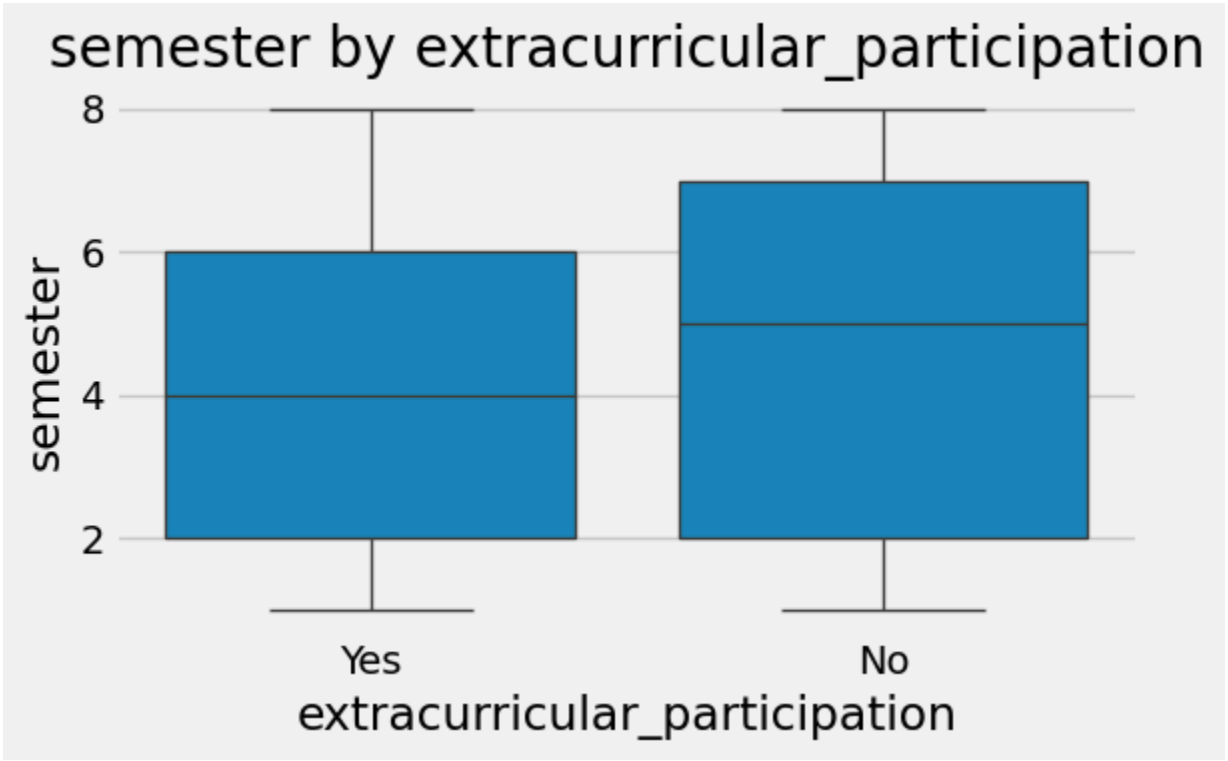

semester by major
8
6
4
2
semester
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

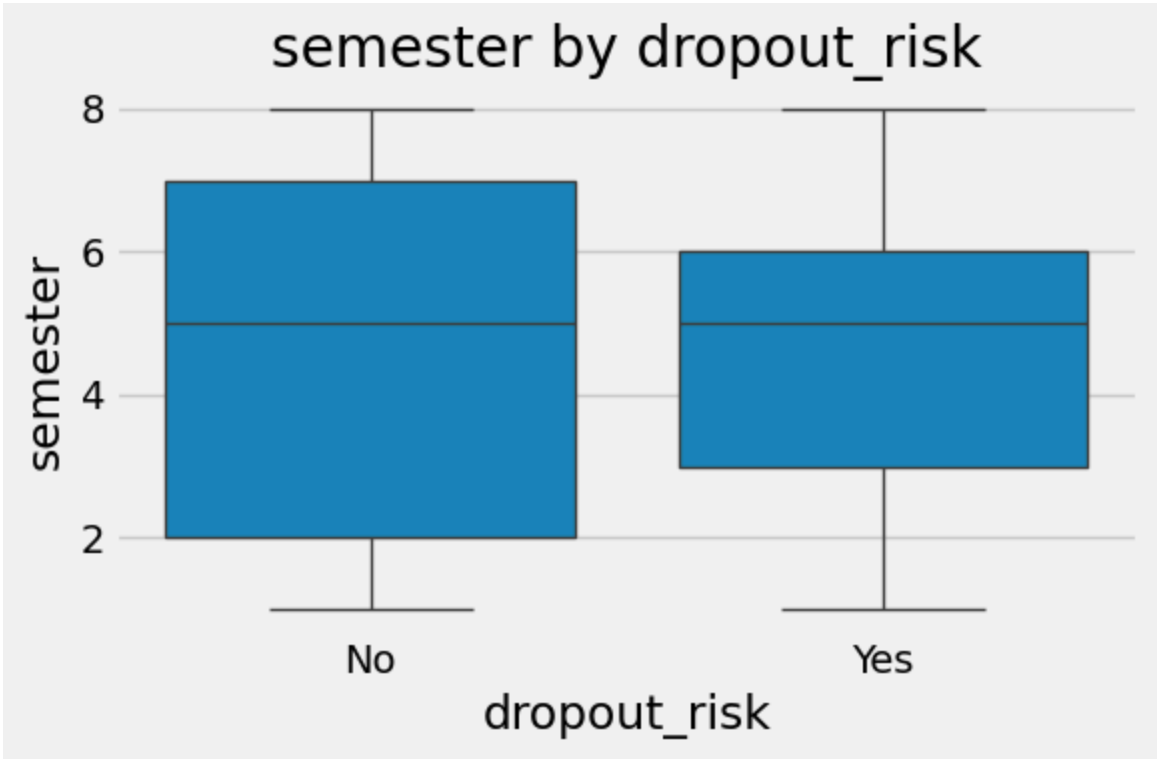

semester by part_time_job
8
6
4
2
semester
Yes
No
part_time_job

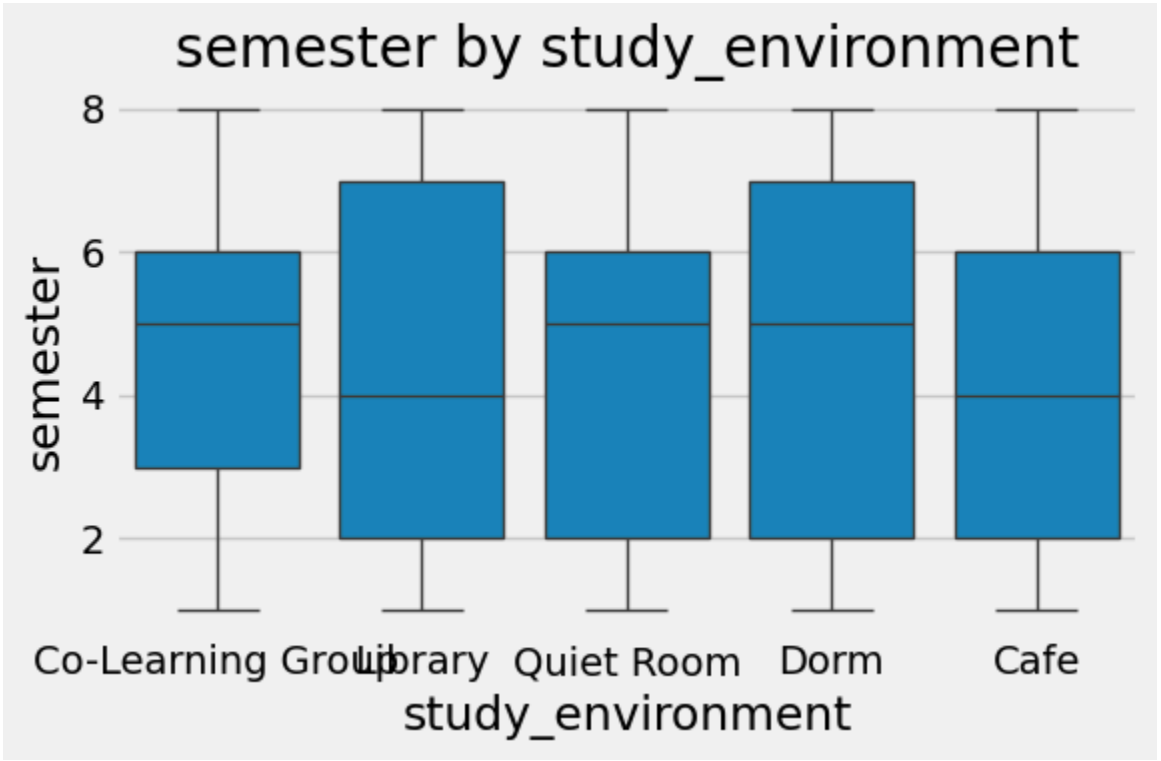

semester by diet_quality
8
6
4
2
semester
Poor
Good
Fair
diet_quality

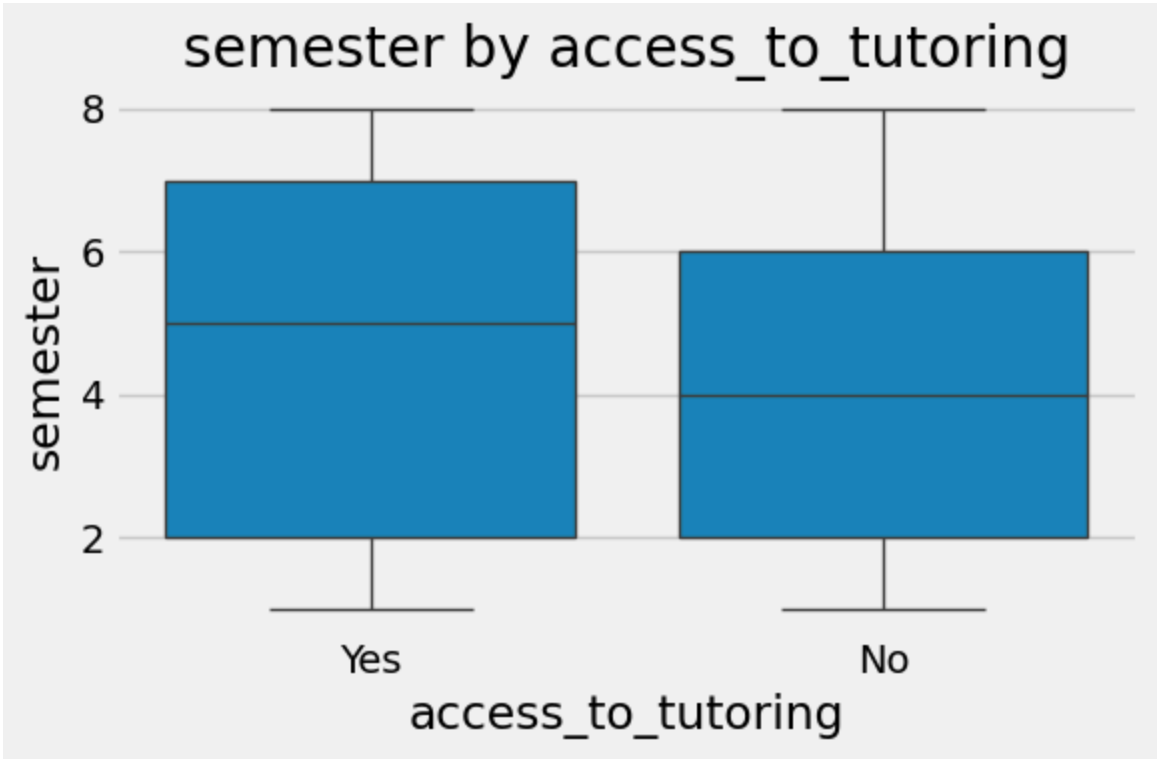

semester by parental_education_level
8
6
4
2
semester
Some College
PhD
High School
Master
Bachelor
parental_education_level

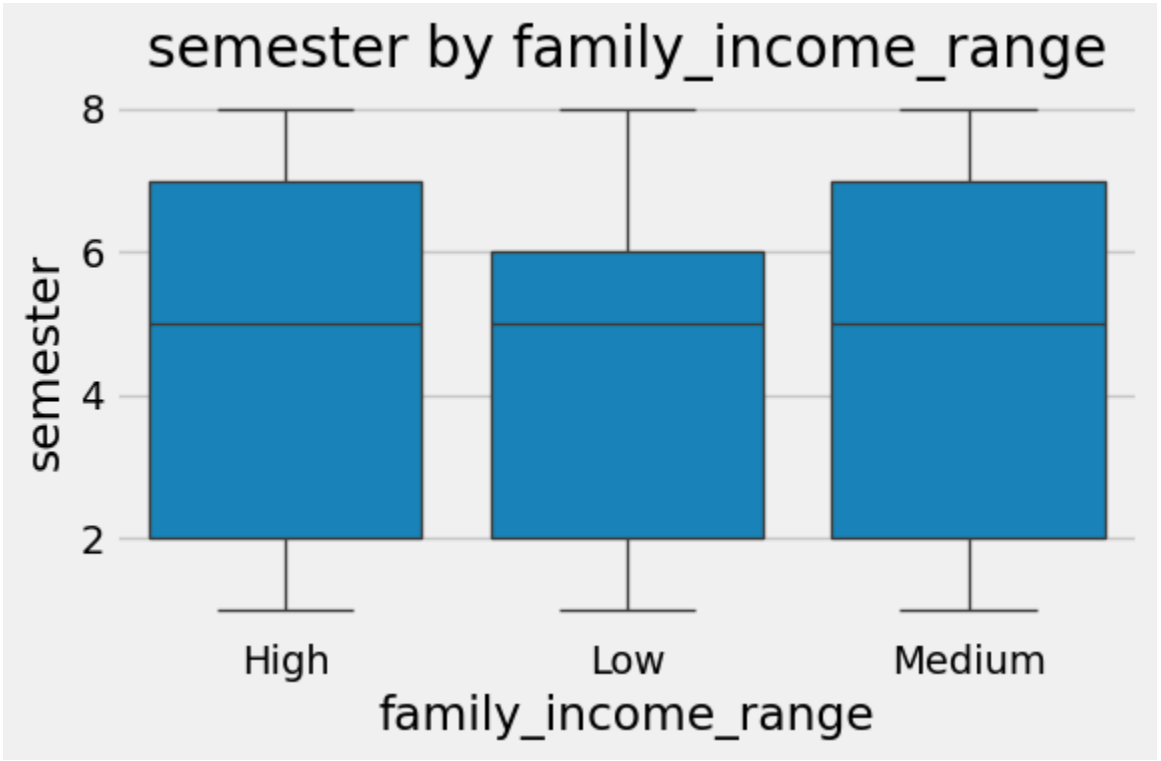

semester by internet_quality
8
6
4
2
semester
High
Low
Medium
internet_quality

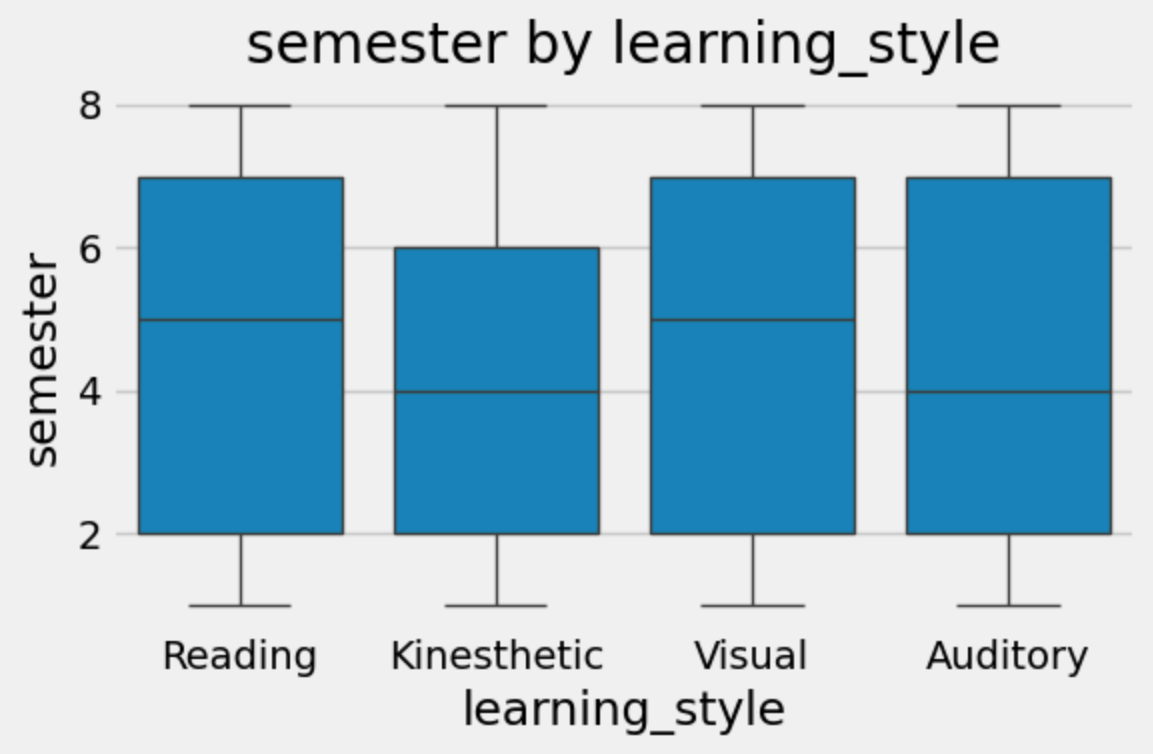

semester by extracurricular_participation
8
6
4
2
semester
Yes
No
extracurricular_participation

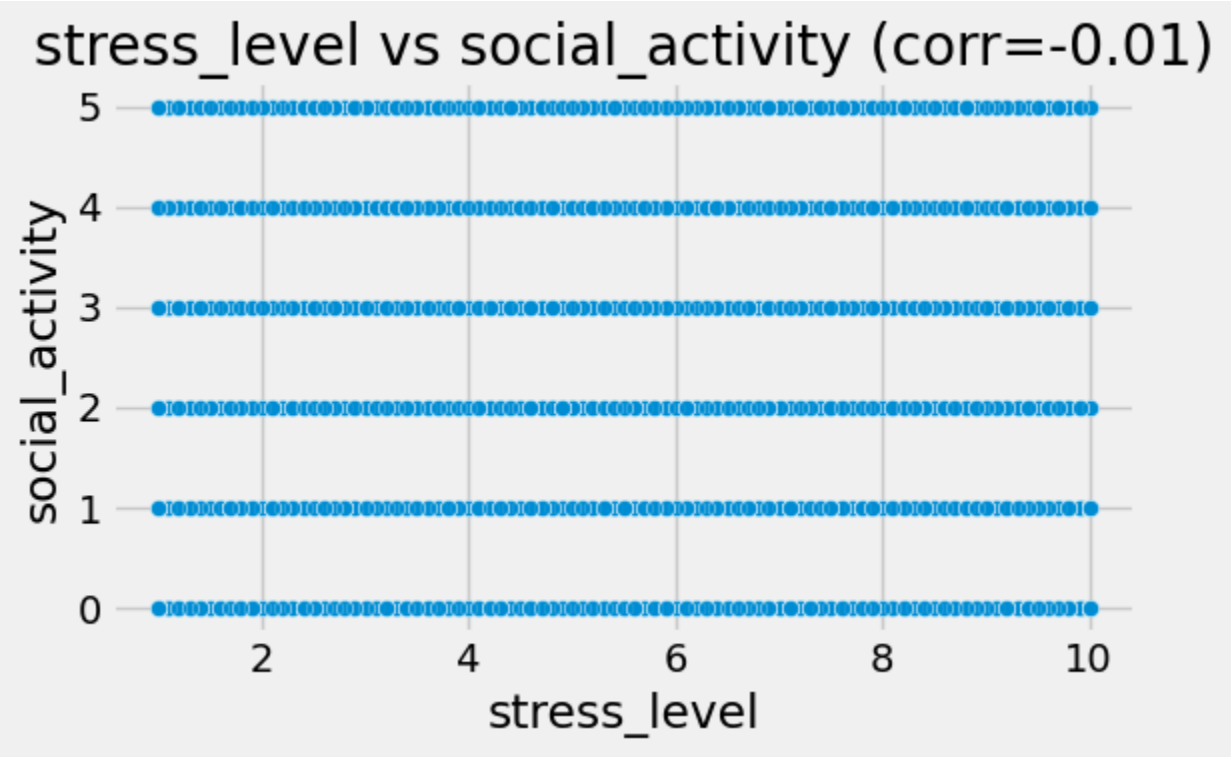

semester by dropout_risk
8
6
4
2
semester
No
Yes
dropout_risk

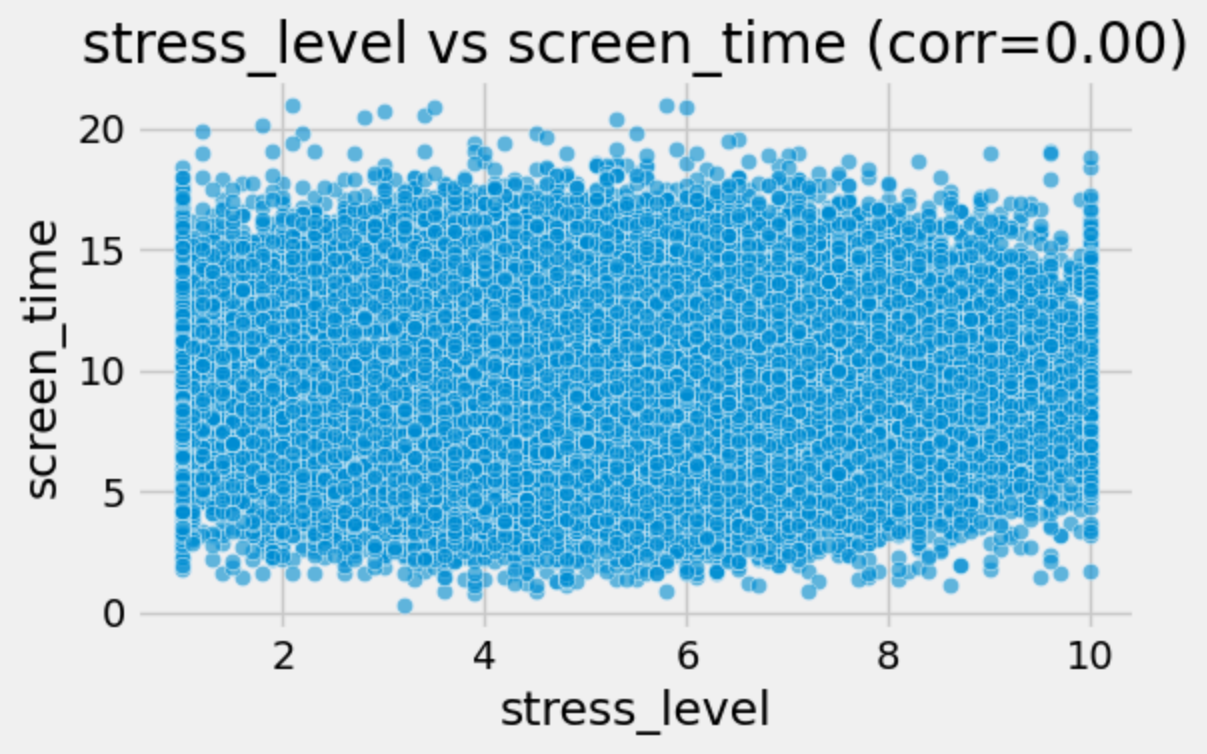

semester by study_environment
8
6
4
2
semester
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

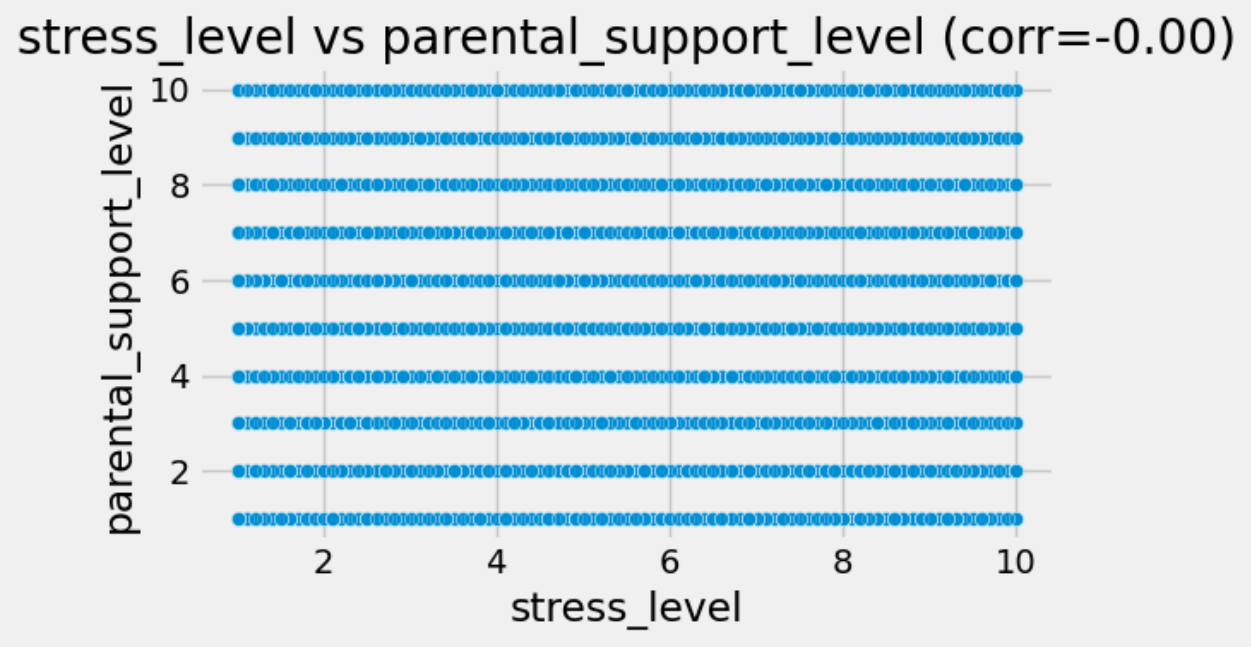

semester by access_to_tutoring
8
6
4
2
semester
Yes
No
access_to_tutoring

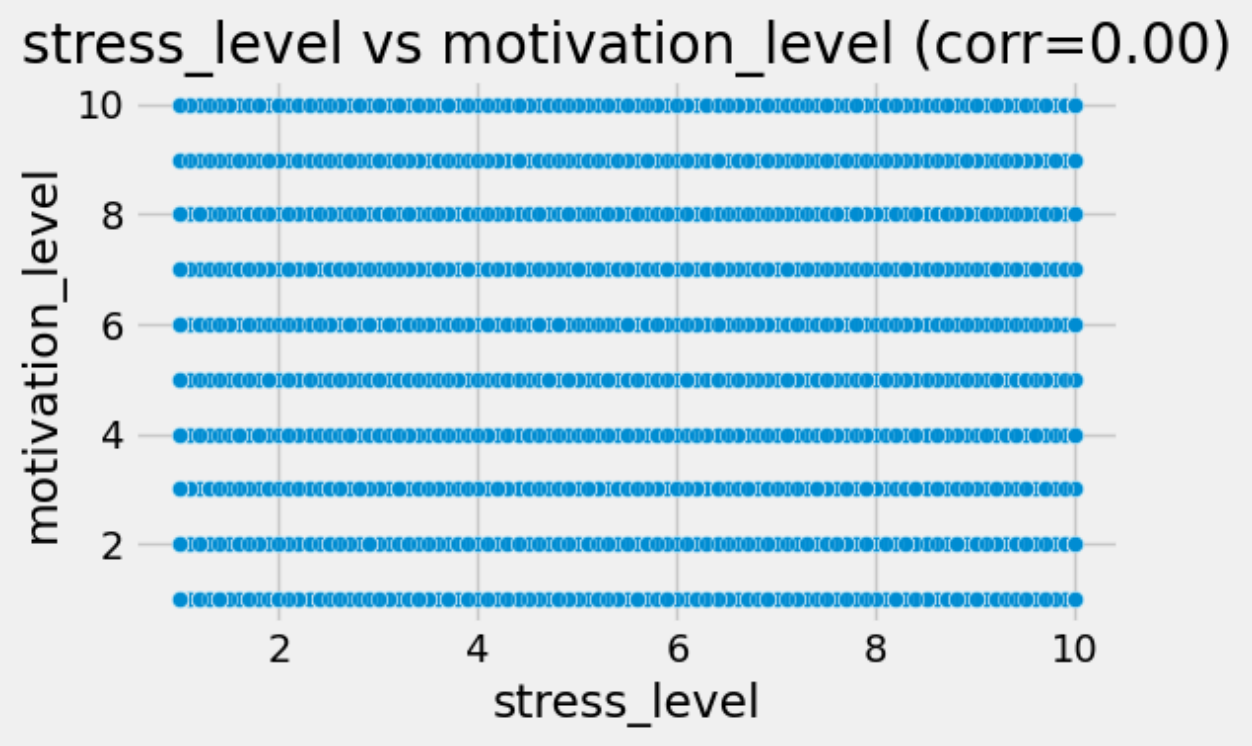

semester by family_income_range
8
6
4
2
semester
High
Low
Medium
family_income_range

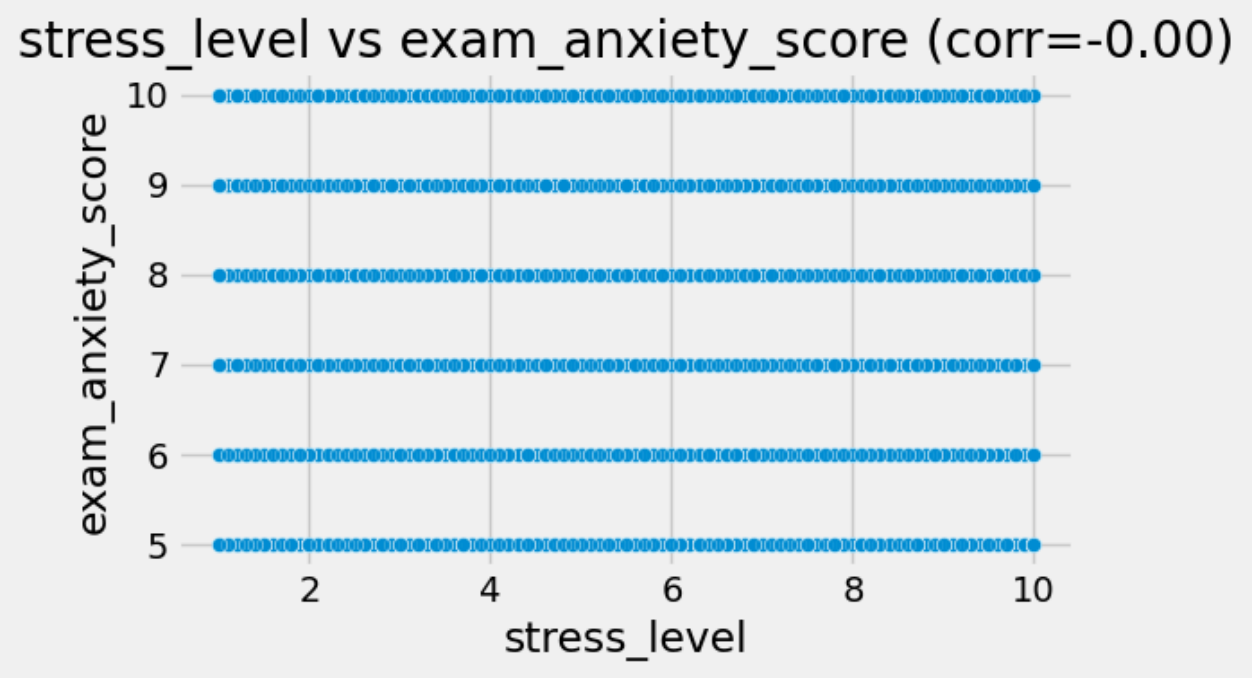

semester by learning_style
semester
8
6
4
2
Reading
Kinesthetic
Visual
Auditory
learning_style

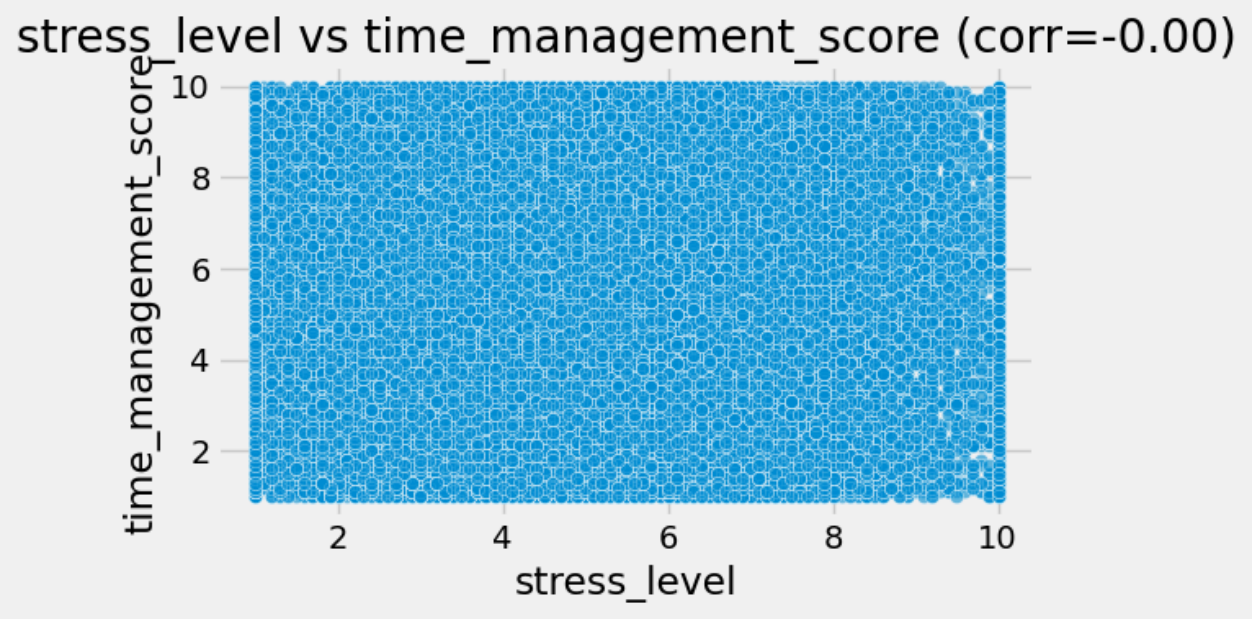

stress_level vs social_activity (corr=-0.01)
social_activity
5
4
3
2
1
0
2
4
6
8
10
stress_level

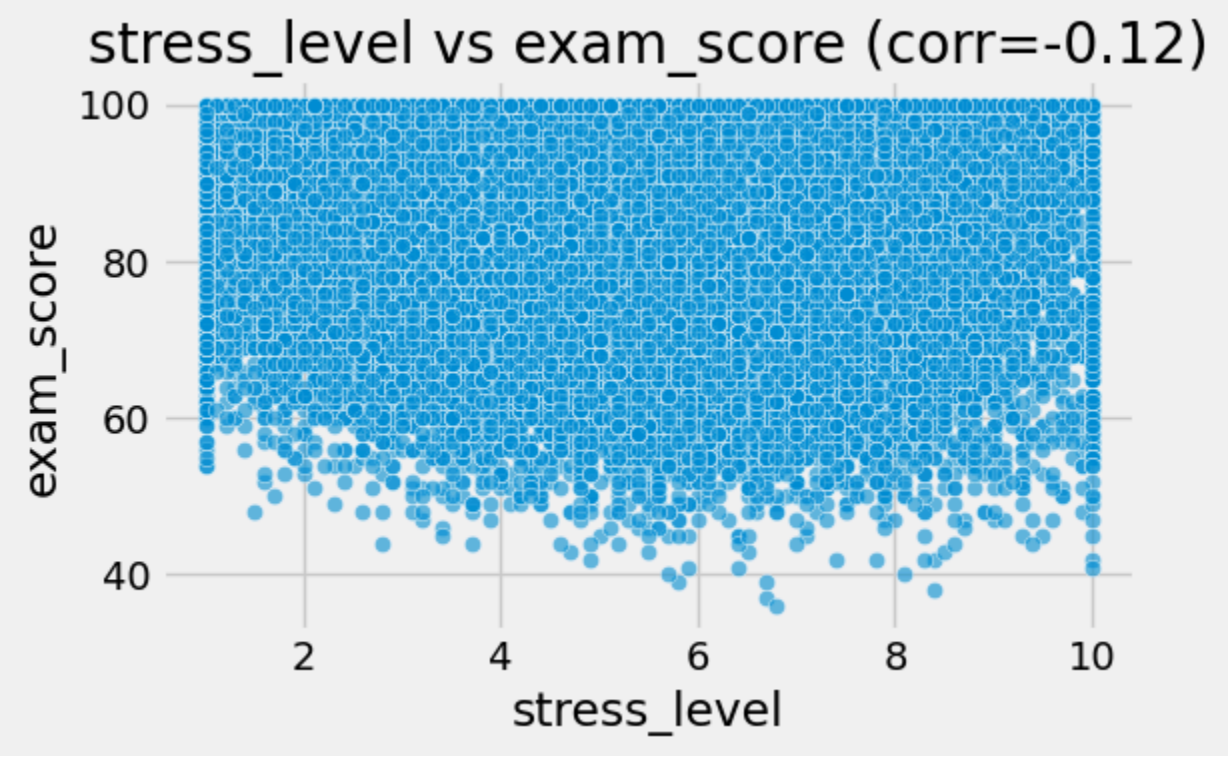

stress_level vs screen_time (corr=0.00)
screen_time
0
5
10
15
20
2
4
6
8
10
stress_level

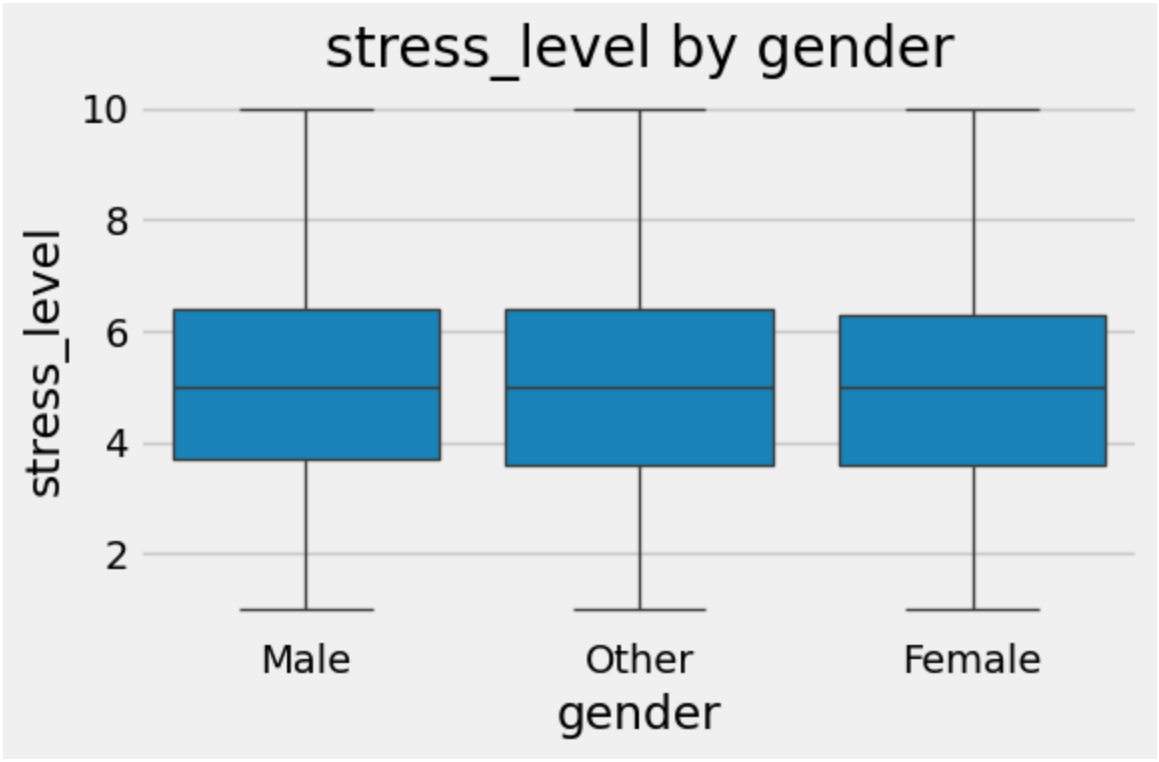

stress_level vs parental_support_level (corr=-0.00)
parental_support_level
2
4
6
8
10
2
4
6
8
10
stress_level

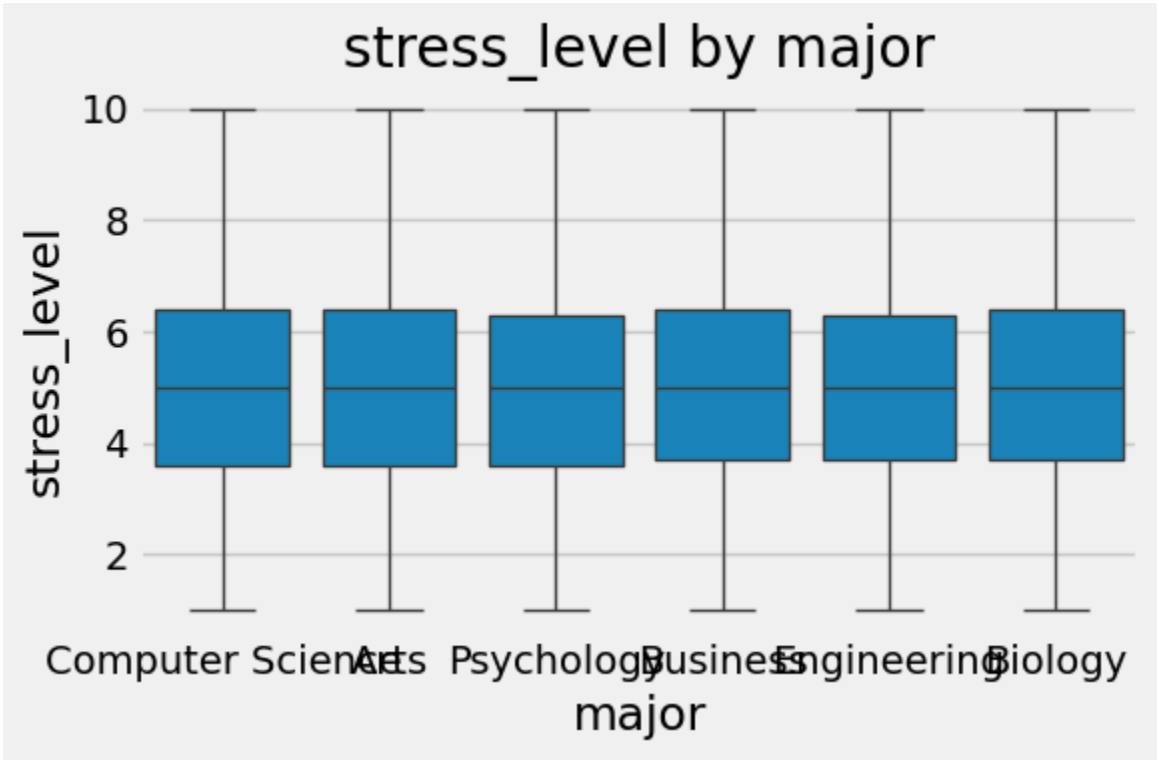

stress_level vs motivation_level (corr=0.00)
motivation_level
10
8
6
4
2
2
4
6
8
10
stress_level


stress_level vs exam_anxiety_score (corr=-0.00)
exam_anxiety_score
10
9
8
7
6
5
2
4
6
8
10
stress_level


stress_level vs time_management_score (corr=-0.00)
time_management_score
10
8
6
4
2
2
4
6
8
10
stress_level

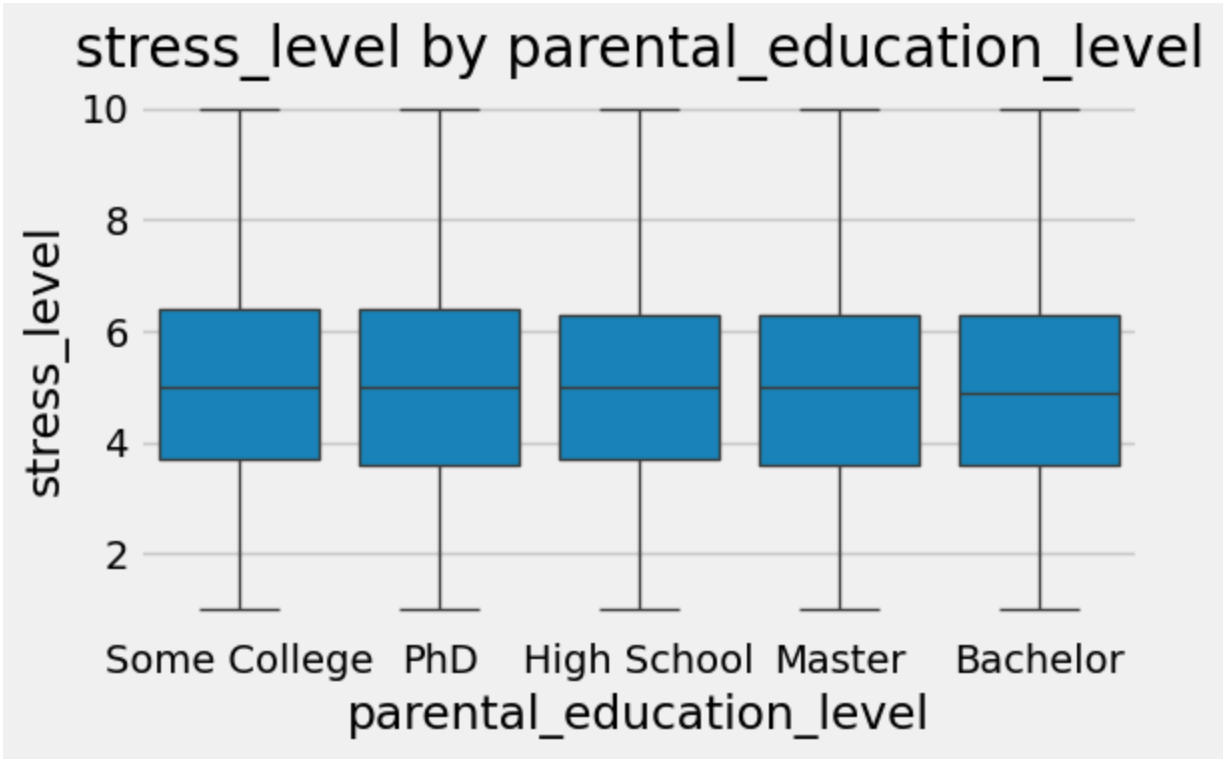

stress_level vs exam_score (corr=-0.12)
exam_score
100
80
60
40
2
4
6
8
10
stress_level

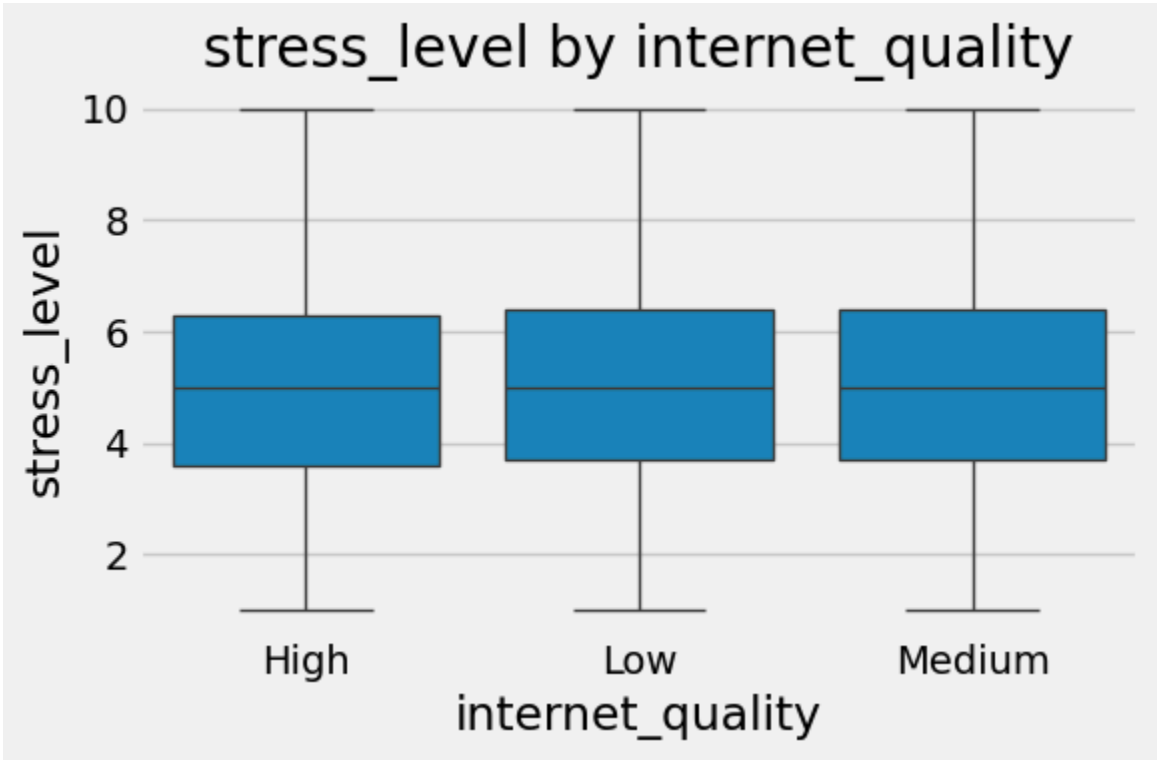

stress_level by gender
stress_level
10
8
6
4
2
Male
Other
Female
gender

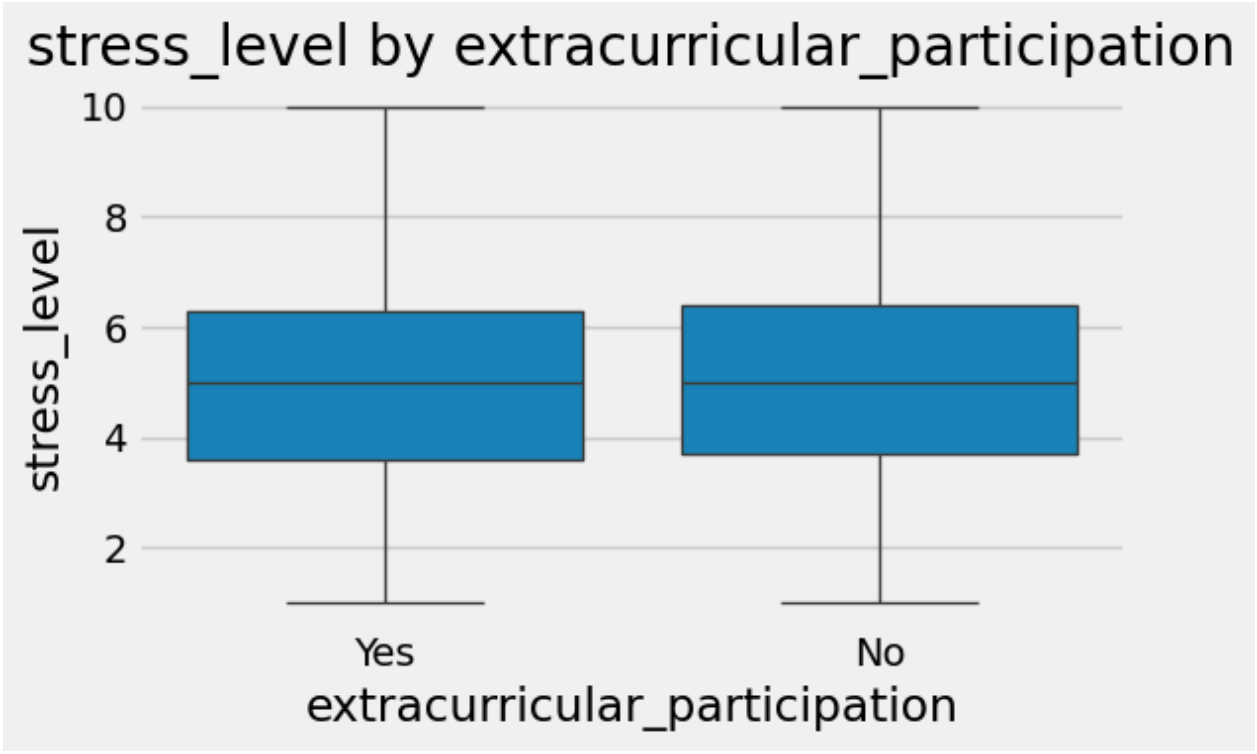

stress_level by major
stress_level
10
8
6
4
2
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

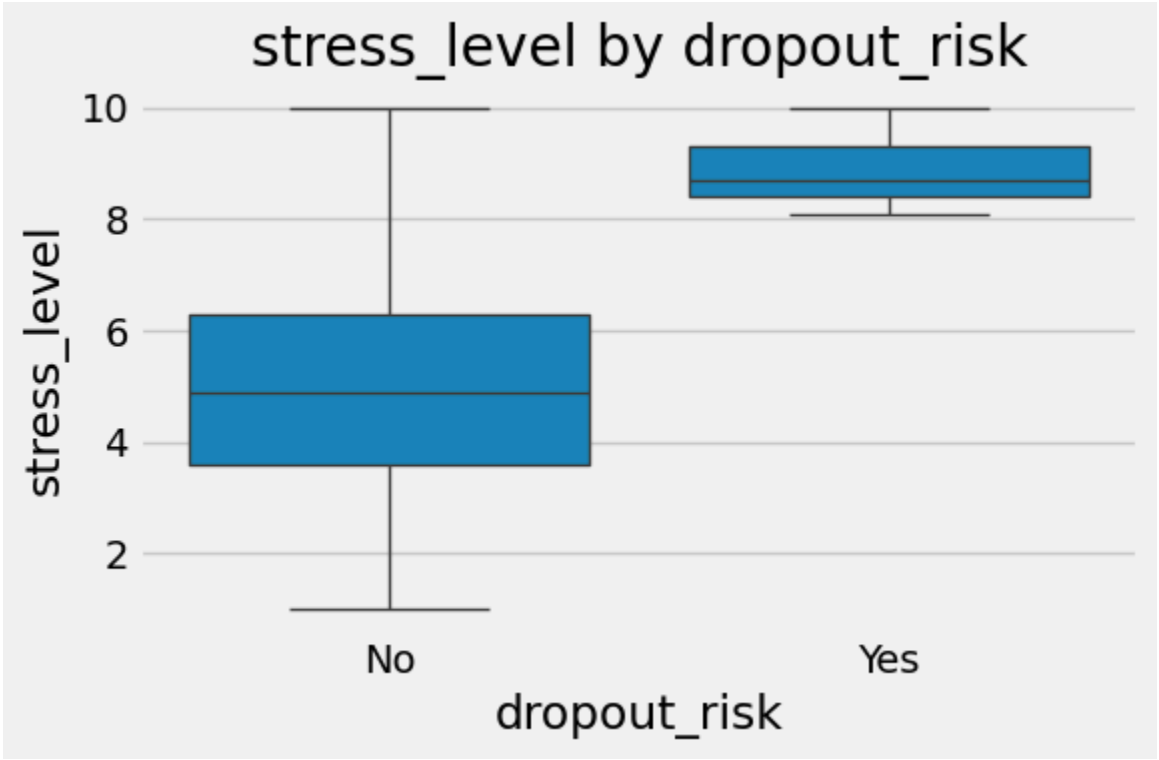

stress_level by part_time_job
stress_level
10
8
6
4
2
Yes
No
part_time_job

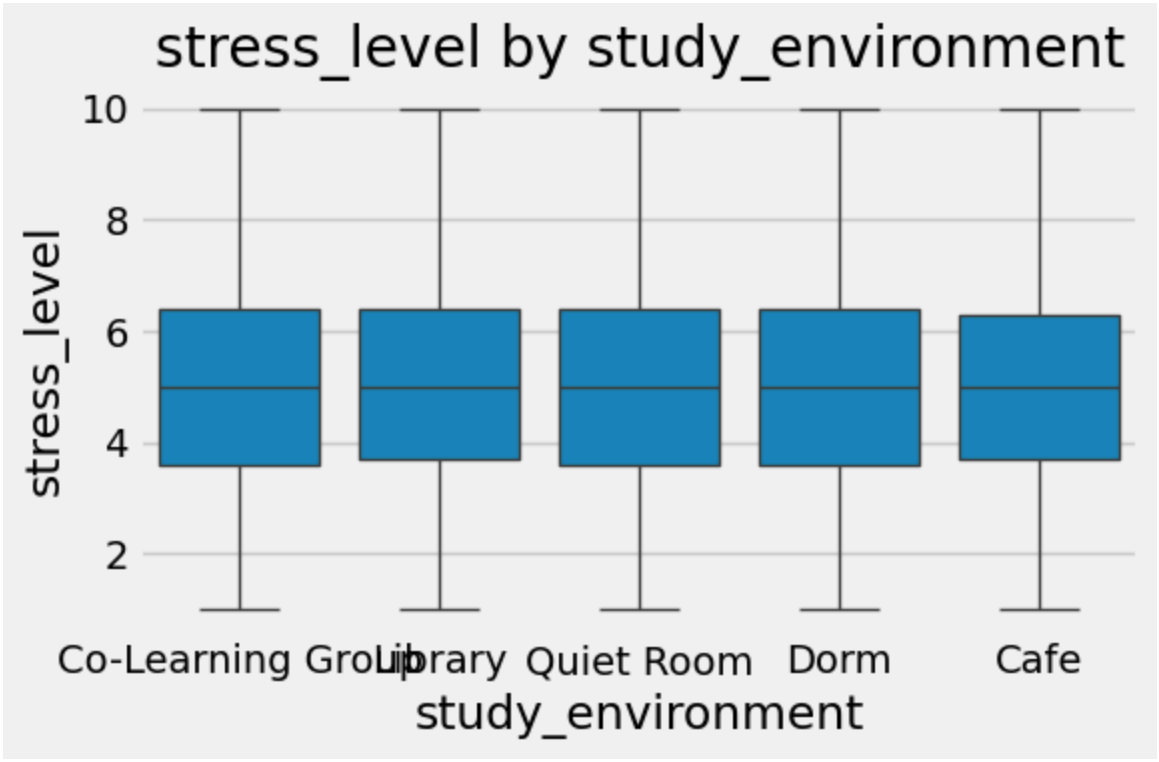

stress_level by diet_quality
stress_level
10
8
6
4
2
Poor
Good
Fair
diet_quality

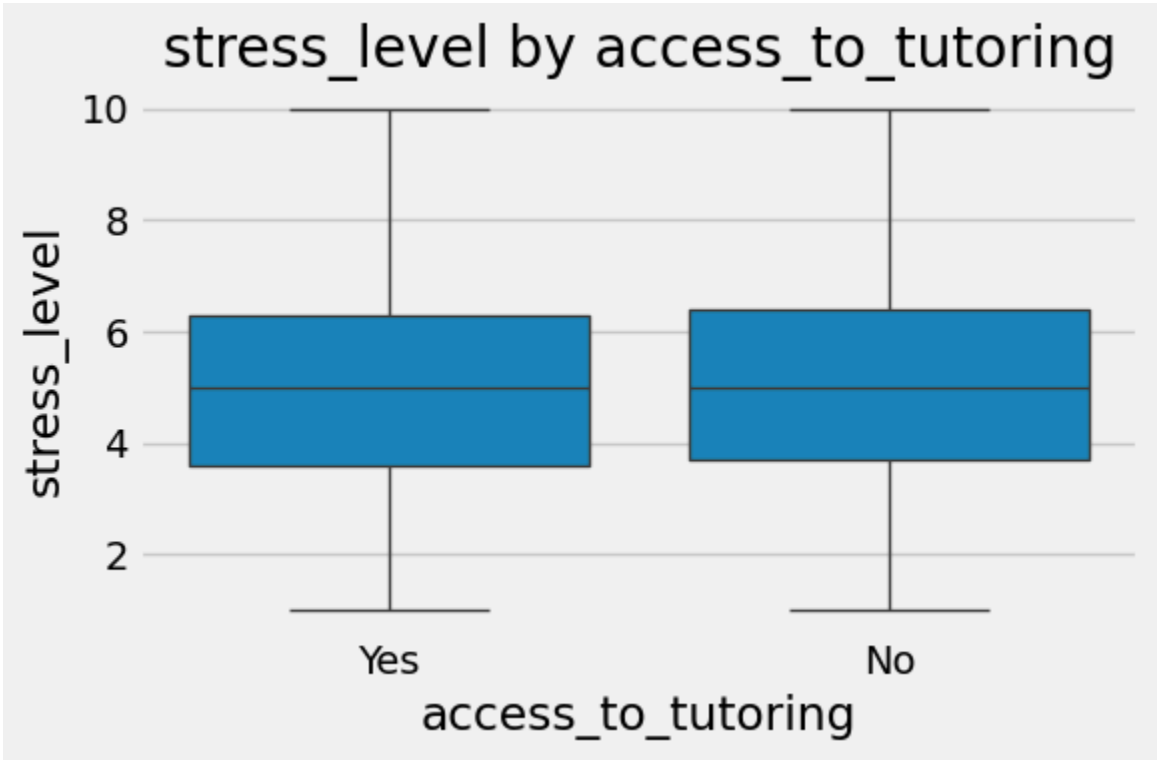

stress_level by parental_education_level
stress_level
10
8
6
4
2
Some College
PhD
High School
Master
Bachelor
parental_education_level

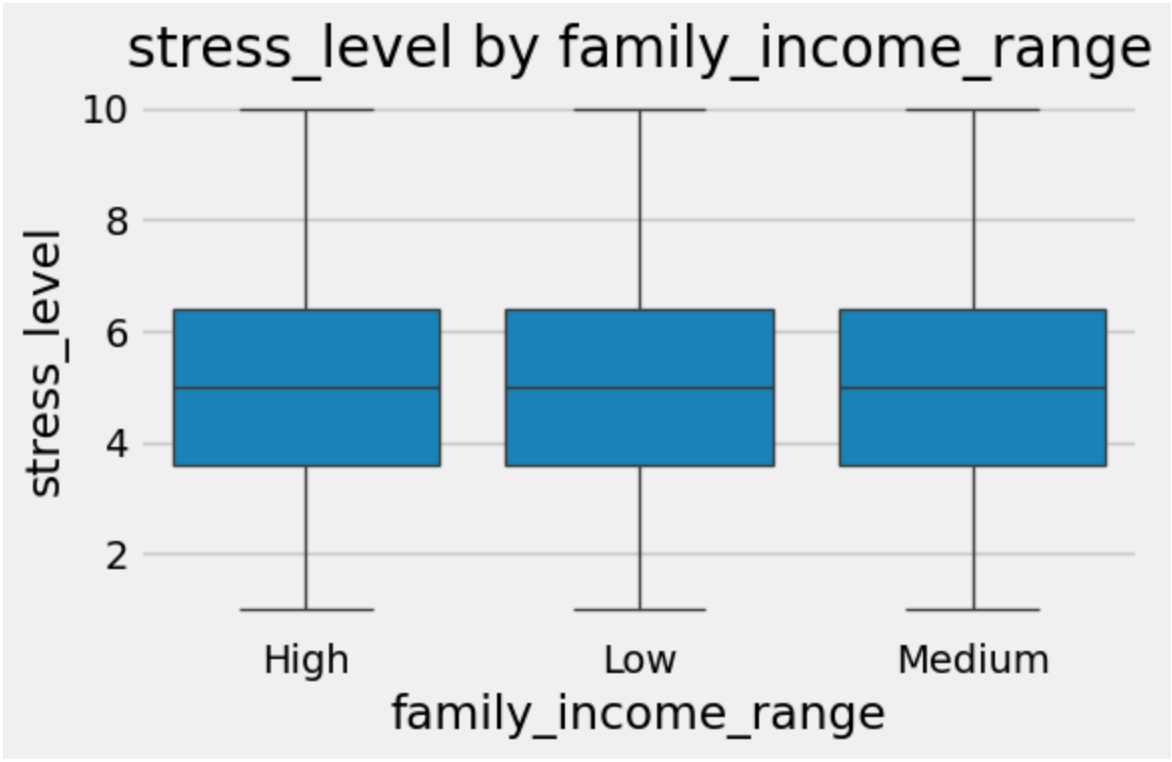

stress_level by internet_quality
stress_level
10
8
6
4
2
High
Low
Medium
internet_quality

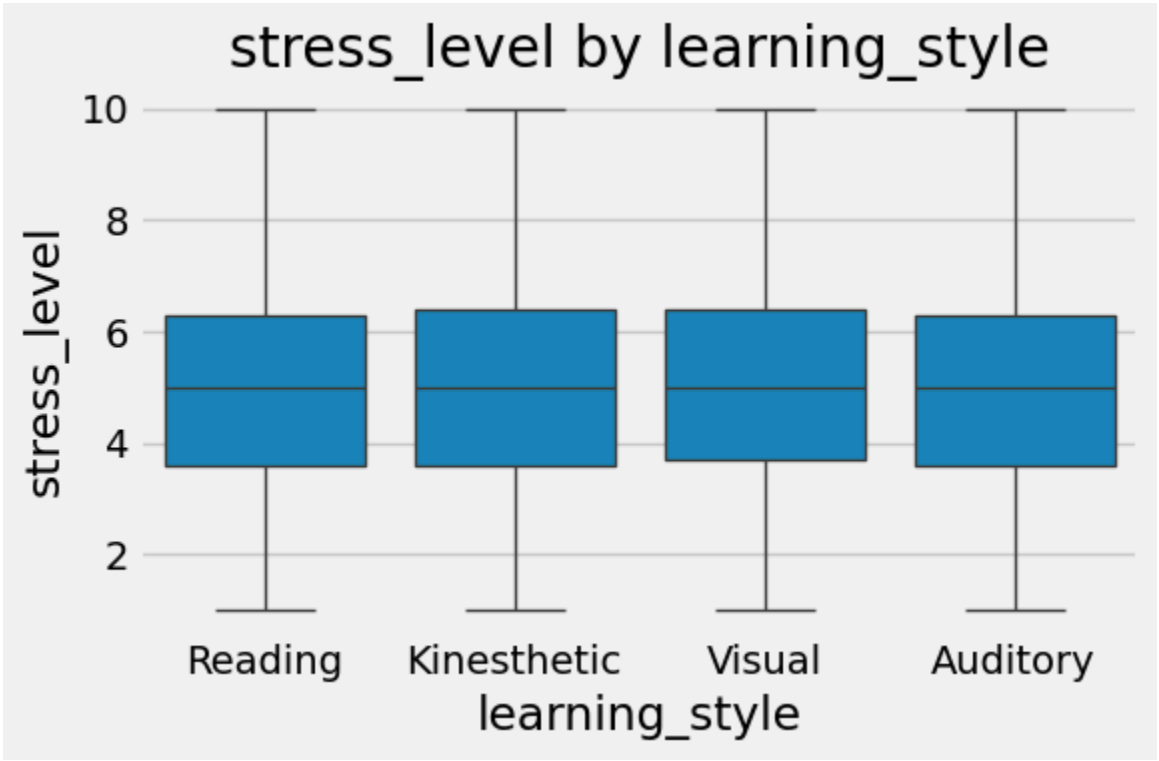

stress_level by extracurricular_participation
stress_level
10
8
6
4
2
Yes
No
extracurricular_participation

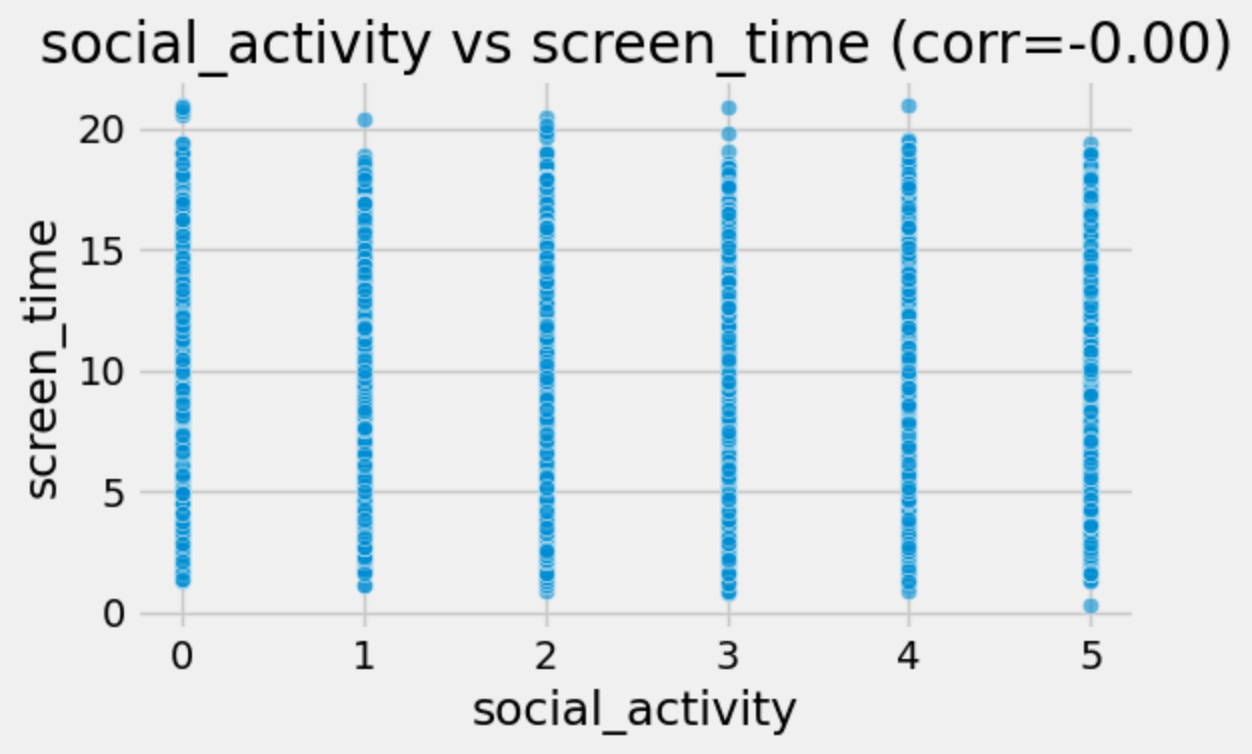

stress_level by dropout_risk
stress_level
10
8
6
4
2
No
Yes
dropout_risk

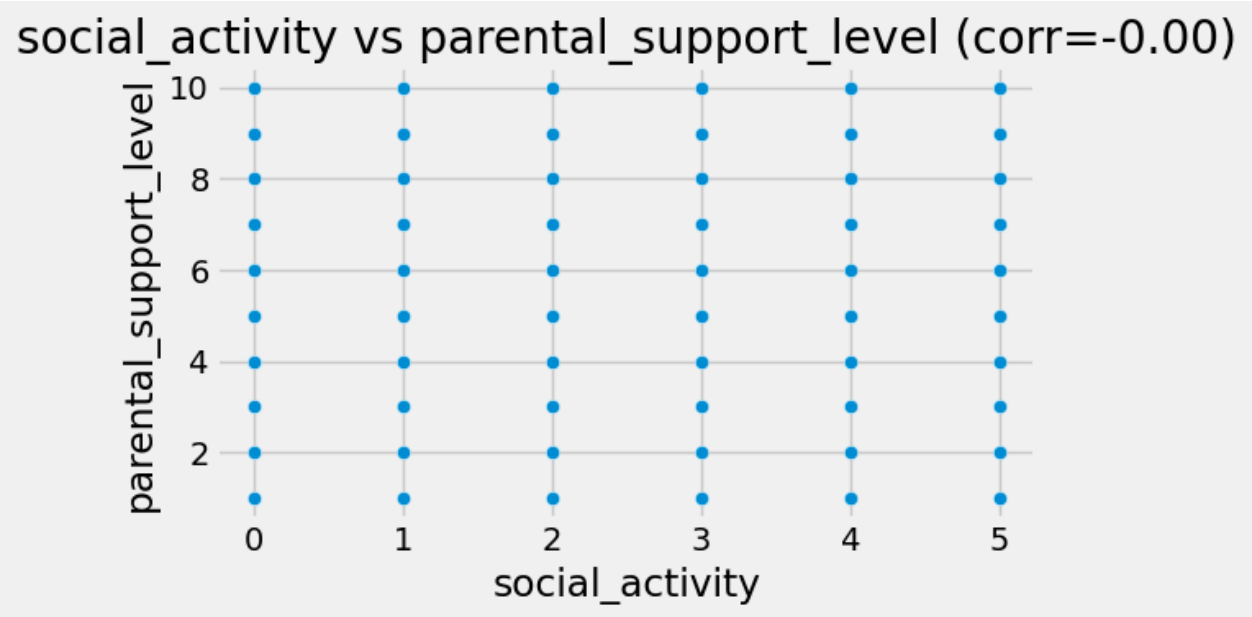

stress_level by study_environment
stress_level
10
8
6
4
2
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

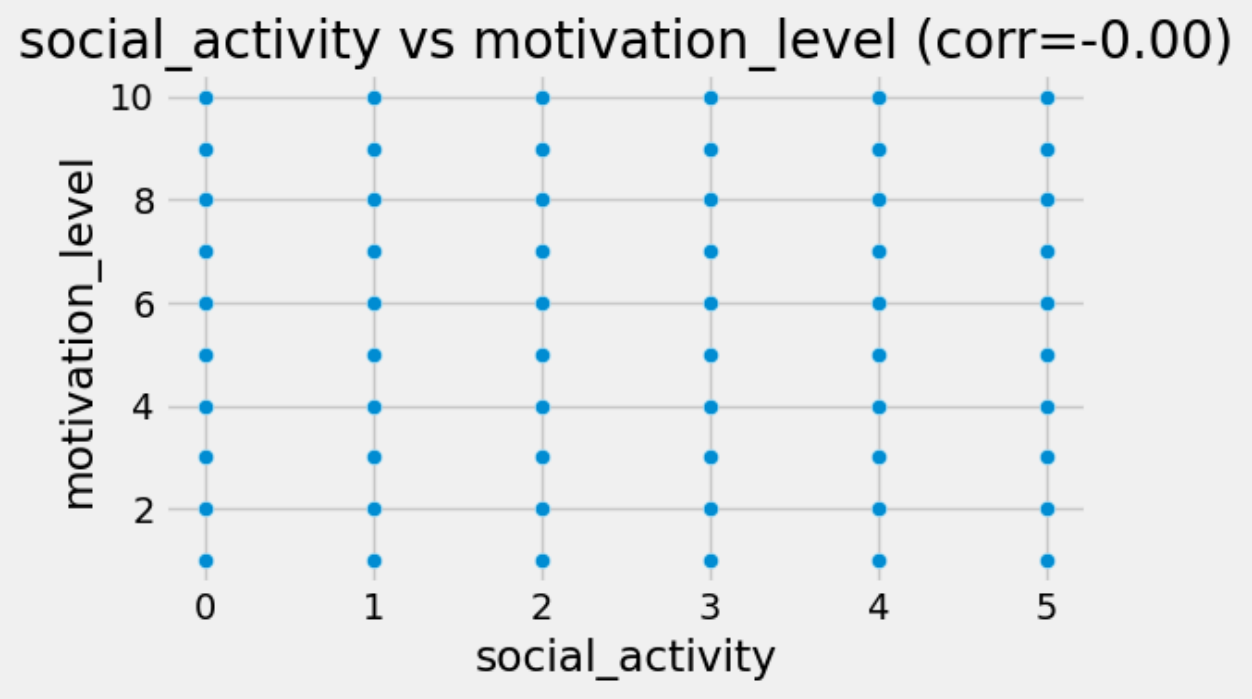

stress_level by access_to_tutoring
stress_level
10
8
6
4
2
Yes
No
access_to_tutoring

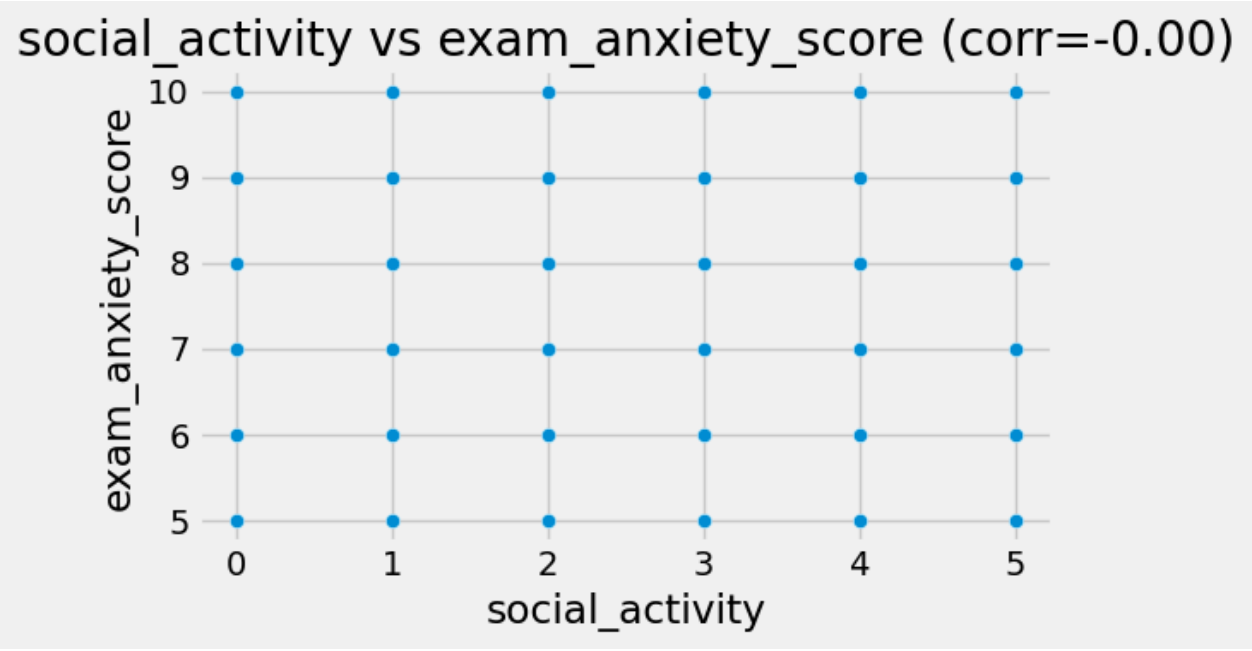

stress_level by family_income_range
stress_level
10
8
6
4
2
High
Low
Medium
family_income_range

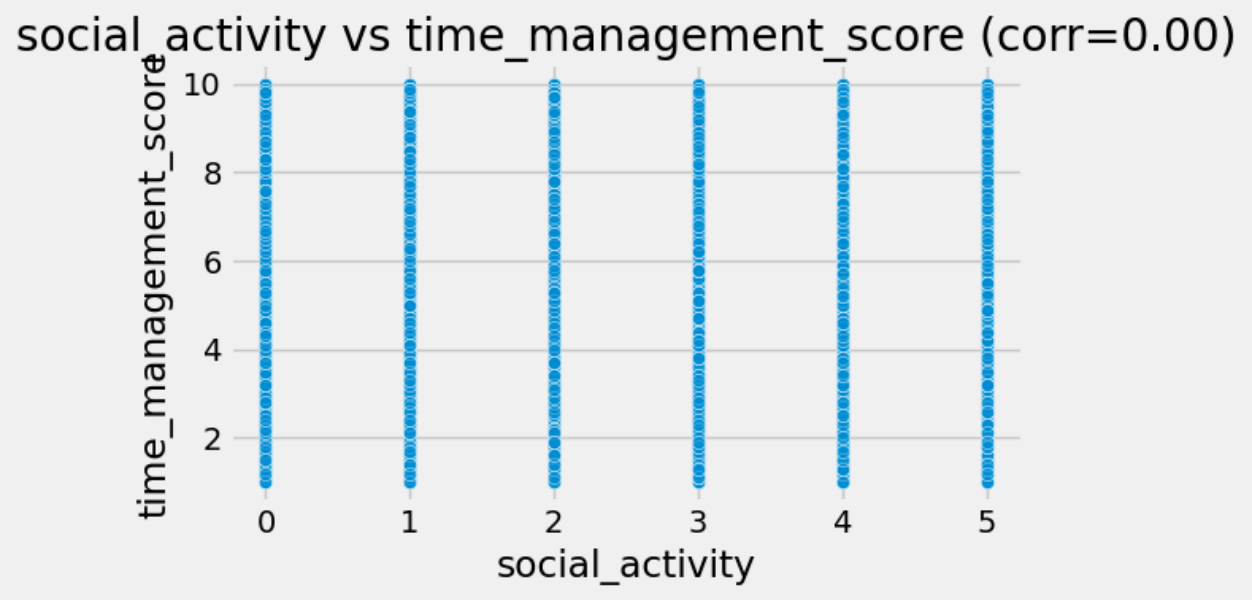

stress_level by learning_style
stress_level
10
8
6
4
2
Reading
Kinesthetic
Visual
Auditory
learning_style

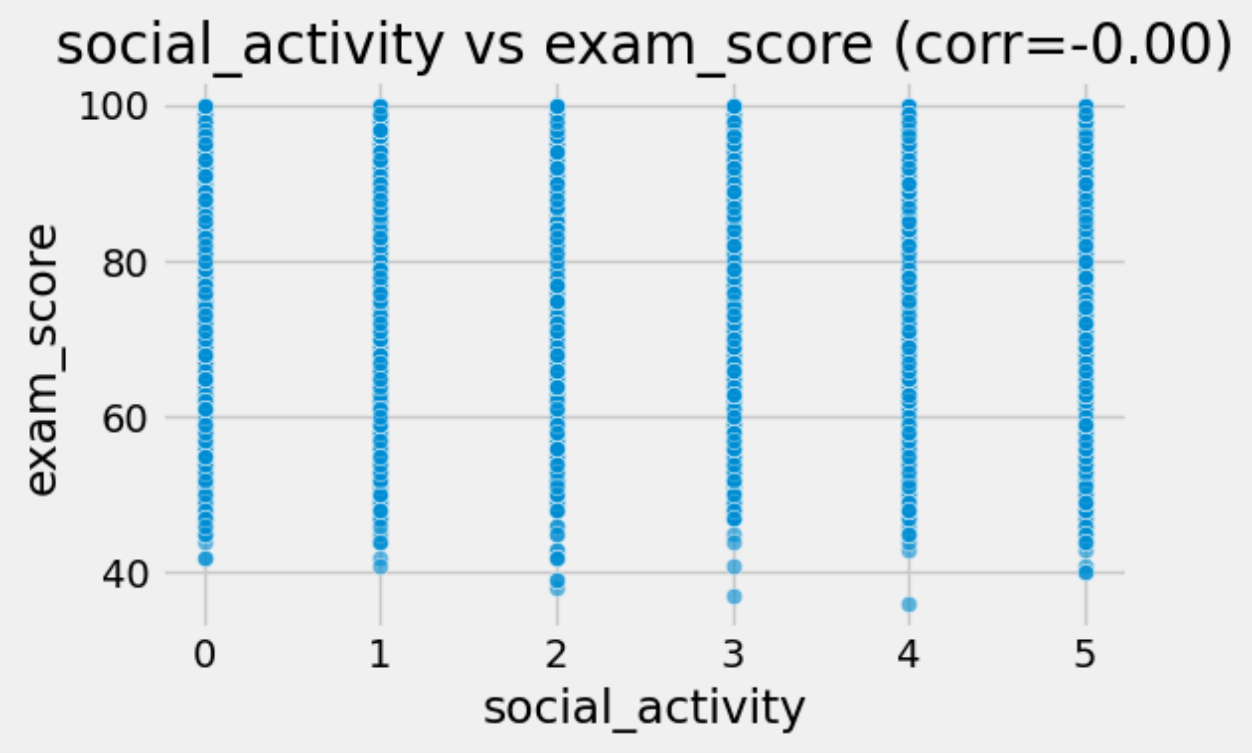

social_activity vs screen_time (corr=-0.00)
screen_time
0
5
10
15
20
0
1
2
3
4
5
social_activity

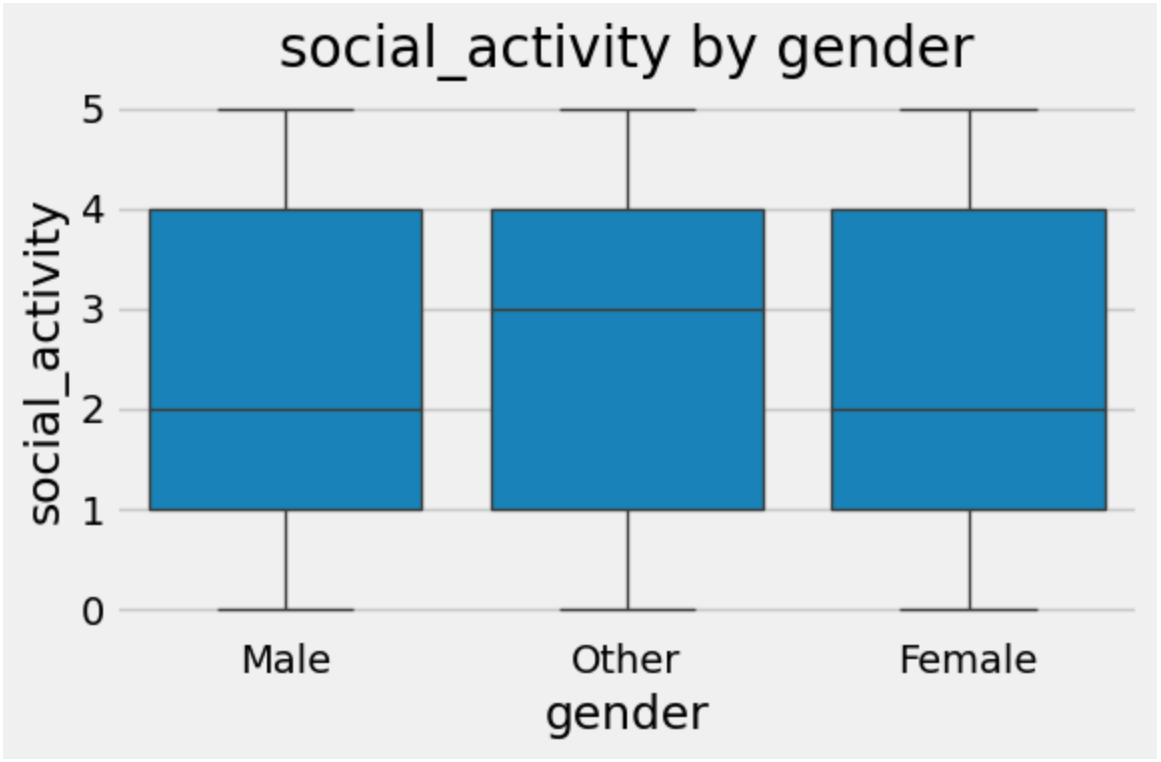

social_activity vs parental_support_level (corr=-0.00)
parental_support_level
2
4
6
8
10
0
1
2
3
4
5
social_activity

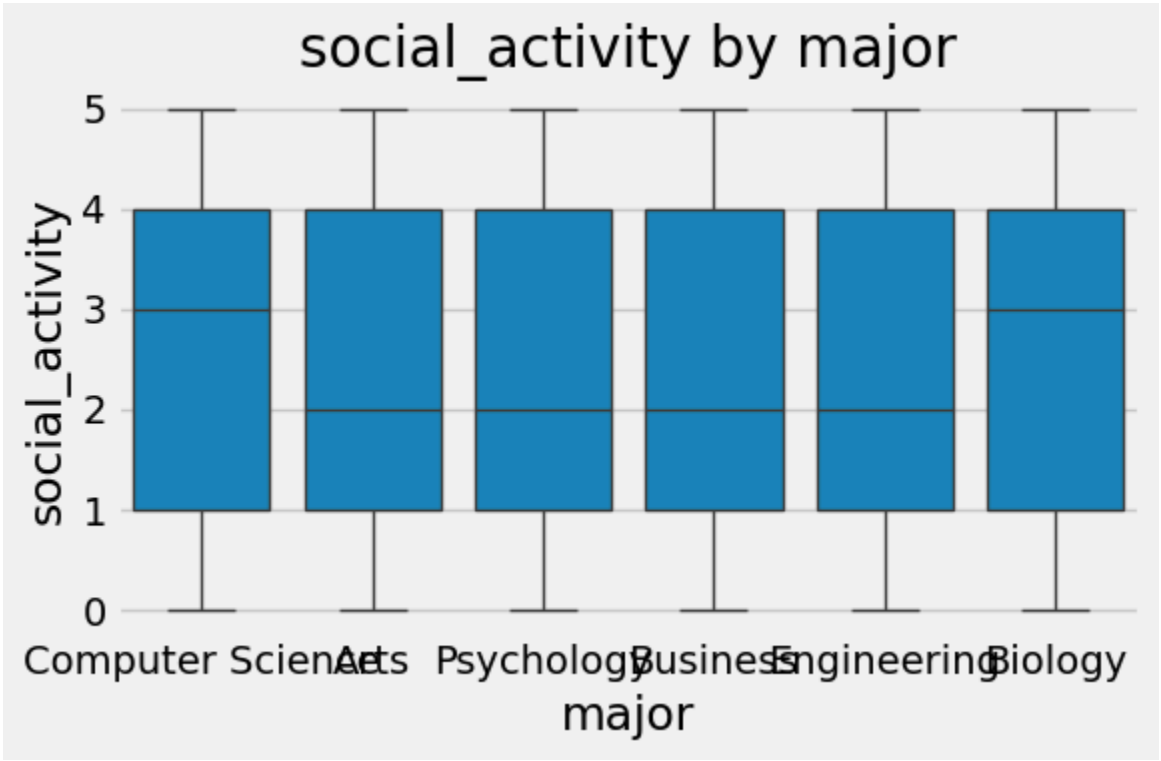

social_activity vs motivation_level (corr=-0.00)
motivation_level
10
8
6
4
2
0
1
2
3
4
5
social_activity

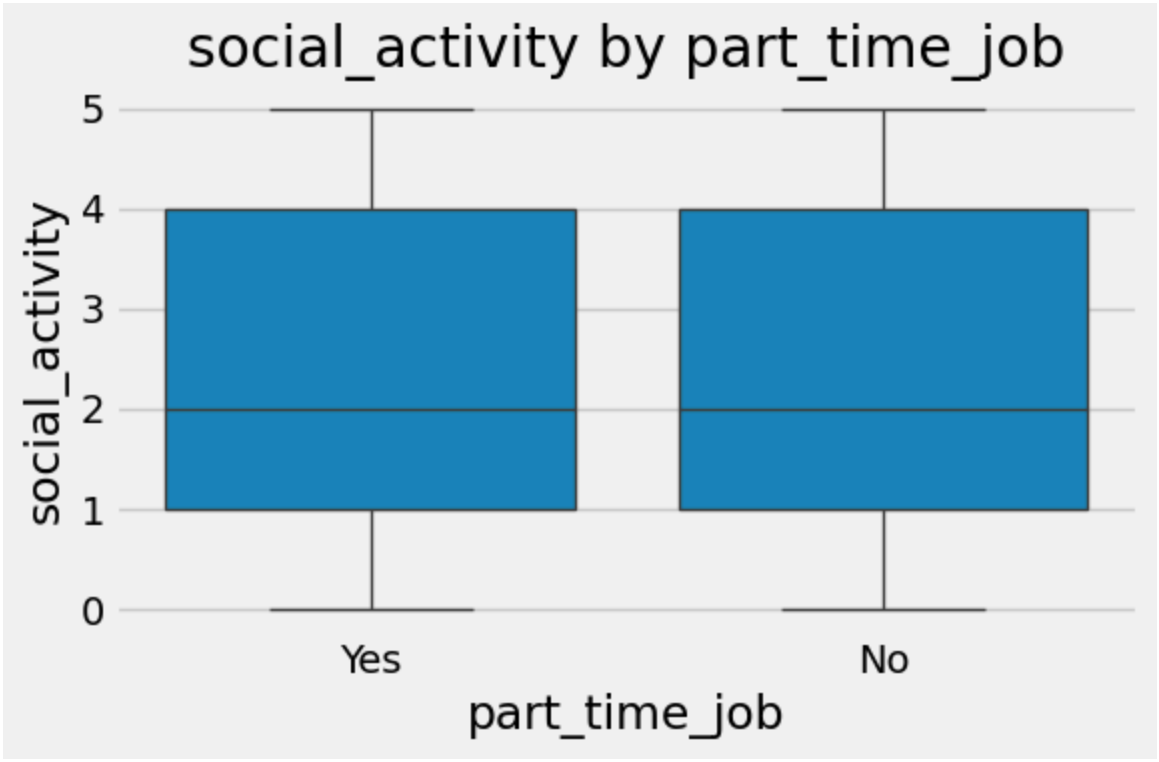

social_activity vs exam_anxiety_score (corr=-0.00)
exam_anxiety_score
10
9
8
7
6
5
0
1
2
3
4
5
social_activity

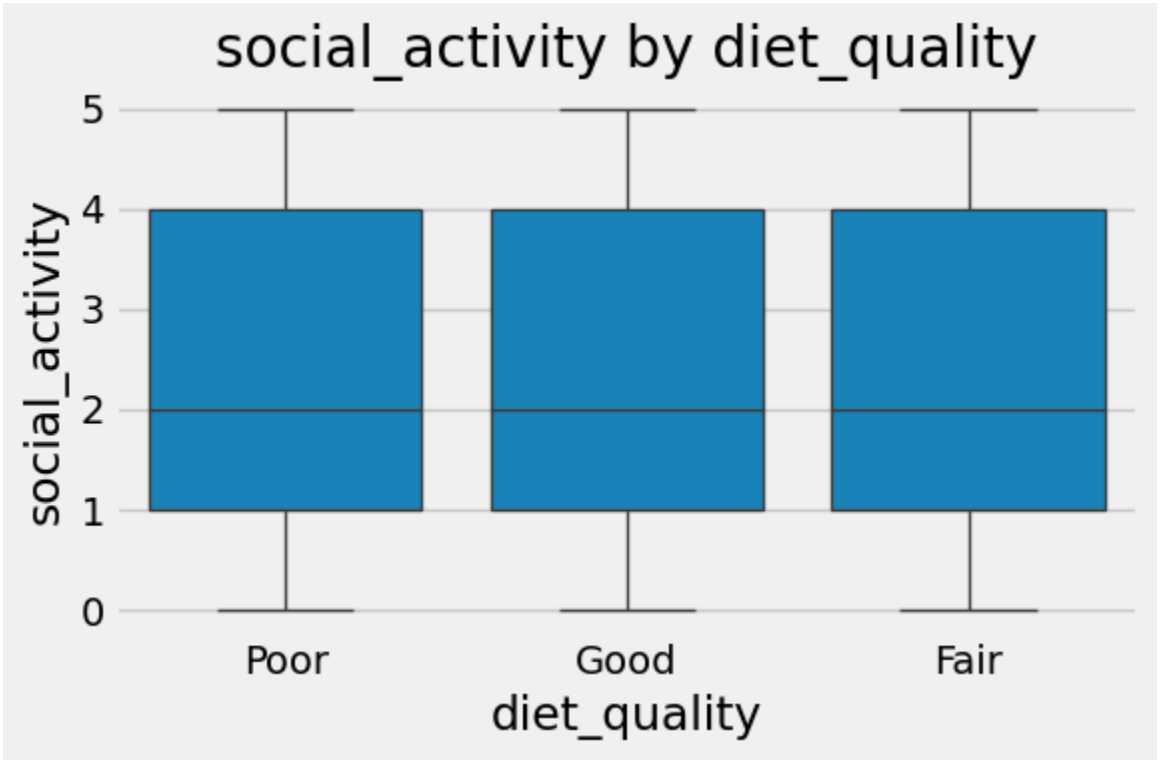

social_activity vs time_management_score (corr=0.00)
time_management_score
10
8
6
4
2
0
1
2
3
4
5
social_activity

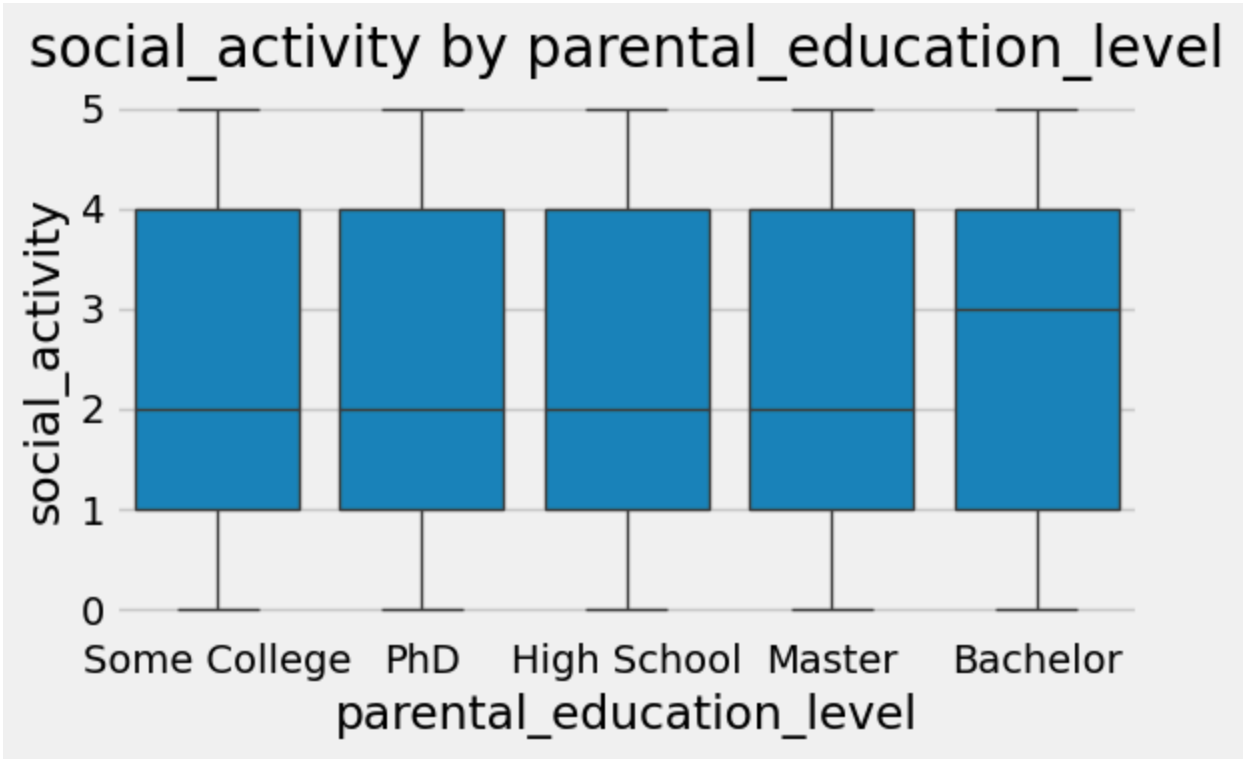

social_activity vs exam_score (corr=-0.00)
exam_score
100
80
60
40
0
1
2
3
4
5
social_activity

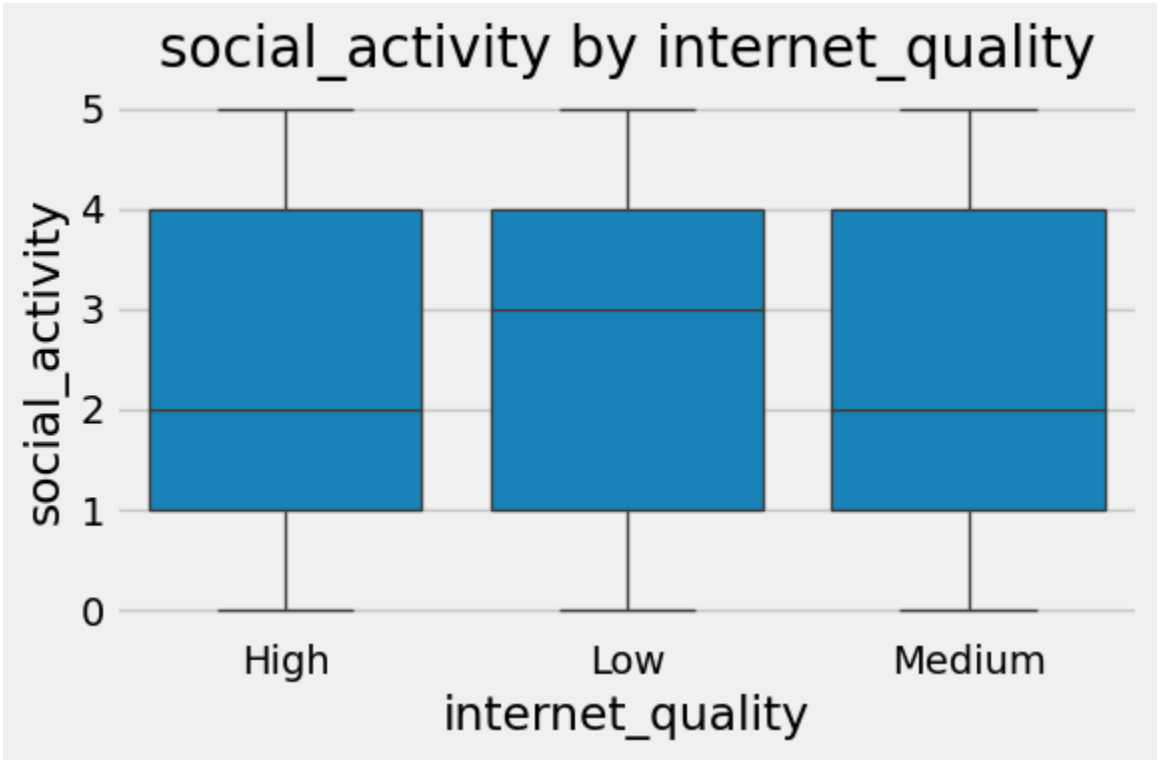

social_activity by gender
social_activity
5
4
3
2
1
0
Male
Other
Female
gender

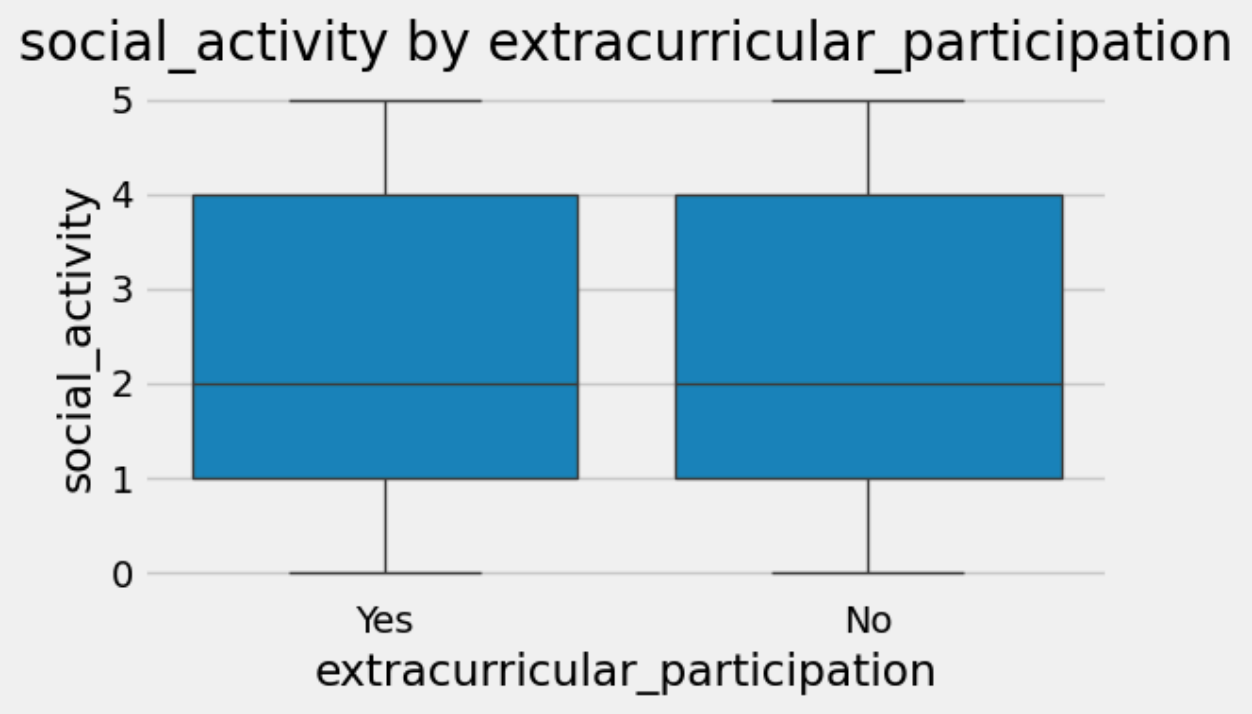

social_activity by major
social_activity
5
4
3
2
1
0
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

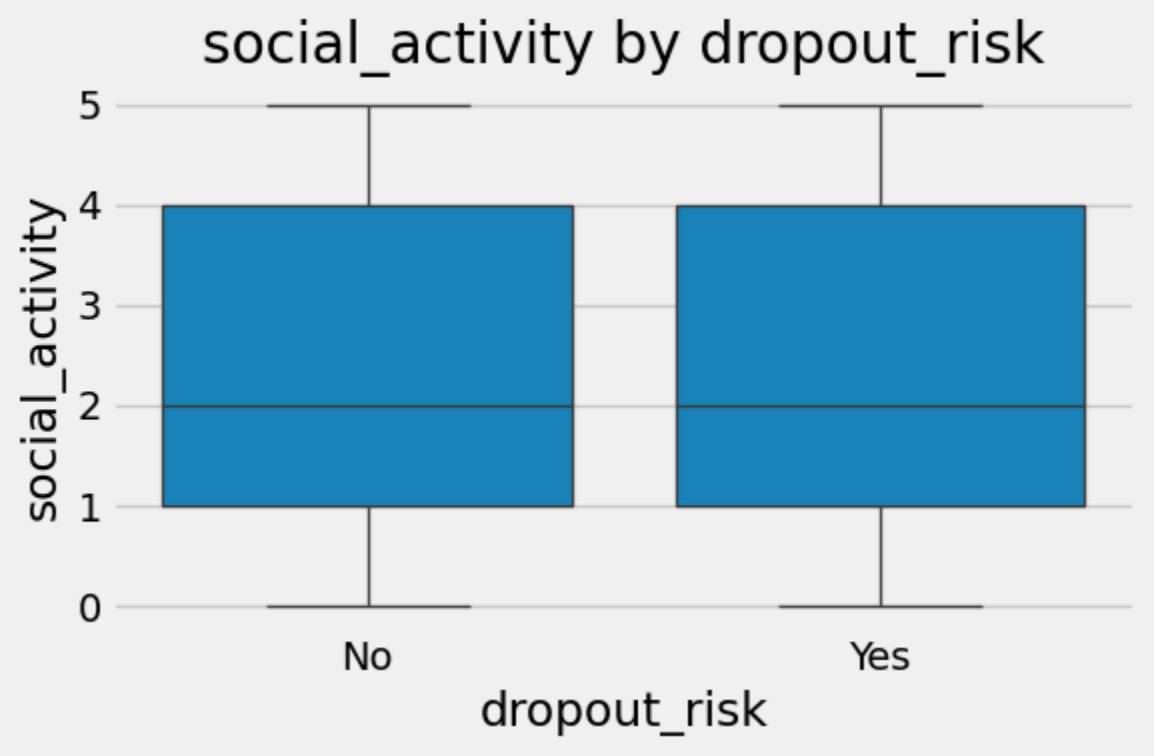

social_activity by part_time_job
social_activity
5
4
3
2
1
0
Yes
No
part_time_job

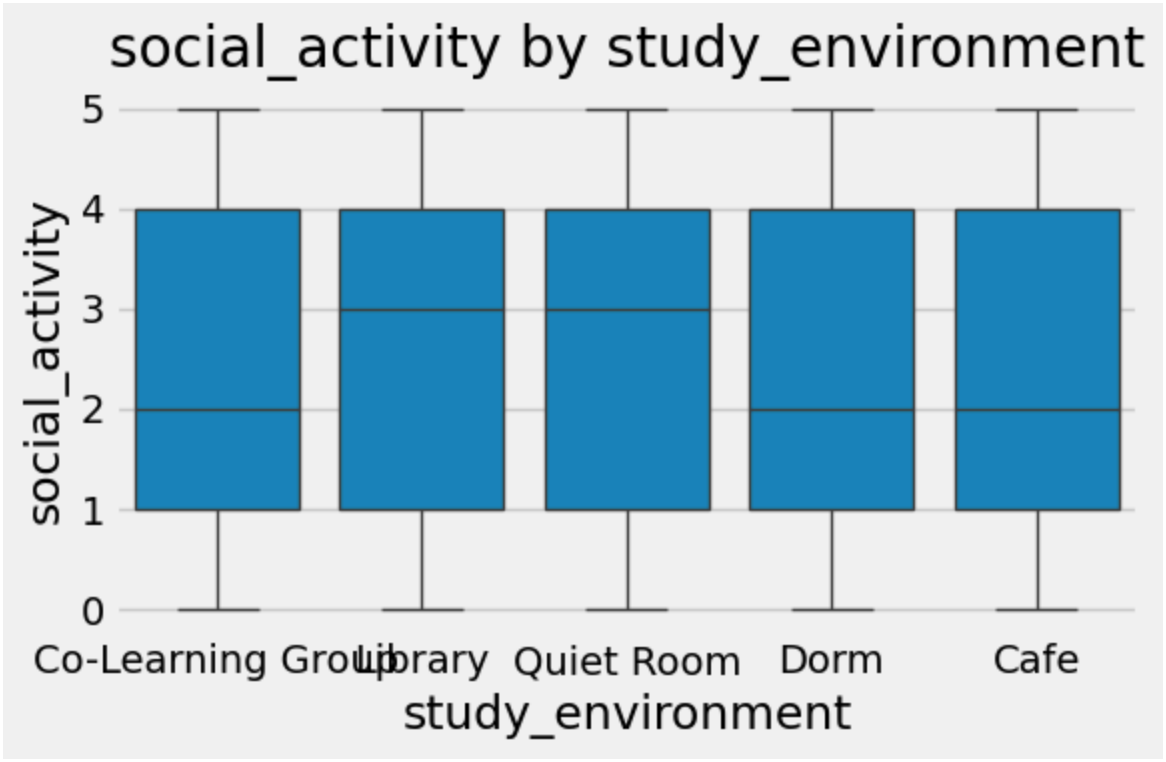

social_activity by diet_quality
social_activity
5
4
3
2
1
0
Poor
Good
Fair
diet_quality

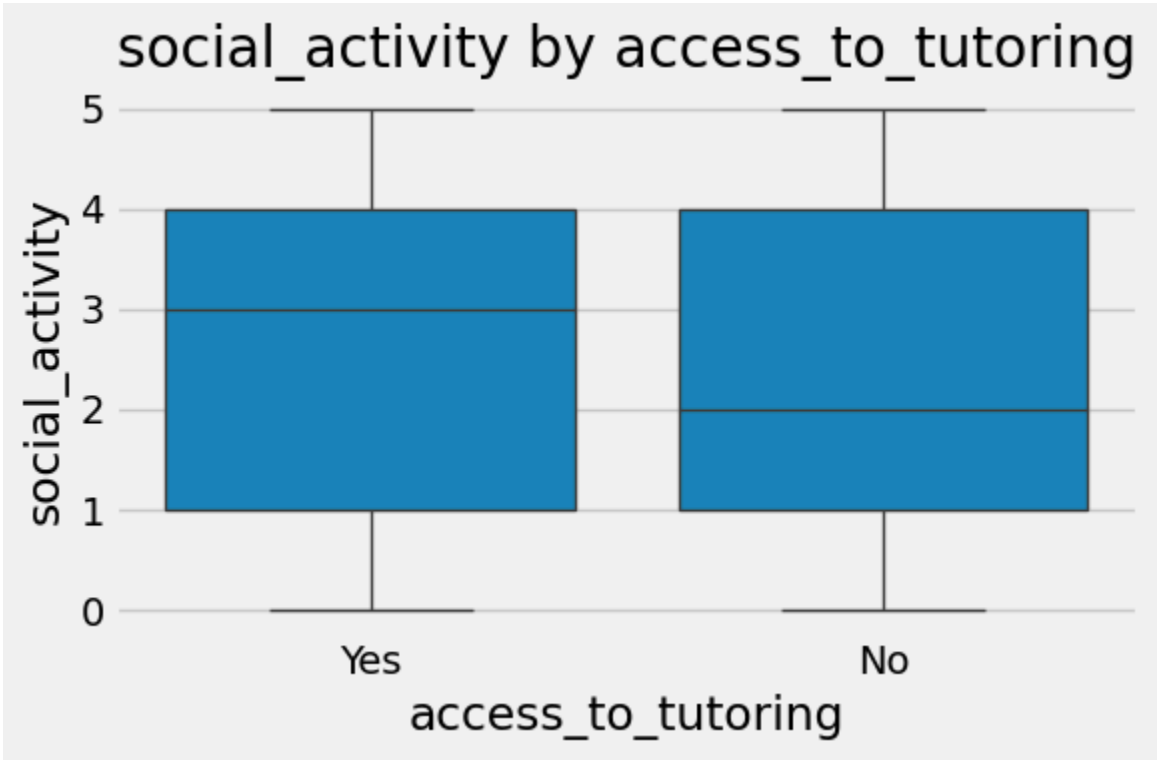

social_activity by parental_education_level
social_activity
0
1
2
3
4
5
Some College
PhD
High School
Master
Bachelor
parental_education_level

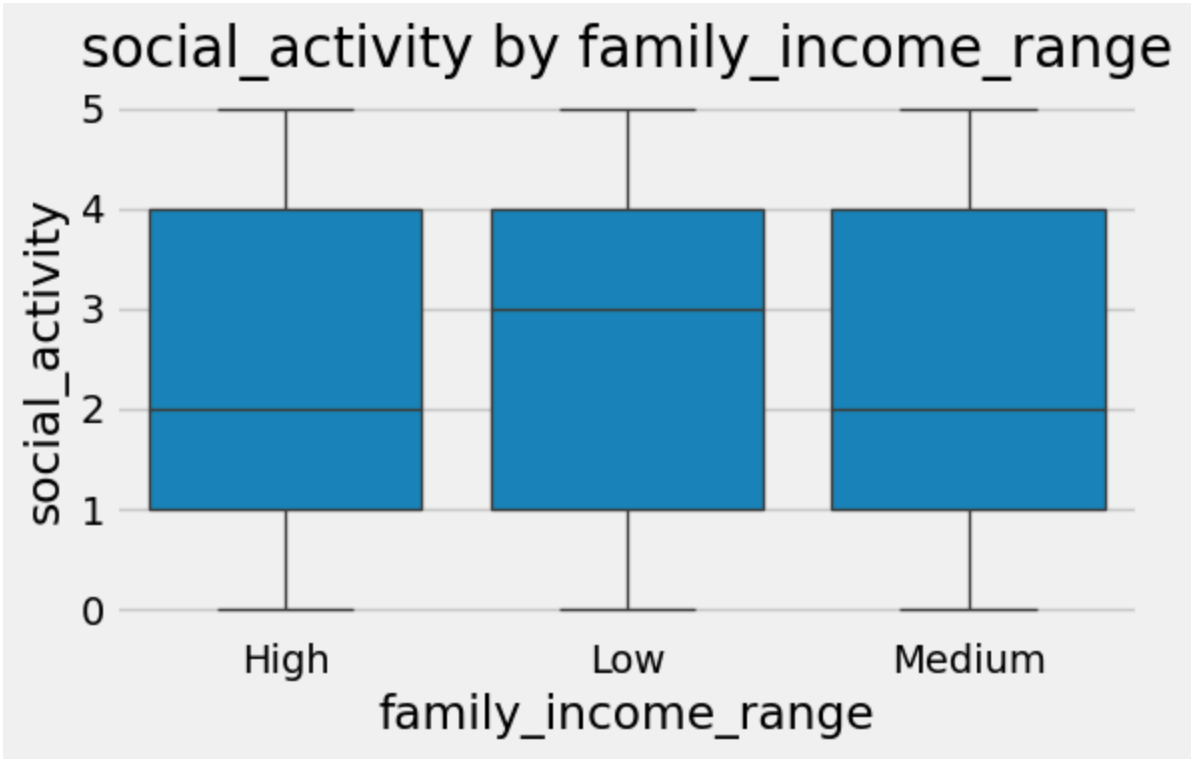

social_activity by internet_quality
social_activity
0
1
2
3
4
5
High
Low
Medium
internet_quality

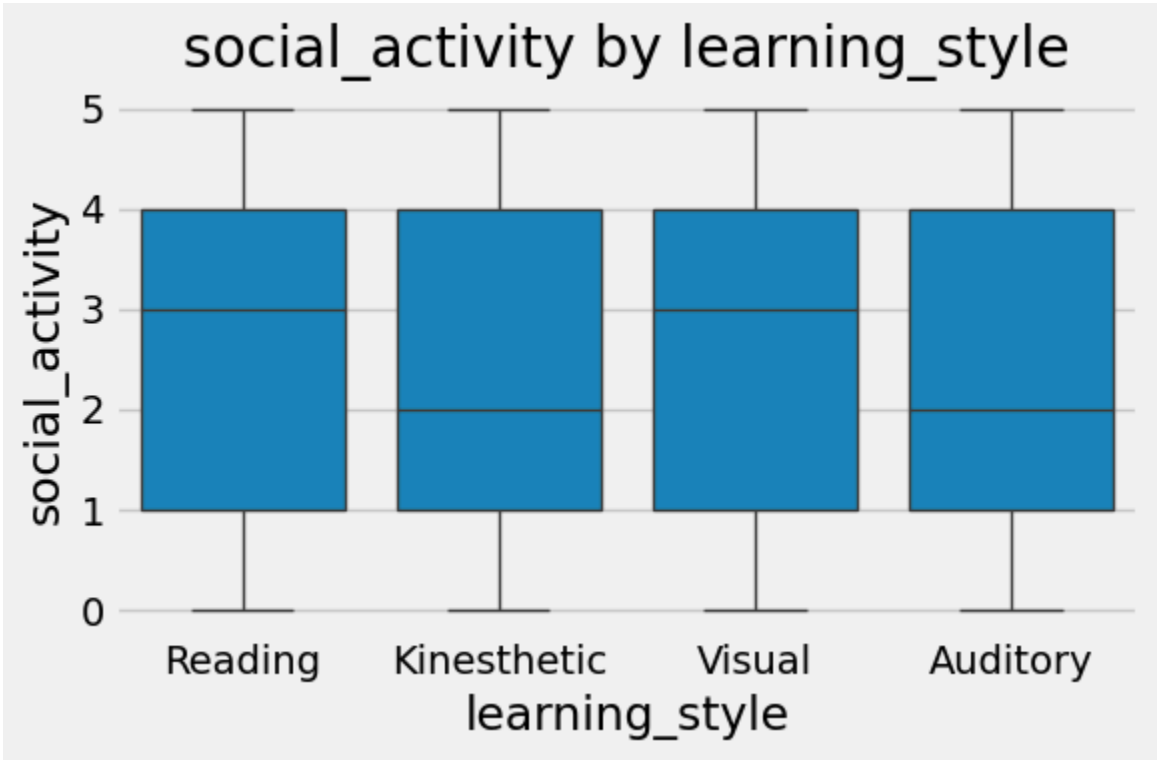

social_activity by extracurricular_participation
social_activity
5
4
3
2
1
0
Yes
No
extracurricular_participation

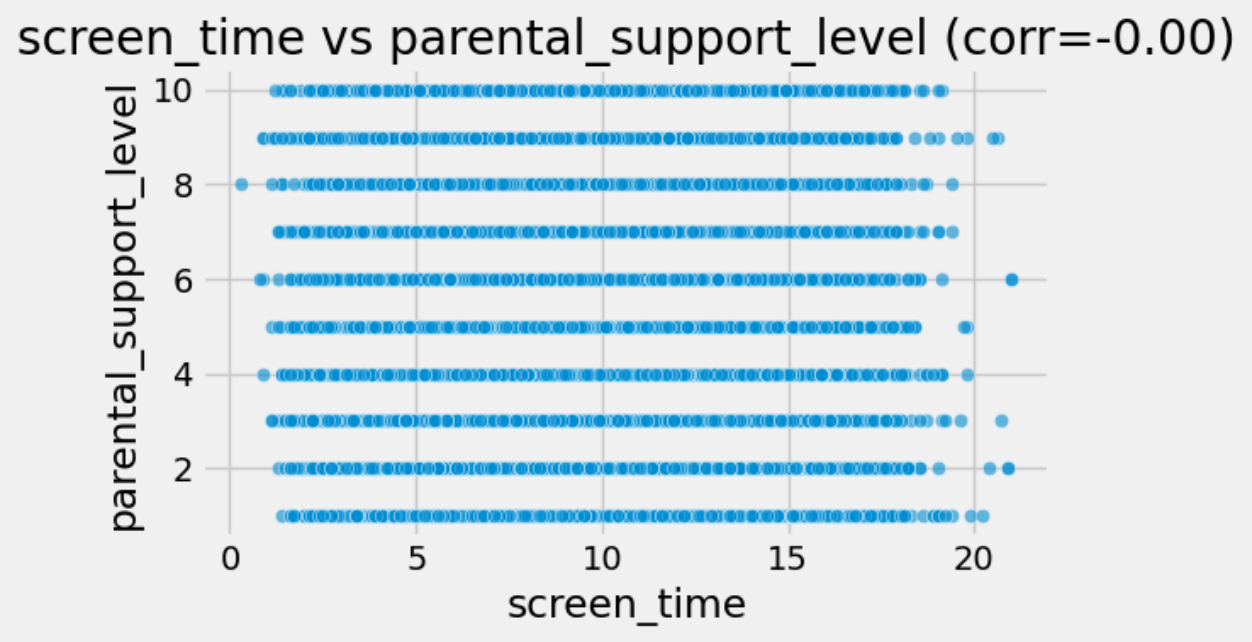

social_activity by dropout_risk
social_activity
5
4
3
2
1
0
No
Yes
dropout_risk

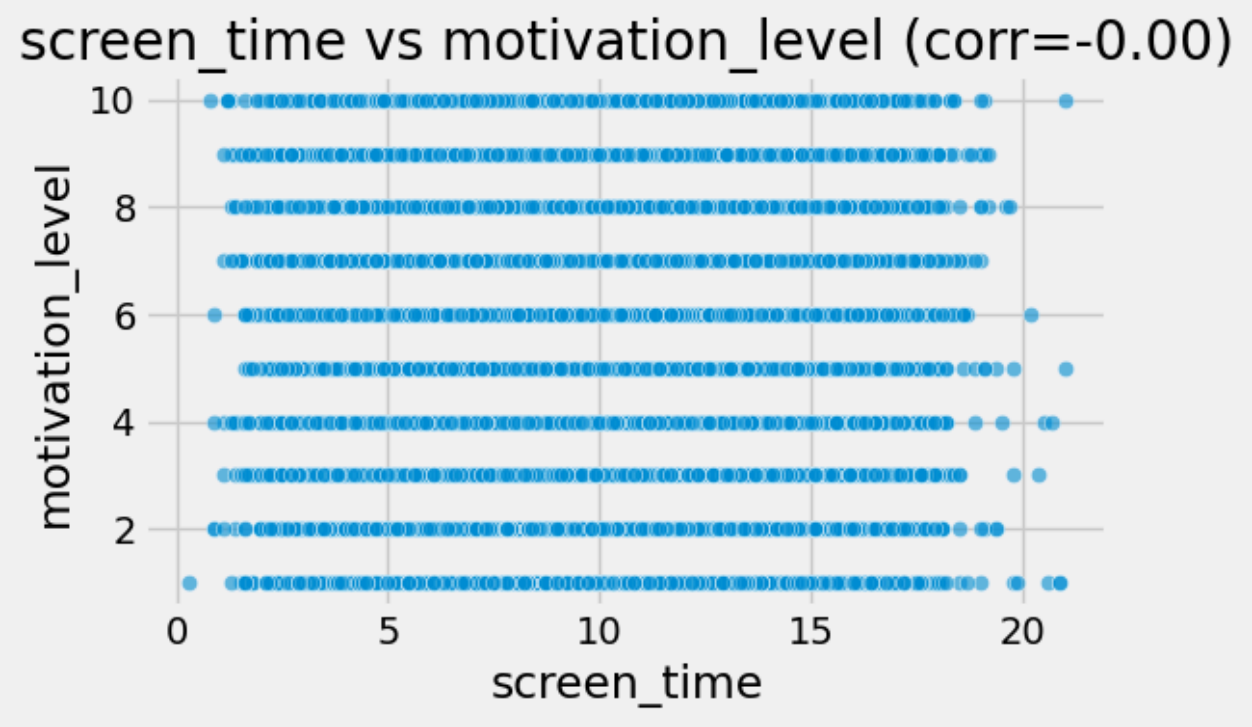

social_activity by study_environment
social_activity
5
4
3
2
1
0
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

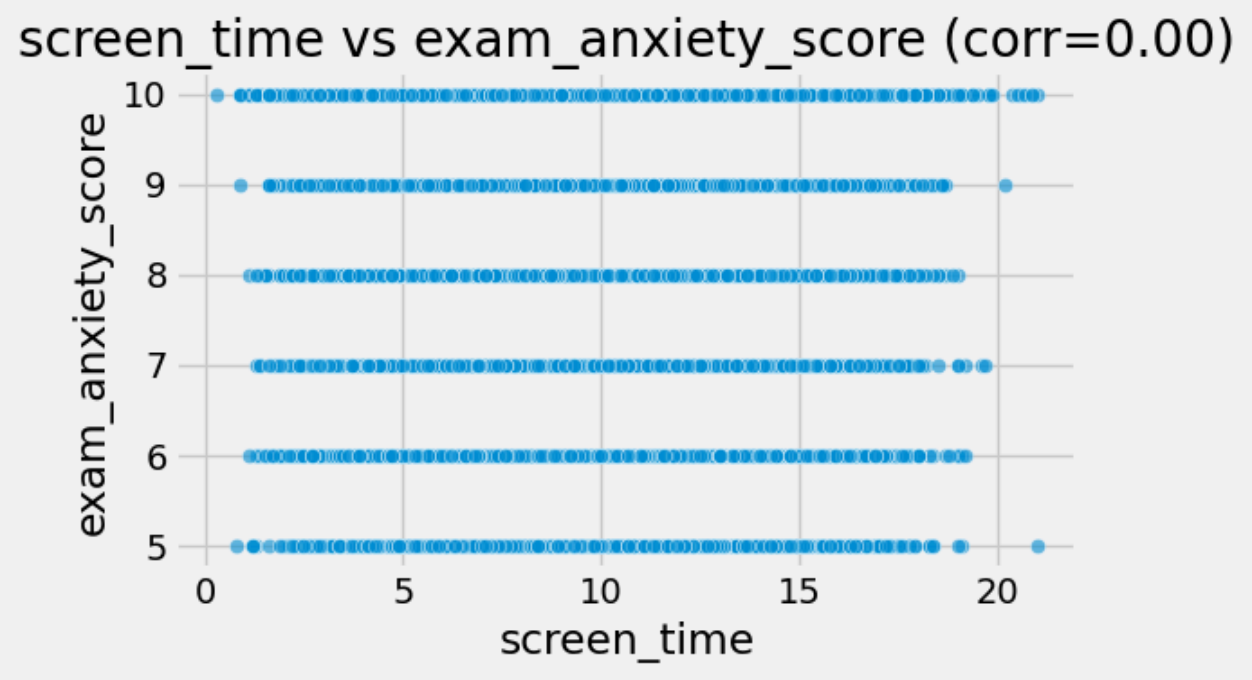

social_activity by access_to_tutoring
social_activity
5
4
3
2
1
0
Yes
No
access_to_tutoring

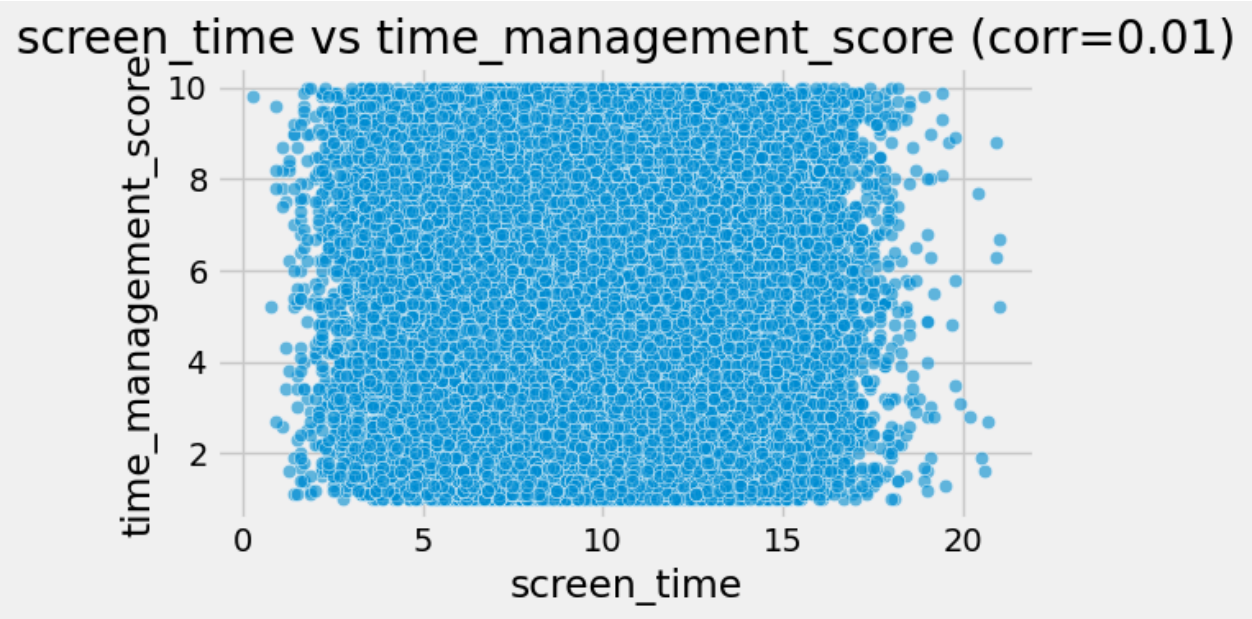

social_activity by family_income_range
social_activity
5
4
3
2
1
0
High
Low
Medium
family_income_range

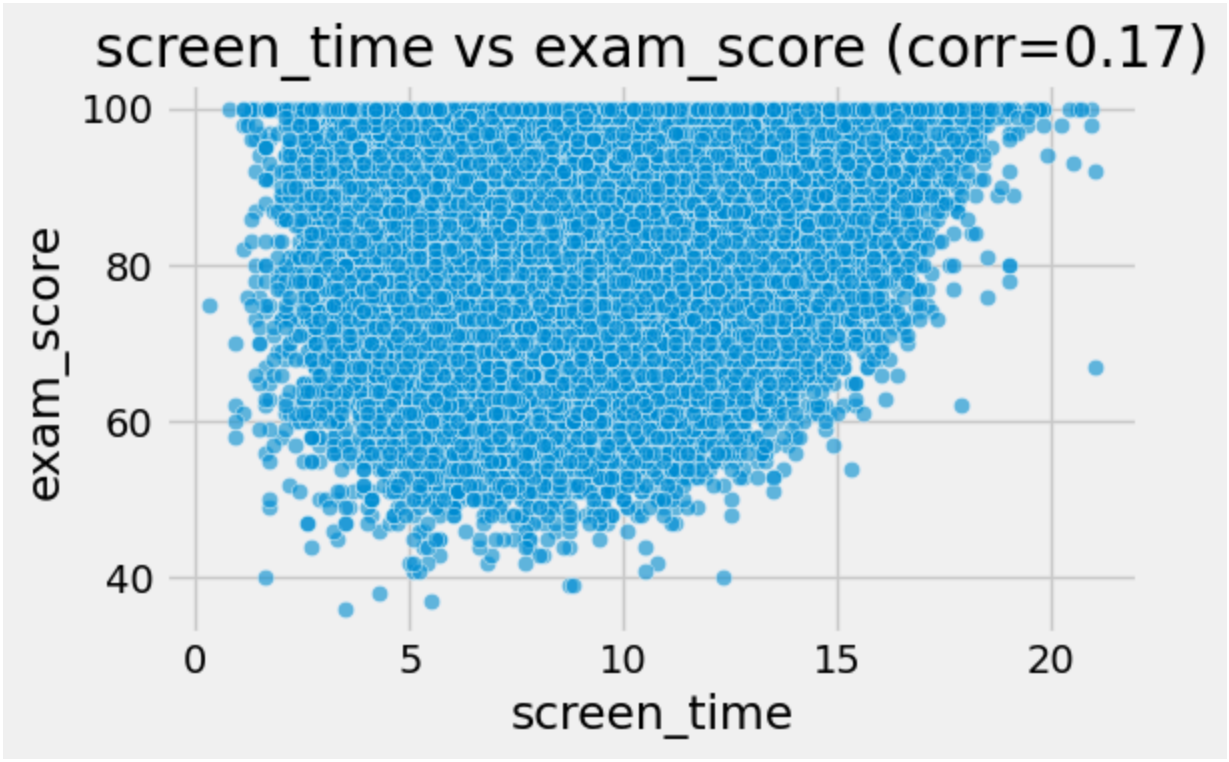

social_activity by learning_style
social_activity
5
4
3
2
1
0
Reading
Kinesthetic
Visual
Auditory
learning_style

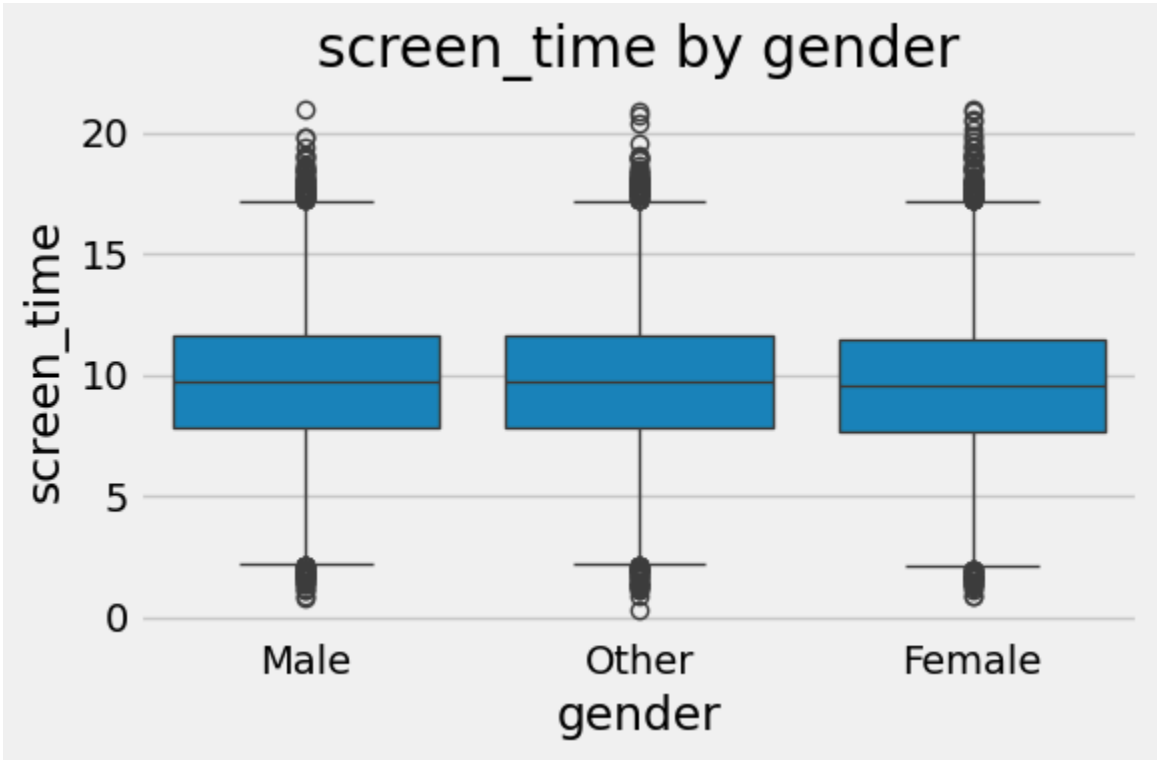

screen_time vs parental_support_level (corr=-0.00)
parental_support_level
10
8
6
4
2
0
5
10
15
20
screen_time

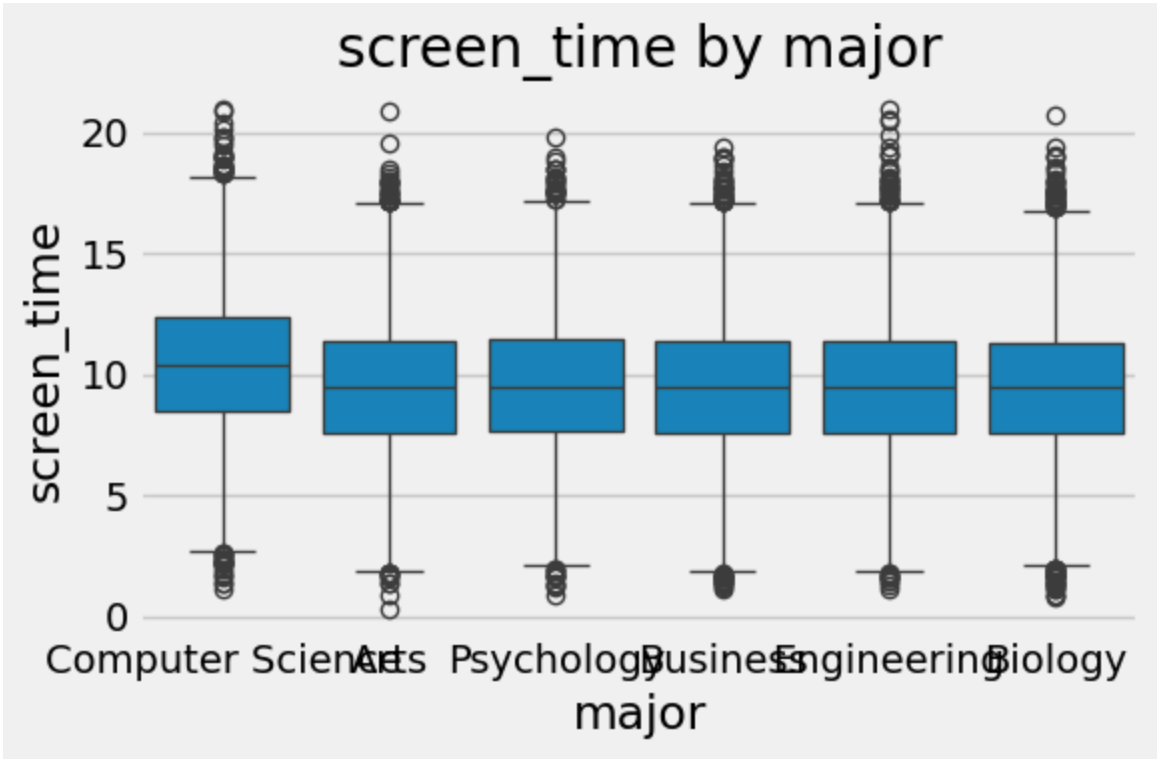

screen_time vs motivation_level (corr=-0.00)
motivation_level
10
8
6
4
2
0
5
10
15
20
screen_time

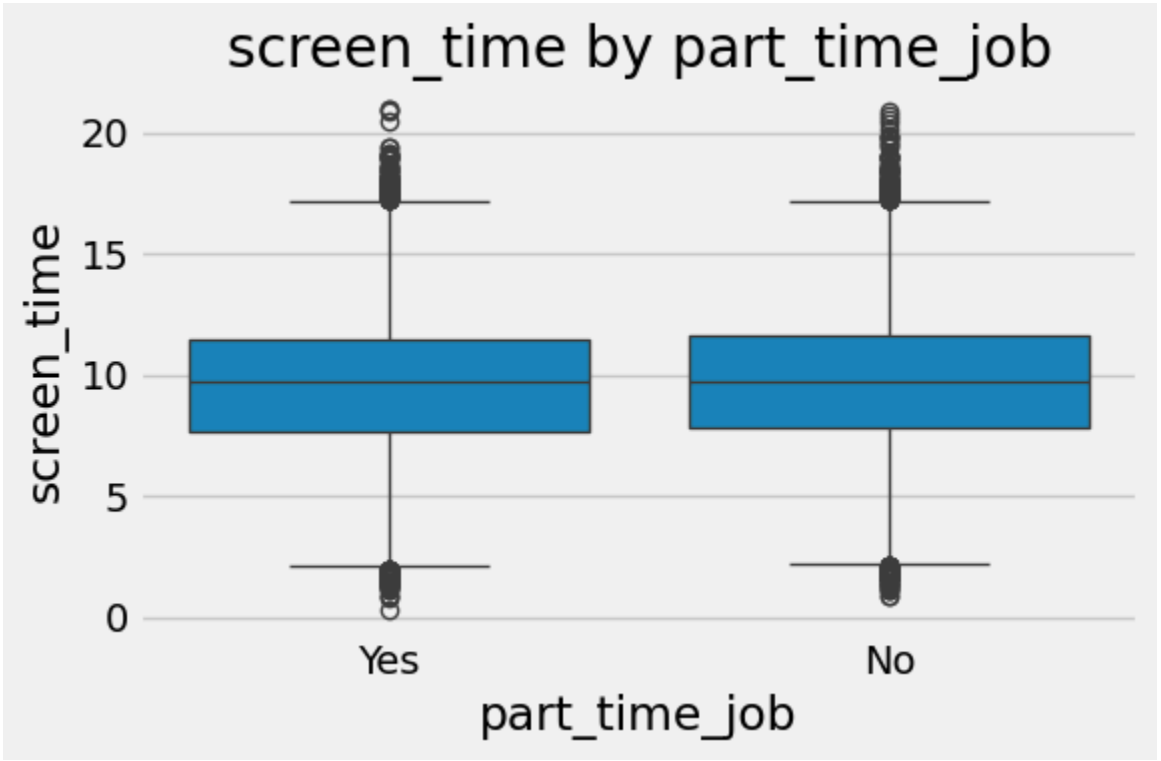

screen_time vs exam_anxiety_score (corr=0.00)
exam_anxiety_score
10
9
8
7
6
5
0
5
10
15
20
screen_time

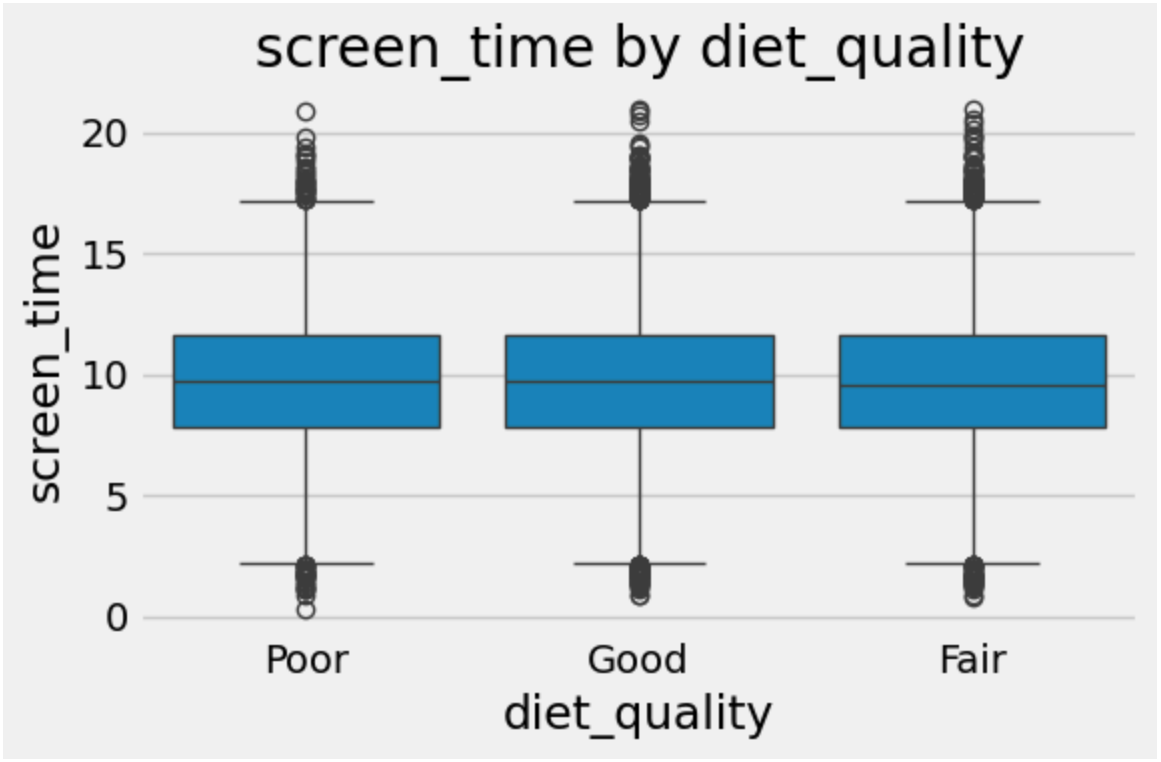

screen_time vs time_management_score (corr=0.01)
time_management_score
10
8
6
4
2
0
5
10
15
20
screen_time

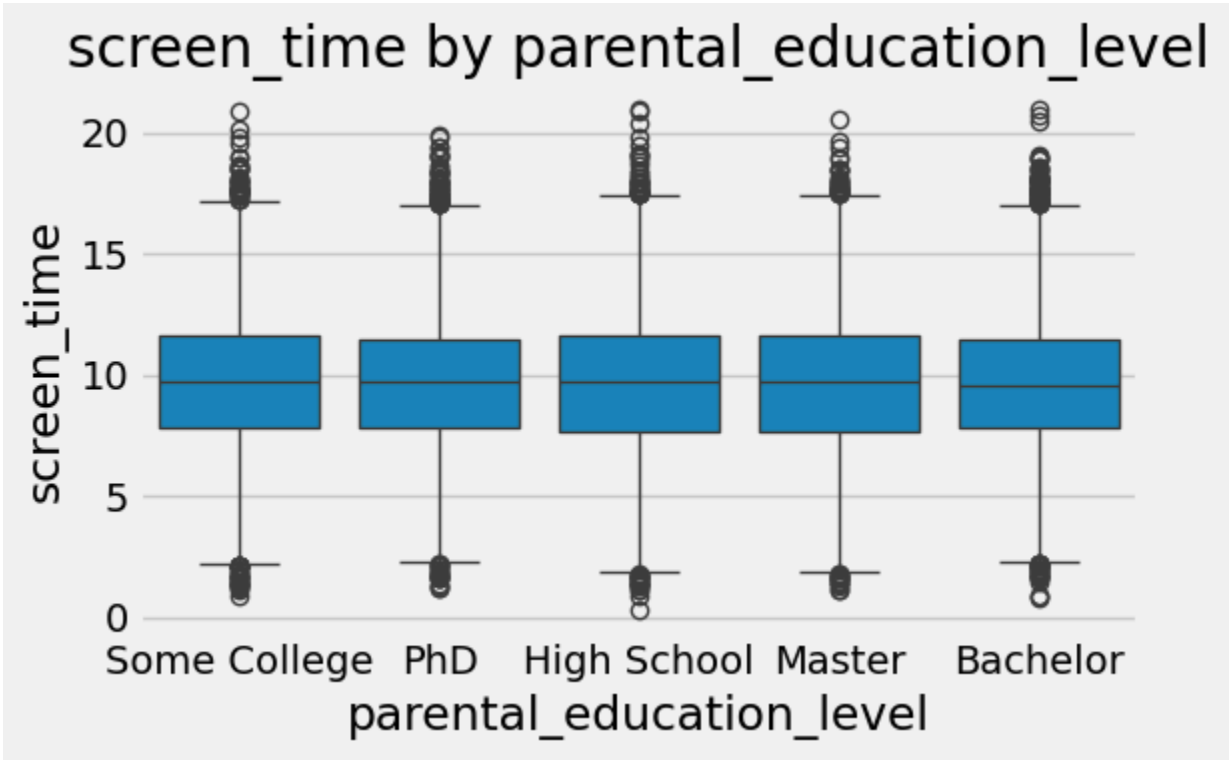

screen_time vs exam_score (corr=0.17)
exam_score
100
80
60
40
0
5
10
15
20
screen_time

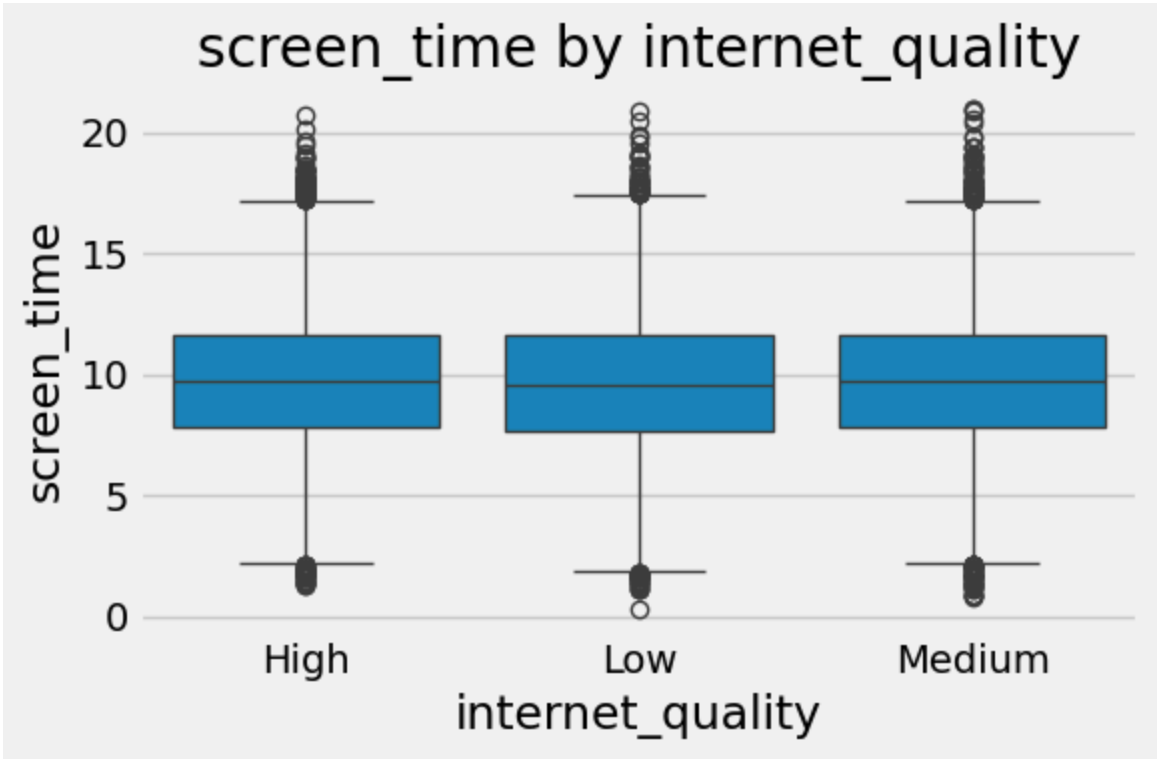

screen_time by gender
screen_time
20
15
10
5
0
Male
Other
Female
gender

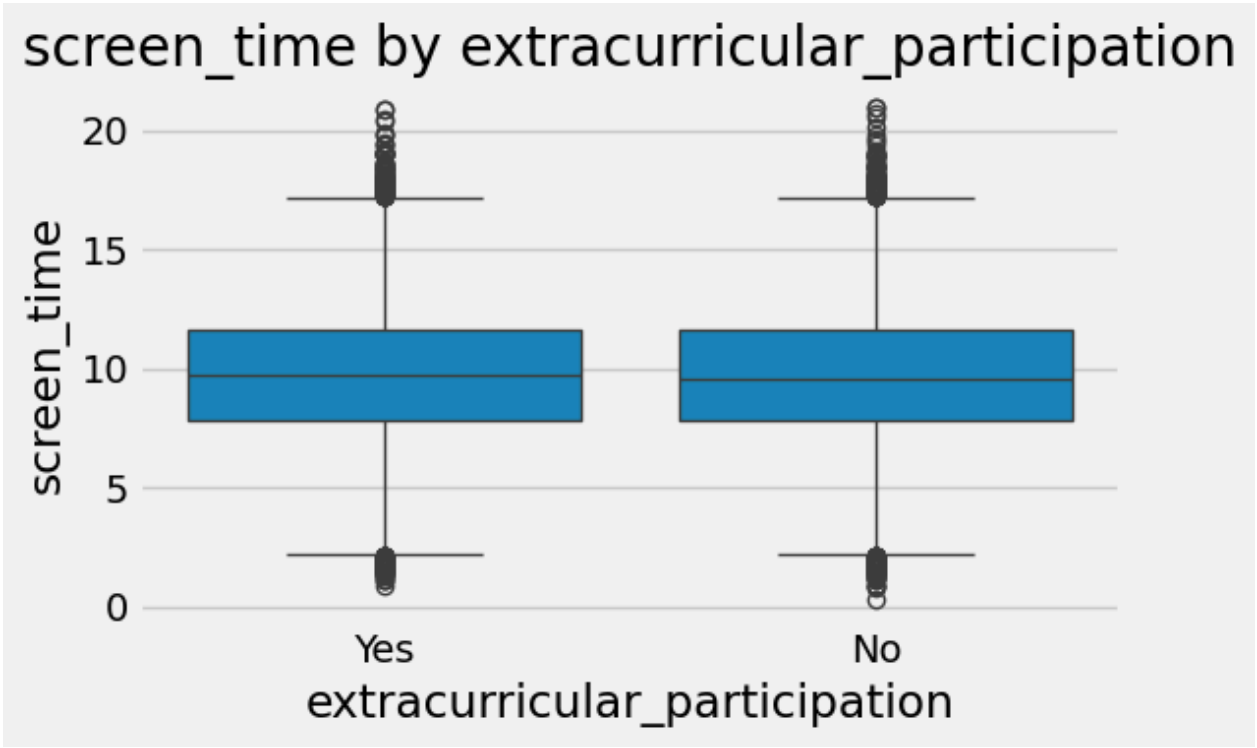

screen_time by major
screen_time
0
5
10
15
20
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

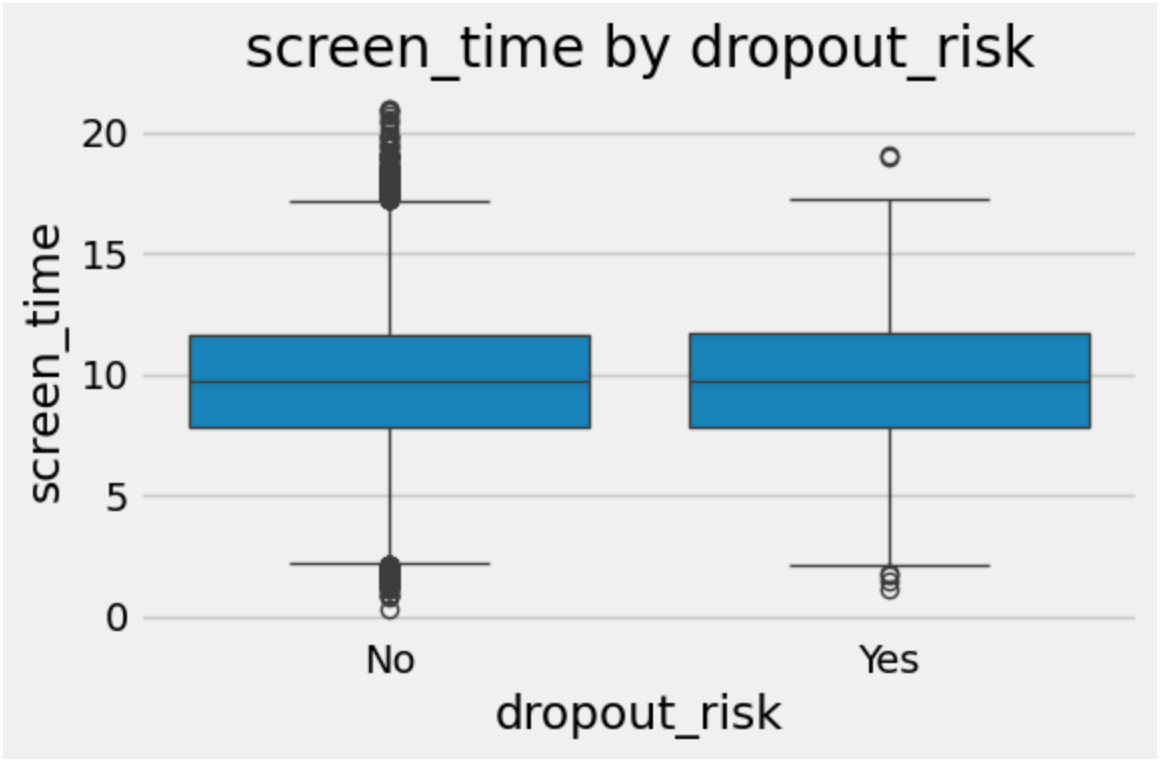

screen_time by part_time_job
screen_time
0
5
10
15
20
Yes
No
part_time_job

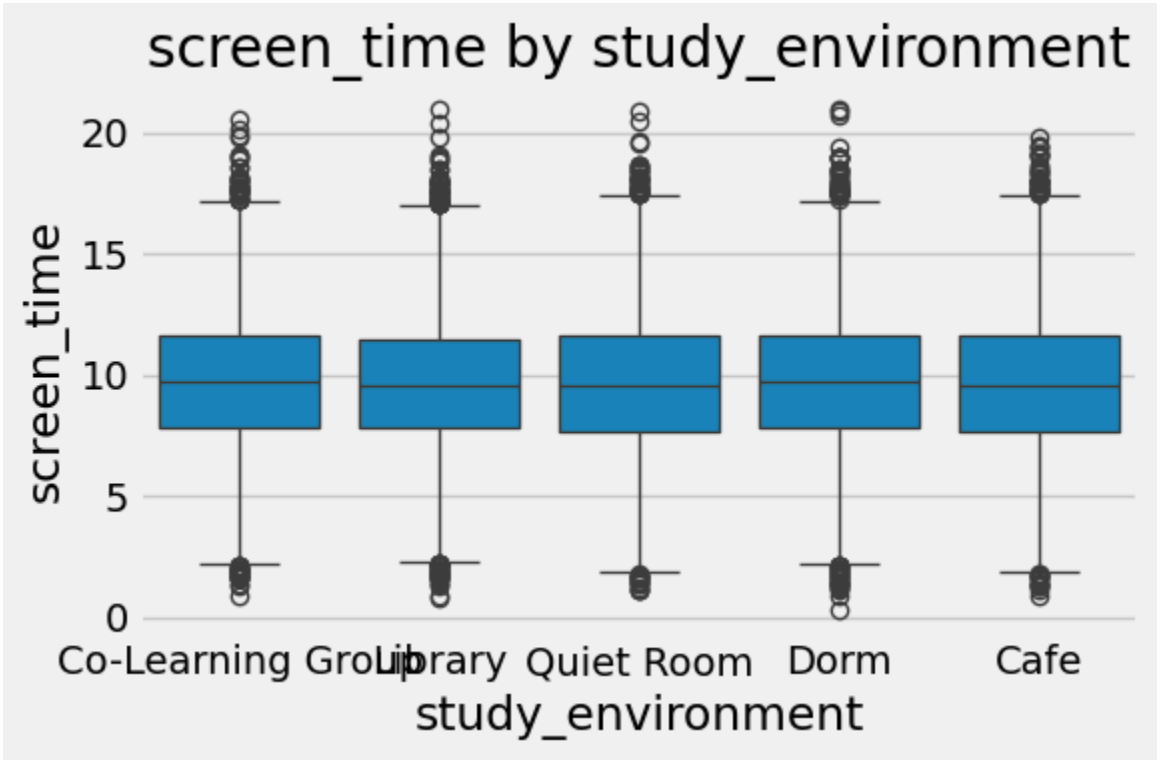

screen_time by diet_quality
screen_time
20
15
10
5
0
Poor
Good
Fair
diet_quality

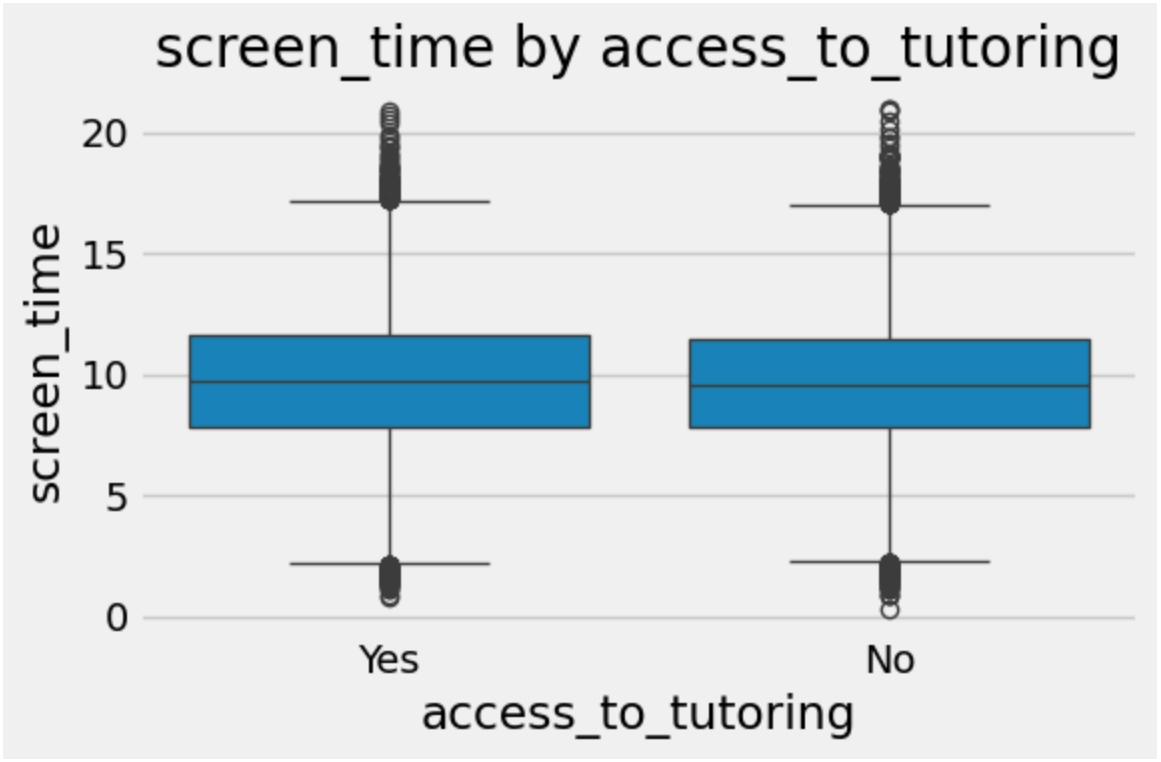

screen_time by parental_education_level
screen_time
20
15
10
5
0
Some College
PhD
High School
Master
Bachelor
parental_education_level

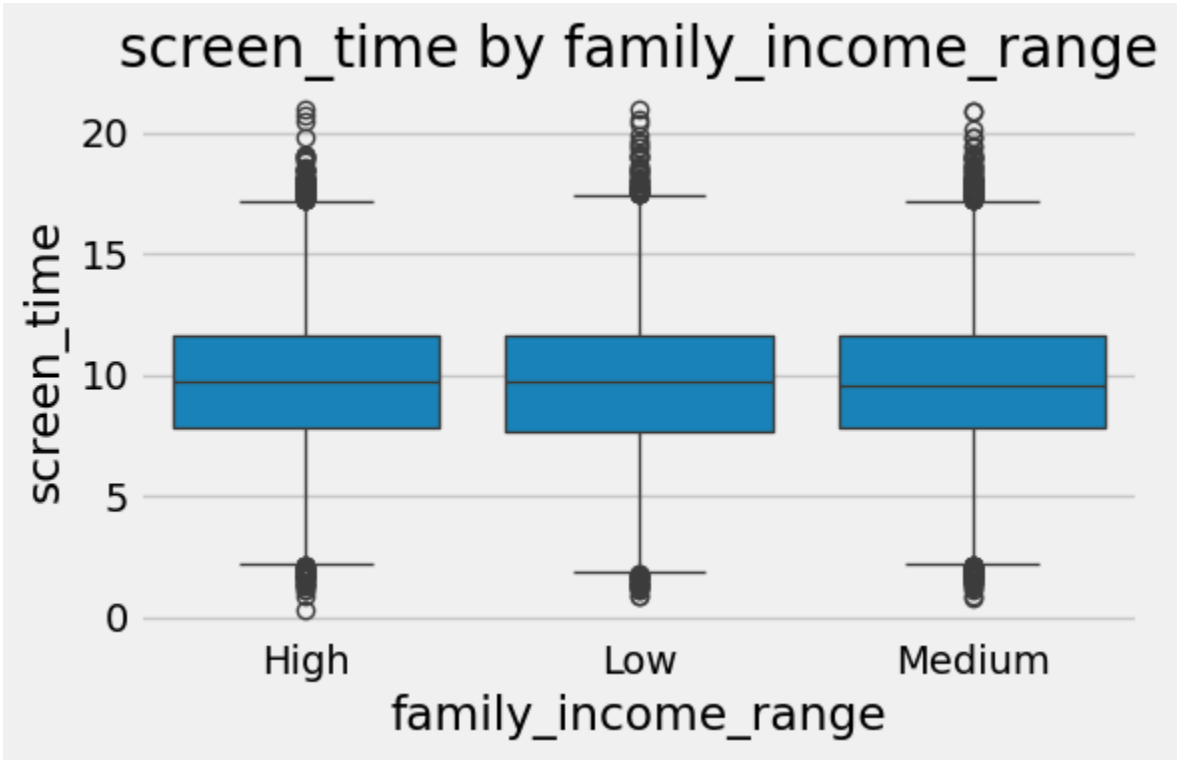

screen_time by internet_quality
20
15
10
5
0
screen_time
High
Low
Medium
internet_quality

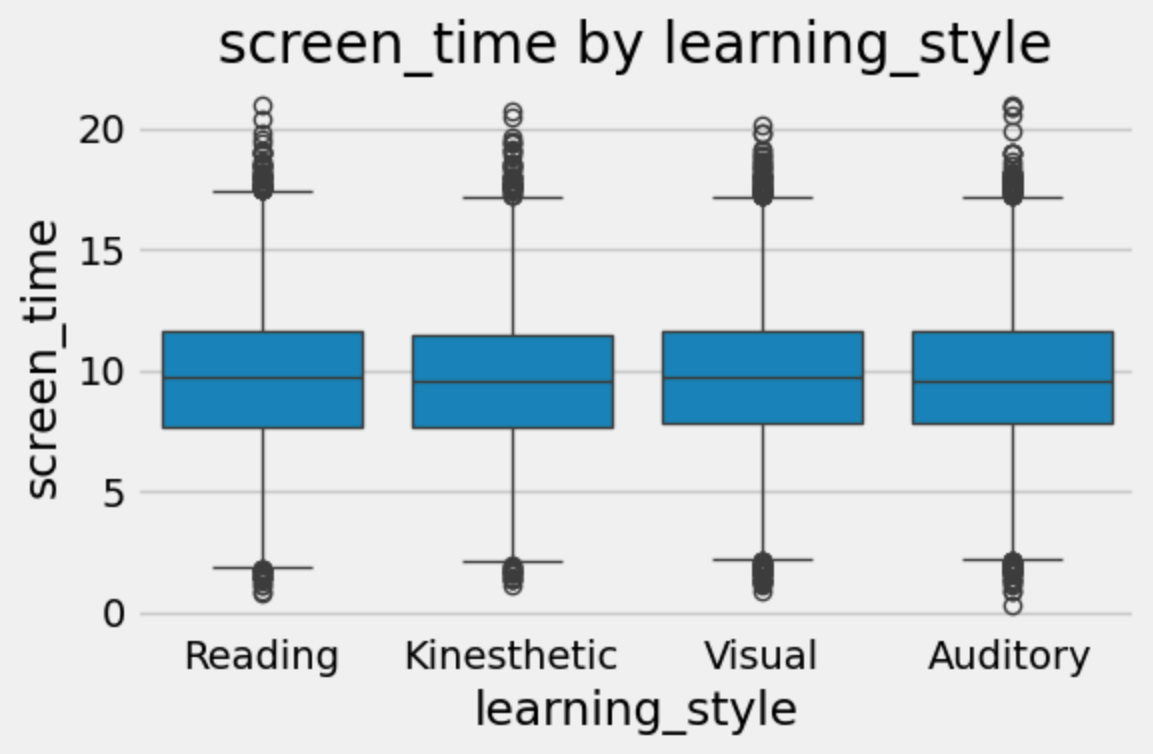

screen_time by extracurricular_participation
20
15
10
5
0
screen_time
Yes
No
extracurricular_participation

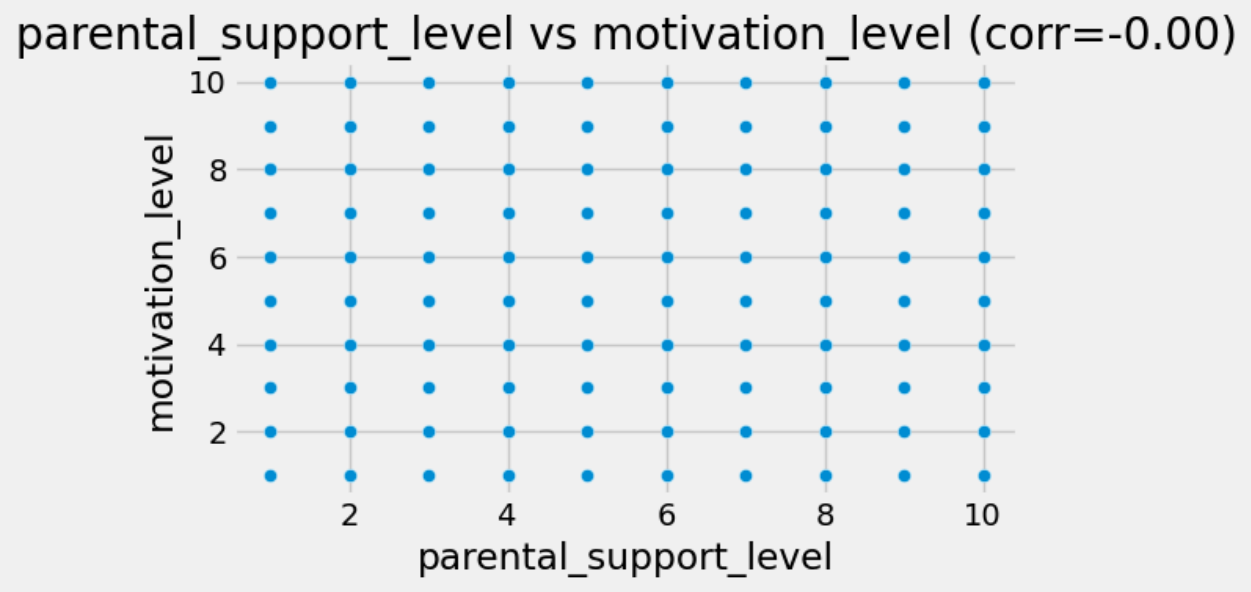

screen_time by dropout_risk
screen_time
20
15
10
5
0
No
Yes
dropout_risk

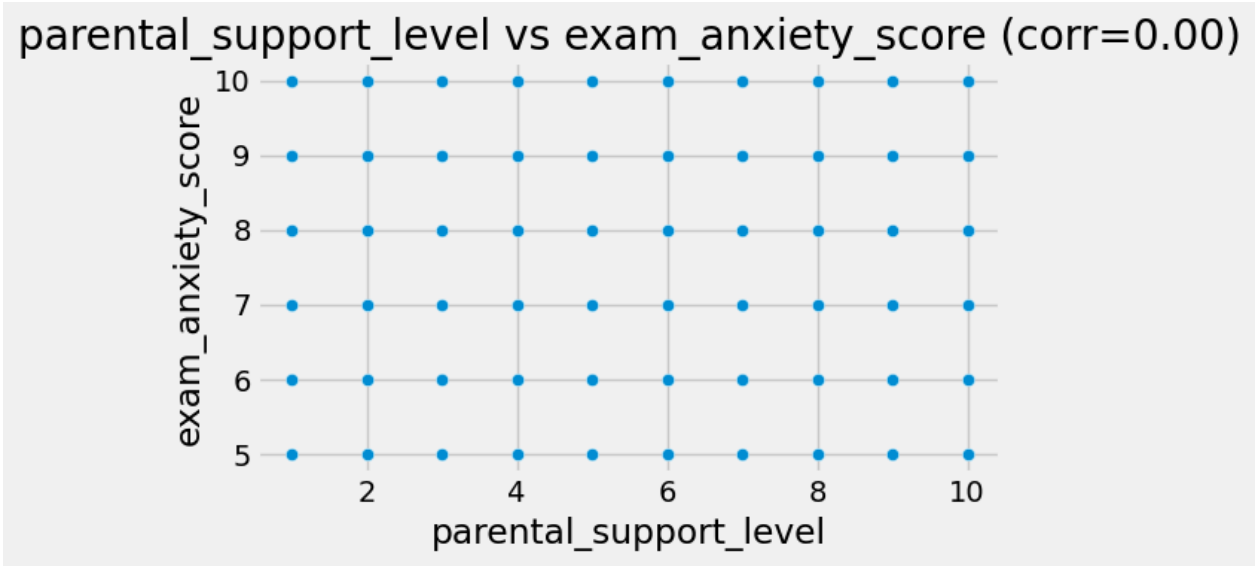

screen_time by study_environment
screen_time
20
15
10
5
0
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

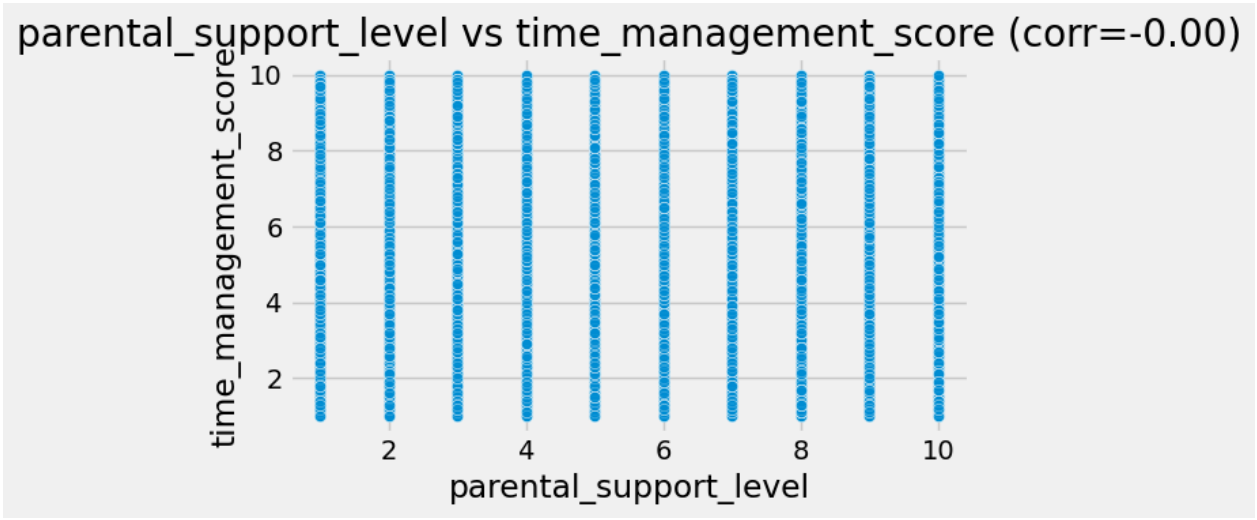

screen_time by access_to_tutoring
screen_time
20
15
10
5
0
Yes
No
access_to_tutoring

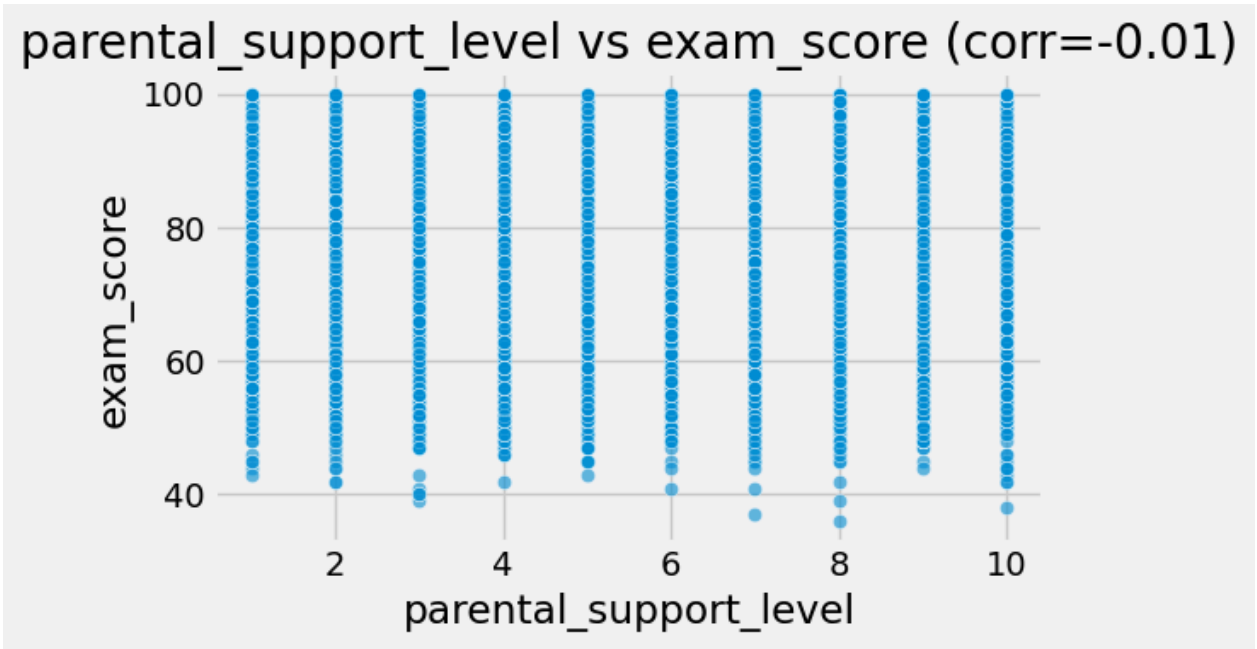

screen_time by family_income_range
screen_time
20
15
10
5
0
High
Low
Medium
family_income_range

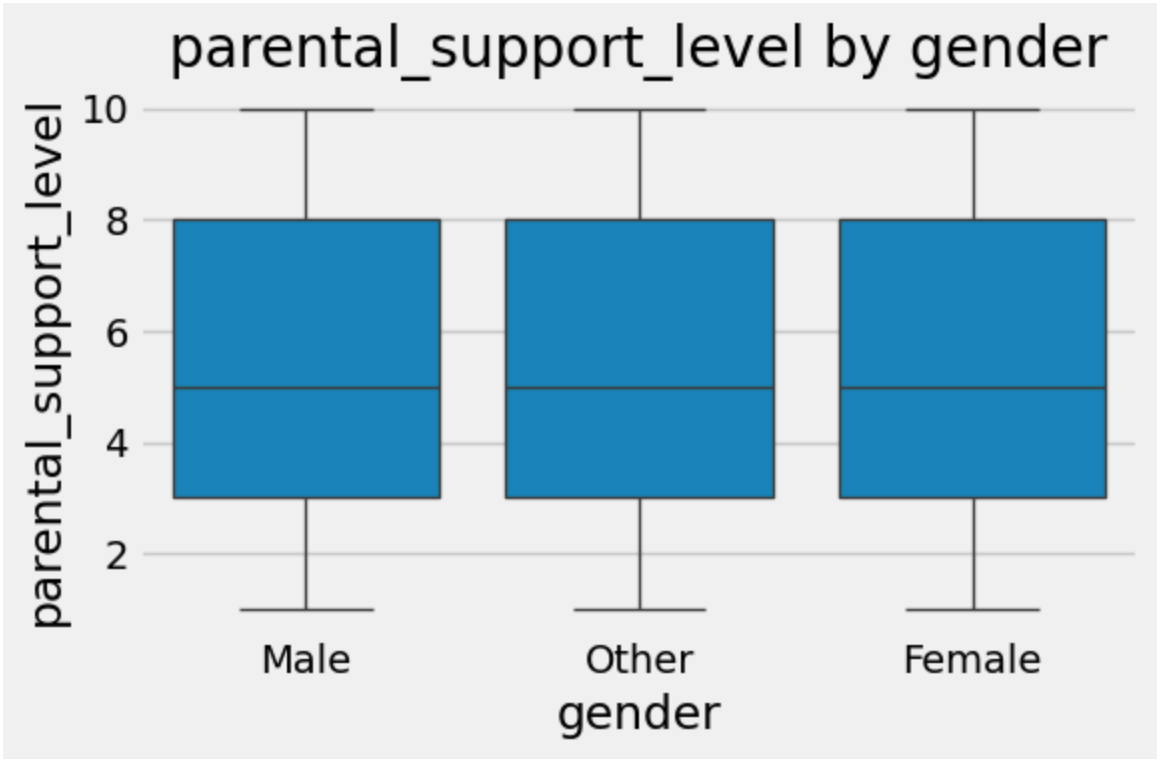

screen_time by learning_style
screen_time
20
15
10
5
0
Reading
Kinesthetic
Visual
Auditory
learning_style

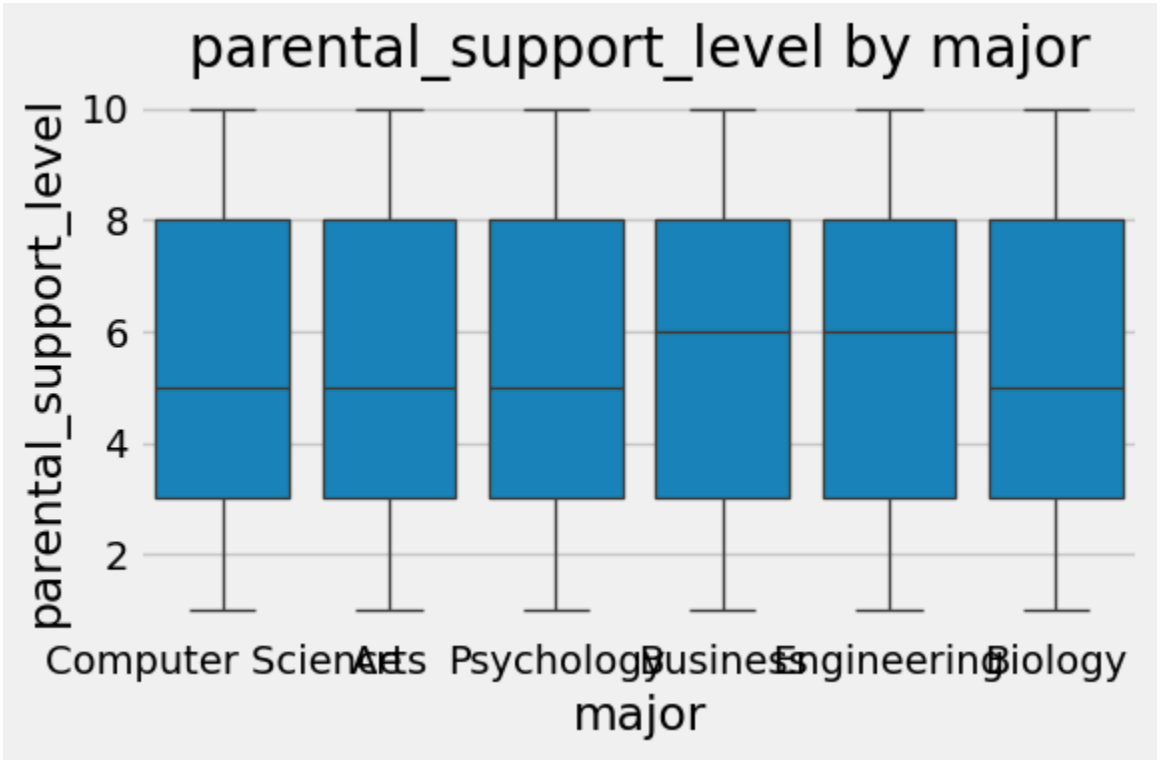

parental_support_level vs motivation_level (corr=-0.00)
motivation_level
10
8
6
4
2
2
4
6
8
10
parental_support_level

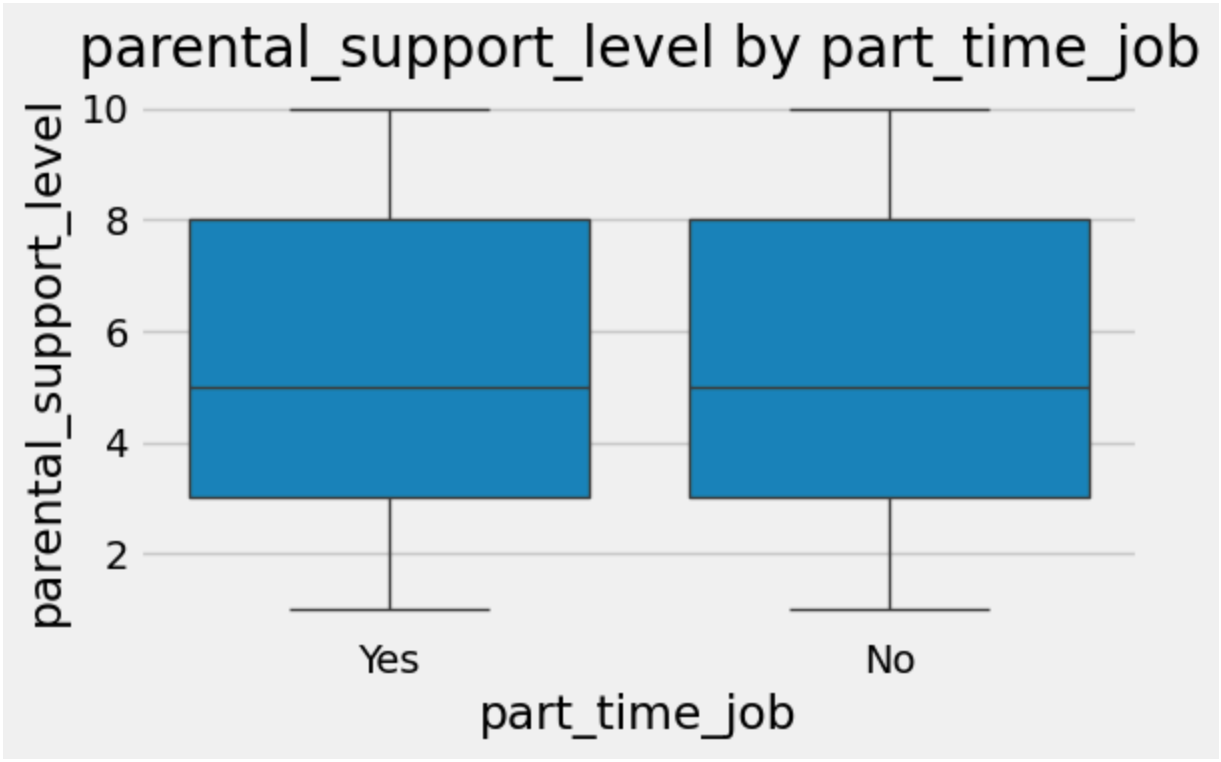

parental_support_level vs exam_anxiety_score (corr=0.00)
exam_anxiety_score
10
9
8
7
6
5
2
4
6
8
10
parental_support_level

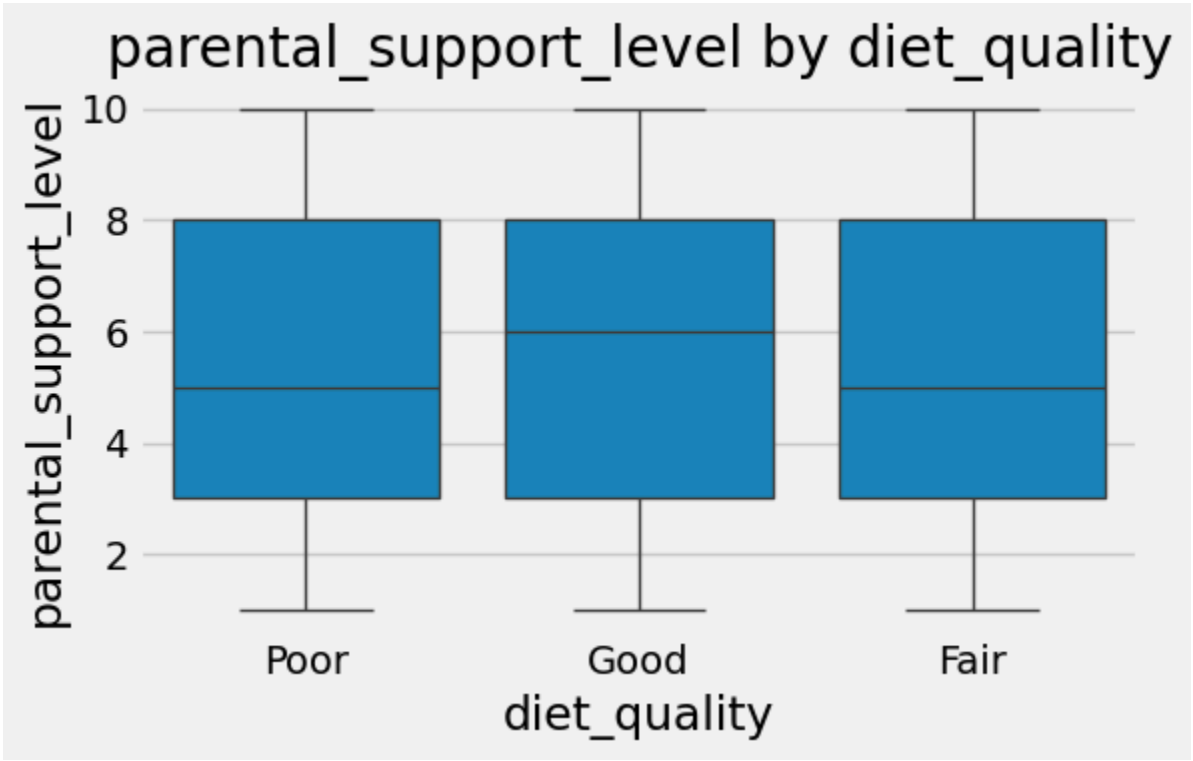

parental_support_level vs time_management_score (corr=-0.00)
time_management_score
10
8
6
4
2
2
4
6
8
10
parental_support_level

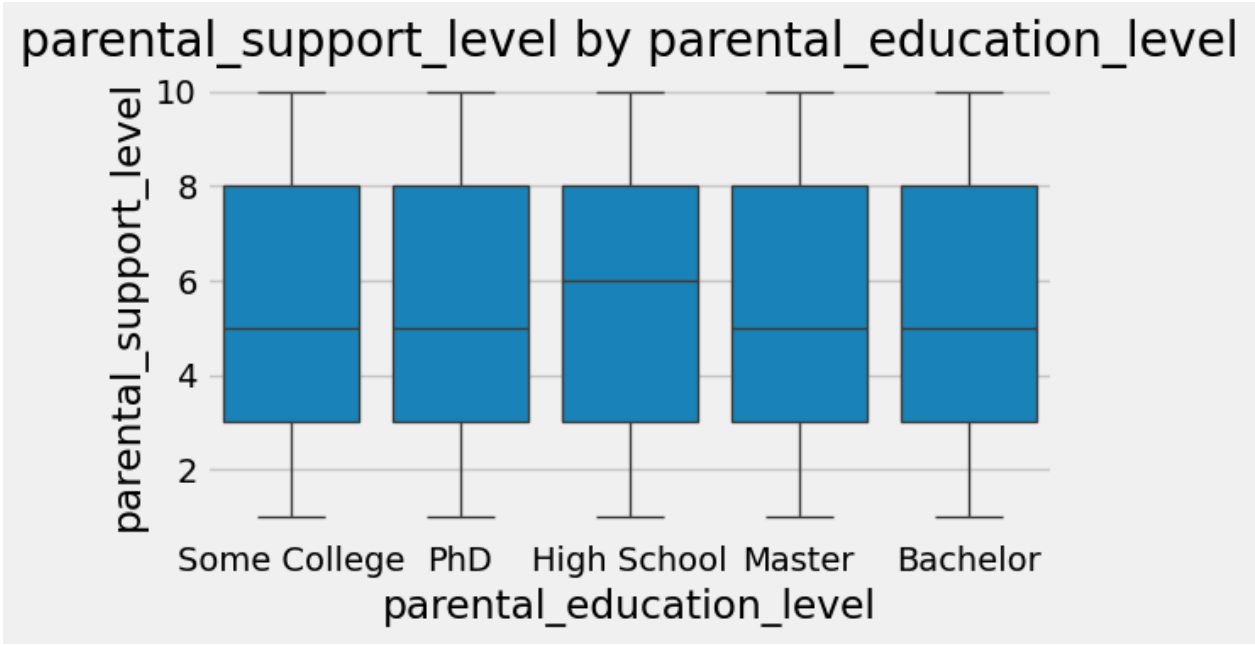

parental_support_level vs exam_score (corr=-0.01)
exam_score
100
80
60
40
2
4
6
8
10
parental_support_level

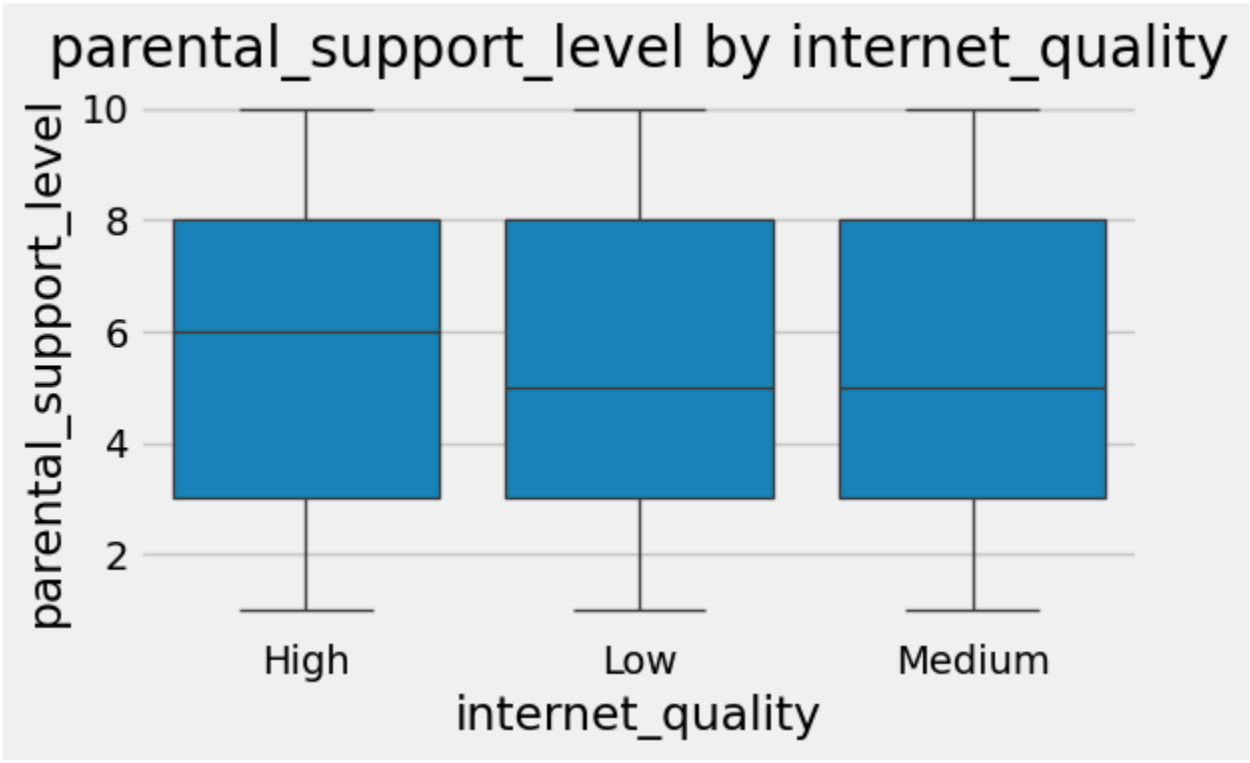

parental_support_level by gender
parental_support_level
10
8
6
4
2
Male
Other
Female
gender

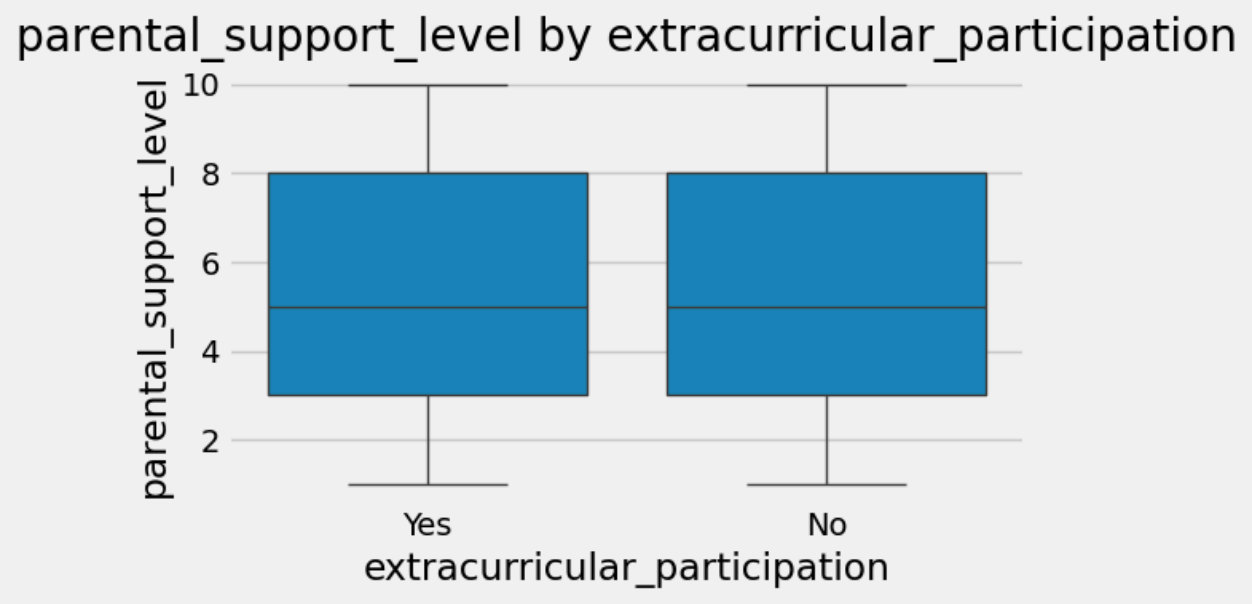

parental_support_level by major
parental_support_level
10
8
6
4
2
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

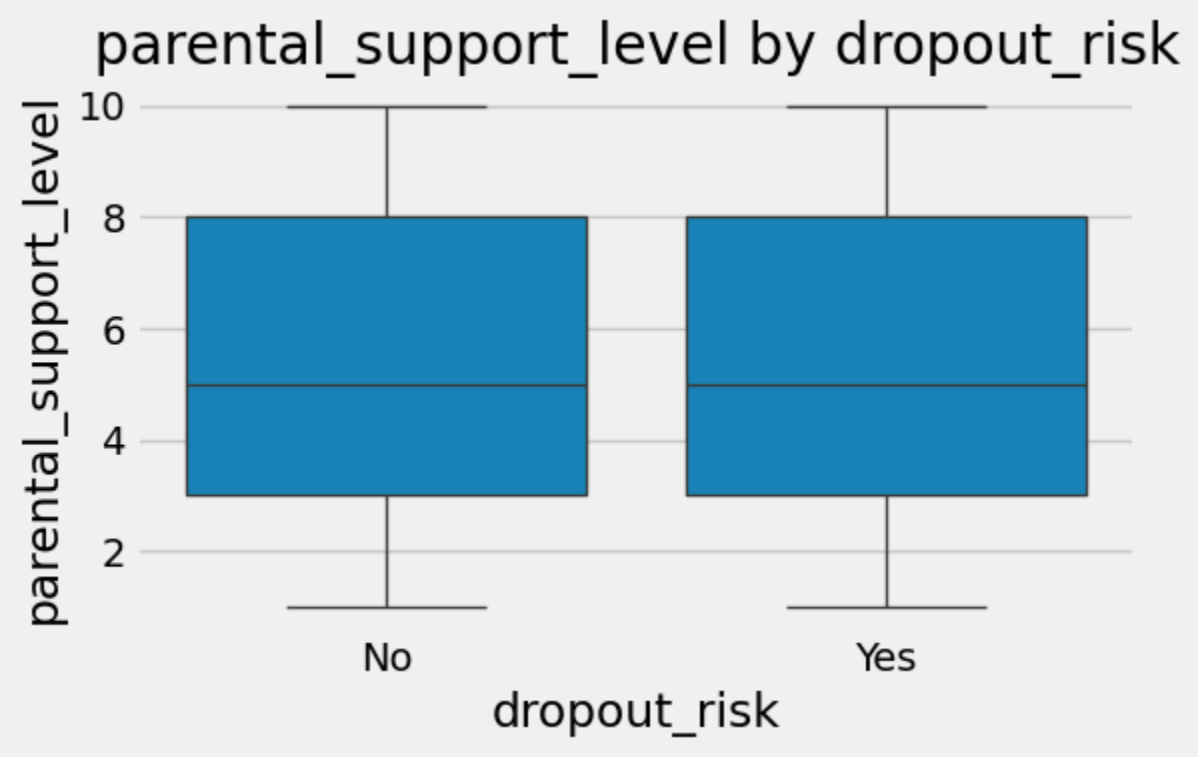

parental_support_level by part_time_job
parental_support_level
10
8
6
4
2
Yes
No
part_time_job

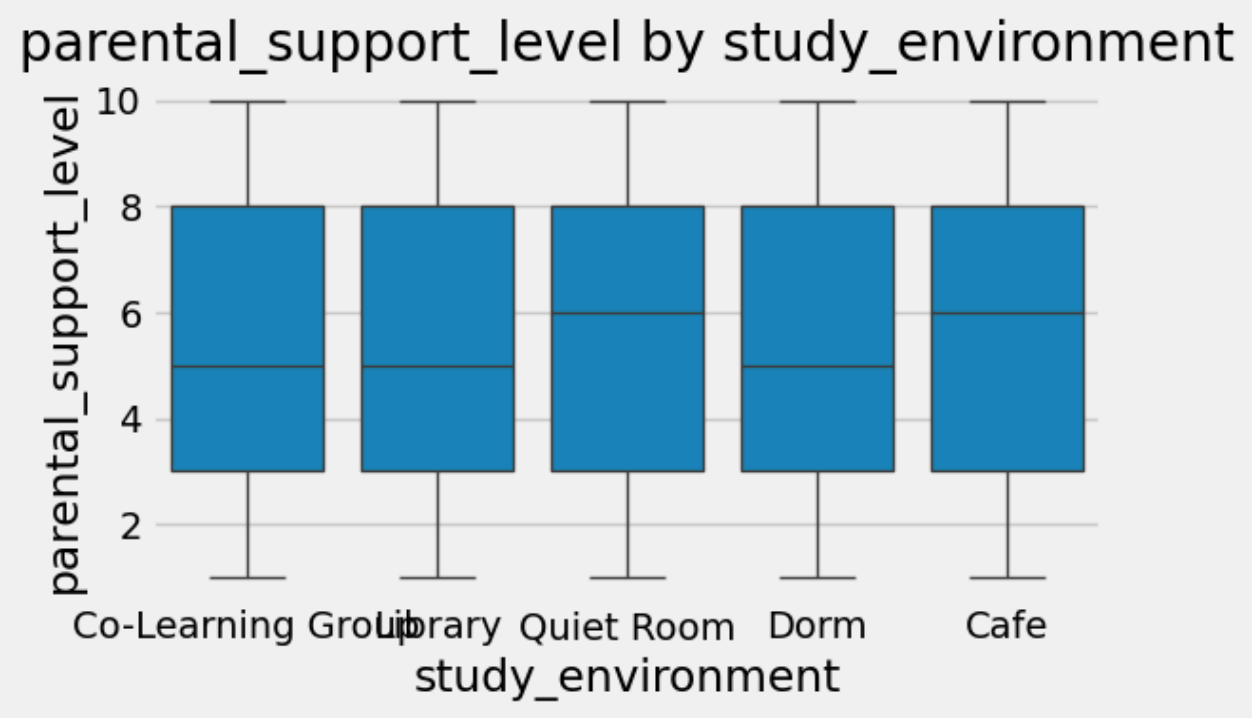

parental_support_level by diet_quality
parental_support_level
10
8
6
4
2
Poor
Good
Fair
diet_quality

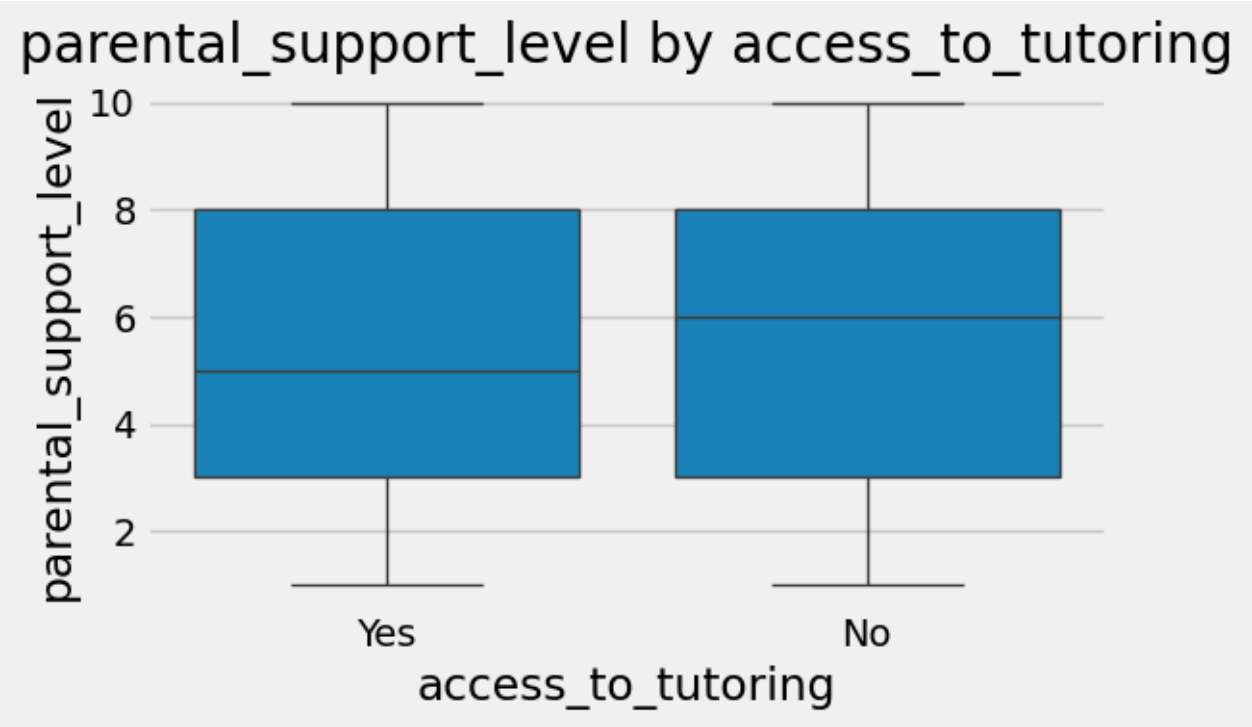

parental_support_level by parental_education_level
parental_support_level
10
8
6
4
2
Some College
PhD
High School
Master
Bachelor
parental_education_level

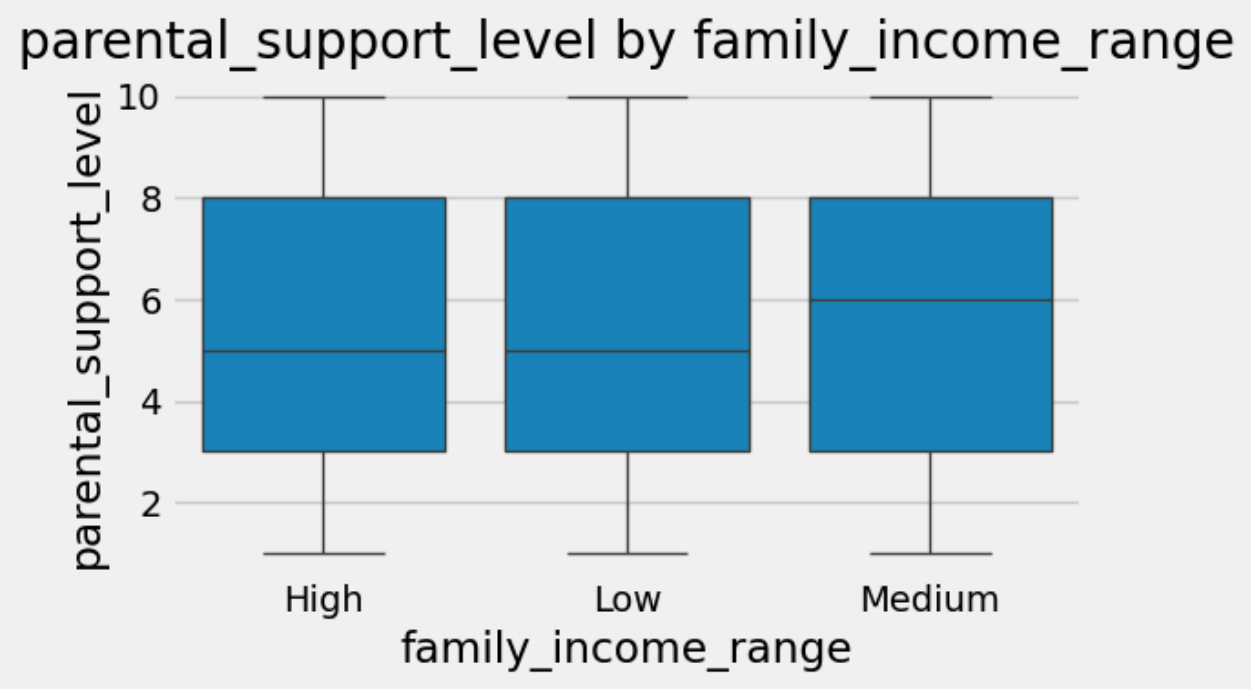

parental_support_level by internet_quality
parental_support_level
10
8
6
4
2
High
Low
Medium
internet_quality

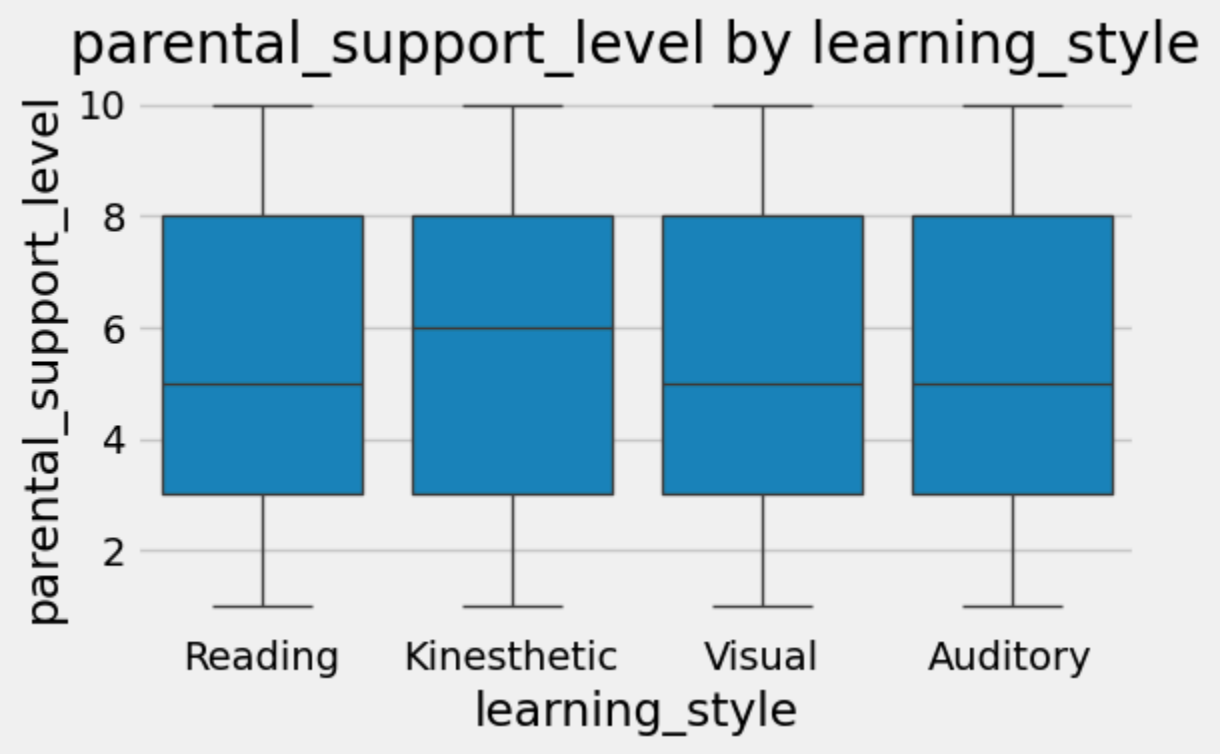

parental_support_level by extracurricular_participation
parental_support_level
10
8
6
4
2
Yes
No
extracurricular_participation

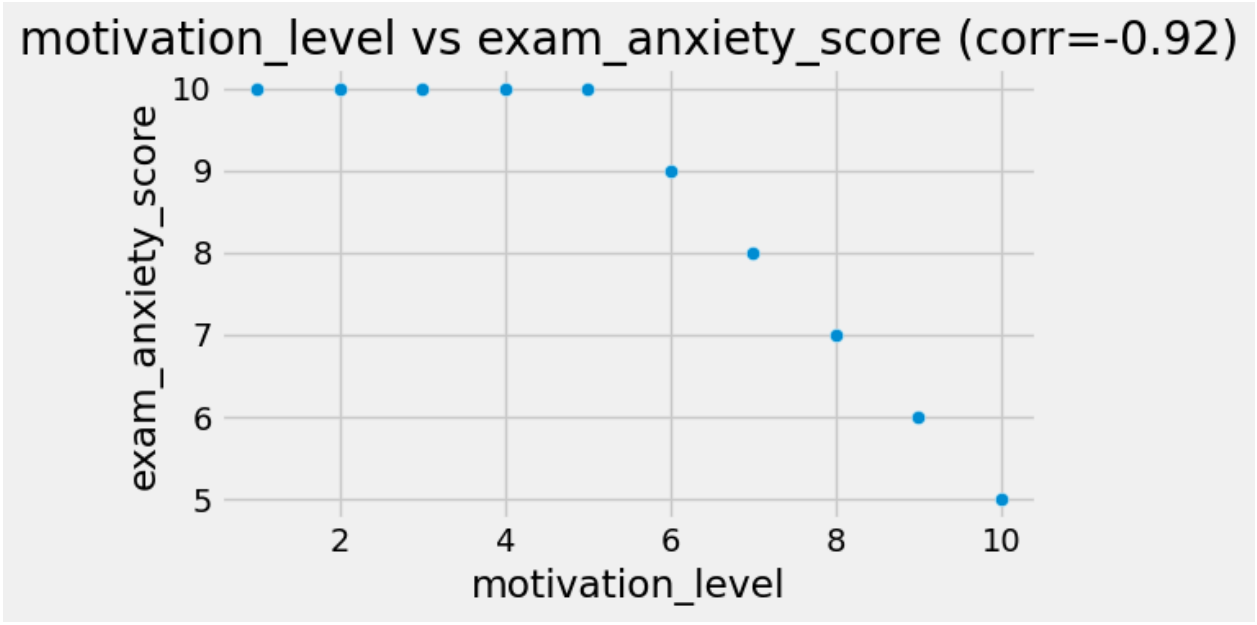

parental_support_level by dropout_risk
parental_support_level
10
8
6
4
2
No
Yes
dropout_risk

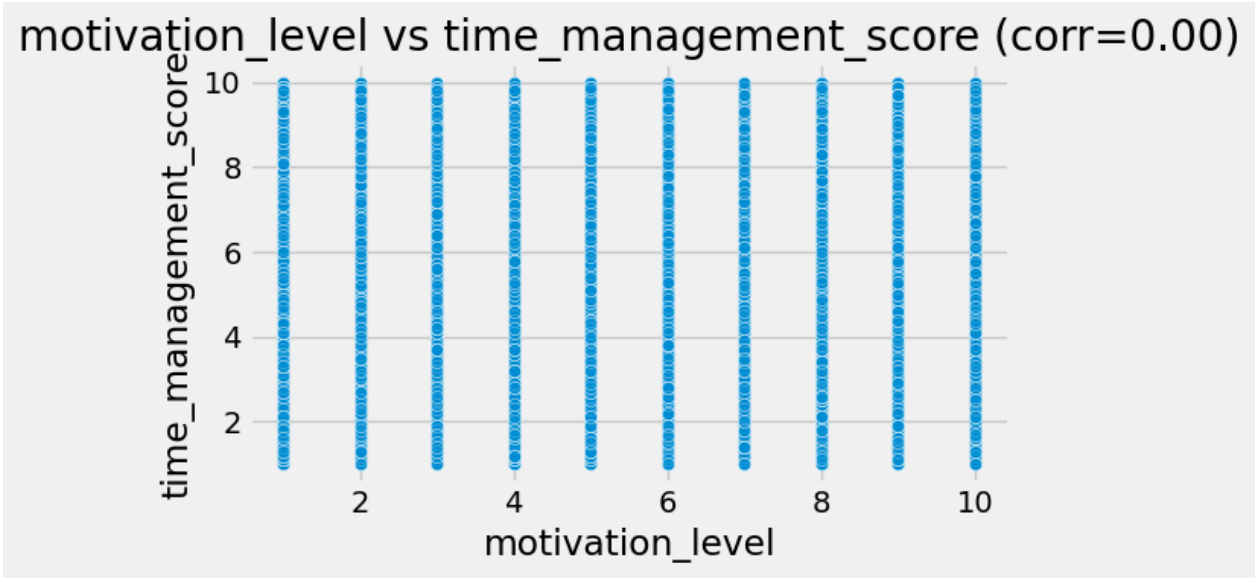

parental_support_level by study_environment
parental_support_level
10
8
6
4
2
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

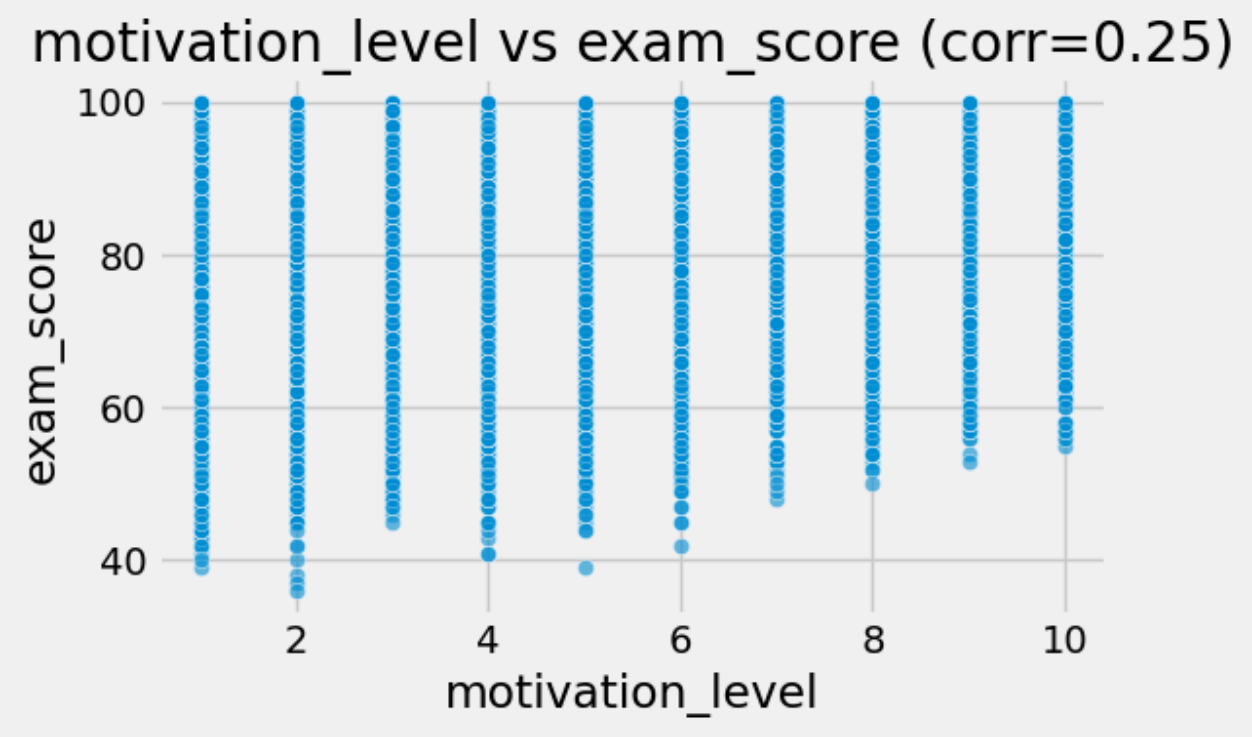

parental_support_level by access_to_tutoring
parental_support_level
10
8
6
4
2
Yes
No
access_to_tutoring

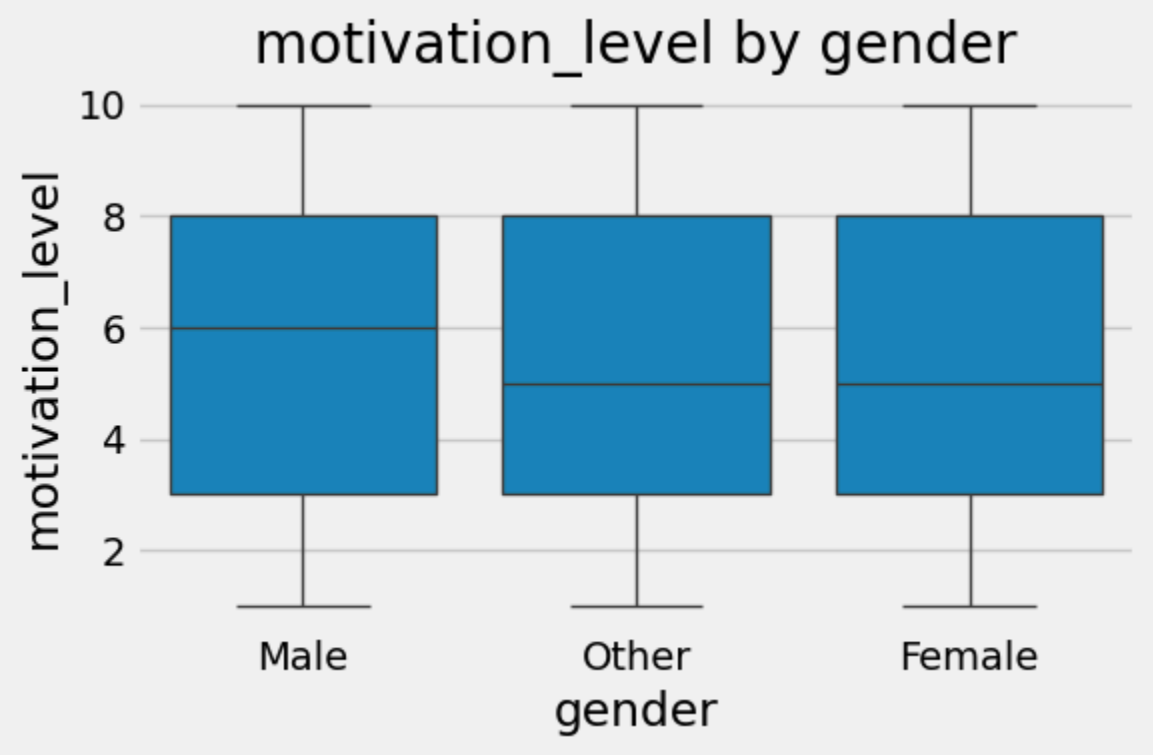

parental_support_level by family_income_range
parental_support_level
10
8
6
4
2
High
Low
Medium
family_income_range

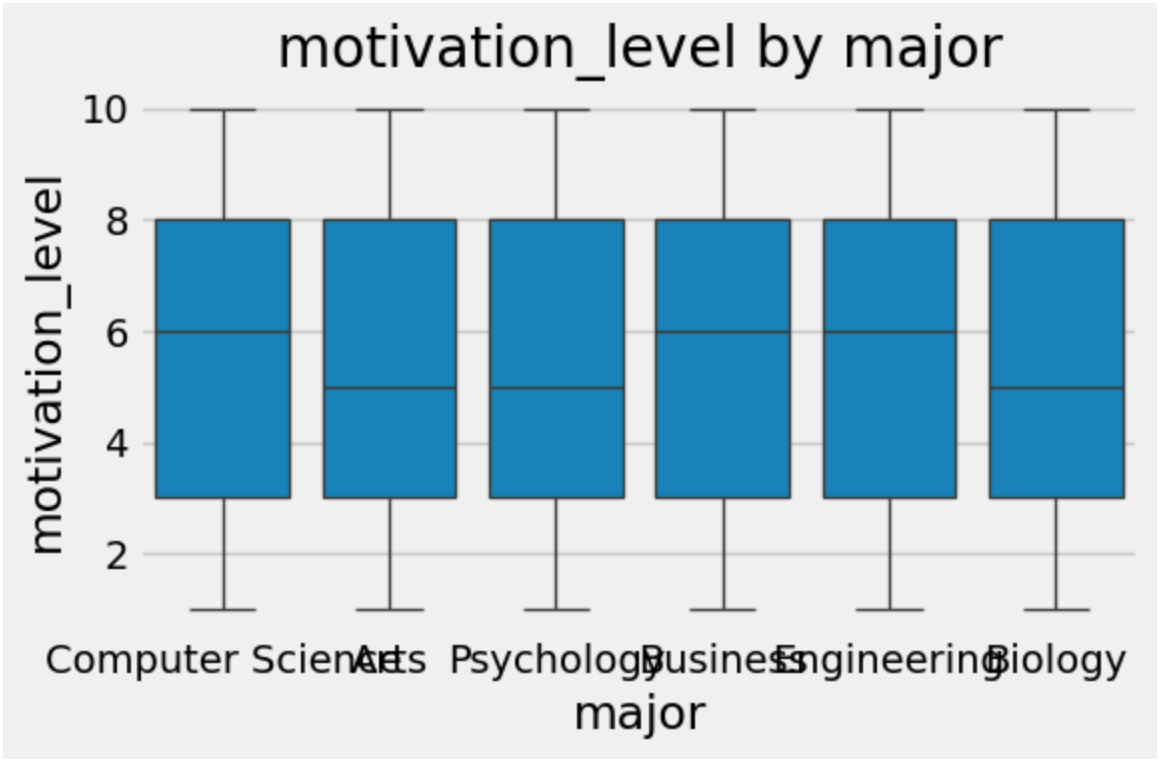

parental_support_level by learning_style
parental_support_level
10
8
6
4
2
Reading
Kinesthetic
Visual
Auditory
learning_style

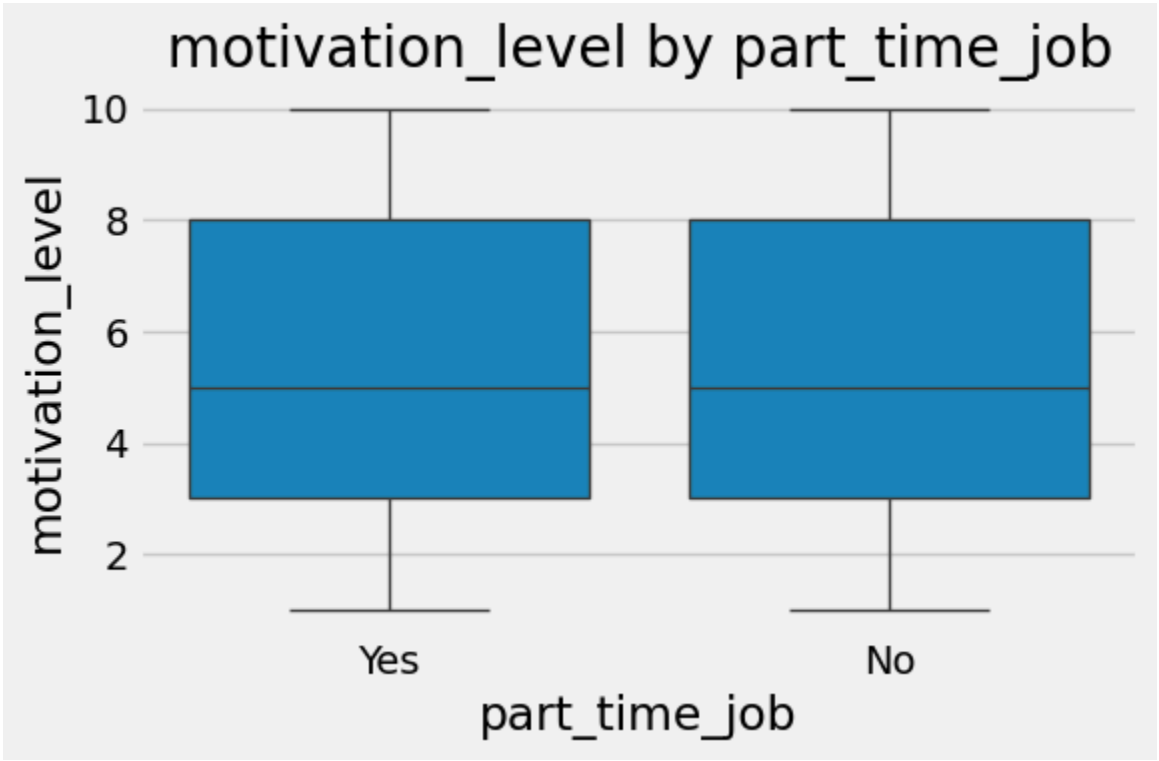

motivation_level vs exam_anxiety_score (corr=-0.92)
exam_anxiety_score
10
9
8
7
6
5
2
4
6
8
10
motivation_level

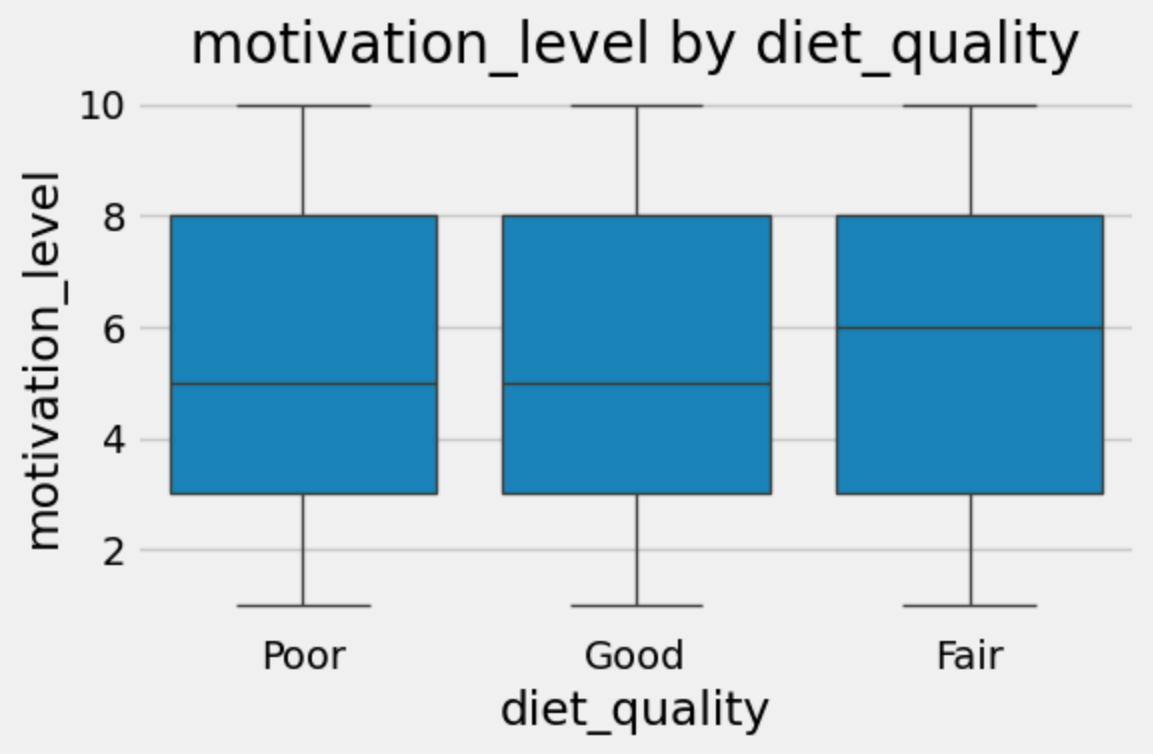

motivation_level vs time_management_score (corr=0.00)
time_management_score
10
8
6
4
2
2
4
6
8
10
motivation_level

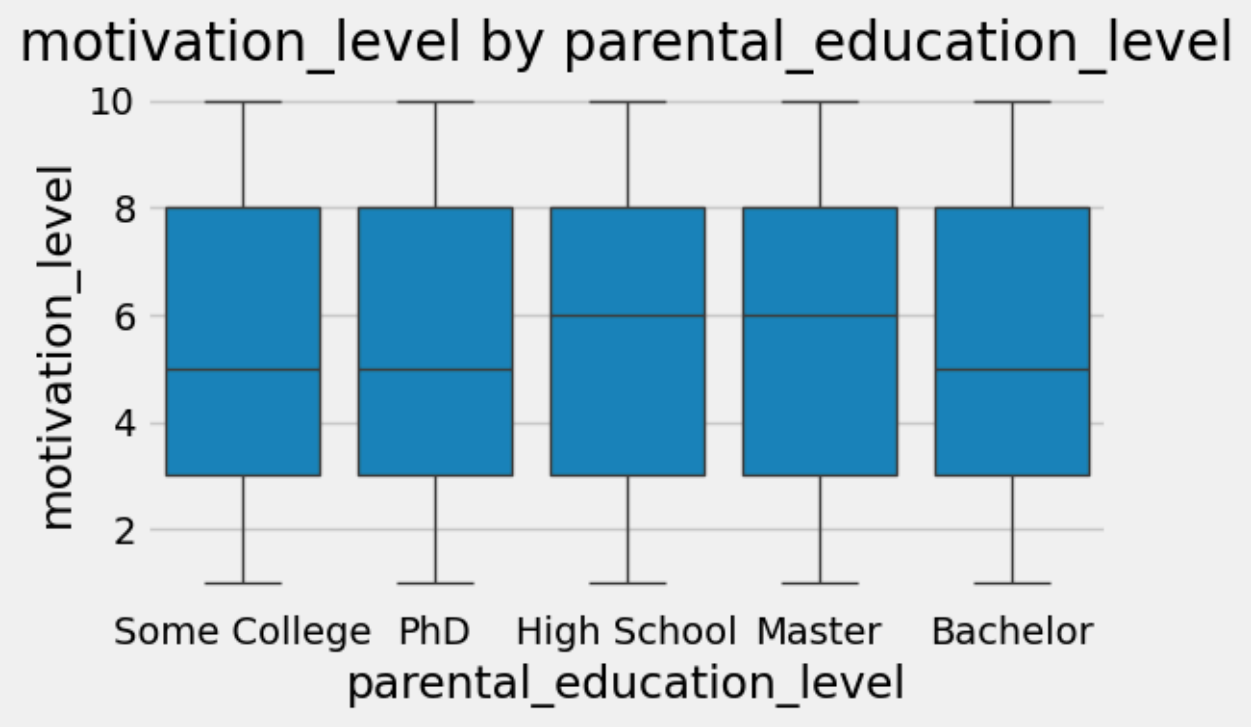

motivation_level vs exam_score (corr=0.25)
exam_score
100
80
60
40
2
4
6
8
10
motivation_level

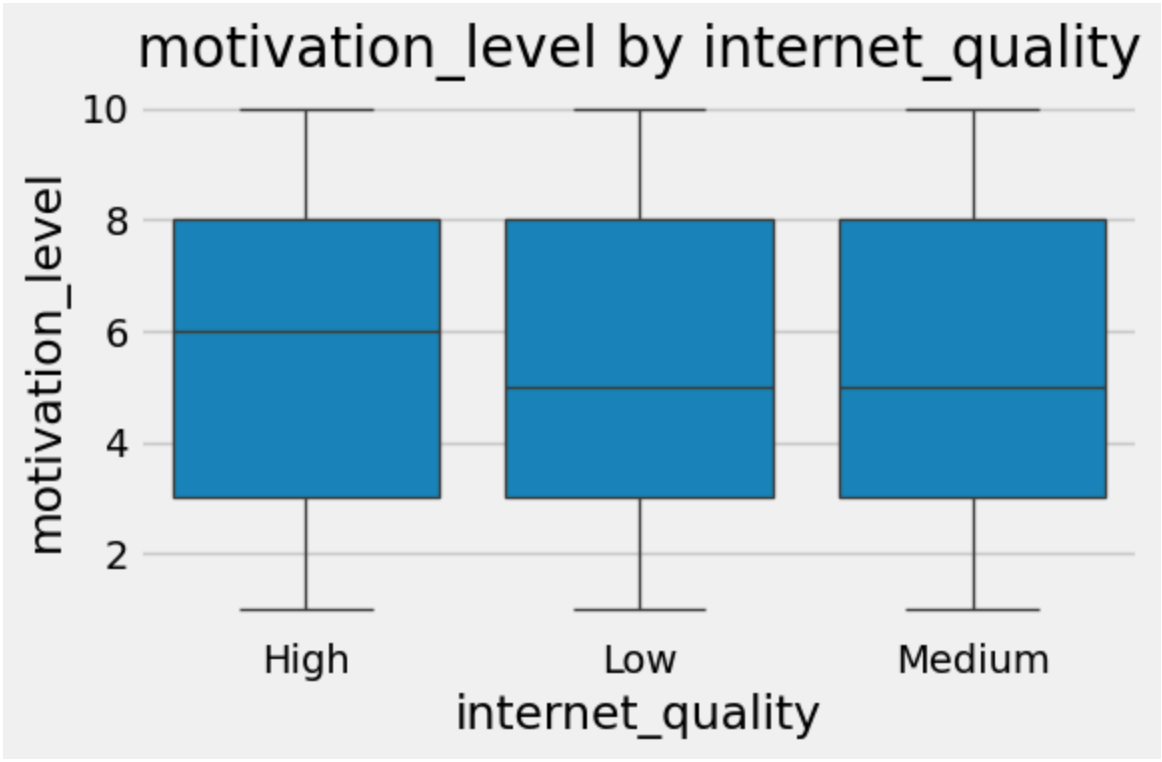

motivation_level by gender
motivation_level
10
8
6
4
2
Male
Other
Female
gender

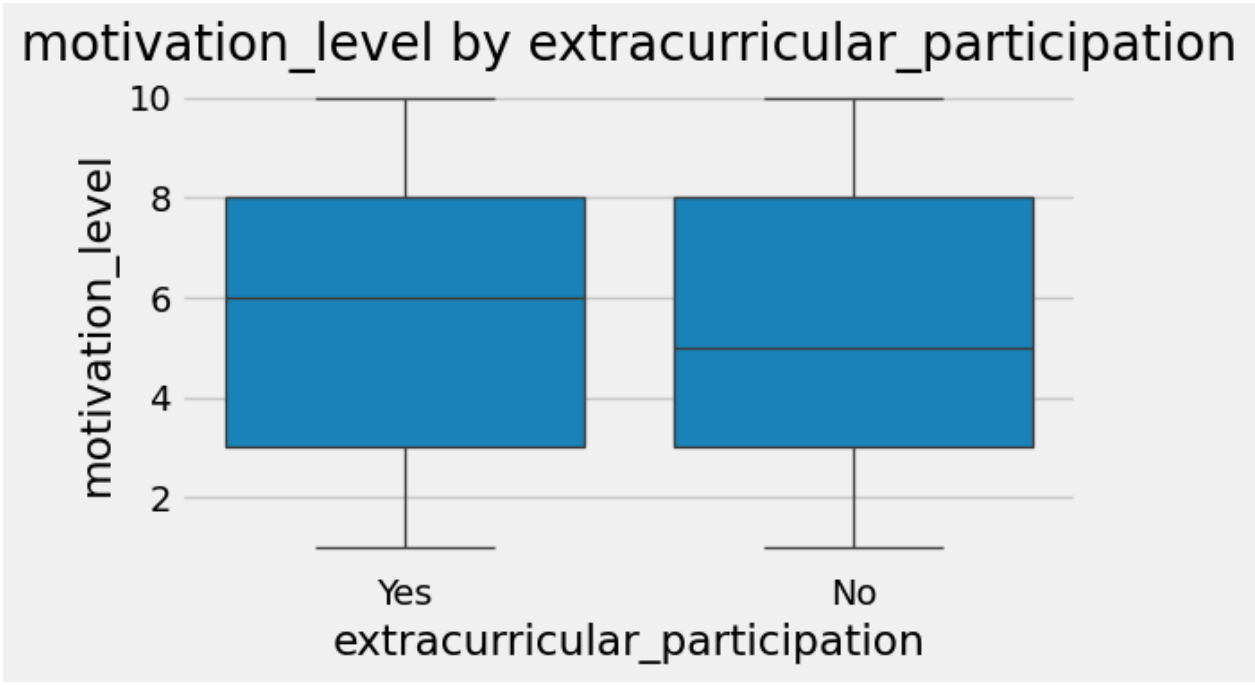

motivation_level by major
motivation_level
10
8
6
4
2
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

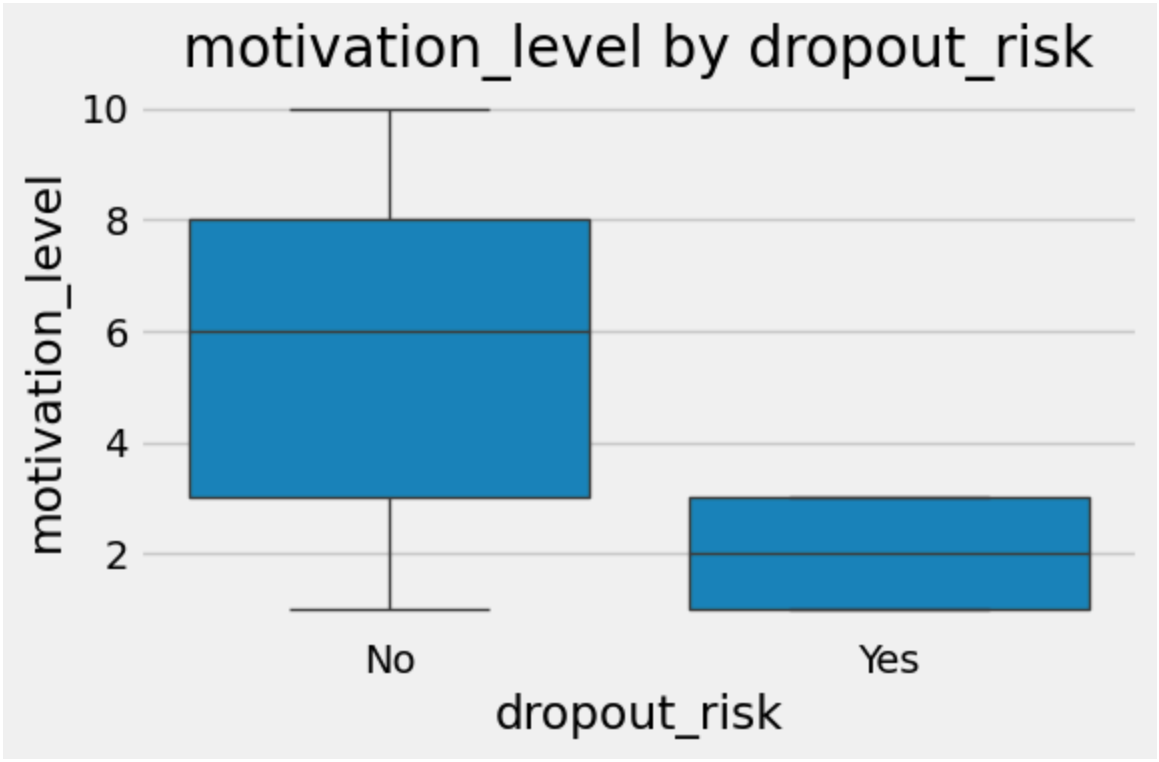

motivation_level by part_time_job
motivation_level
10
8
6
4
2
Yes
No
part_time_job

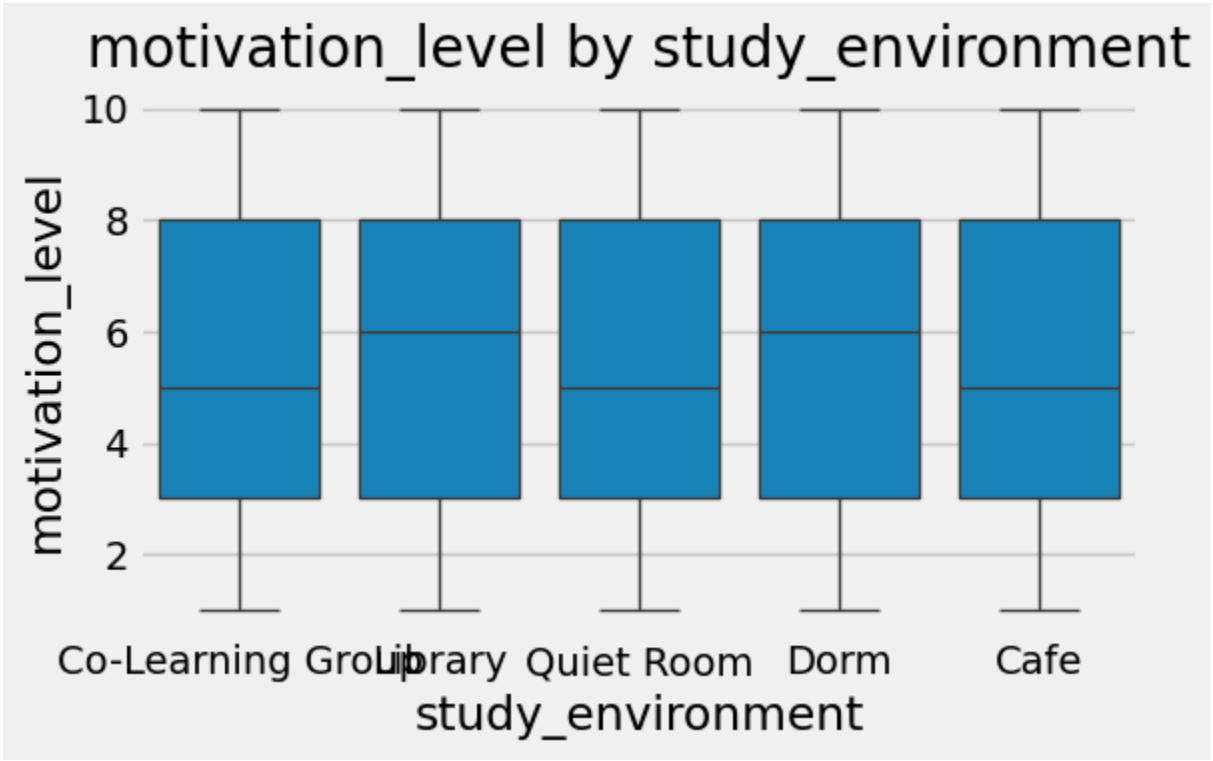

motivation_level by diet_quality
motivation_level
10
8
6
4
2
Poor
Good
Fair
diet_quality

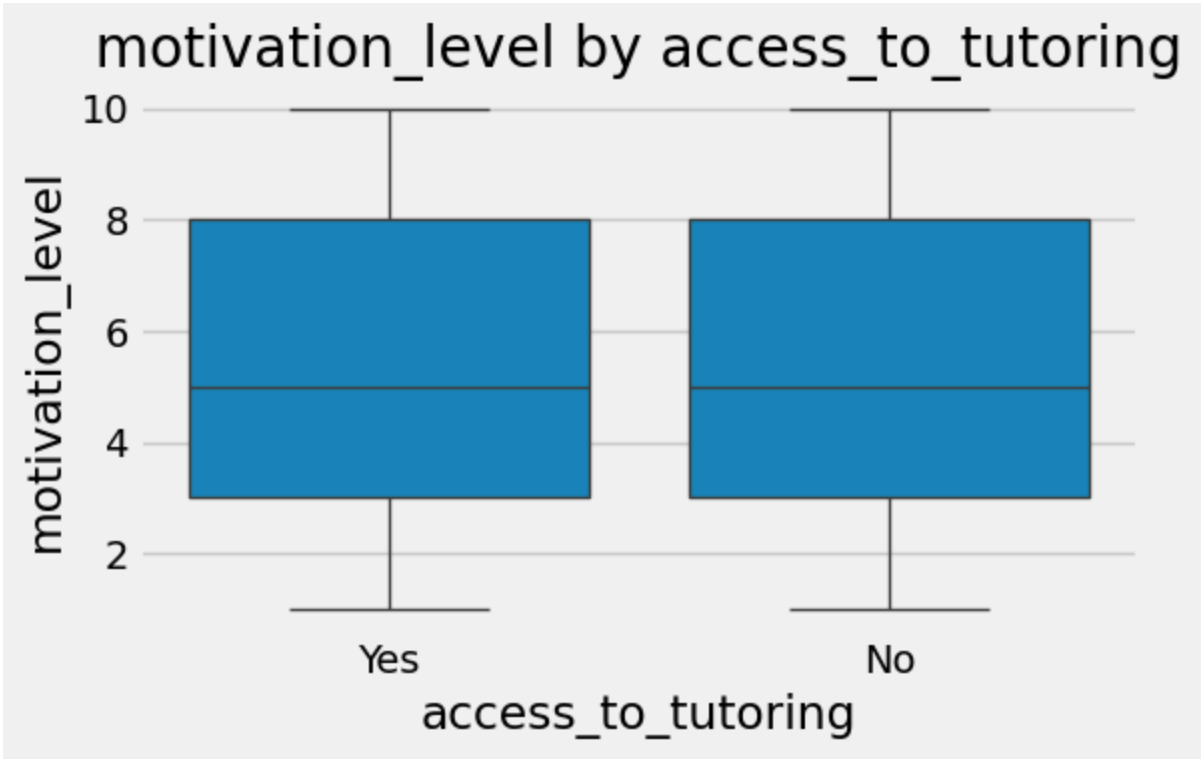

motivation_level by parental_education_level
motivation_level
10
8
6
4
2
Some College
PhD
High School
Master
Bachelor
parental_education_level

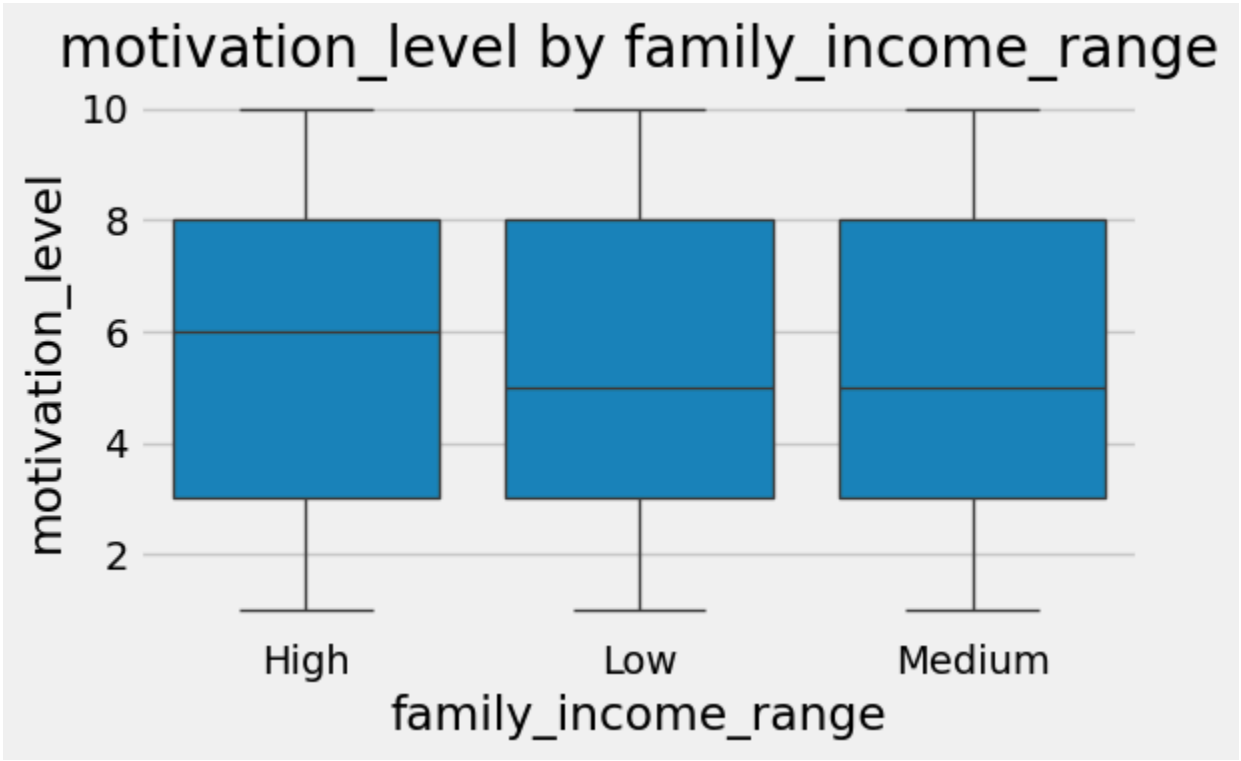

motivation_level by internet_quality
motivation_level
10
8
6
4
2
High
Low
Medium
internet_quality

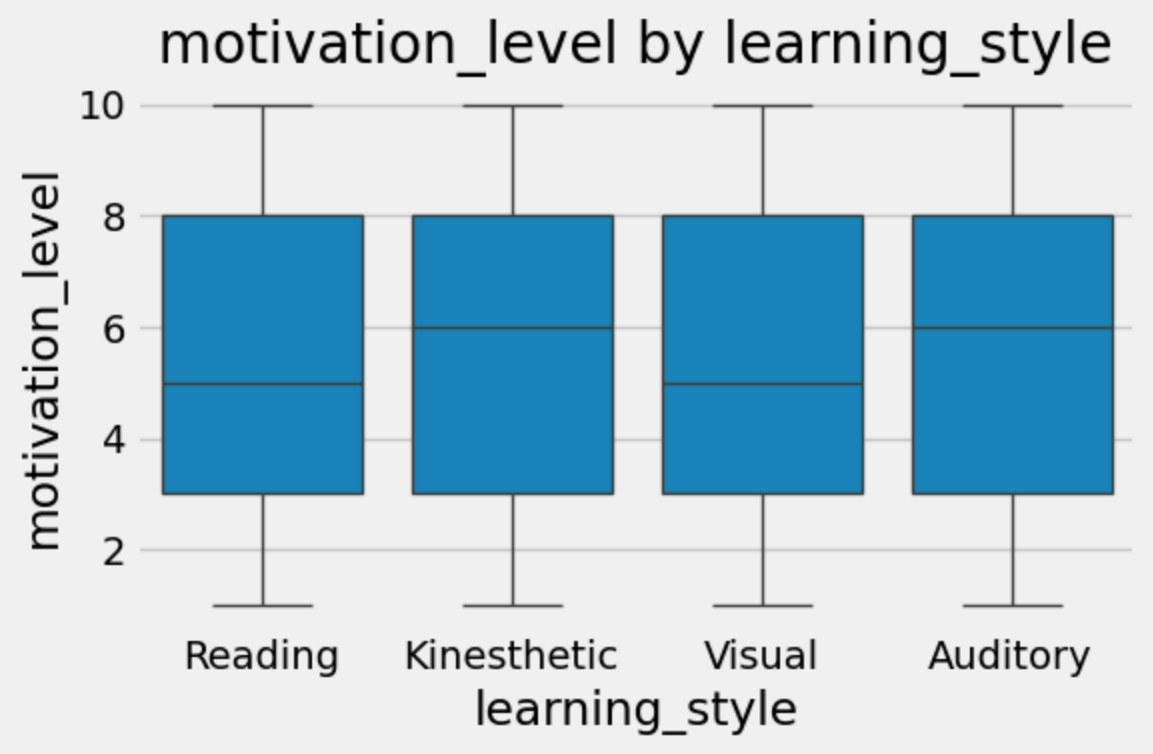

motivation_level by extracurricular_participation
motivation_level
10
8
6
4
2
Yes
No
extracurricular_participation

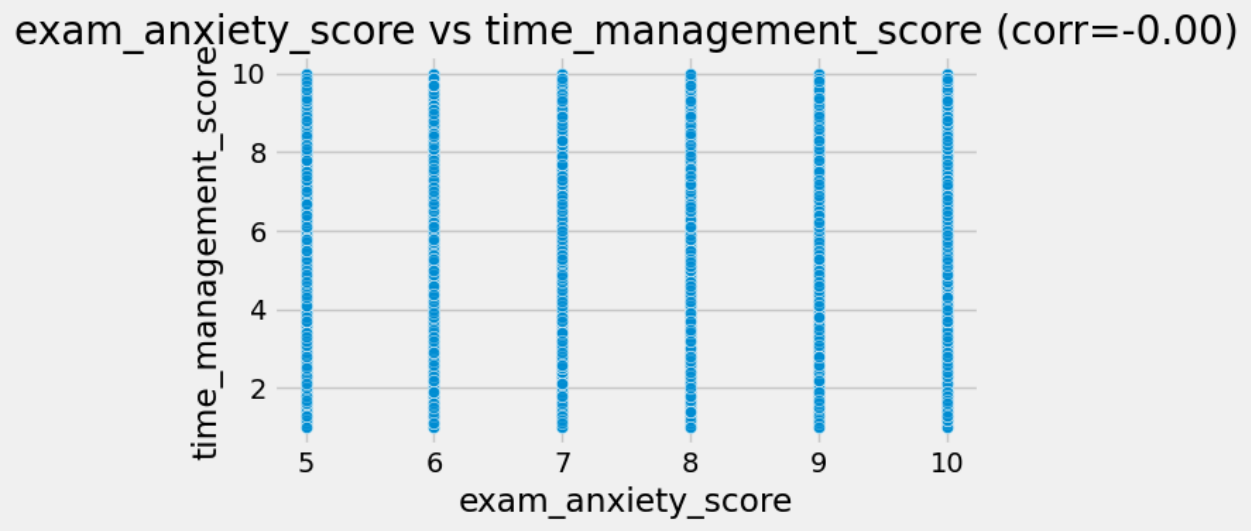

motivation_level by dropout_risk
motivation_level
10
8
6
4
2
No
Yes
dropout_risk

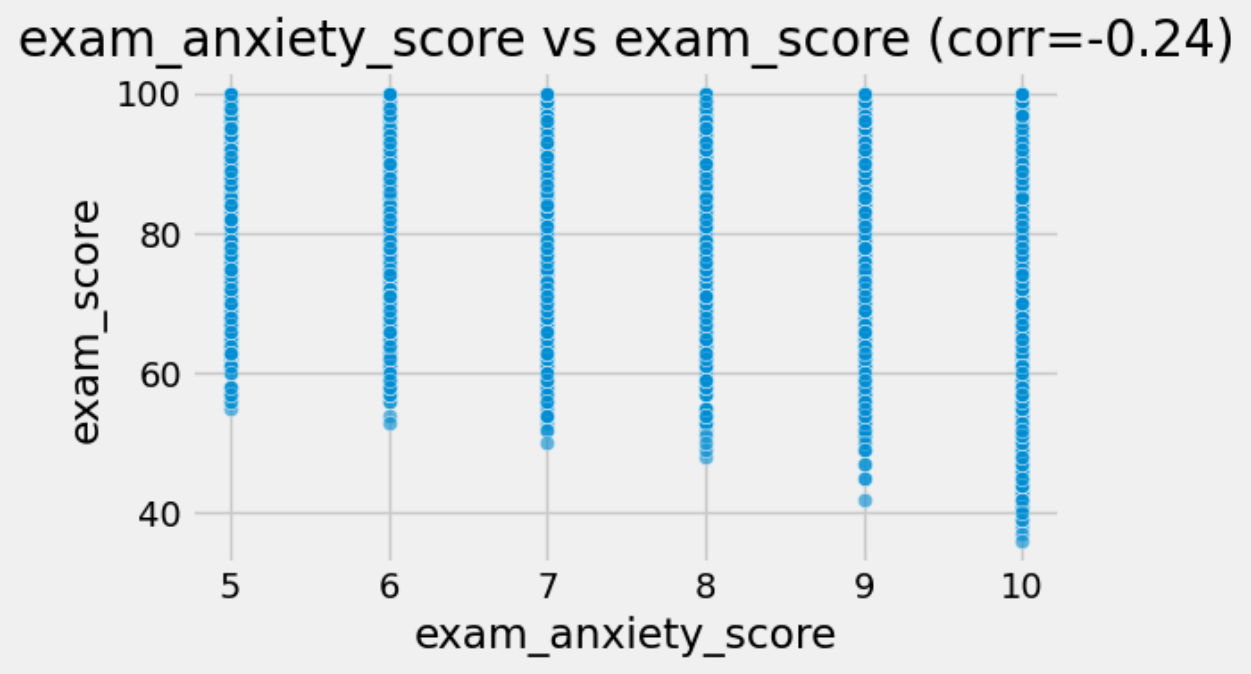

motivation_level by study_environment
motivation_level
10
8
6
4
2
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

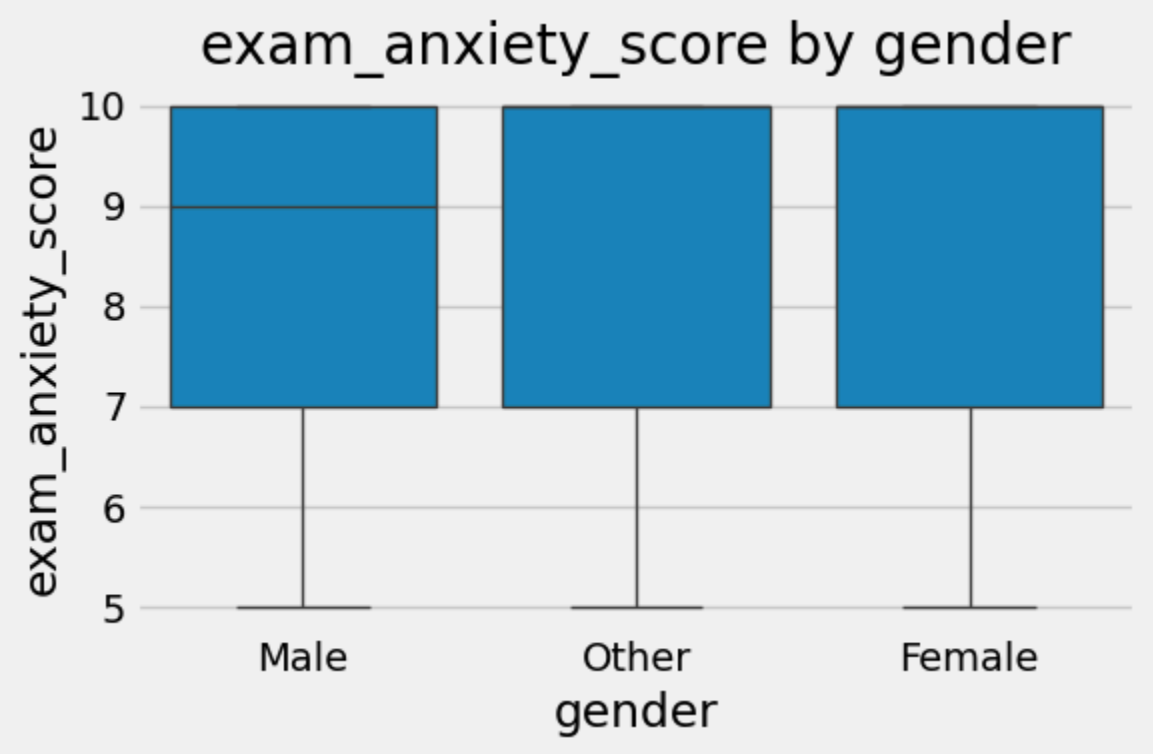

motivation_level by access_to_tutoring
motivation_level
10
8
6
4
2
Yes
No
access_to_tutoring

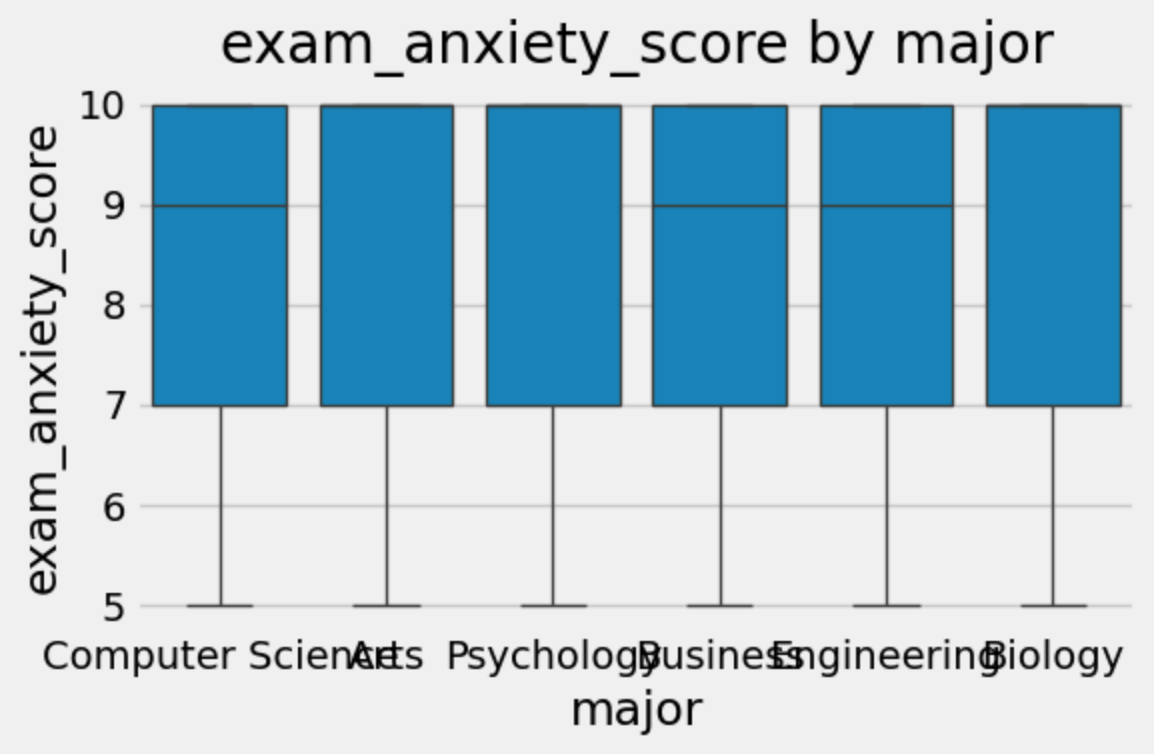

motivation_level by family_income_range
motivation_level
10
8
6
4
2
High
Low
Medium
family_income_range

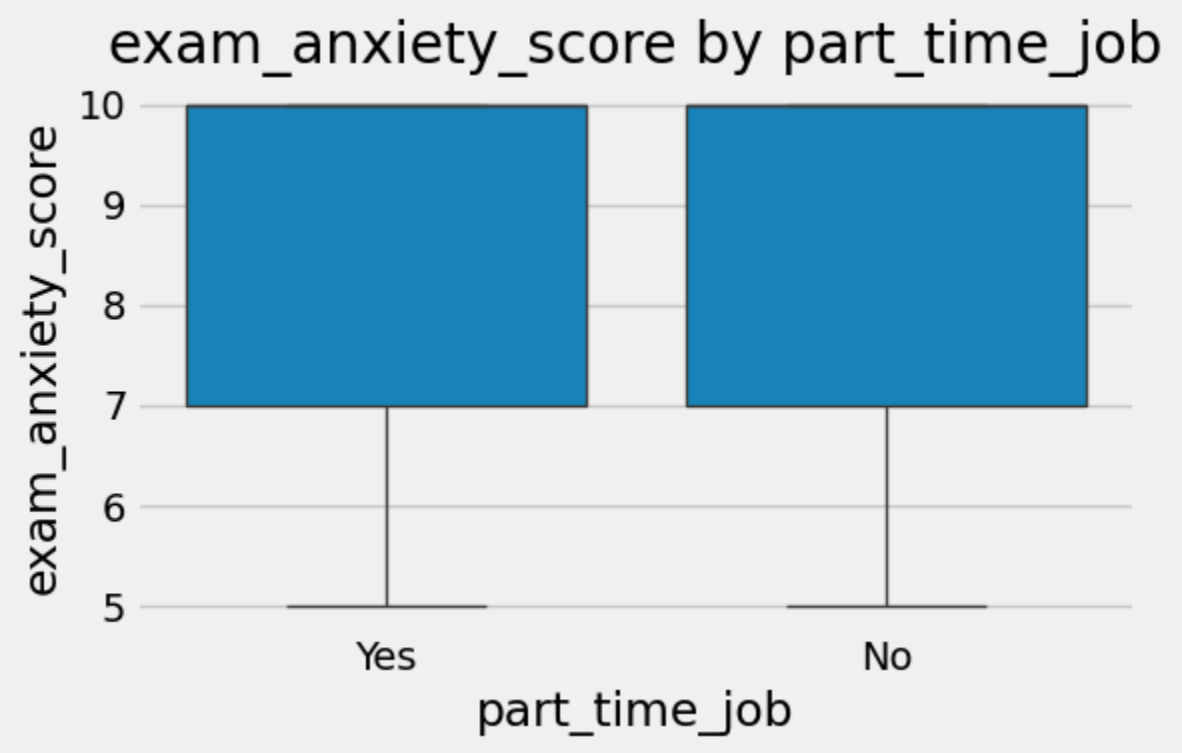

motivation_level by learning_style
motivation_level
10
8
6
4
2
Reading
Kinesthetic
Visual
Auditory
learning_style

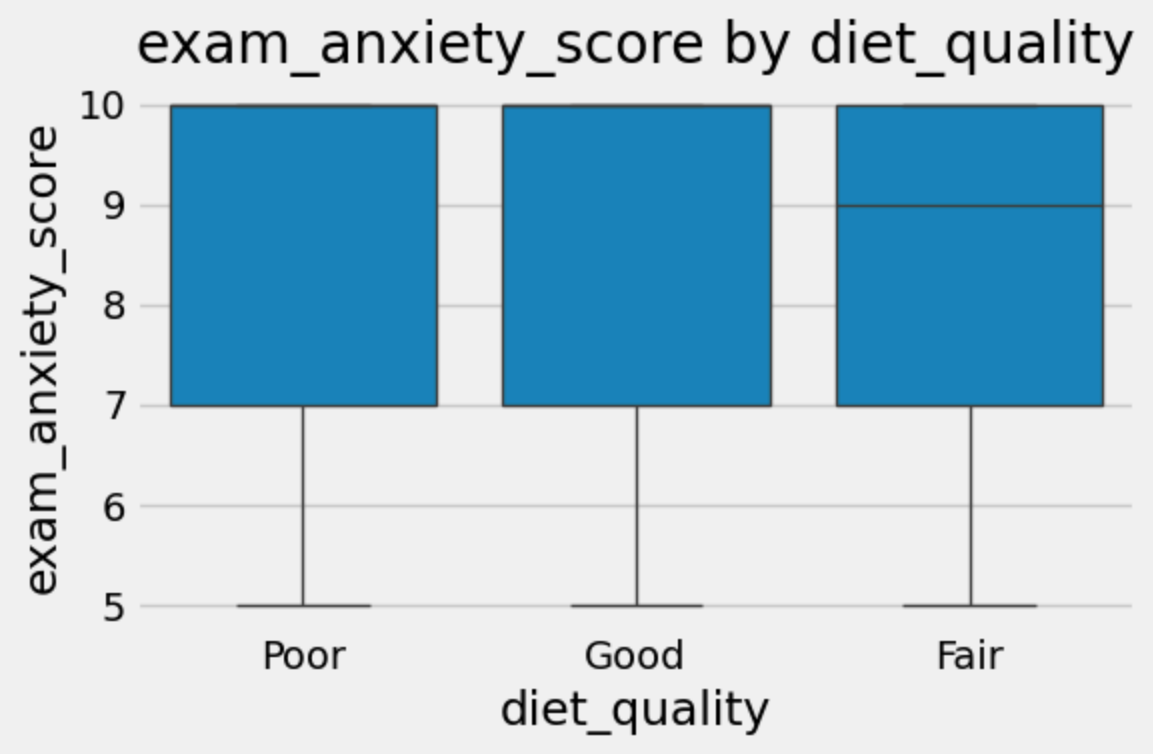

exam_anxiety_score vs time_management_score (corr=-0.00)
time_management_score
10
8
6
4
2
5
6
7
8
9
10
exam_anxiety_score

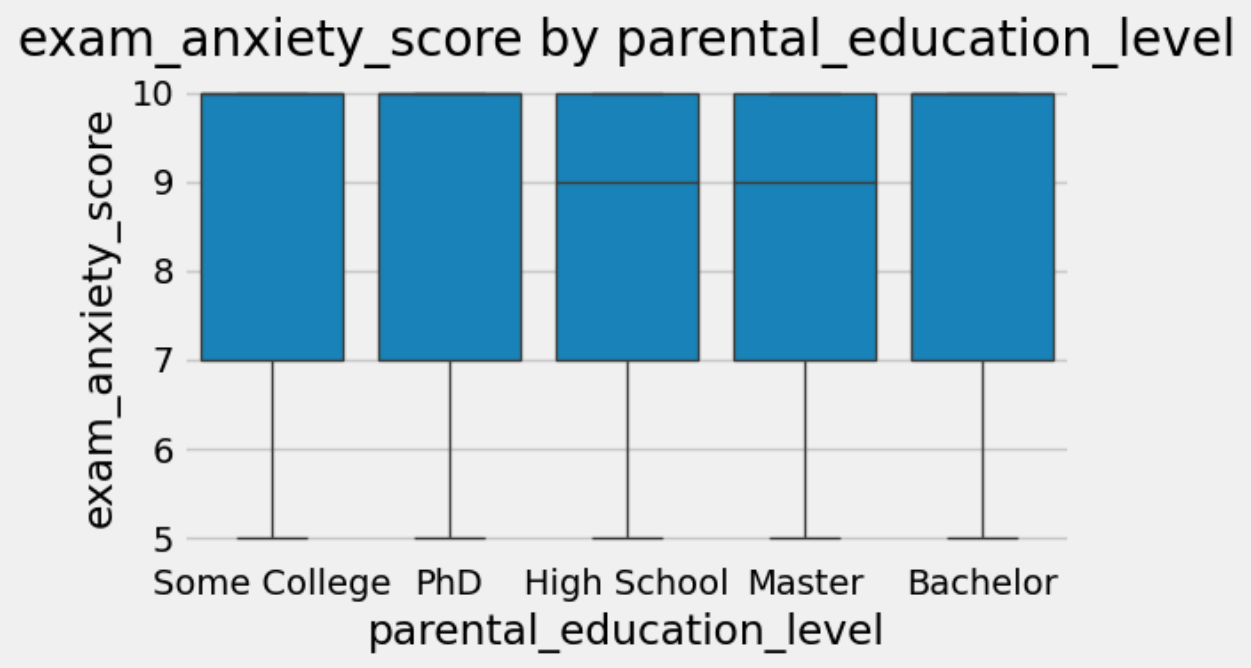

exam_anxiety_score vs exam_score (corr=-0.24)
exam_score
100
80
60
40
5
6
7
8
9
10
exam_anxiety_score

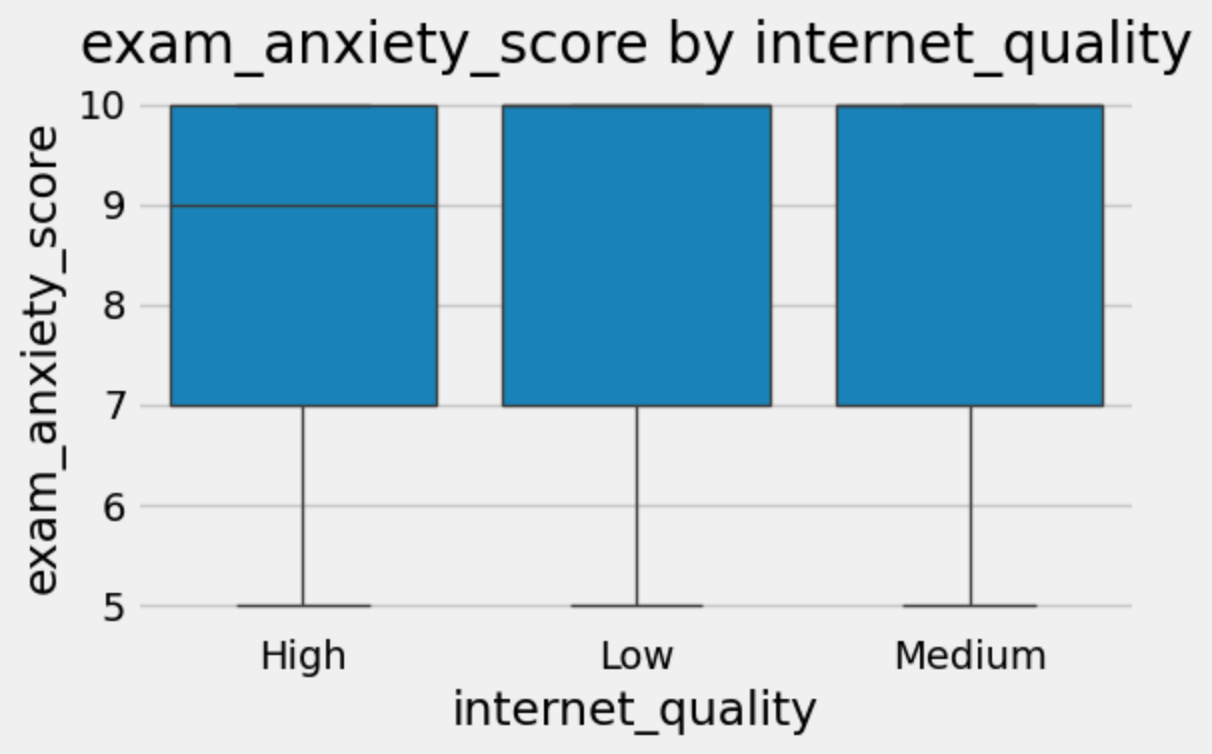

exam_anxiety_score by gender
exam_anxiety_score
10
9
8
7
6
5
Male
Other
Female
gender

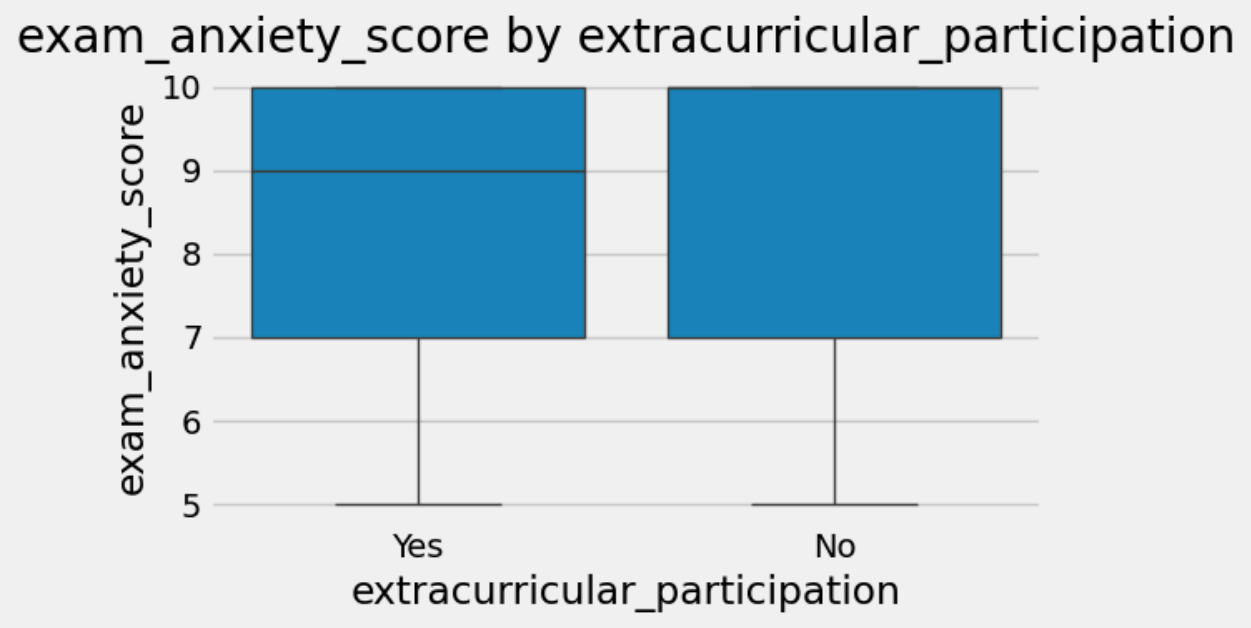

exam_anxiety_score by major
exam_anxiety_score
10
9
8
7
6
5
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

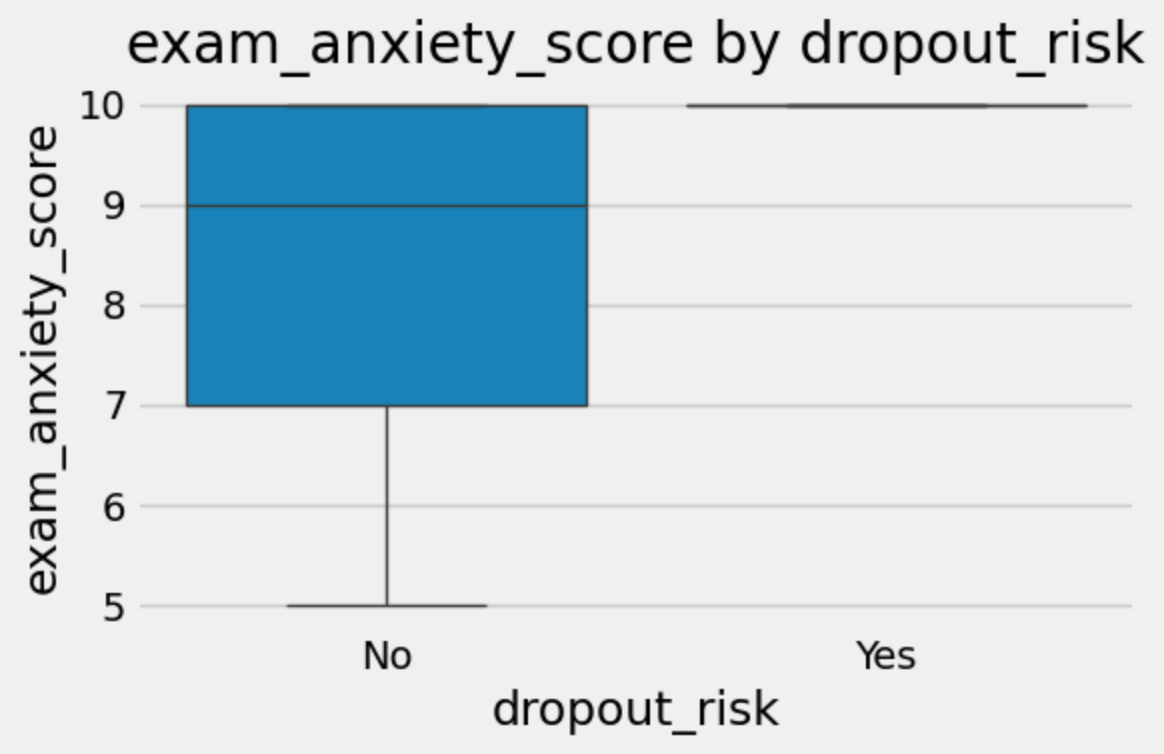

exam_anxiety_score by part_time_job
exam_anxiety_score
10
9
8
7
6
5
Yes
No
part_time_job

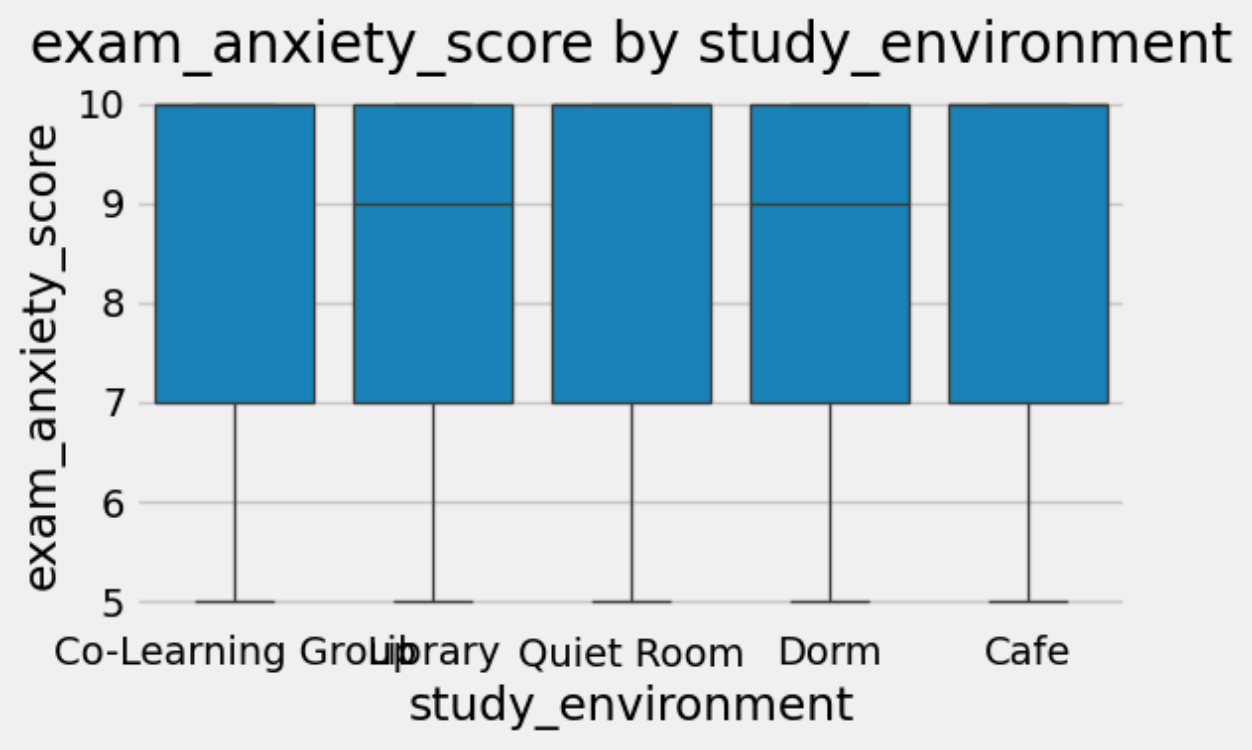

exam_anxiety_score by diet_quality
exam_anxiety_score
10
9
8
7
6
5
Poor
Good
Fair
diet_quality

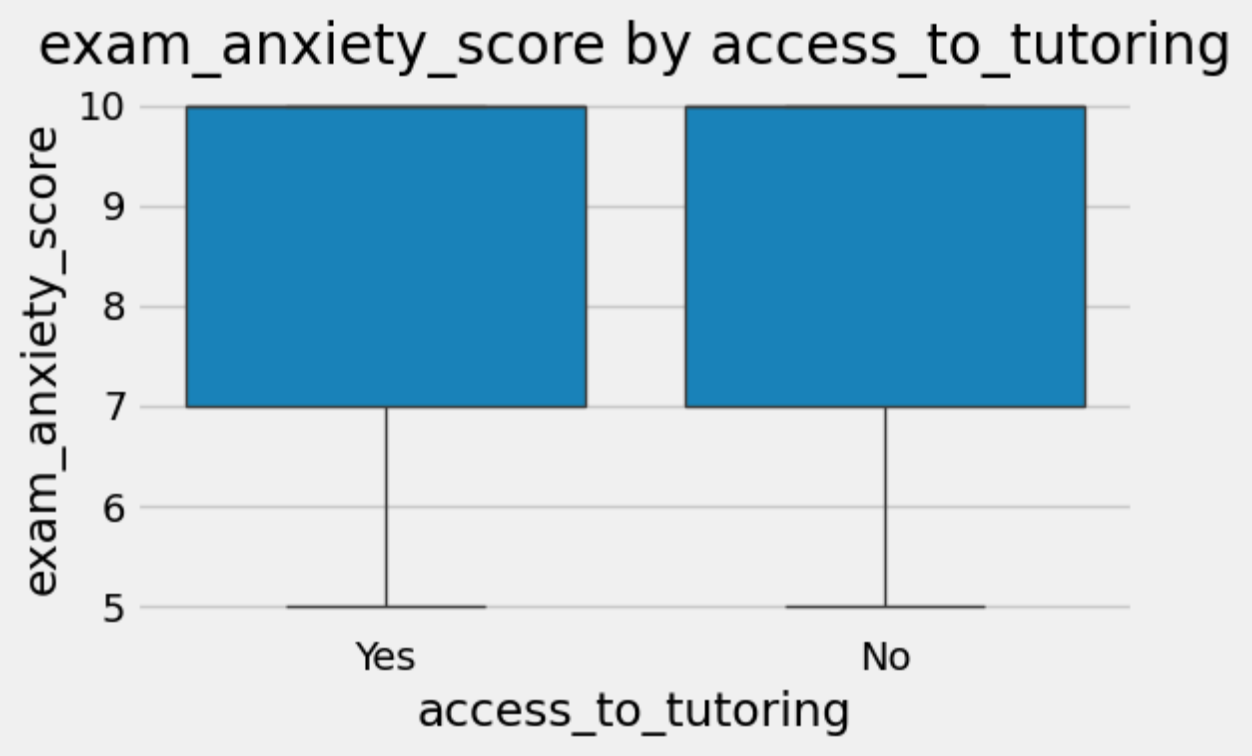

exam_anxiety_score by parental_education_level
exam_anxiety_score
10
9
8
7
6
5
Some College
PhD
High School
Master
Bachelor
parental_education_level

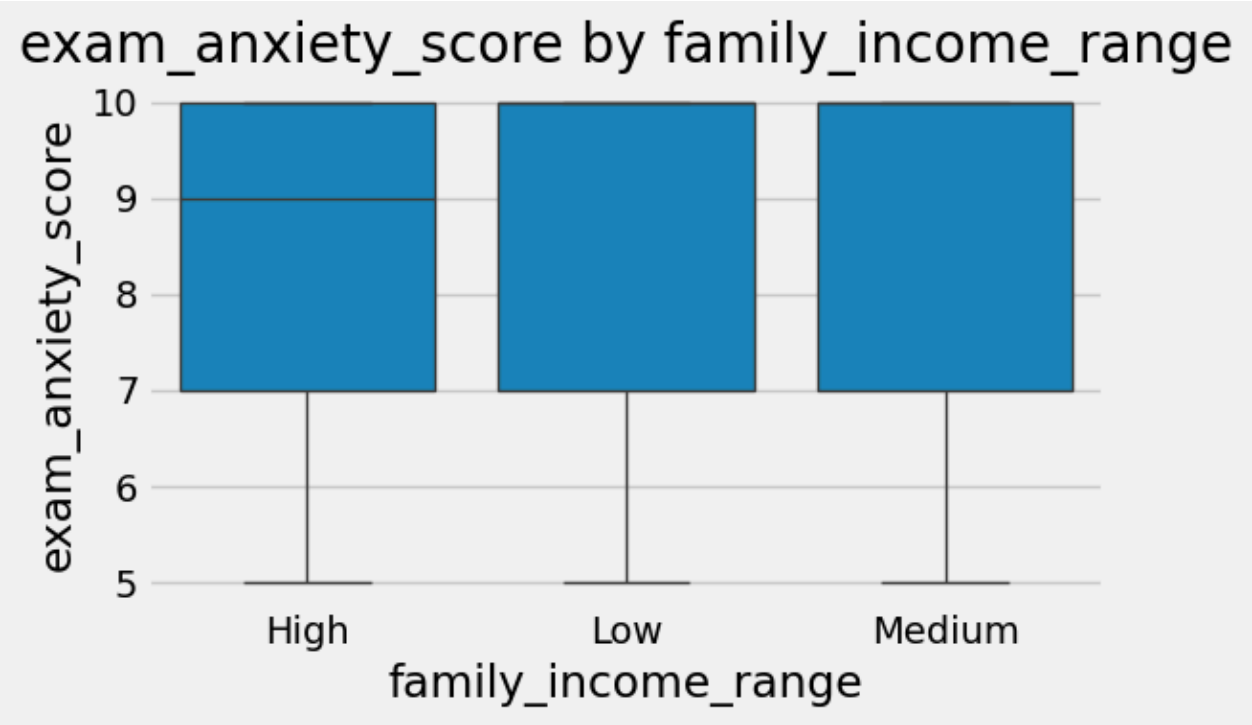

exam_anxiety_score by internet_quality
exam_anxiety_score
10
9
8
7
6
5
High
Low
Medium
internet_quality

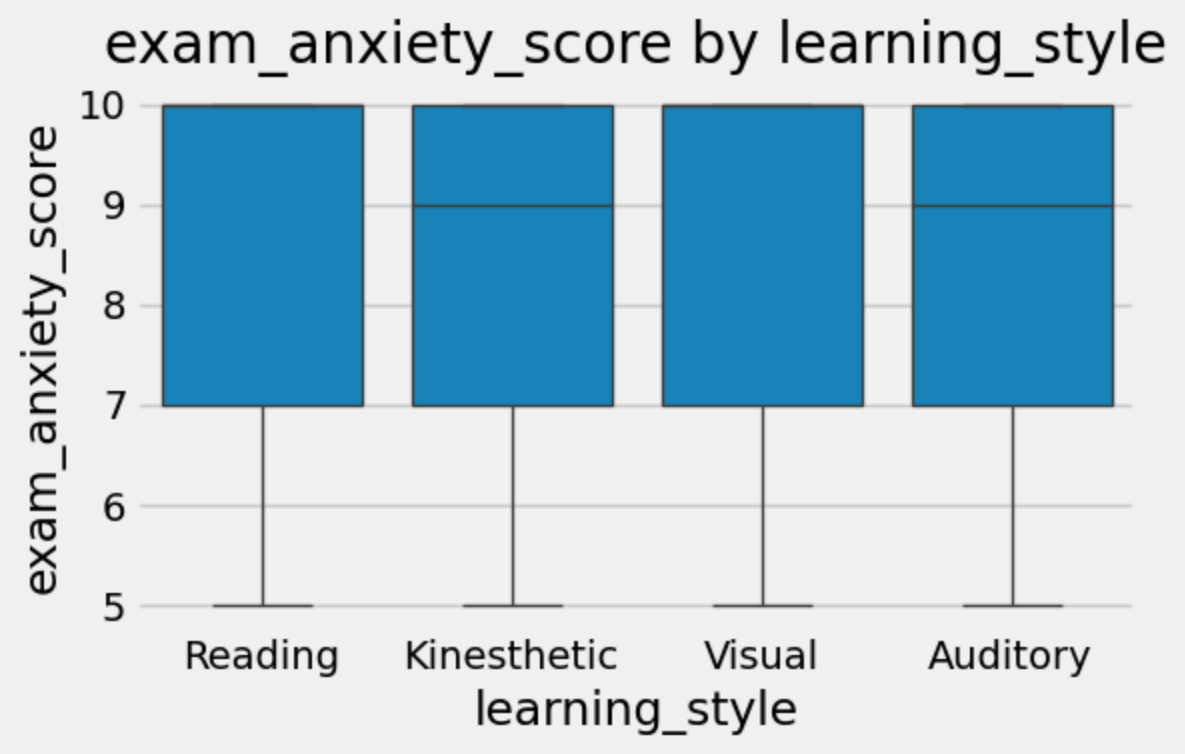

exam_anxiety_score by extracurricular_participation
exam_anxiety_score
10
9
8
7
6
5
Yes
No
extracurricular_participation

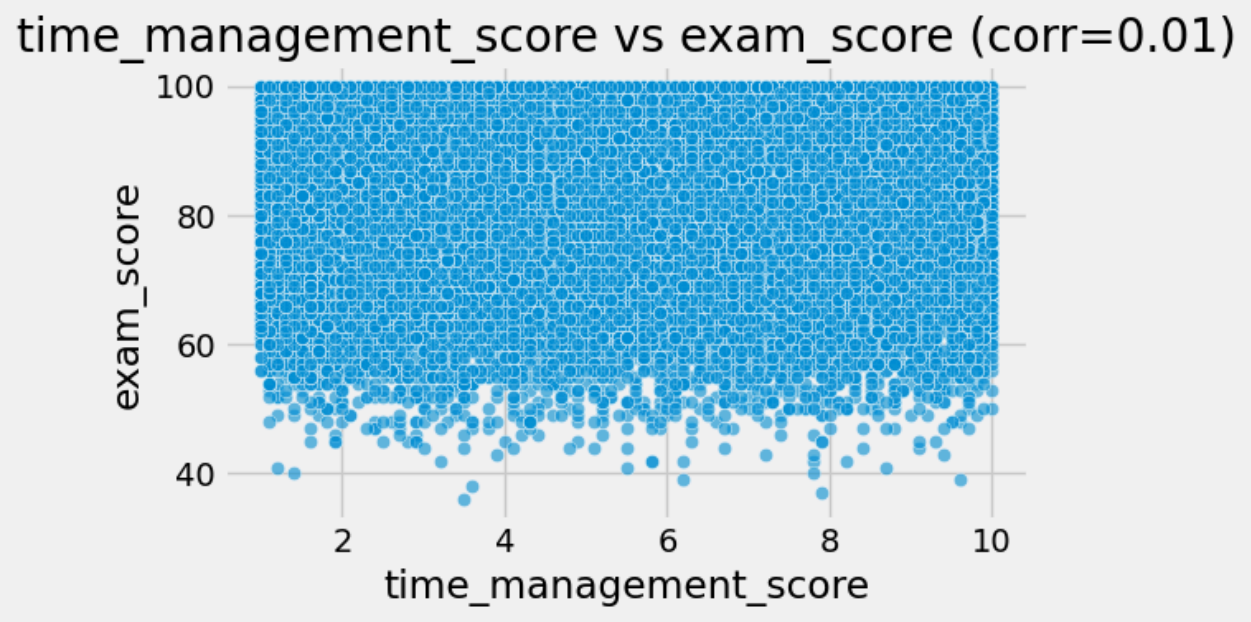

exam_anxiety_score by dropout_risk
exam_anxiety_score
10
9
8
7
6
5
No
Yes
dropout_risk

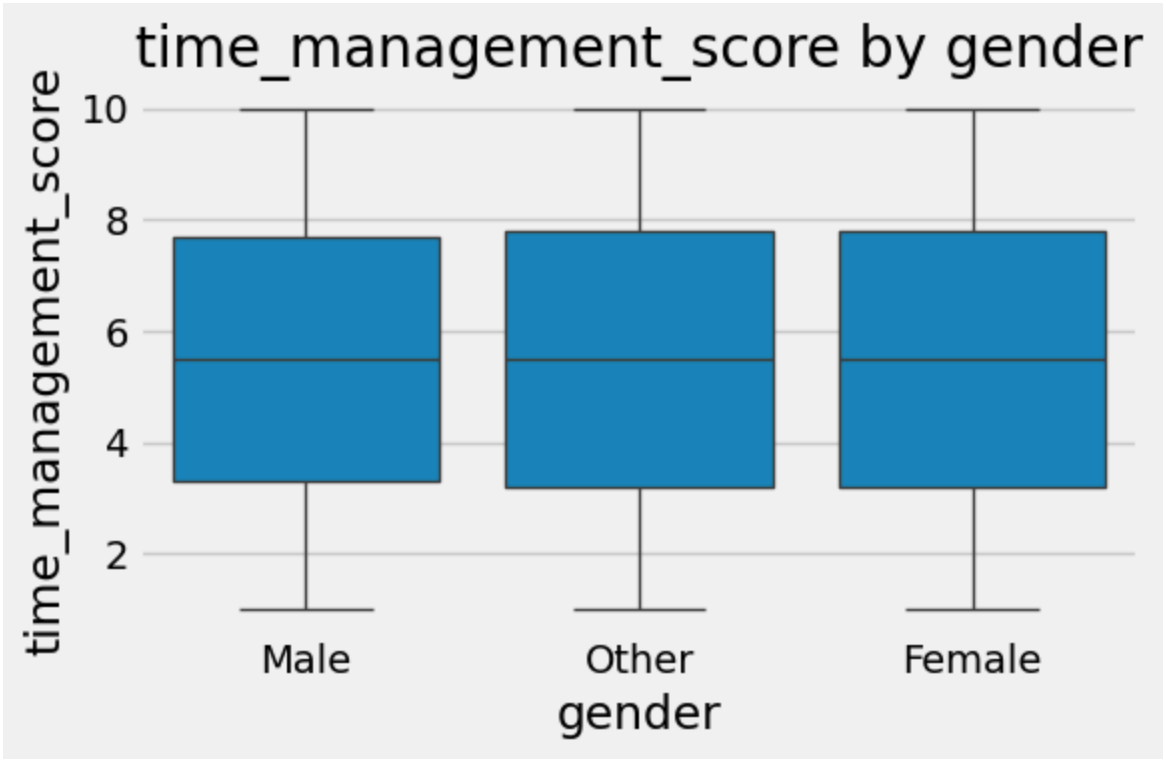

exam_anxiety_score by study_environment
exam_anxiety_score
10
9
8
7
6
5
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

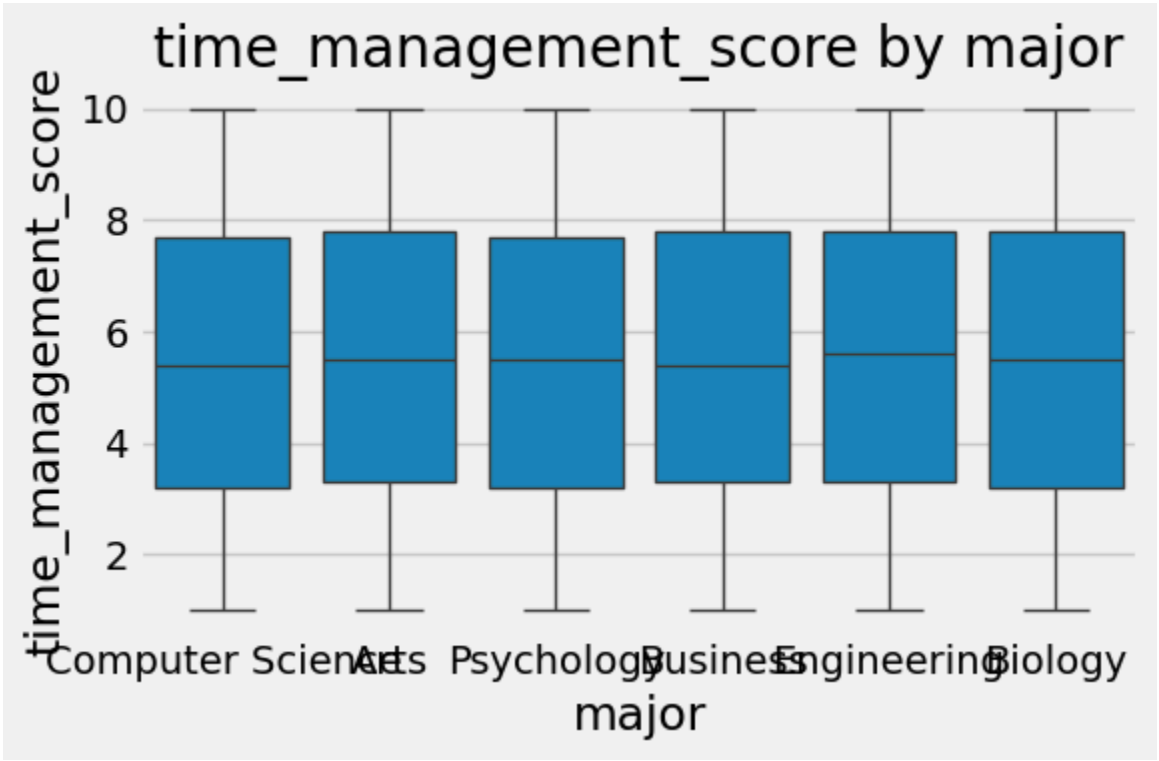

exam_anxiety_score by access_to_tutoring
exam_anxiety_score
10
9
8
7
6
5
Yes
No
access_to_tutoring

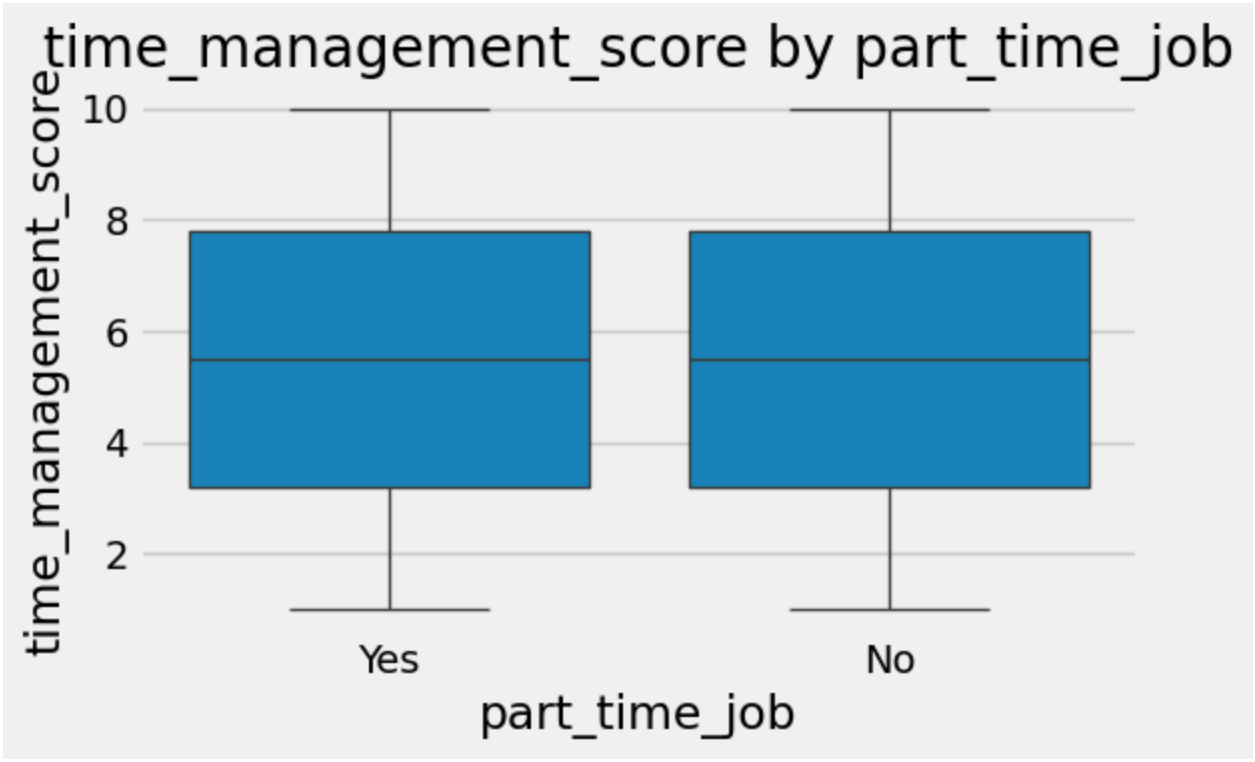

exam_anxiety_score by family_income_range
exam_anxiety_score
10
9
8
7
6
5
High
Low
Medium
family_income_range

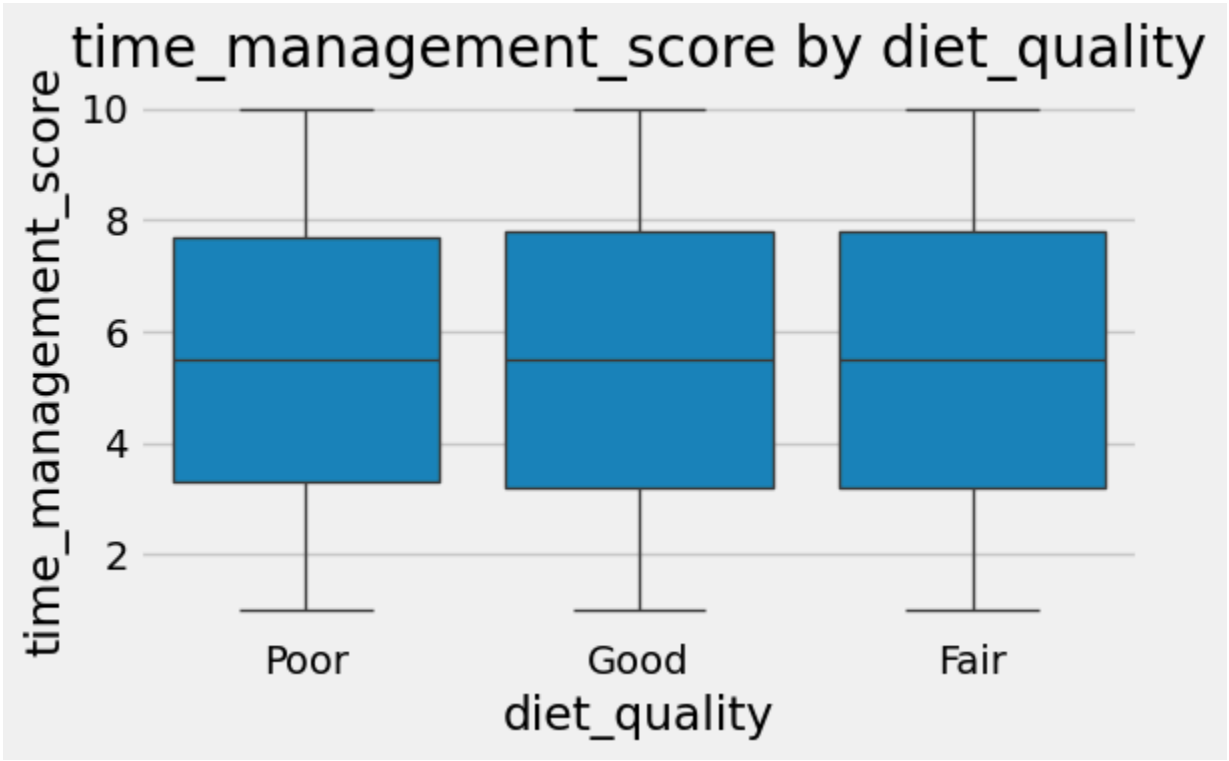

exam_anxiety_score by learning_style
exam_anxiety_score
10
9
8
7
6
5
Reading
Kinesthetic
Visual
Auditory
learning_style

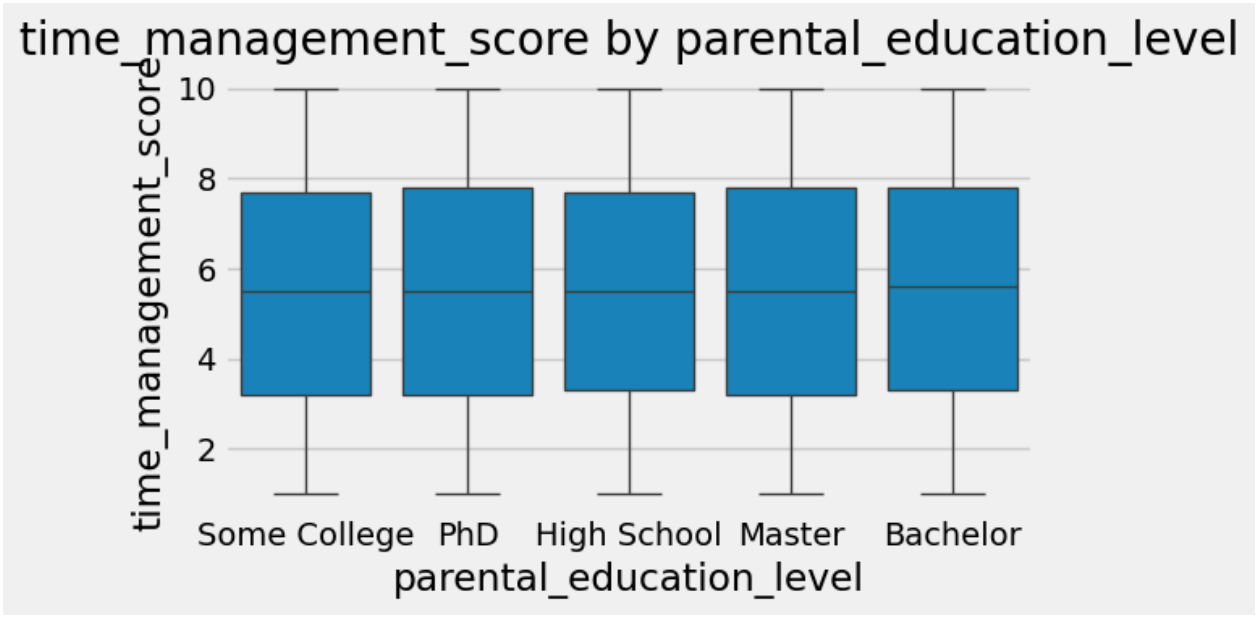

time_management_score vs exam_score (corr=0.01)
exam_score
100
80
60
40
2
4
6
8
10
time_management_score

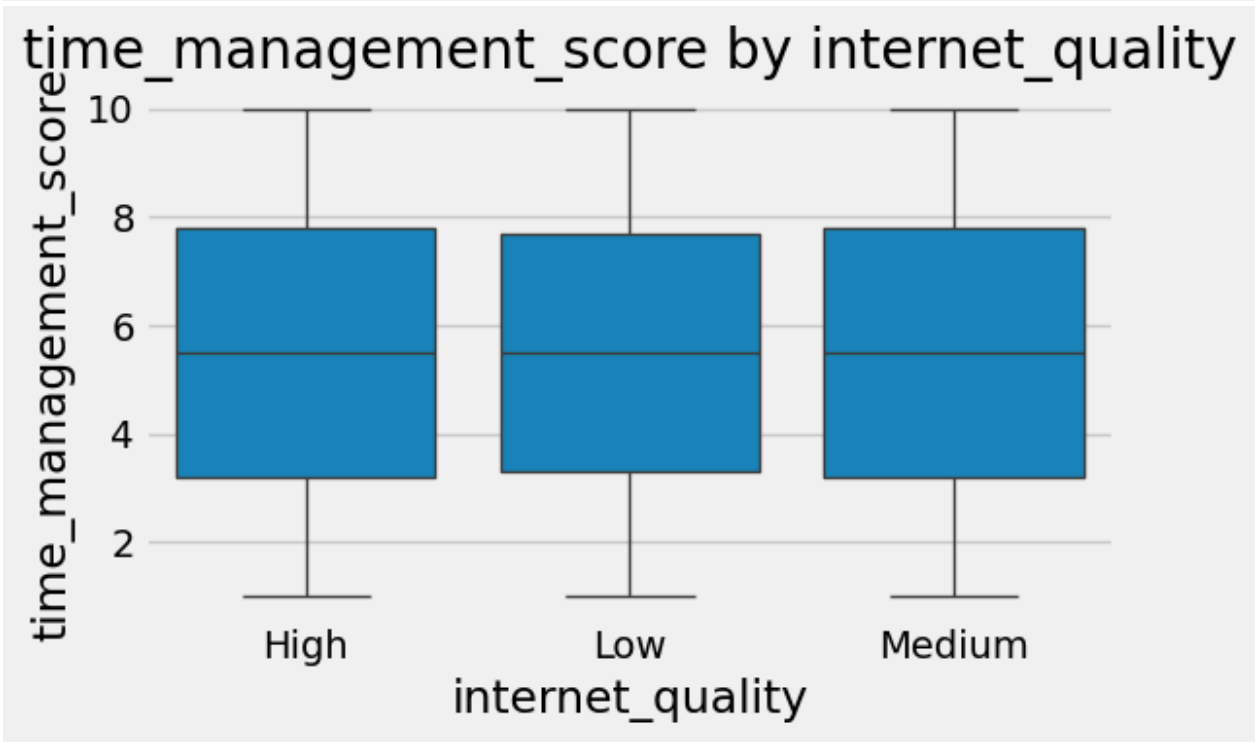

time_management_score by gender
time_management_score
10
8
6
4
2
Male
Other
Female
gender

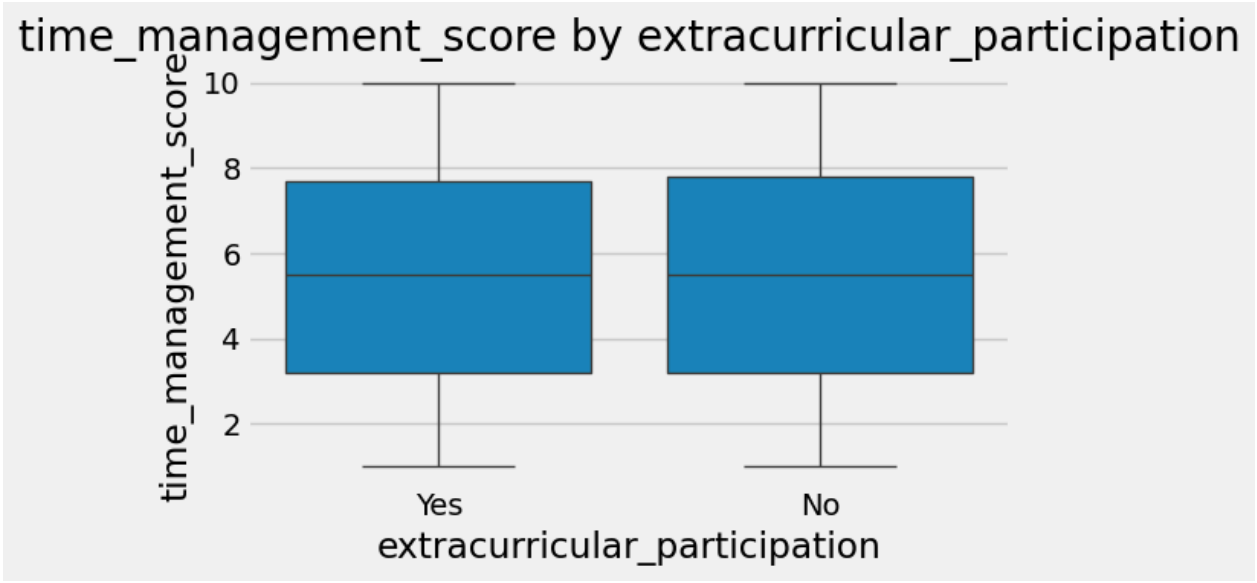

time_management_score by major
time_management_score
10
8
6
4
2
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

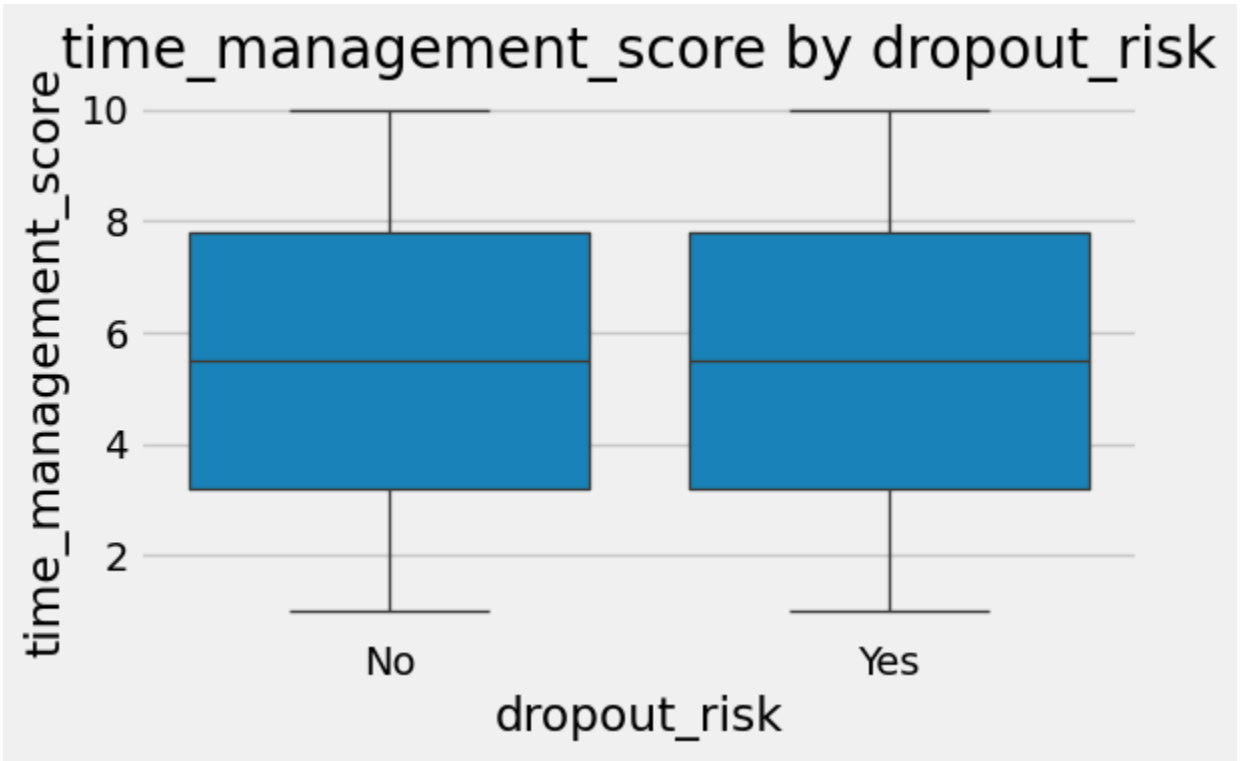

time_management_score by part_time_job
time_management_score
10
8
6
4
2
Yes
No
part_time_job

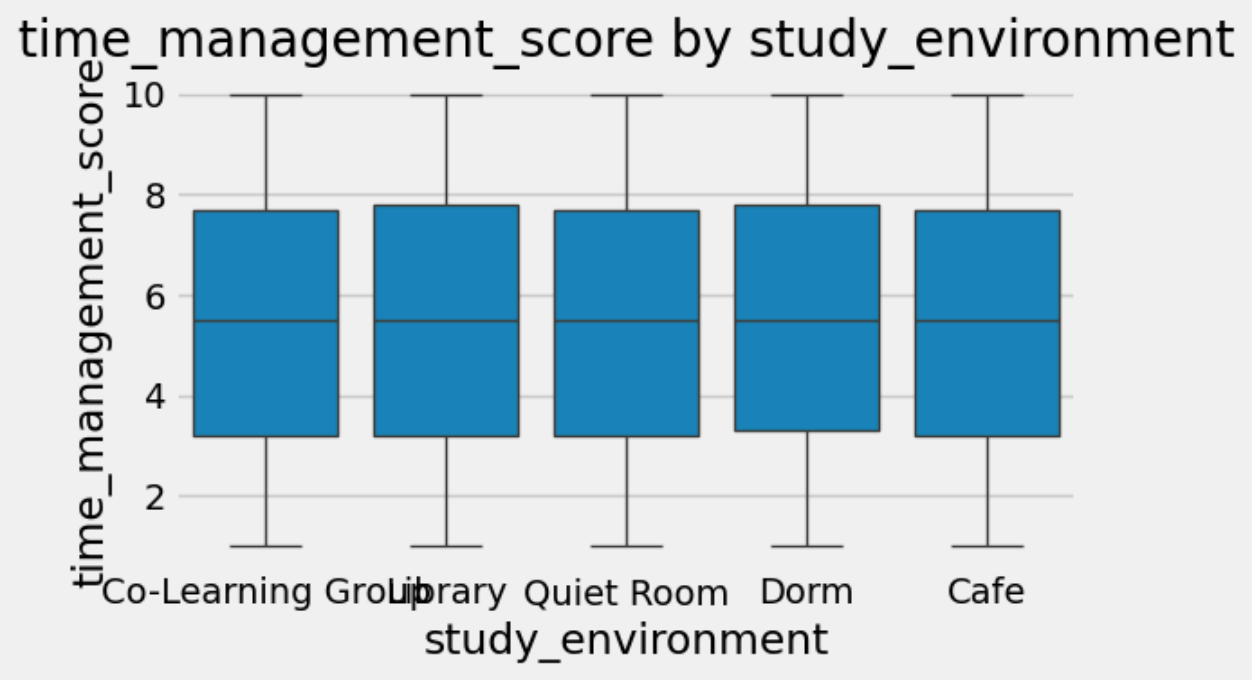

time_management_score by diet_quality
time_management_score
10
8
6
4
2
Poor
Good
Fair
diet_quality

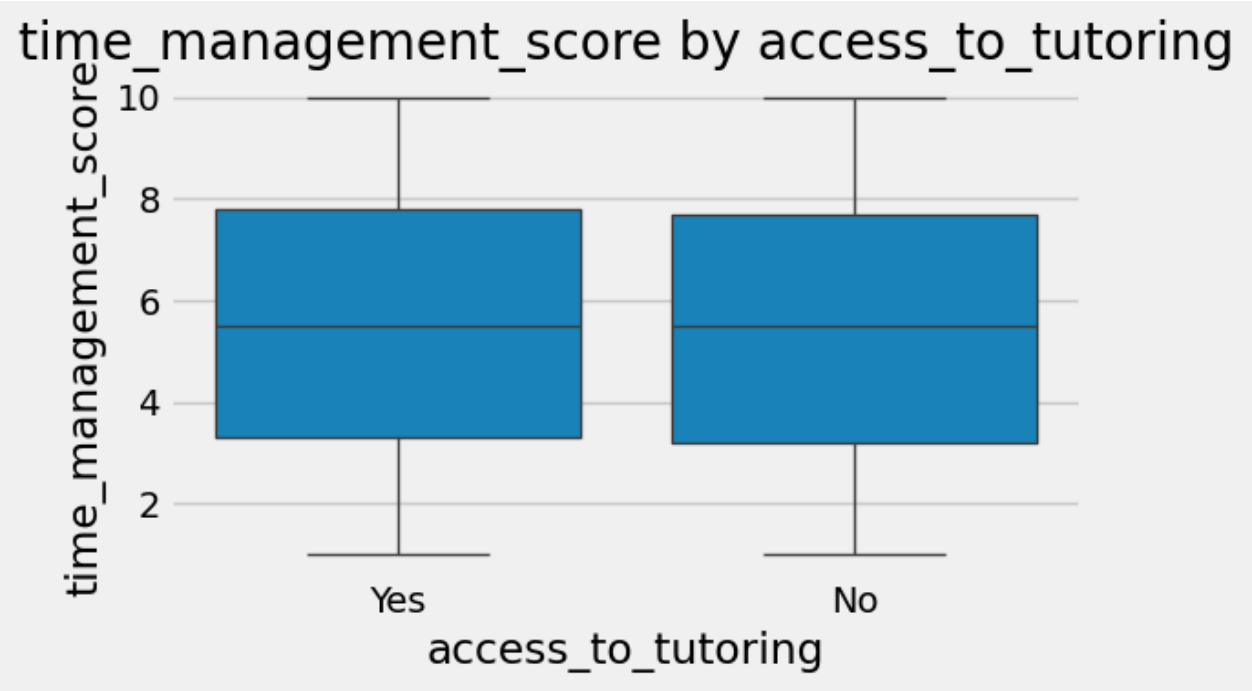

time_management_score by parental_education_level
time_management_score
10
8
6
4
2
Some College
PhD
High School
Master
Bachelor
parental_education_level

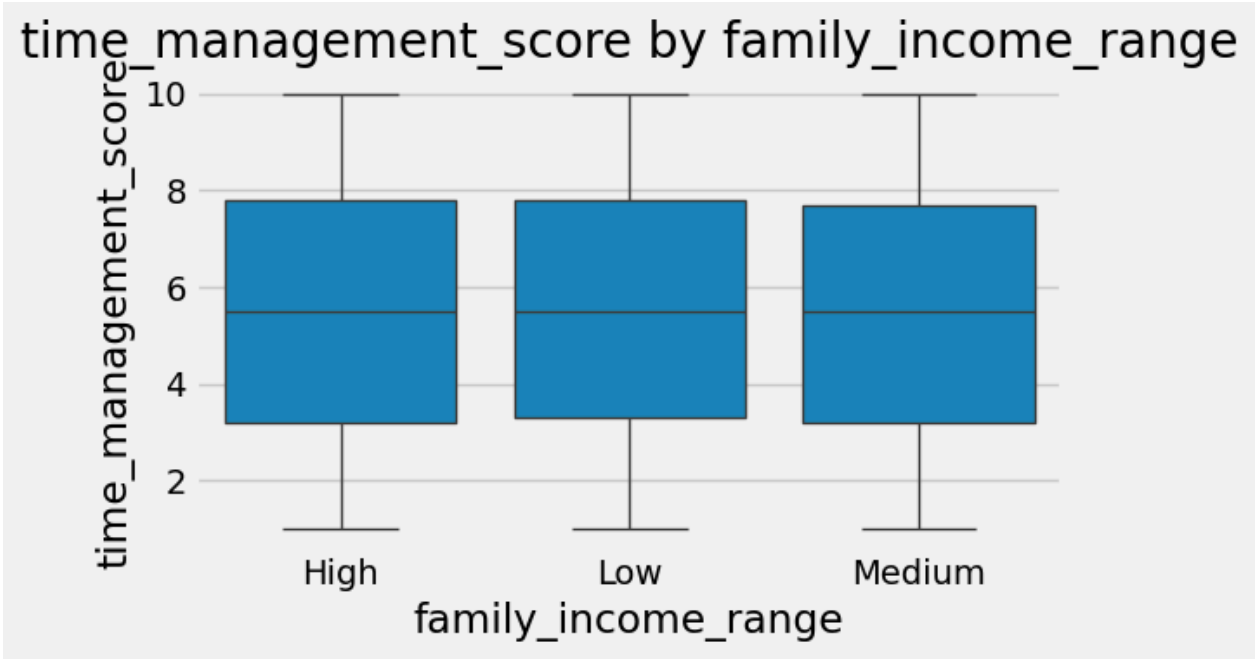

time_management_score by internet_quality
time_management_score
10
8
6
4
2
High
Low
Medium
internet_quality

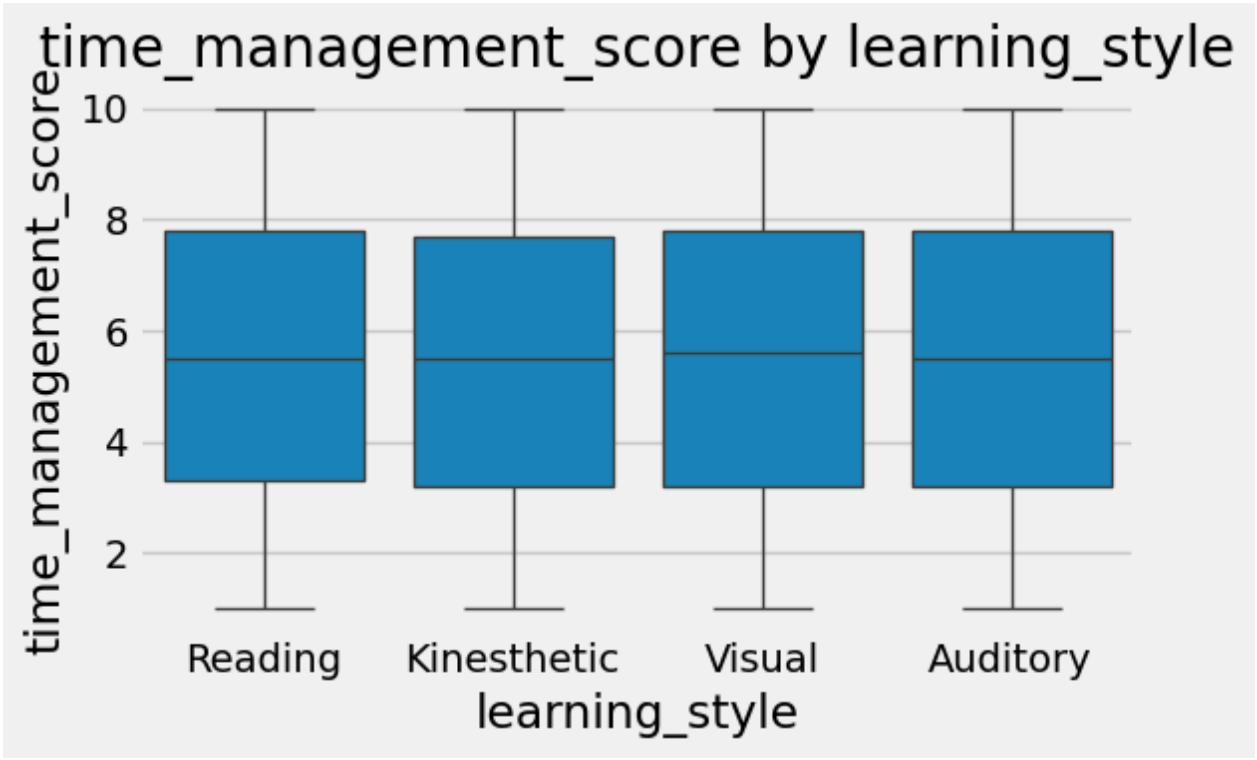

time_management_score by extracurricular_participation
time_management_score
10
8
6
4
2
Yes
No
extracurricular_participation


time_management_score by dropout_risk
time_management_score
10
8
6
4
2
No
Yes
dropout_risk

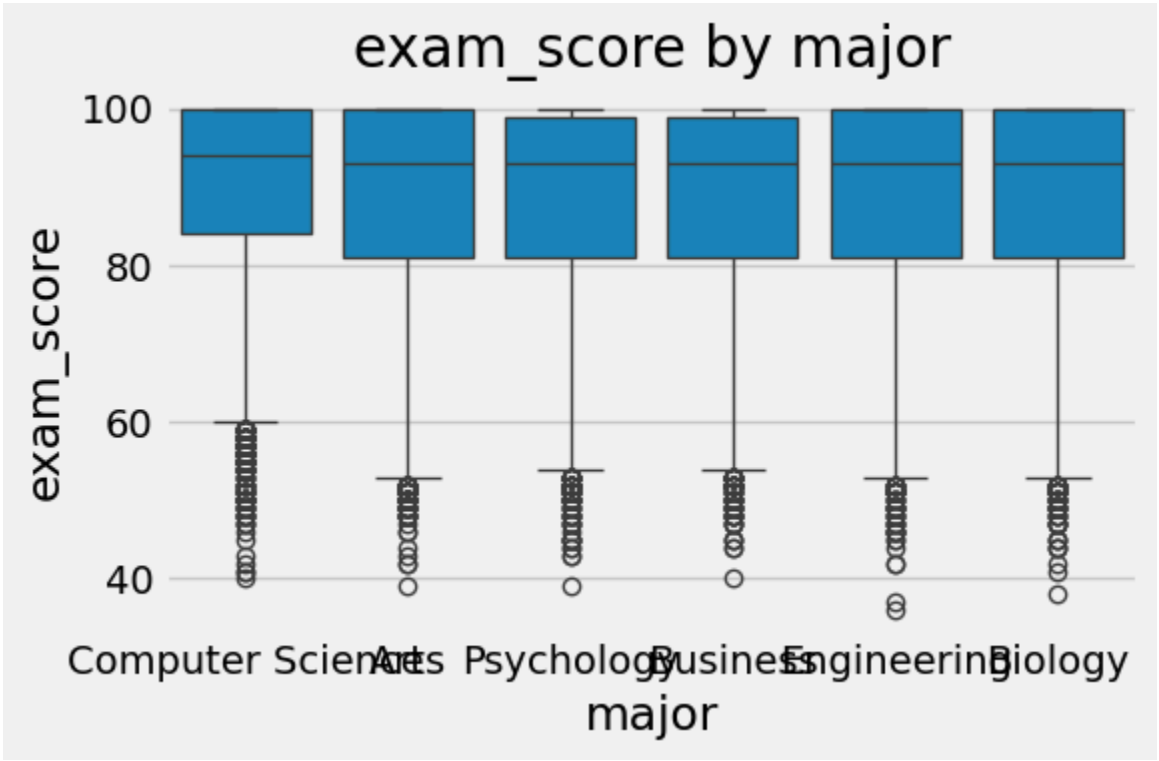

time_management_score by study_environment
time_management_score
10
8
6
4
2
Co-Learning Group
Library
Quiet Room
Dorm
Cafe
study_environment

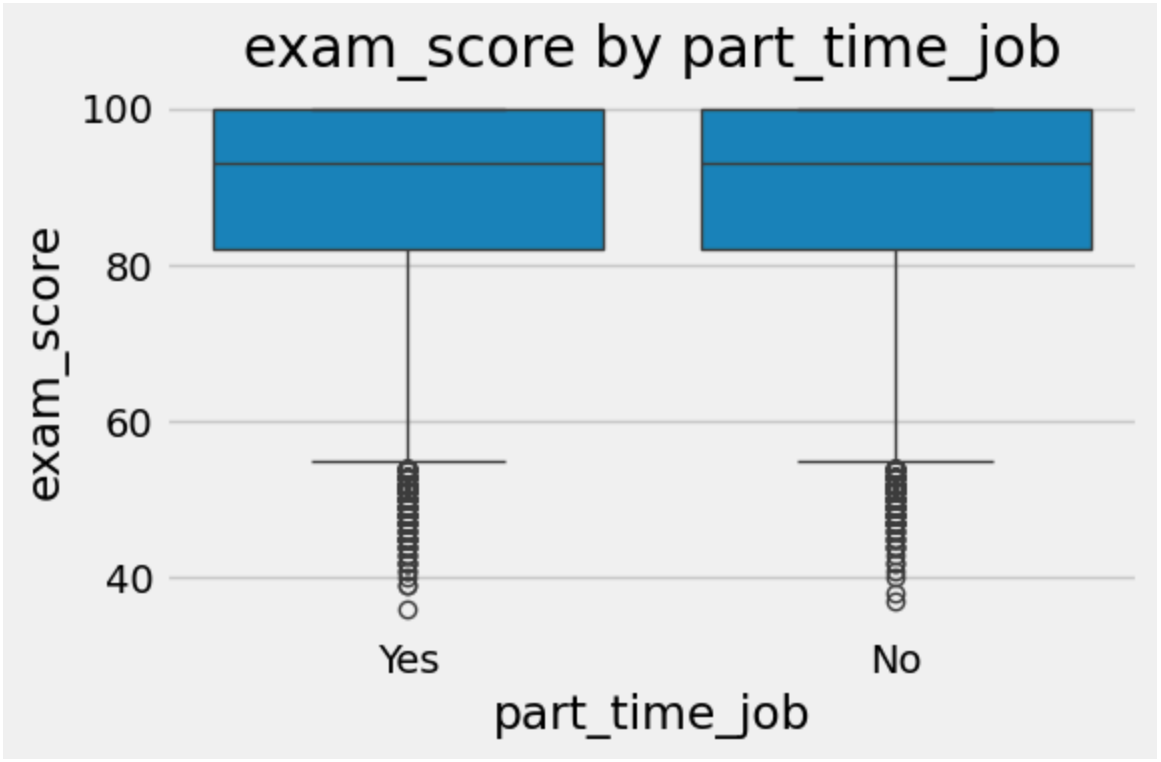

time_management_score by access_to_tutoring
time_management_score
10
8
6
4
2
Yes
No
access_to_tutoring


time_management_score by family_income_range
time_management_score
10
8
6
4
2
High
Low
Medium
family_income_range

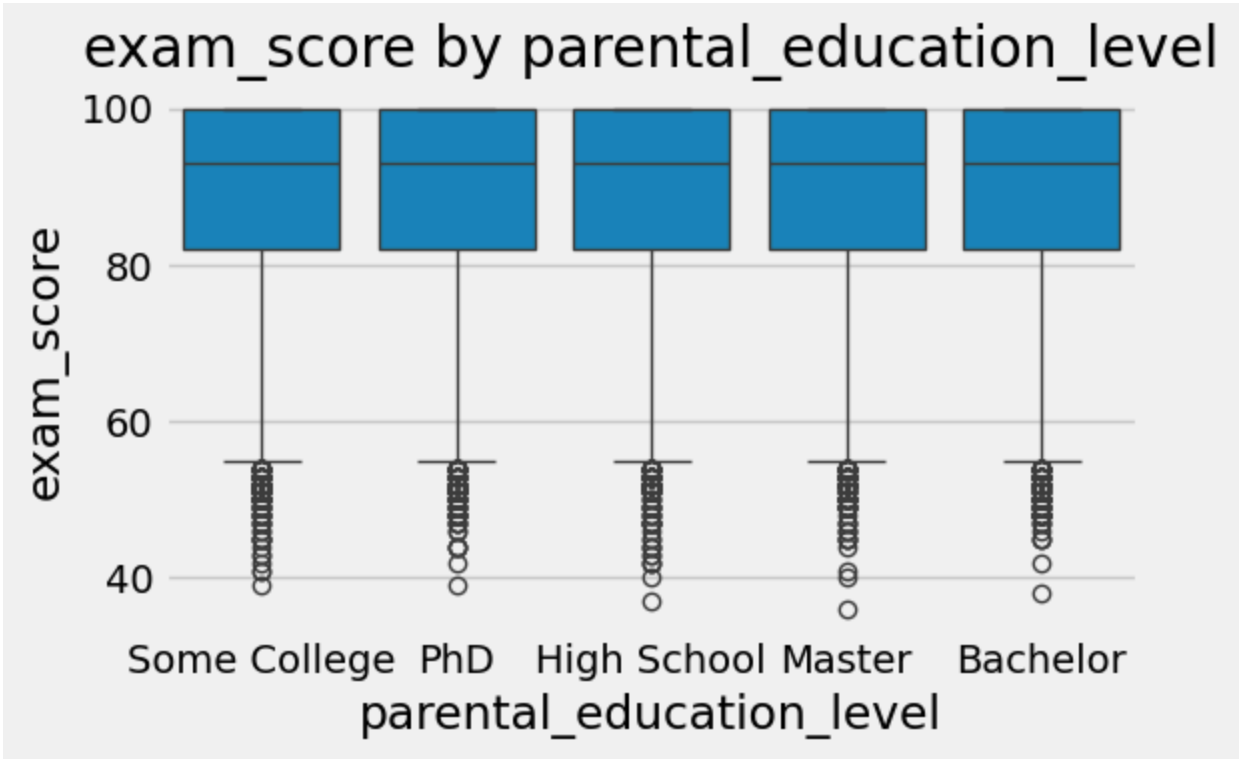

time_management_score by learning_style
time_management_score
10
8
6
4
2
Reading
Kinesthetic
Visual
Auditory
learning_style

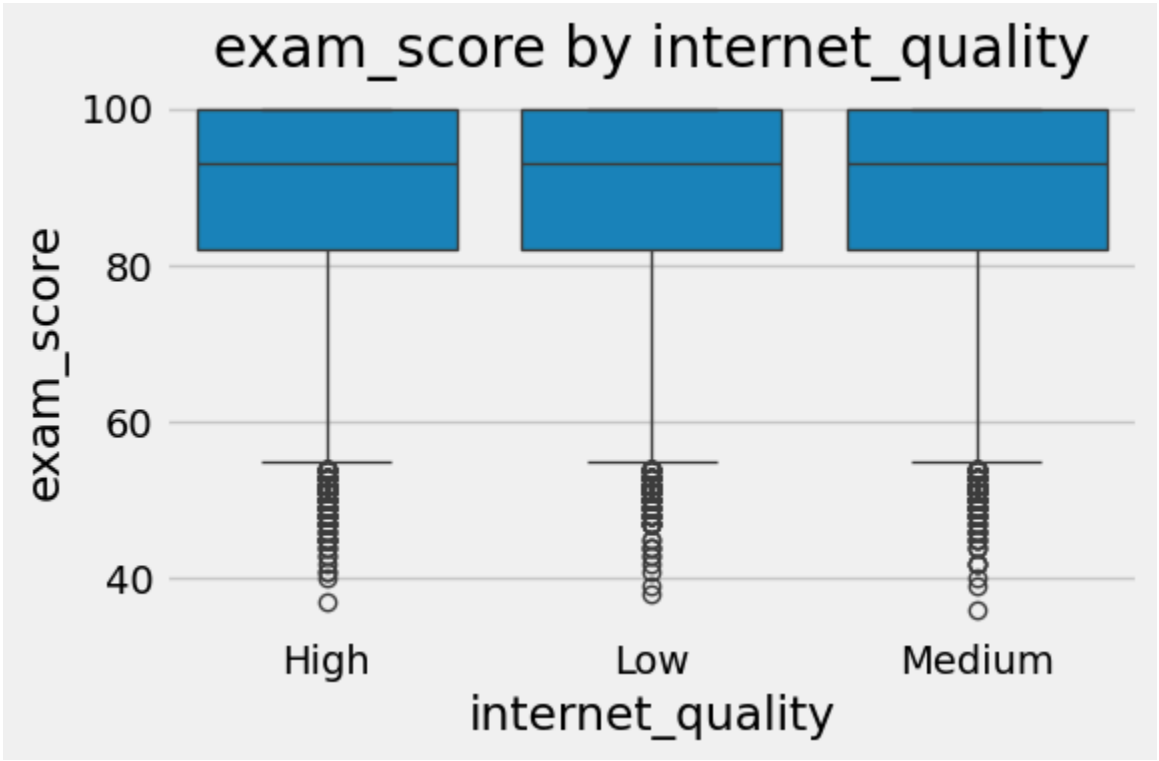

exam_score by gender
100
80
60
40
exam_score
Male
Other
Female
gender

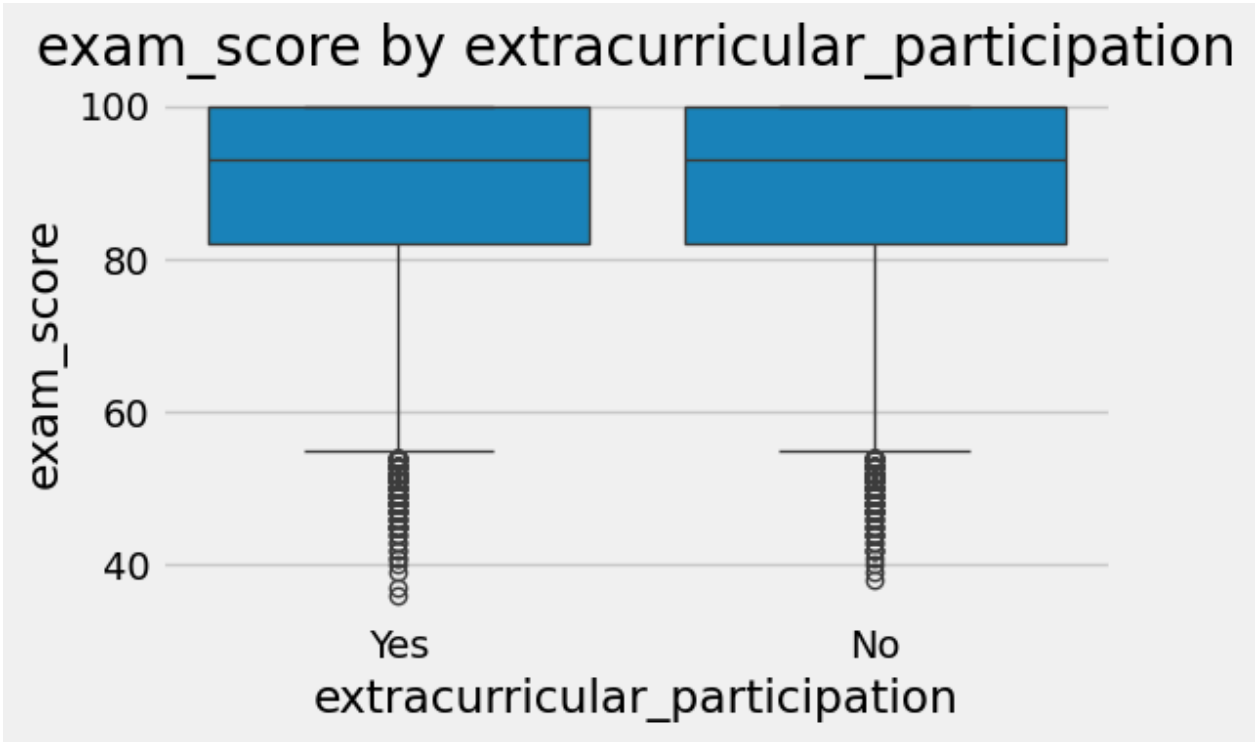

exam_score by major
100
80
60
40
exam_score
Computer Science
Arts
Psychology
Business
Engineering
Biology
major

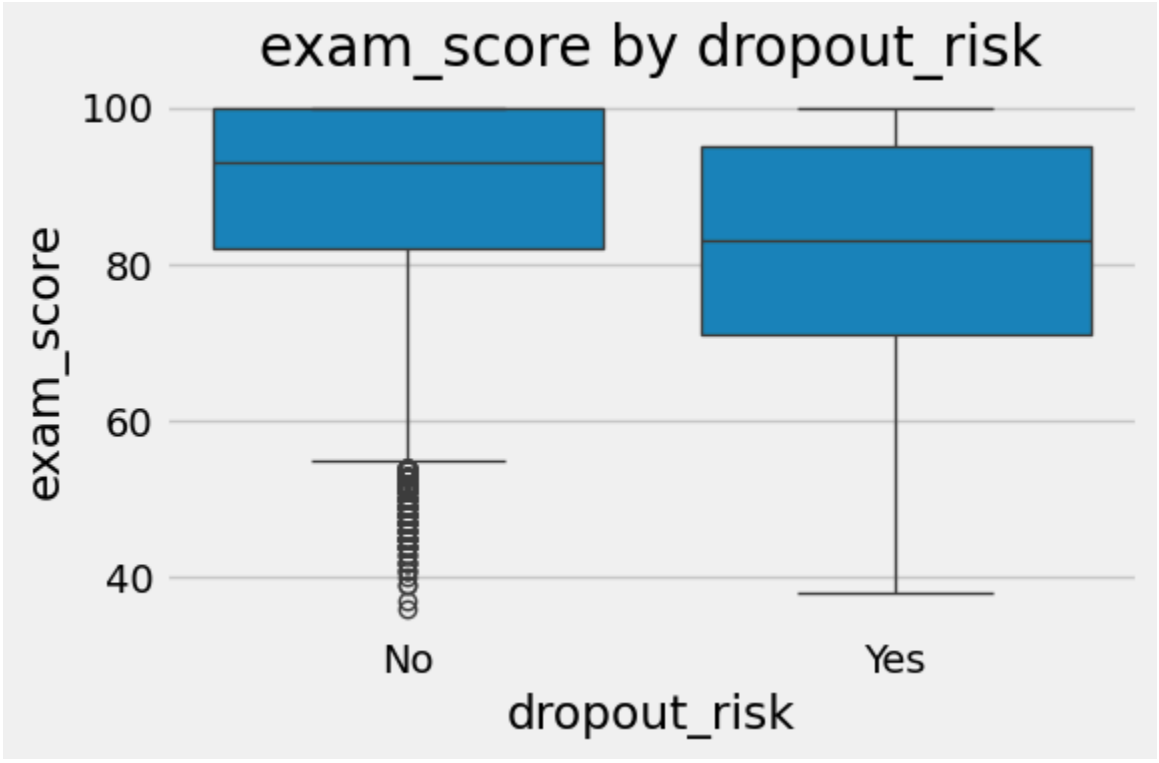

exam_score by part_time_job
100
80
60
40
exam_score
Yes
No
part_time_job

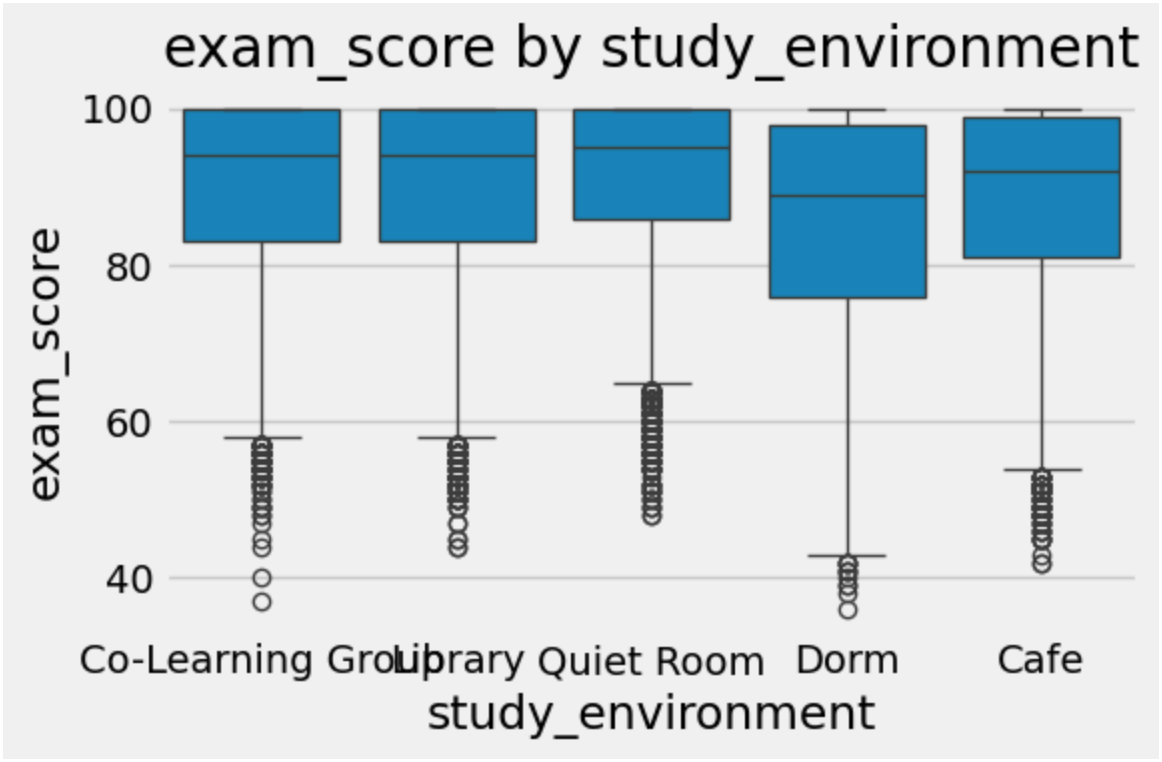

exam_score by diet_quality
100
80
60
40
exam_score
Poor
Good
Fair
diet_quality

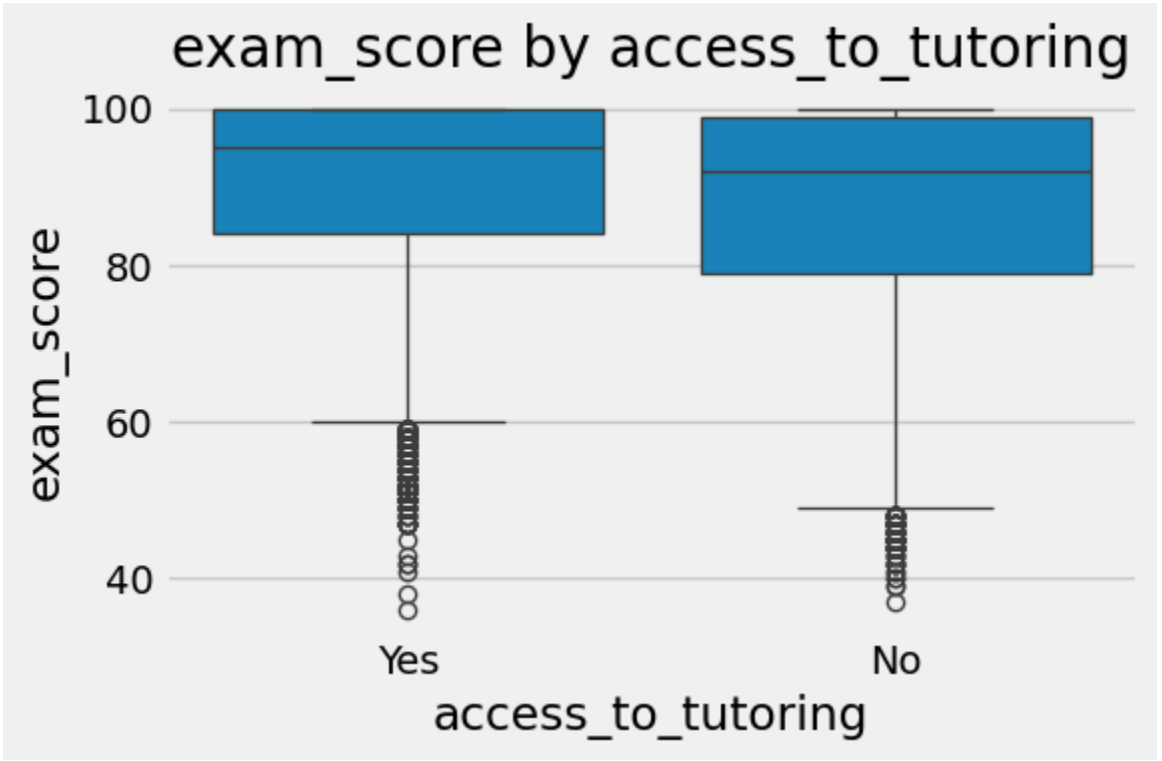

exam_score by parental_education_level
100
80
60
40
exam_score
Some College
PhD
High School
Master
Bachelor
parental_education_level

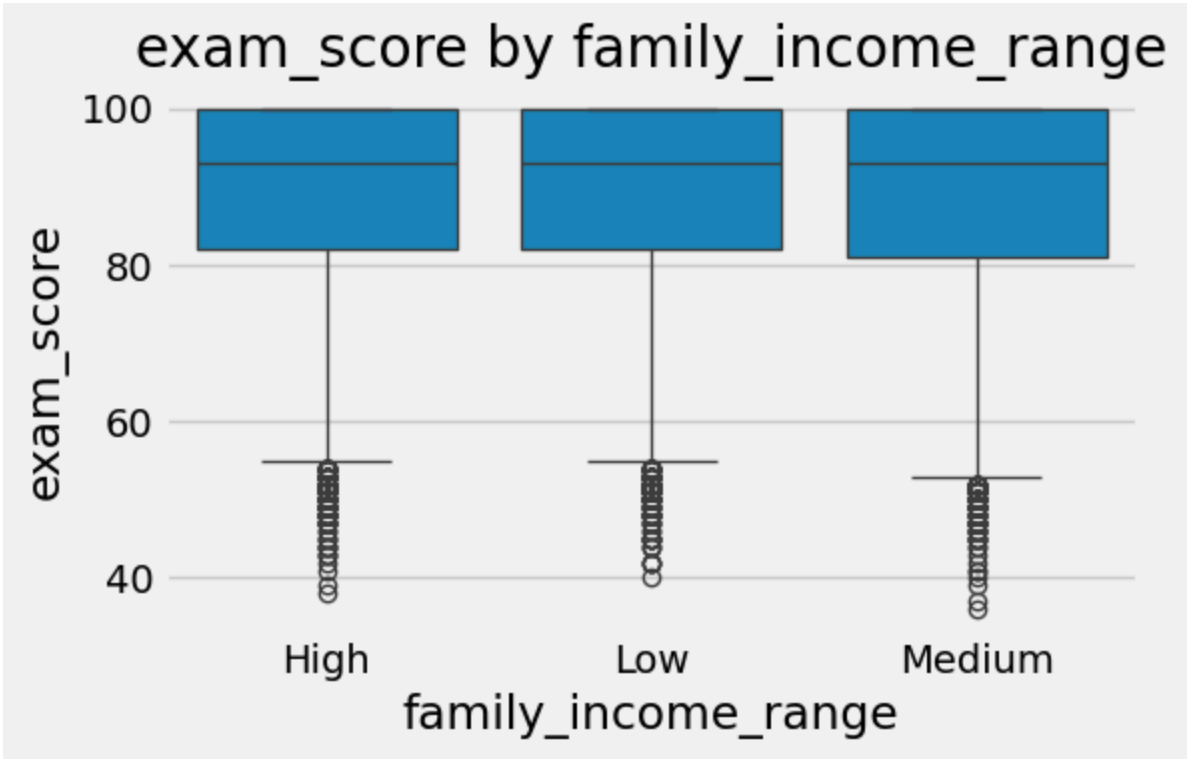

exam_score by internet_quality
100
80
60
40
exam_score
High
Low
Medium
internet_quality

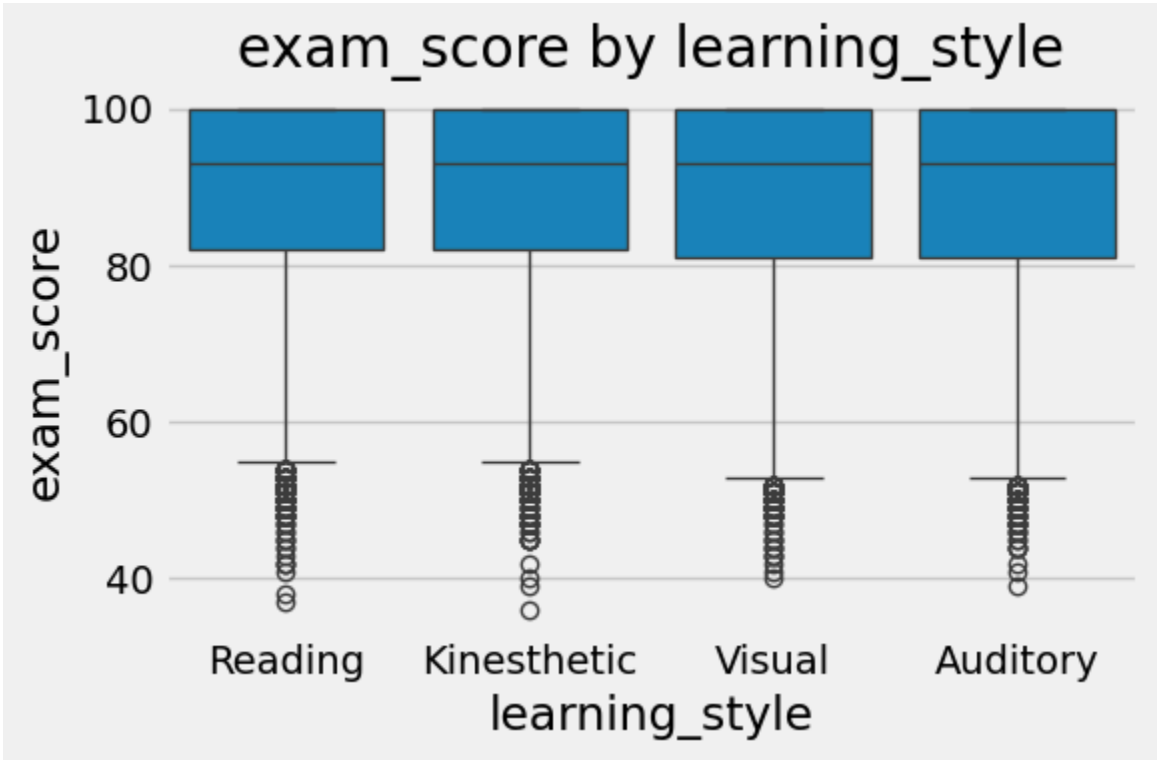

exam_score by extracurricular_participation
100
80
60
40
exam_score
Yes
No
extracurricular_participation

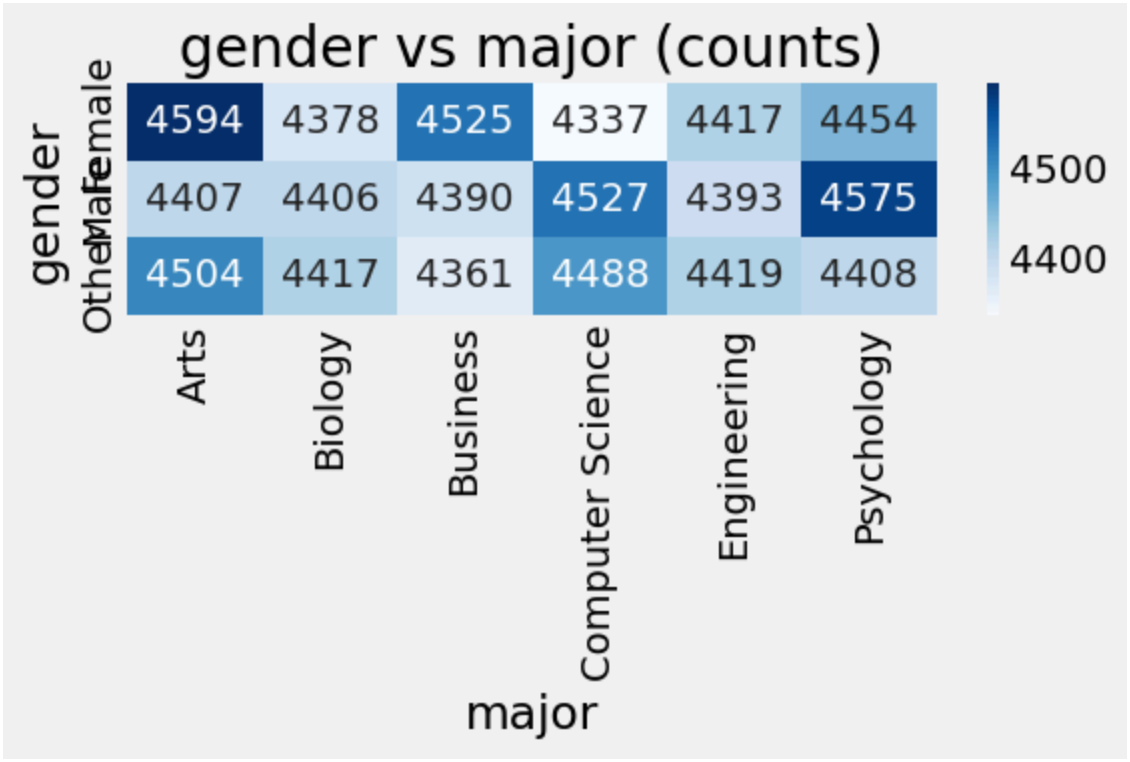

exam_score by dropout_risk
100
80
60
40
exam_score
No
Yes
dropout_risk

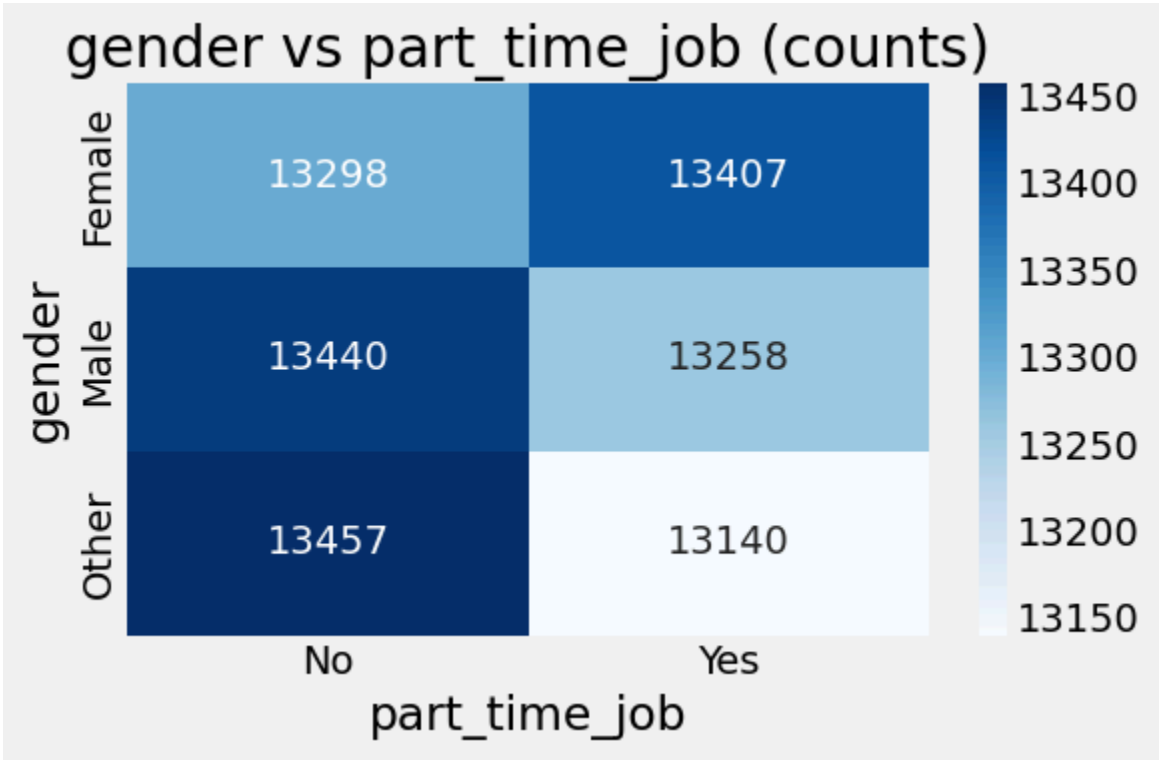

exam_score by study_environment
exam_score
100
80
60
40
Co-Learning Grou
Library Quiet Room
Dorm
Cafe
study_environment

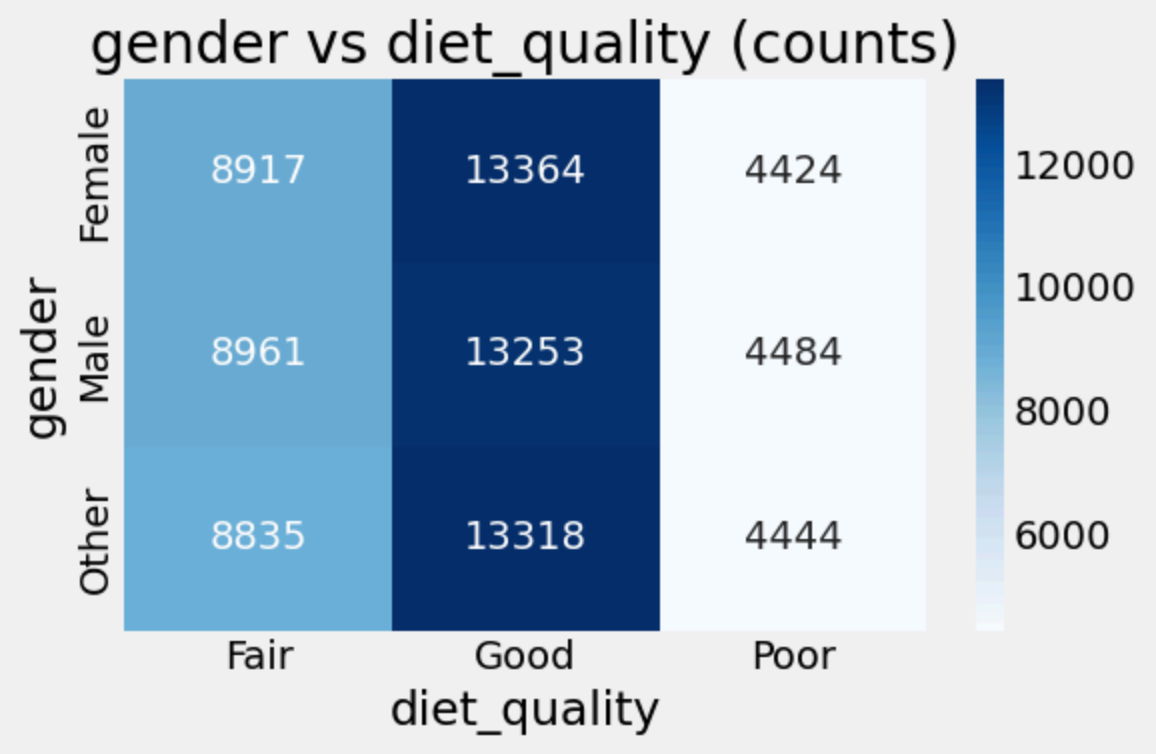

exam_score by access_to_tutoring
exam_score
100
80
60
40
Yes
No
access_to_tutoring

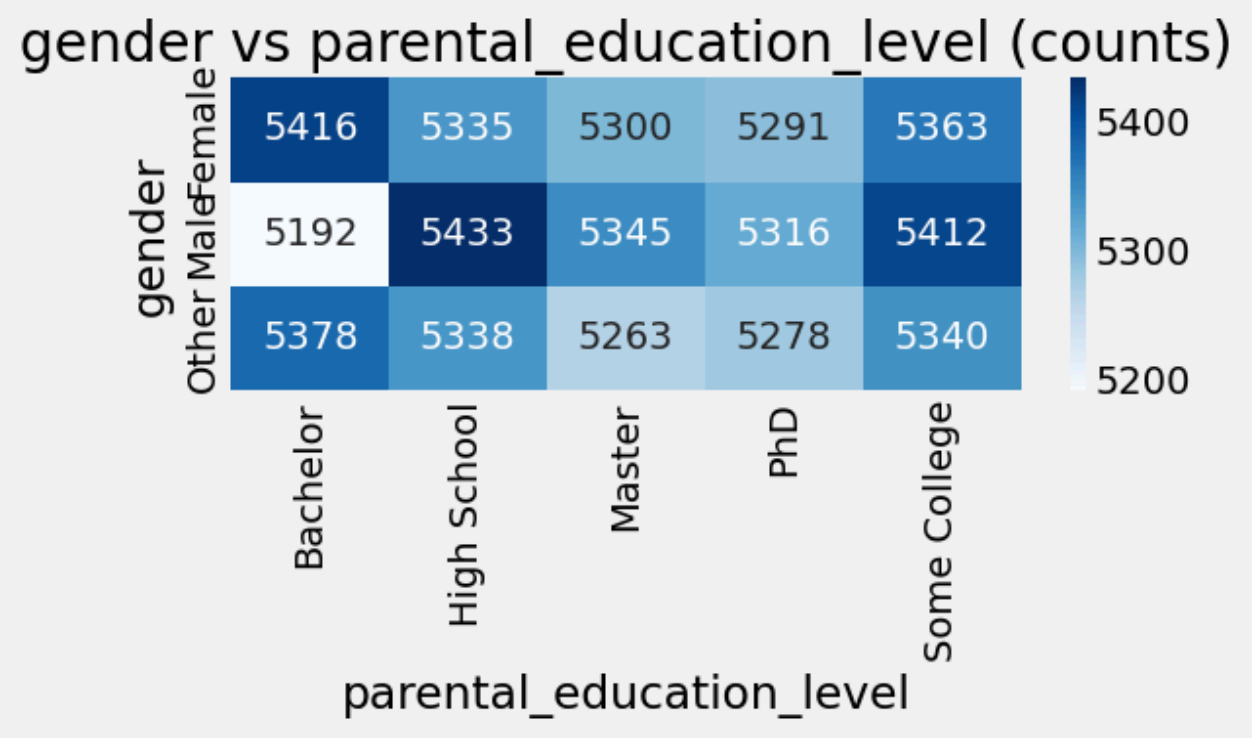

exam_score by family_income_range
100
80
60
40
exam_score
High
Low
Medium
family_income_range

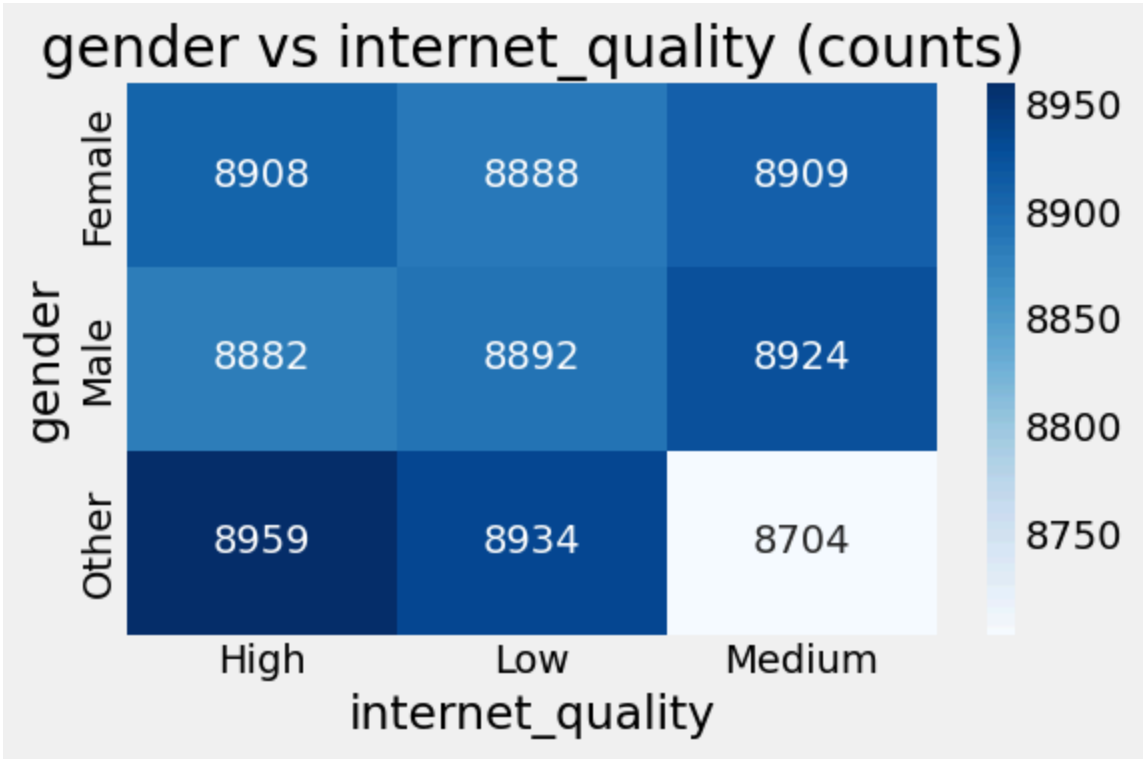

exam_score by learning_style
100
80
60
40
exam_score
Reading
Kinesthetic
Visual
Auditory
learning_style

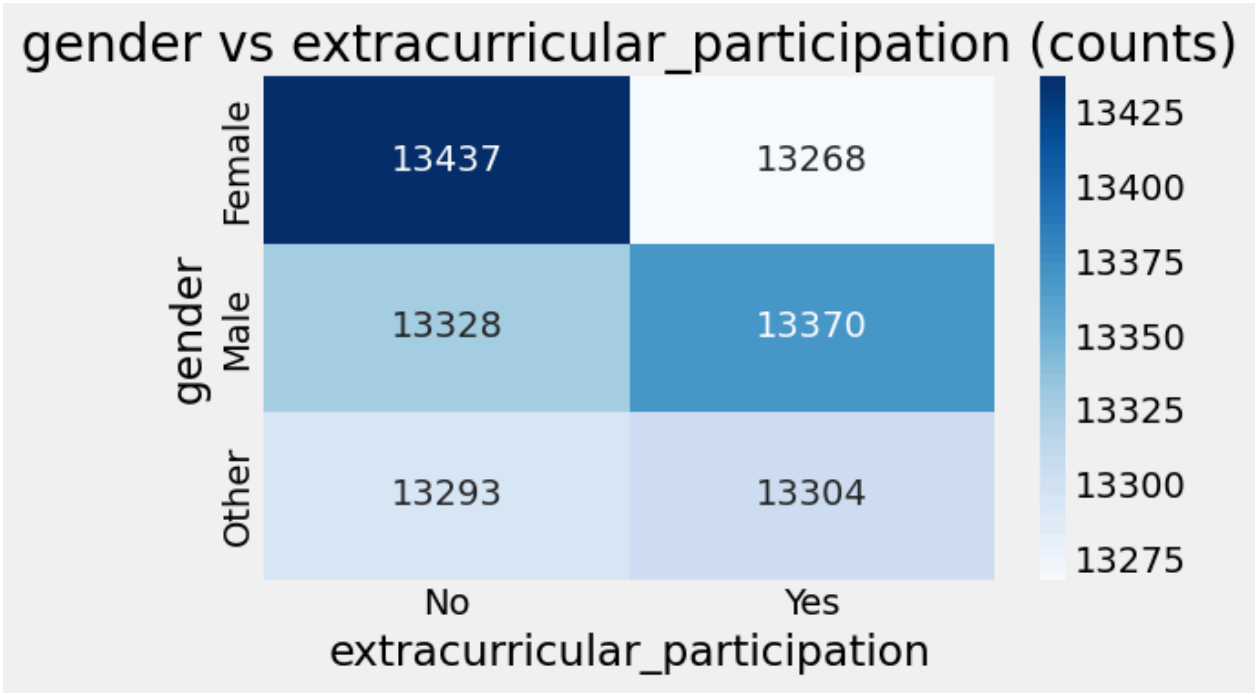

gender vs major (counts)
gender
Female
Male
Other
4594
4378
4525
4337
4417
4454
4407
4406
4390
4527
4393
4575
4504
4417
4361
4488
4419
4408
4500
4400
Arts
Biology
Business
Computer Science
Engineering
Psychology
major

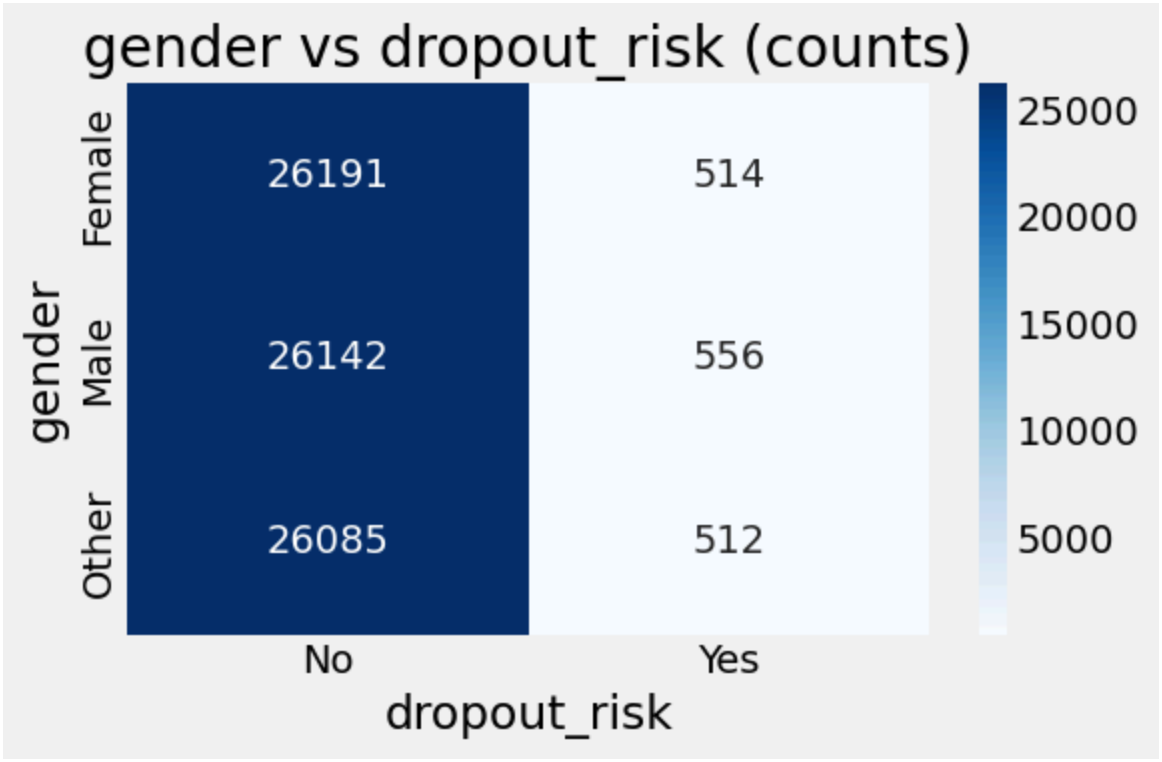

gender vs part_time_job (counts)
gender
Female
Male
Other
13298
13407
13440
13258
13457
13140
13450
13400
13350
13300
13250
13200
13150
No
Yes
part_time_job

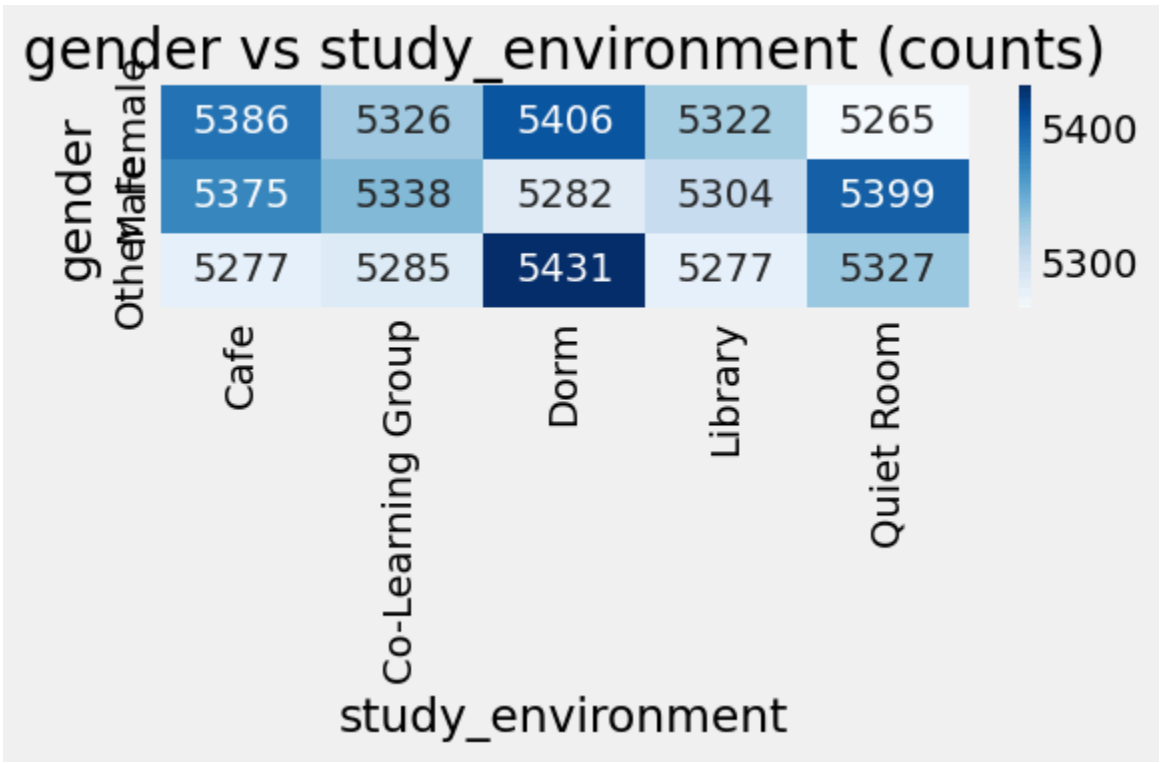

gender vs diet_quality (counts)
gender
Female
Male
Other
8917
13364
4424
8961
13253
4484
8835
13318
4444
12000
10000
8000
6000
Fair
Good
Poor
diet_quality

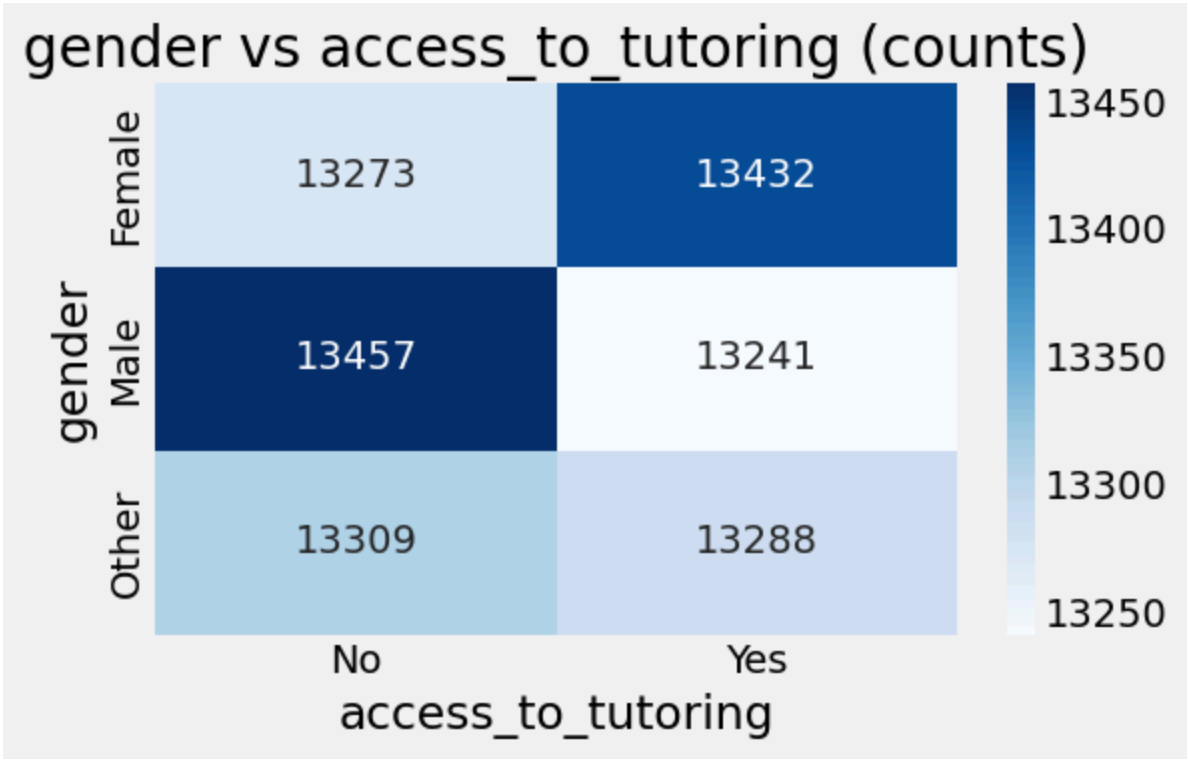

gender vs parental_education_level (counts)
gender
Female
Male
Other
5416
5335
5300
5291
5363
5192
5433
5345
5316
5412
5378
5338
5263
5278
5340
5400
5300
5200
Bachelor
High School
Master
PhD
Some College
parental_education_level

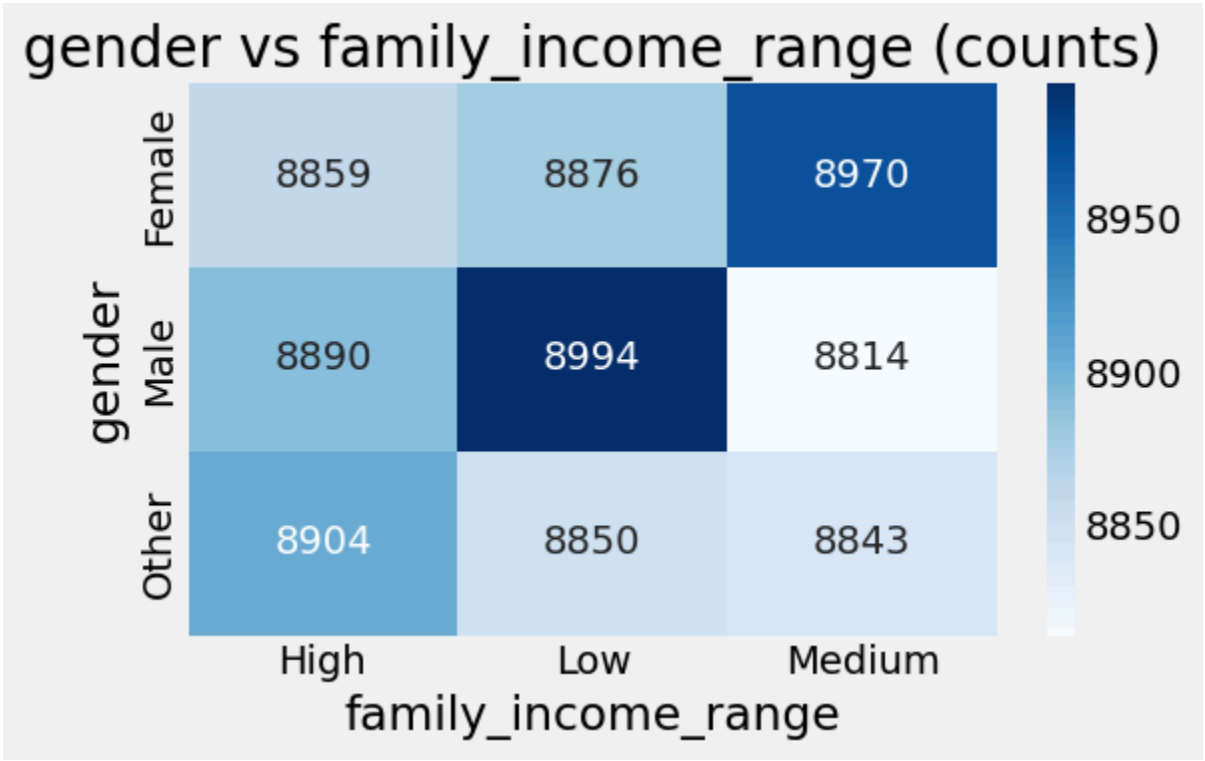

gender vs internet_quality (counts)
gender
Female
Male
Other
8908
8888
8909
8882
8892
8924
8959
8934
8704
8950
8900
8850
8800
8750
High
Low
Medium
internet_quality

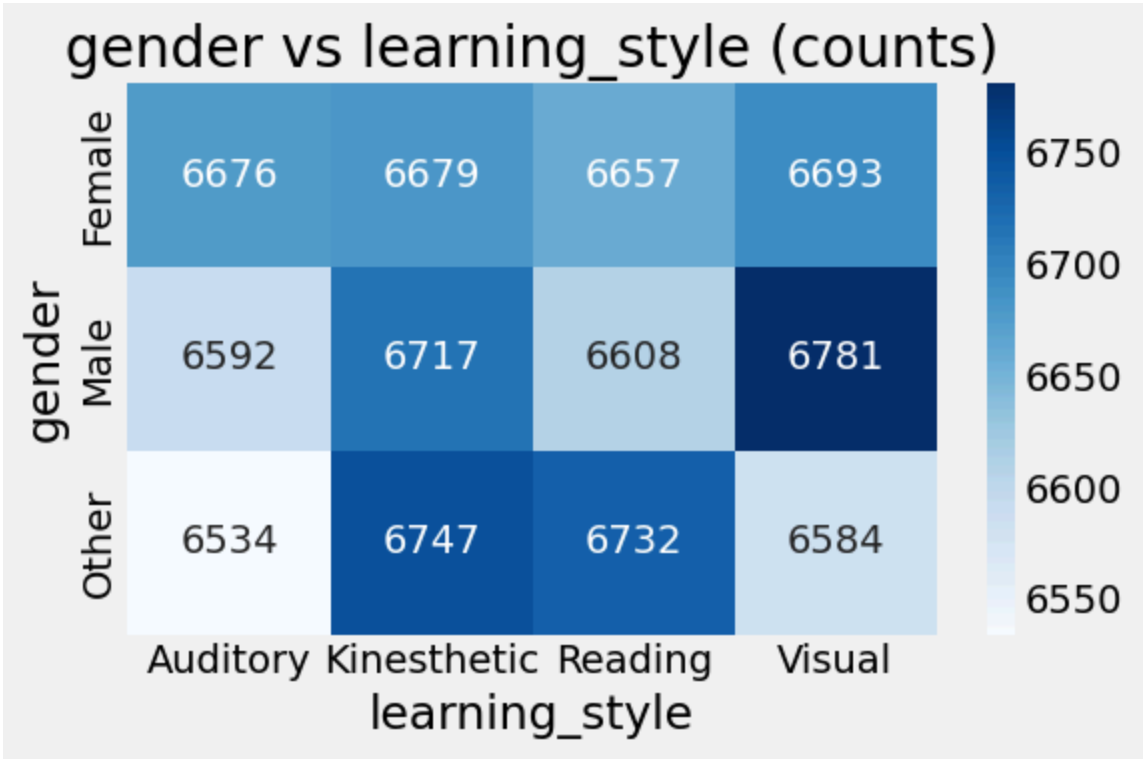

gender vs extracurricular_participation (counts)
gender
Female
Male
Other
13437
13268
13328
13370
13293
13304
13425
13400
13375
13350
13325
13300
13275
No
Yes
extracurricular_participation

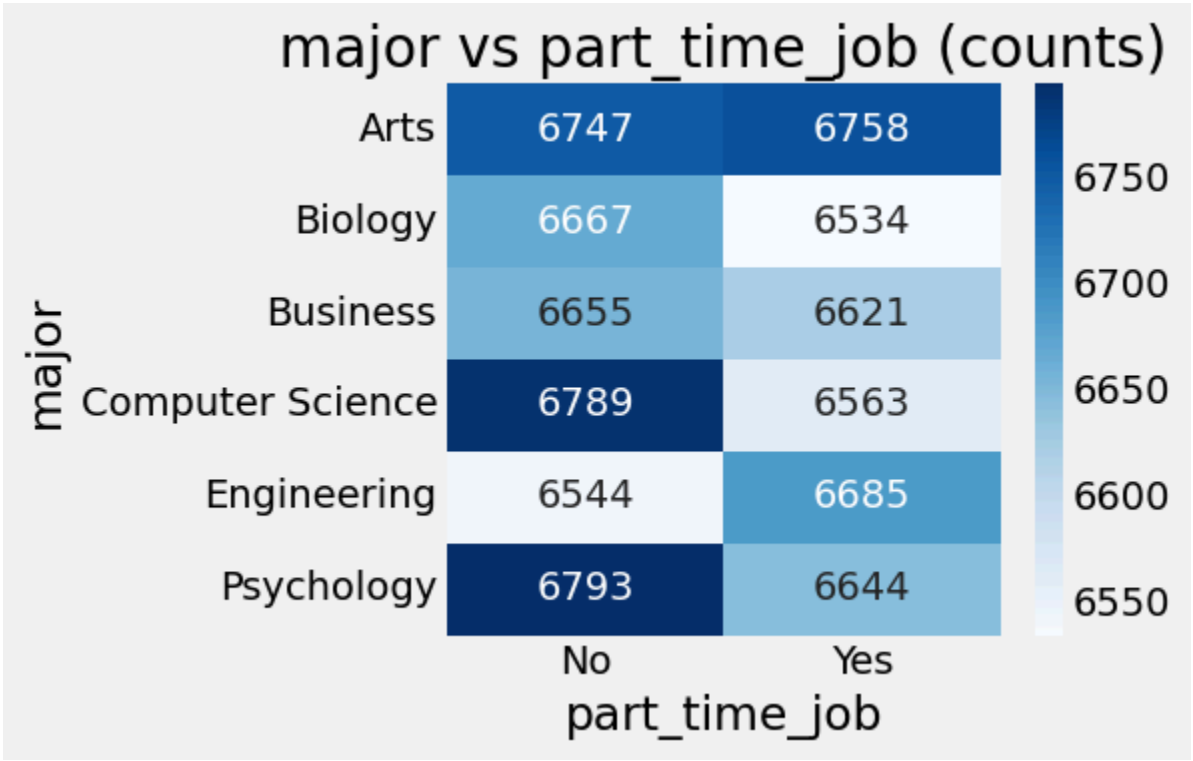

gender vs dropout_risk (counts)
gender
Female
Male
Other
26191
514
26142
556
26085
512
No
Yes
dropout_risk
25000
20000
15000
10000
5000

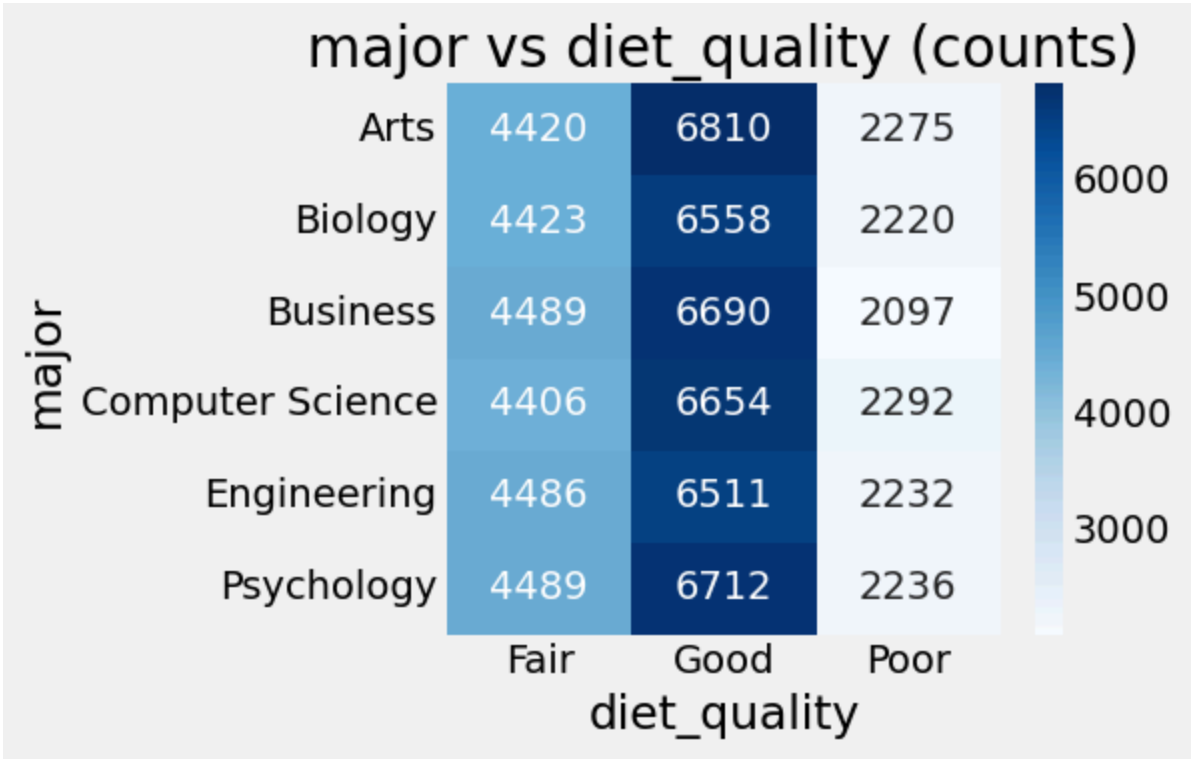

gender vs study_environment (counts)
gender
Female
Male
Other
5386
5326
5406
5322
5265
5375
5338
5282
5304
5399
5277
5285
5431
5277
5327
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
study_environment
5400
5300

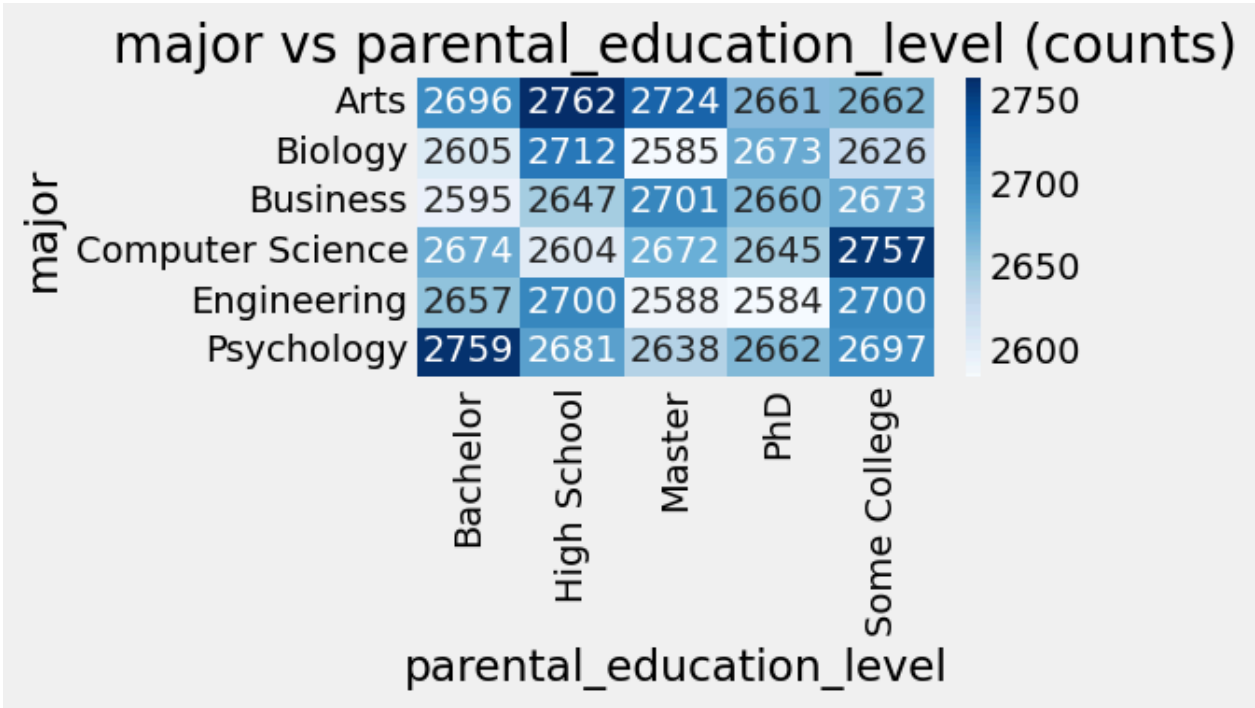

gender vs access_to_tutoring (counts)
gender
Female
Male
Other
13273
13432
13457
13241
13309
13288
No
Yes
access_to_tutoring
13450
13400
13350
13300
13250

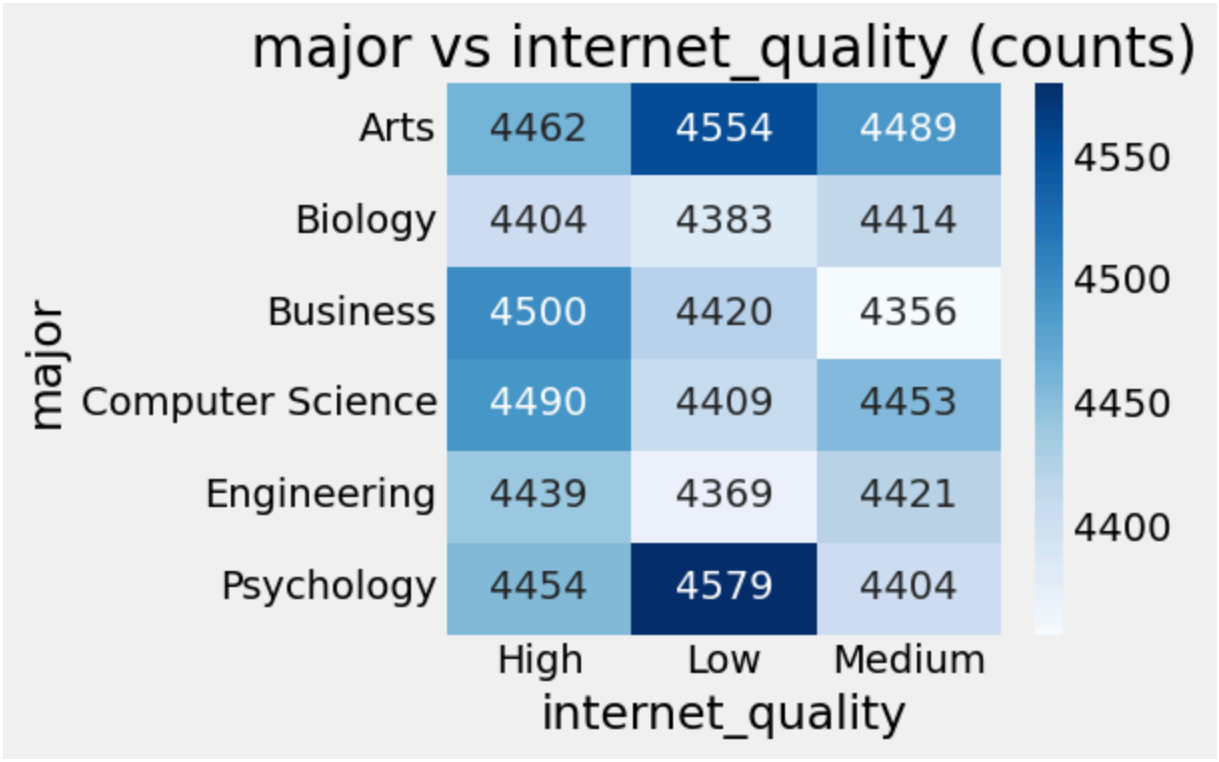

gender vs family_income_range (counts)
gender
Female
Male
Other
8859
8876
8970
8890
8994
8814
8904
8850
8843
High
Low
Medium
family_income_range
8950
8900
8850

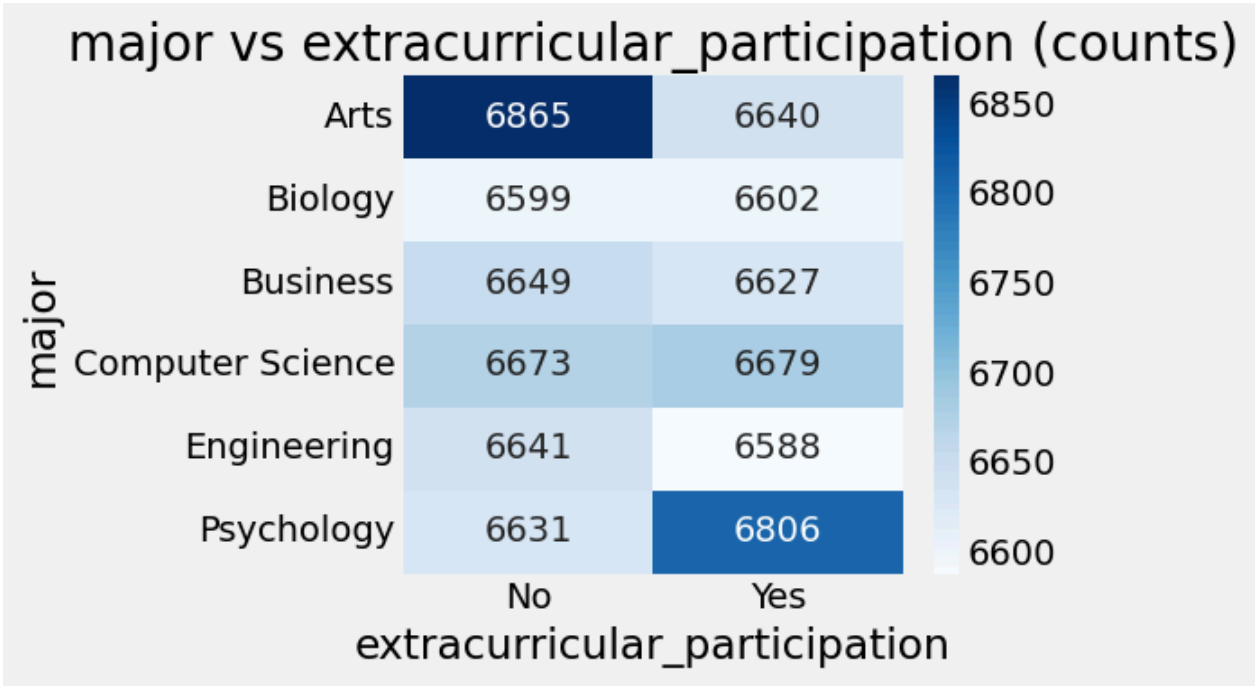

gender vs learning_style (counts)
gender
Female
Male
Other
6676
6679
6657
6693
6592
6717
6608
6781
6534
6747
6732
6584
Auditory
Kinesthetic
Reading
Visual
learning_style
6750
6700
6650
6600
6550

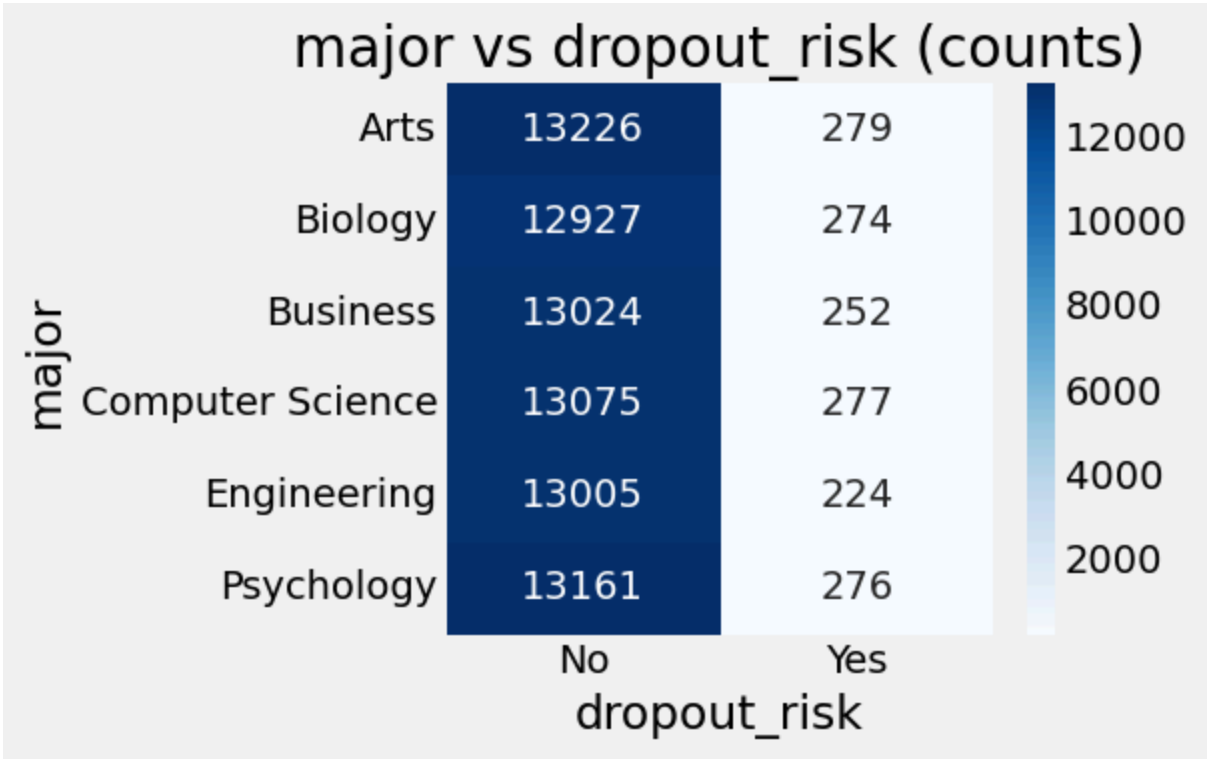

major vs part_time_job (counts)
major
Arts
Biology
Business
Computer Science
Engineering
Psychology
6747
6758
6667
6534
6655
6621
6789
6563
6544
6685
6793
6644
No
Yes
part_time_job
6750
6700
6650
6600
6550

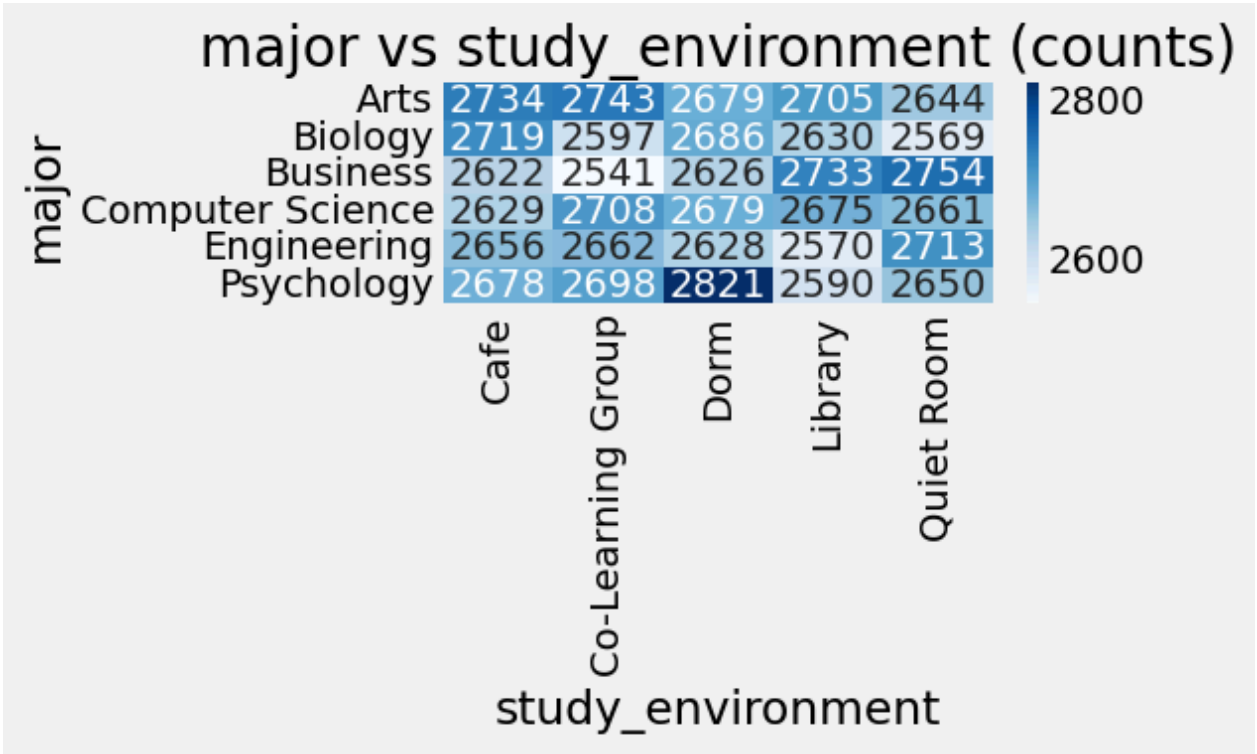

major vs diet_quality (counts)
major
Arts
Biology
Business
Computer Science
Engineering
Psychology
4420
6810
2275
4423
6558
2220
4489
6690
2097
4406
6654
2292
4486
6511
2232
4489
6712
2236
Fair
Good
Poor
diet_quality
6000
5000
4000
3000

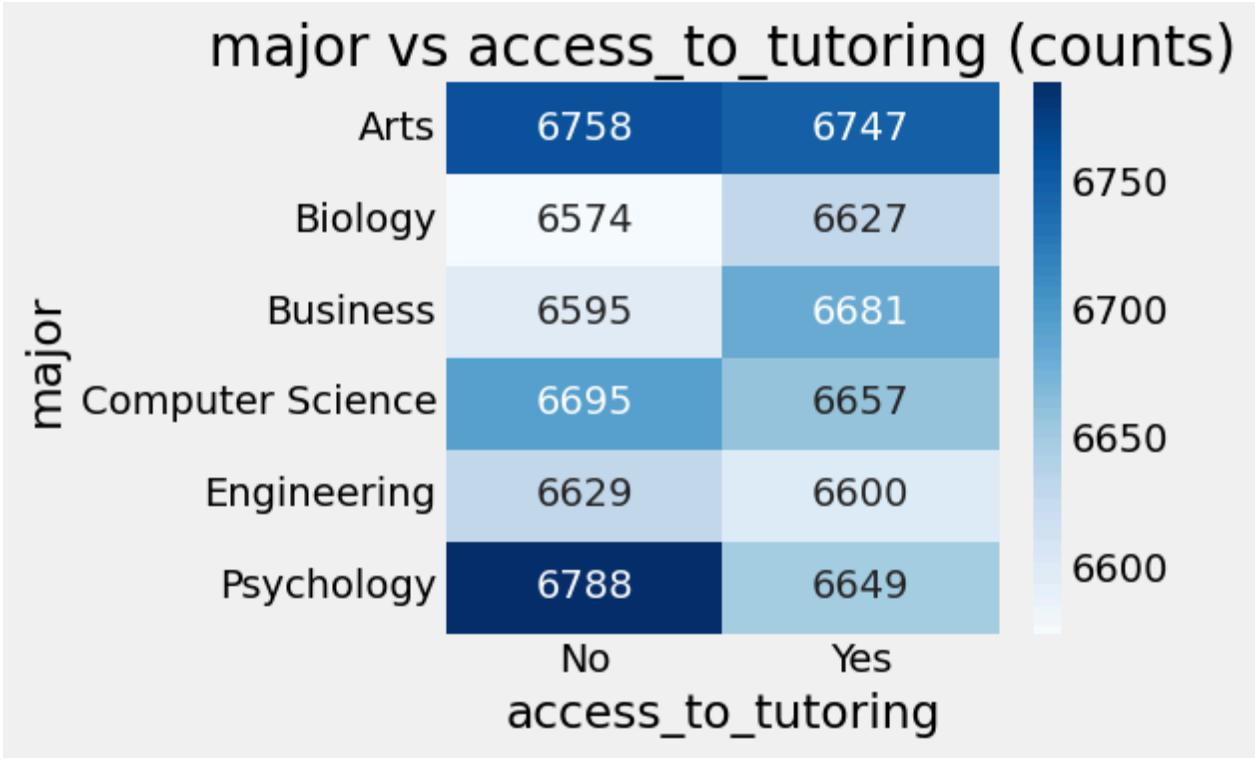

major vs parental_education_level (counts)
major
Arts
Biology
Business
Computer Science
Engineering
Psychology
2696
2762
2724
2661
2662
2605
2712
2585
2673
2626
2595
2647
2701
2660
2673
2674
2604
2672
2645
2757
2657
2700
2588
2584
2700
2759
2681
2638
2662
2697
Bachelor
High School
Master
PhD
Some College
parental_education_level
2750
2700
2650
2600

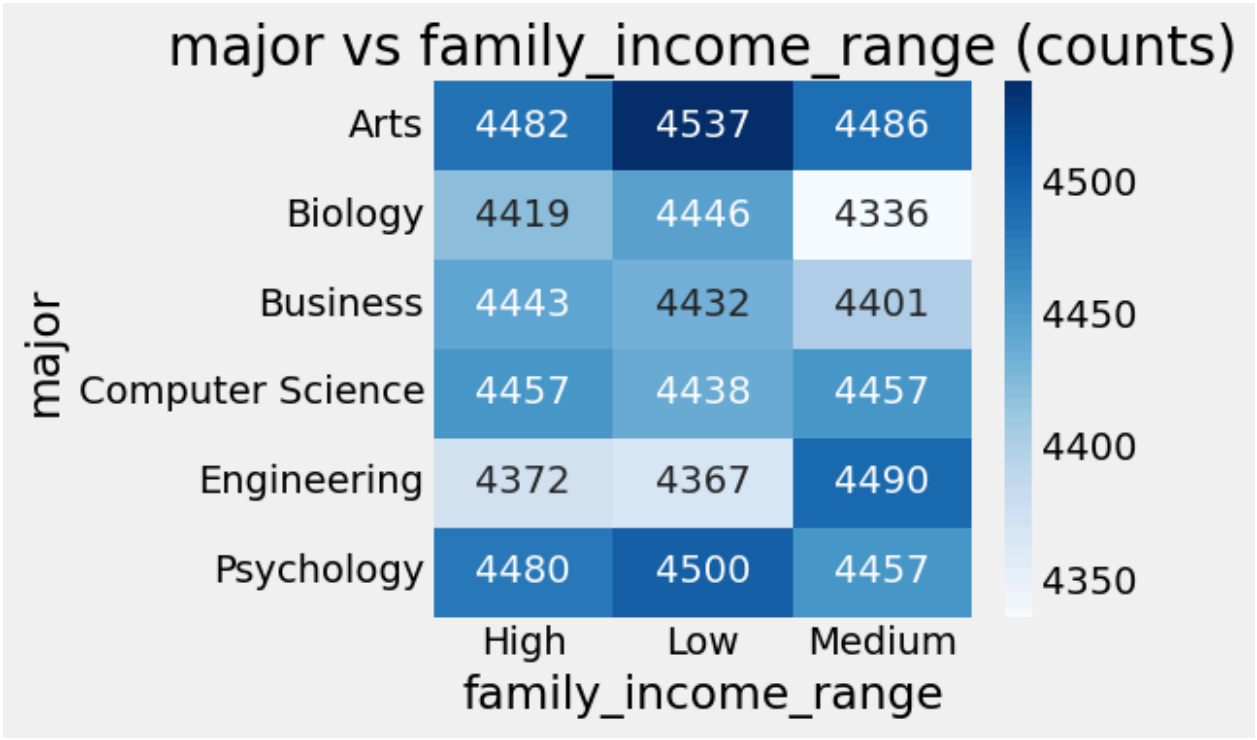

major vs internet_quality (counts)
Arts
Biology
Business
Computer Science
Engineering
Psychology
major
4462
4554
4489
4404
4383
4414
4500
4420
4356
4490
4409
4453
4439
4369
4421
4454
4579
4404
High
Low
Medium
internet_quality
4550
4500
4450
4400

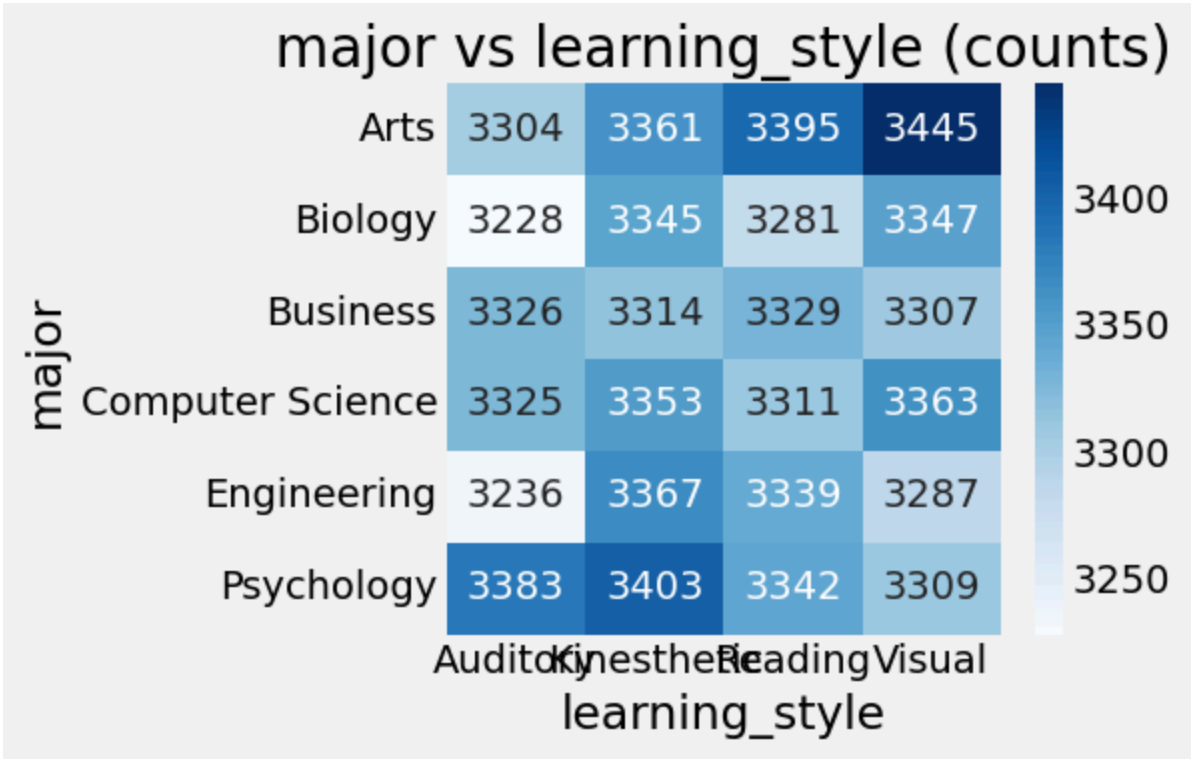

major vs extracurricular_participation (counts)
Arts
Biology
Business
Computer Science
Engineering
Psychology
major
6865
6640
6599
6602
6649
6627
6673
6679
6641
6588
6631
6806
No
Yes
extracurricular_participation
6850
6800
6750
6700
6650
6600

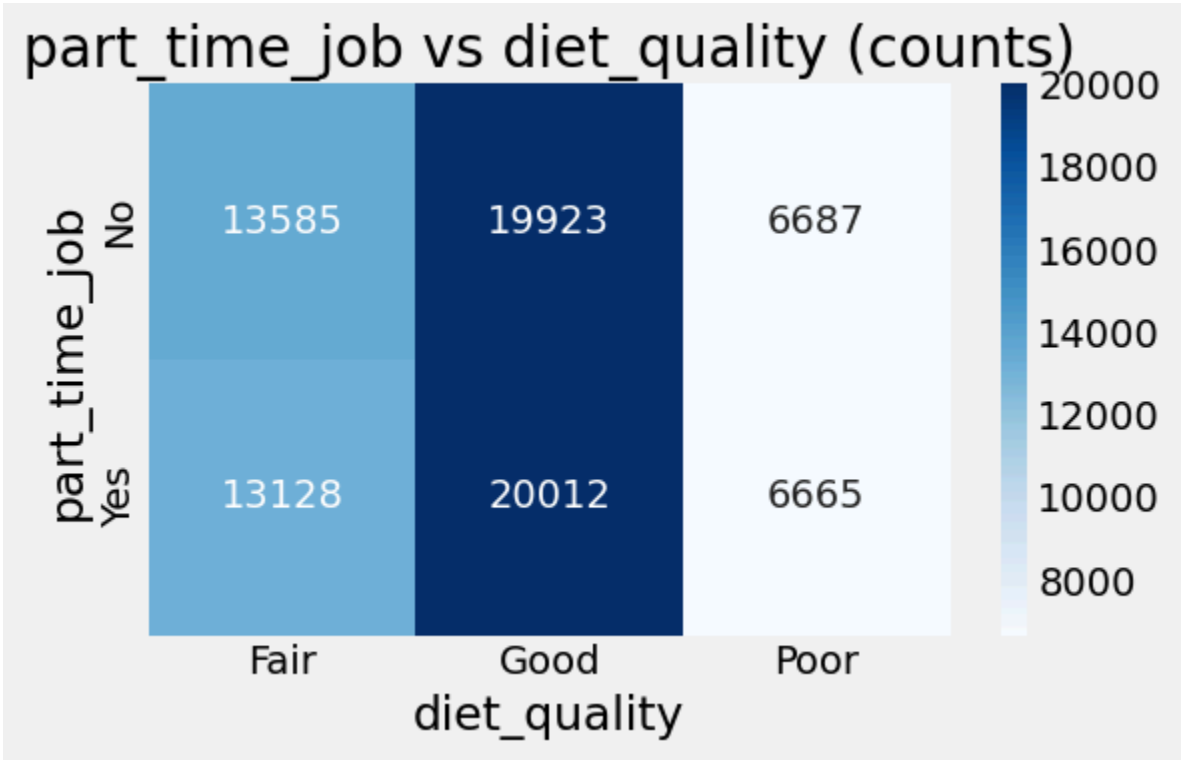

major vs dropout_risk (counts)
major
Arts
Biology
Business
Computer Science
Engineering
Psychology
13226
279
12927
274
13024
252
13075
277
13005
224
13161
276
No
Yes
dropout_risk
12000
10000
8000
6000
4000
2000

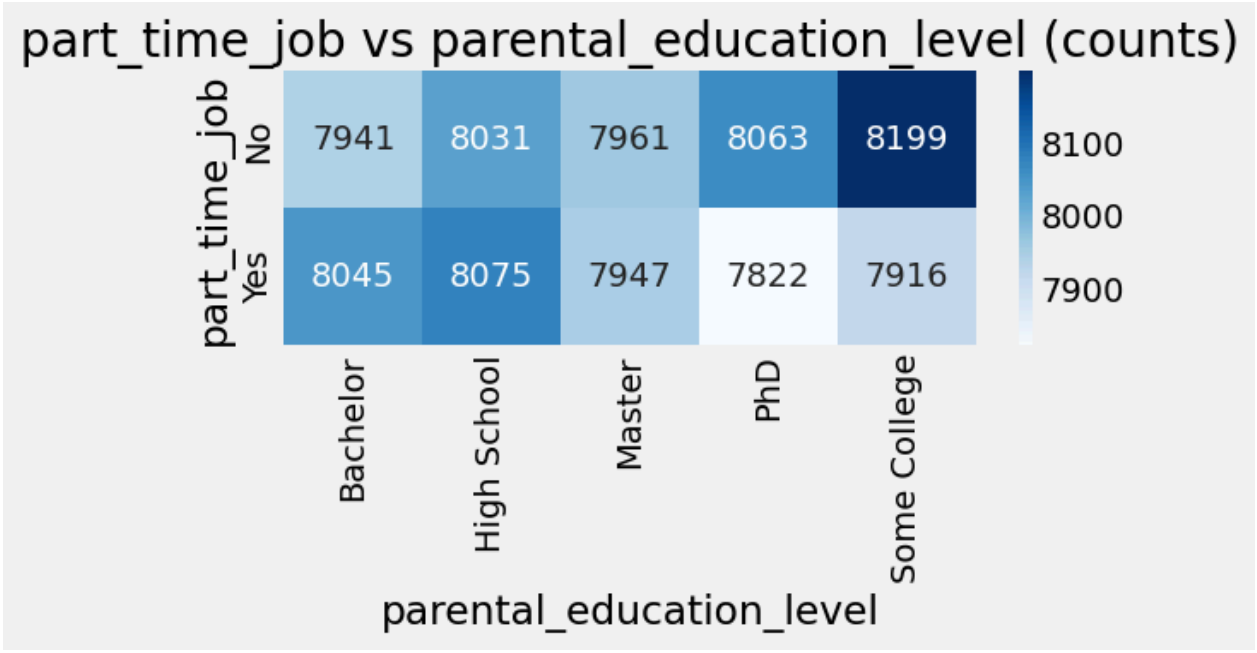

major vs study_environment (counts)
major
Arts 2734 2743 2679 2705 2644
Biology 2719 2597 2686 2630 2569
Business 2622 2541 2626 2733 2754
Computer Science 2629 2708 2679 2675 2661
Engineering 2656 2662 2628 2570 2713
Psychology 2678 2698 2821 2590 2650
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
study_environment
2800
2600

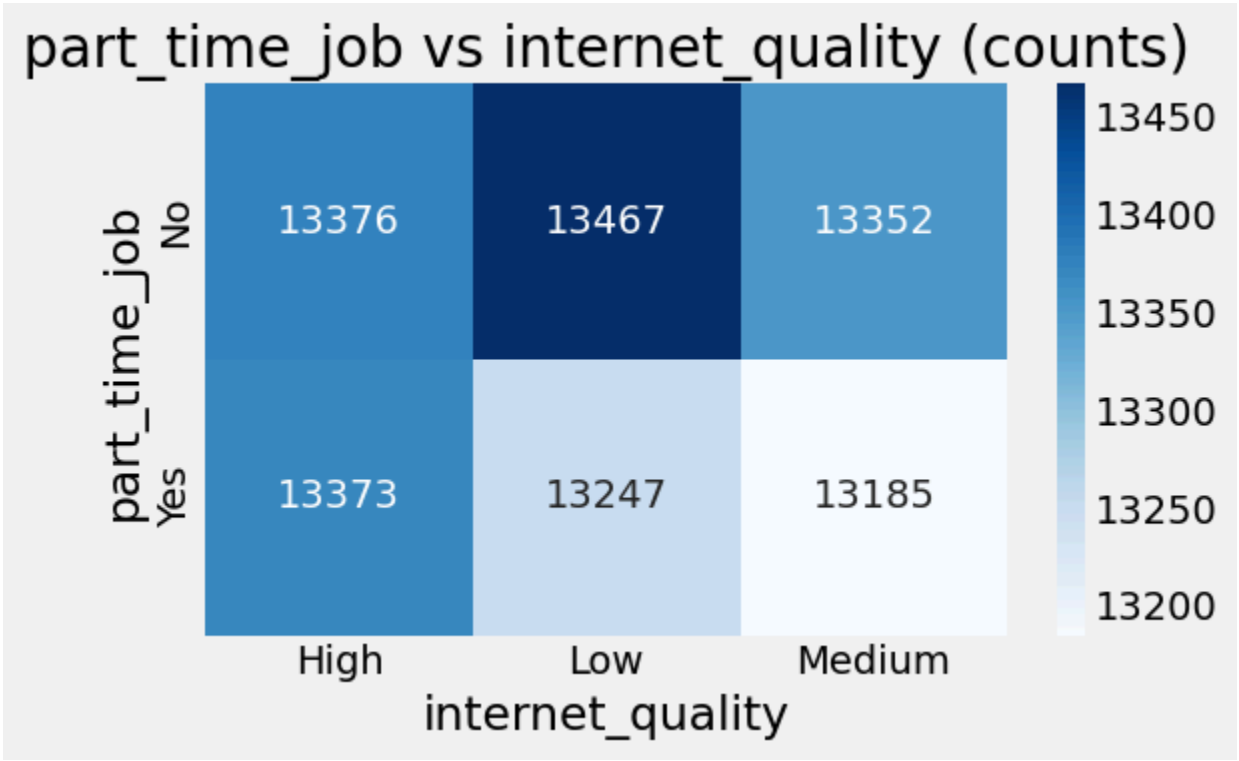

major vs access_to_tutoring (counts)
Arts
Biology
Business
Computer Science
Engineering
Psychology
major
6758
6747
6574
6627
6595
6681
6695
6657
6629
6600
6788
6649
No
Yes
access_to_tutoring
6750
6700
6650
6600

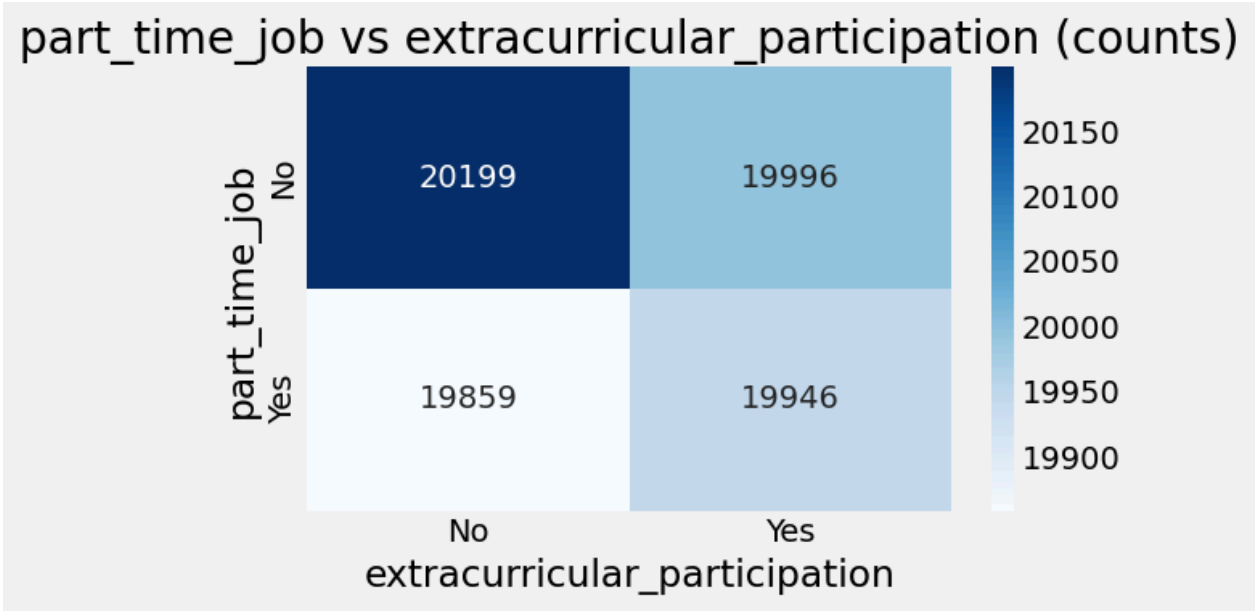

major vs family_income_range (counts)
Arts
Biology
Business
Computer Science
Engineering
Psychology
major
4482
4537
4486
4419
4446
4336
4443
4432
4401
4457
4438
4457
4372
4367
4490
4480
4500
4457
High
Low
Medium
family_income_range
4500
4450
4400
4350

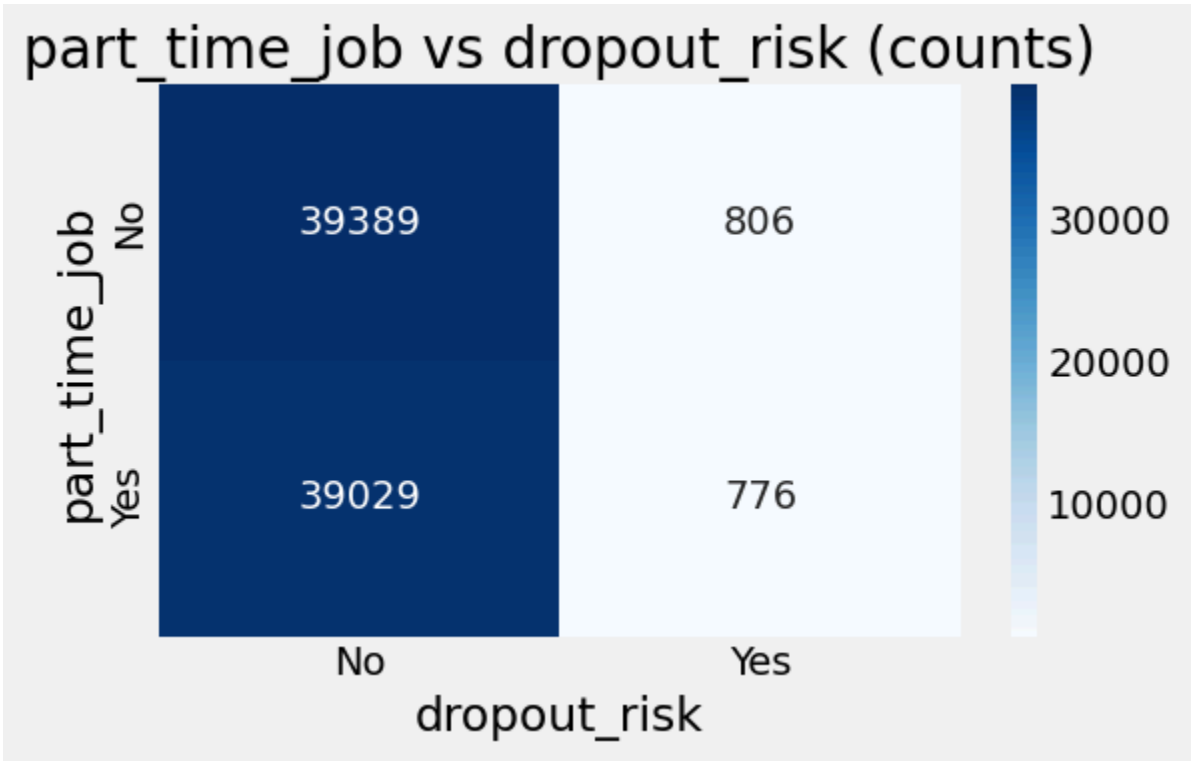

major vs learning_style (counts)
Arts
Biology
Business
Computer Science
Engineering
Psychology
major
3304
3361
3395
3445
3228
3345
3281
3347
3326
3314
3329
3307
3325
3353
3311
3363
3236
3367
3339
3287
3383
3403
3342
3309
Auditory
Kinesthetic
Reading
Visual
learning_style
3400
3350
3300
3250

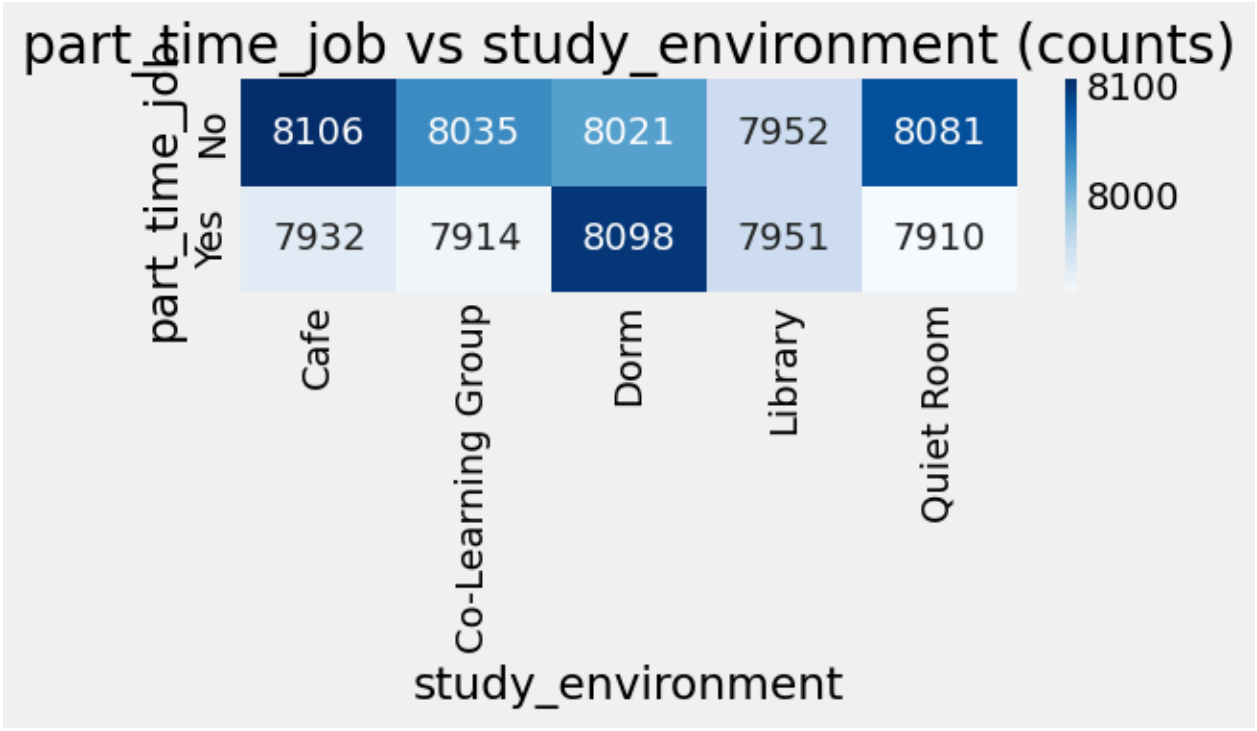

part_time_job vs diet_quality (counts)
part_time_job
No
Yes
13585
19923
6687
13128
20012
6665
Fair
Good
Poor
diet_quality
20000
18000
16000
14000
12000
10000
8000

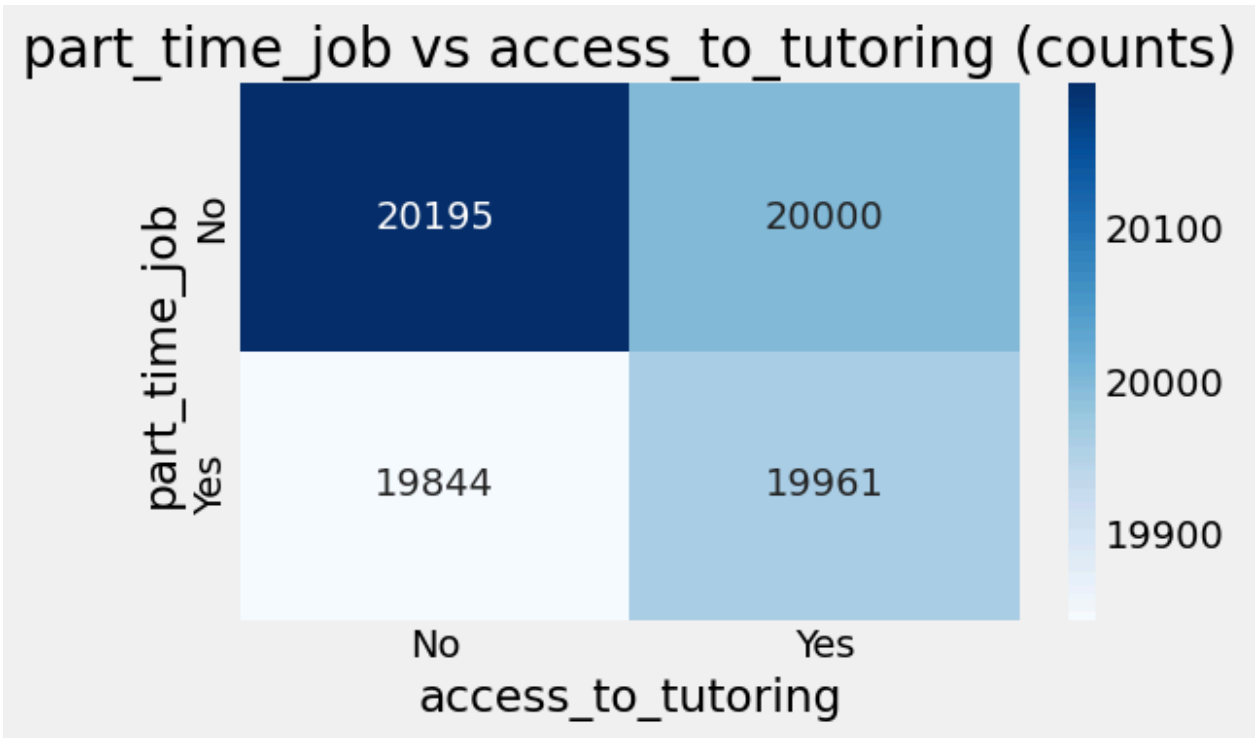

part_time_job vs parental_education_level (counts)
part_time_job
No
Yes
7941
8031
7961
8063
8199
8045
8075
7947
7822
7916
8100
8000
7900
Bachelor
High School
Master
PhD
Some College
parental_education_level

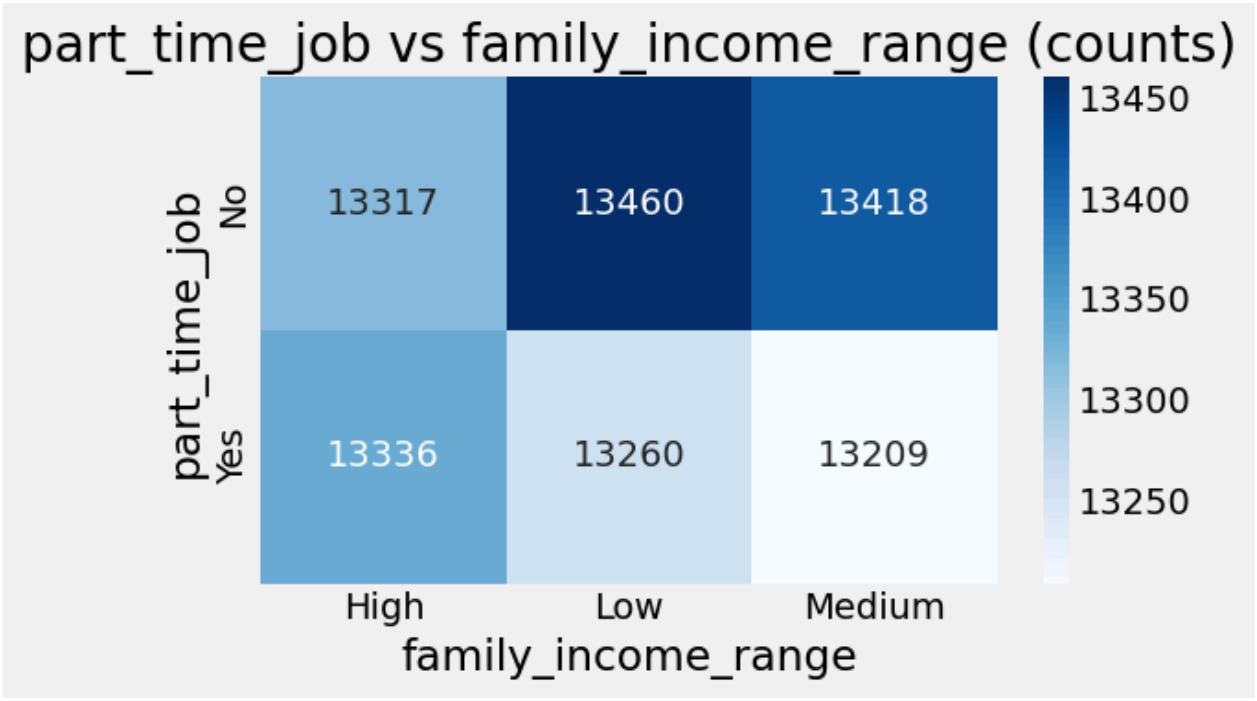

part_time_job vs internet_quality (counts)
part_time_job
No
Yes
13376
13467
13352
13373
13247
13185
13450
13400
13350
13300
13250
13200
High
Low
Medium
internet_quality

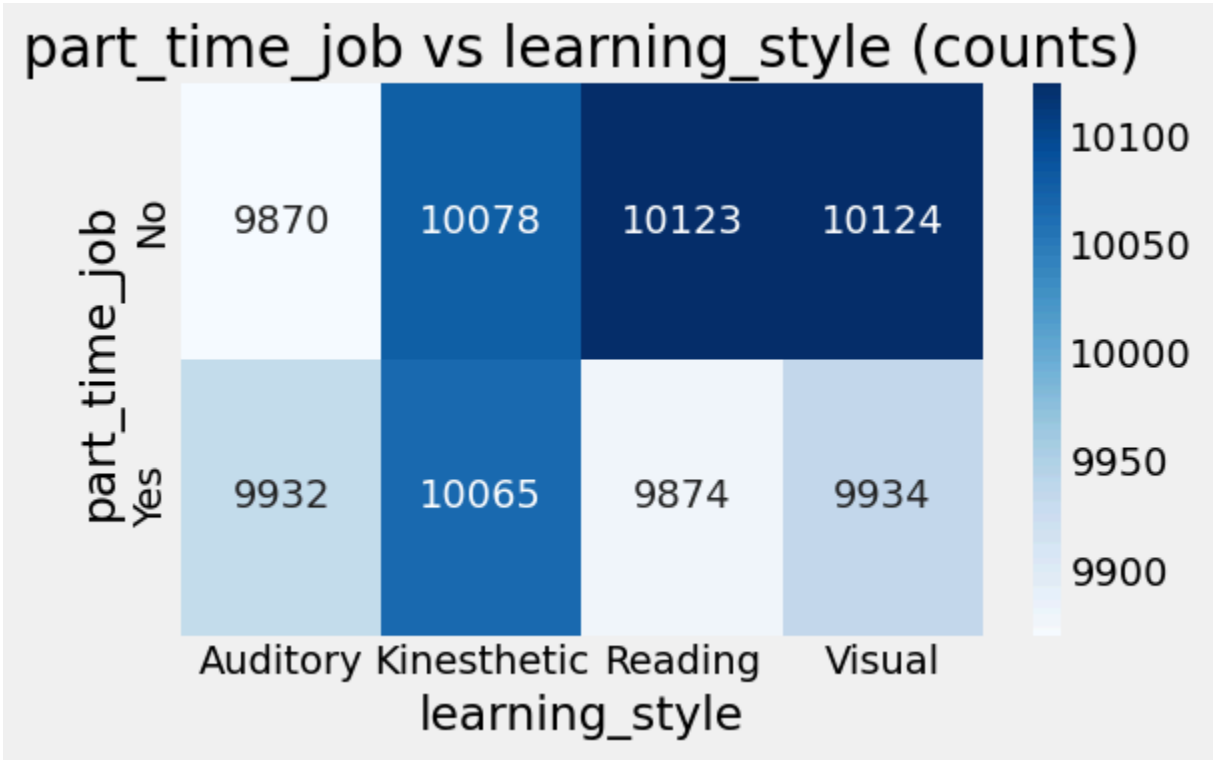

part_time_job vs extracurricular_participation (counts)
part_time_job
No
Yes
20199
19996
19859
19946
20150
20100
20050
20000
19950
19900
No
Yes
extracurricular_participation

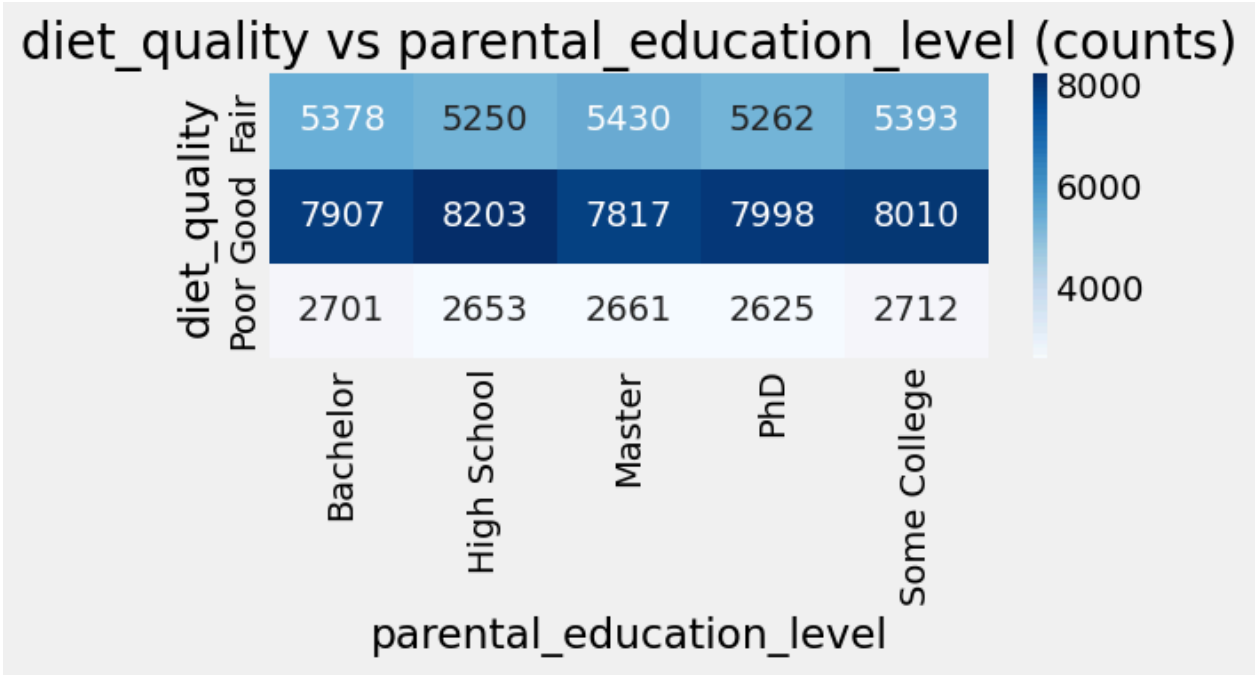

part_time_job vs dropout_risk (counts)
part_time_job
No
Yes
39389
806
39029
776
30000
20000
10000
No
Yes
dropout_risk

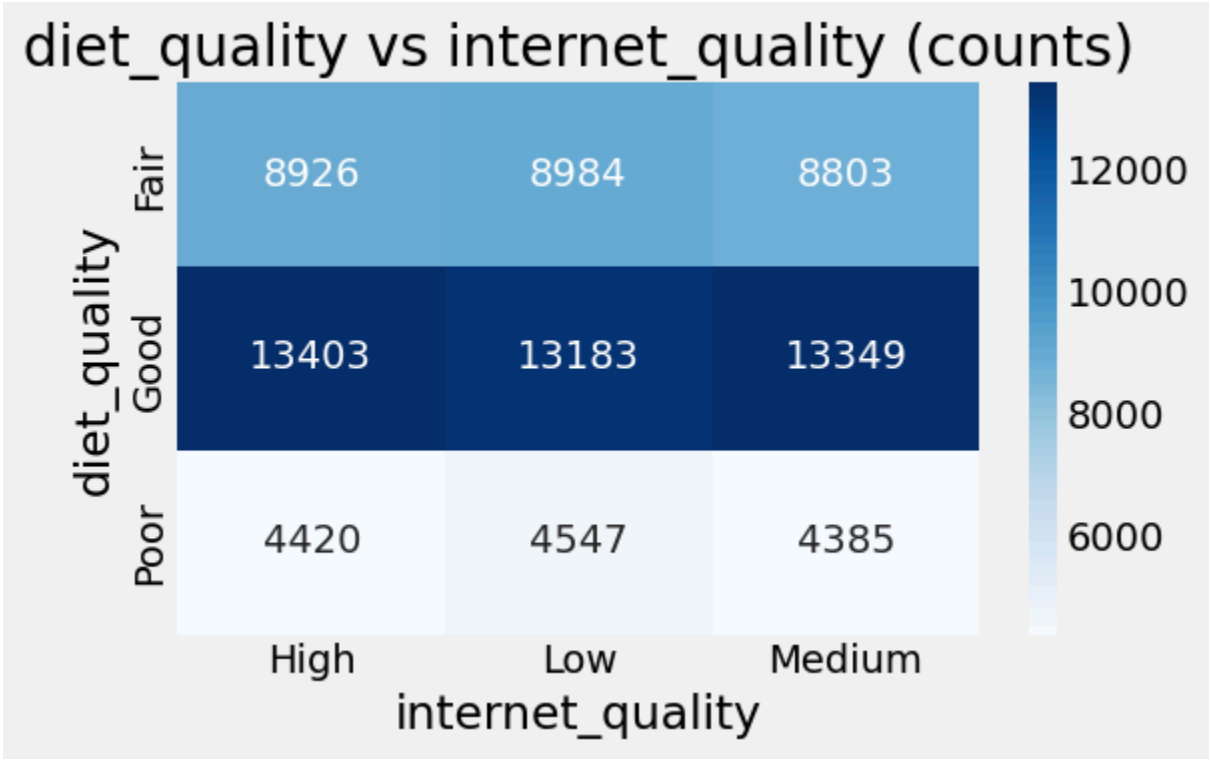

part_time_job vs study_environment (counts)
part_time_job
No
Yes
8106
8035
8021
7952
8081
7932
7914
8098
7951
7910
8100
8000
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
study_environment

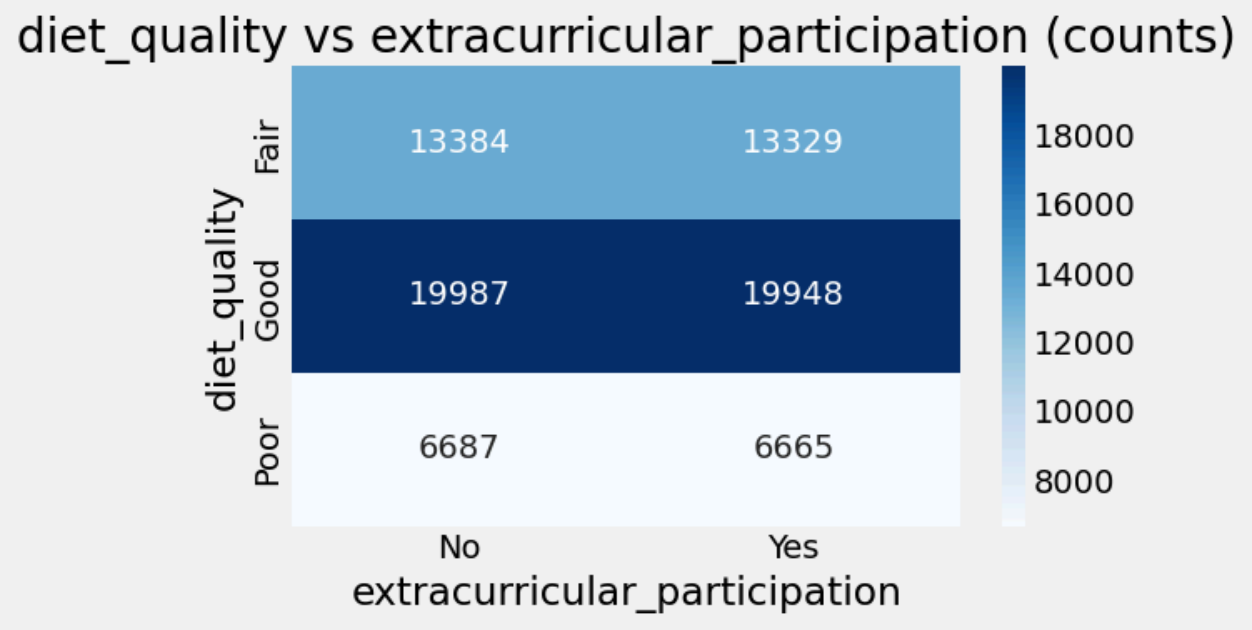

part_time_job vs access_to_tutoring (counts)
part_time_job
No
Yes
20195
20000
19844
19961
20100
20000
19900
No
Yes
access_to_tutoring

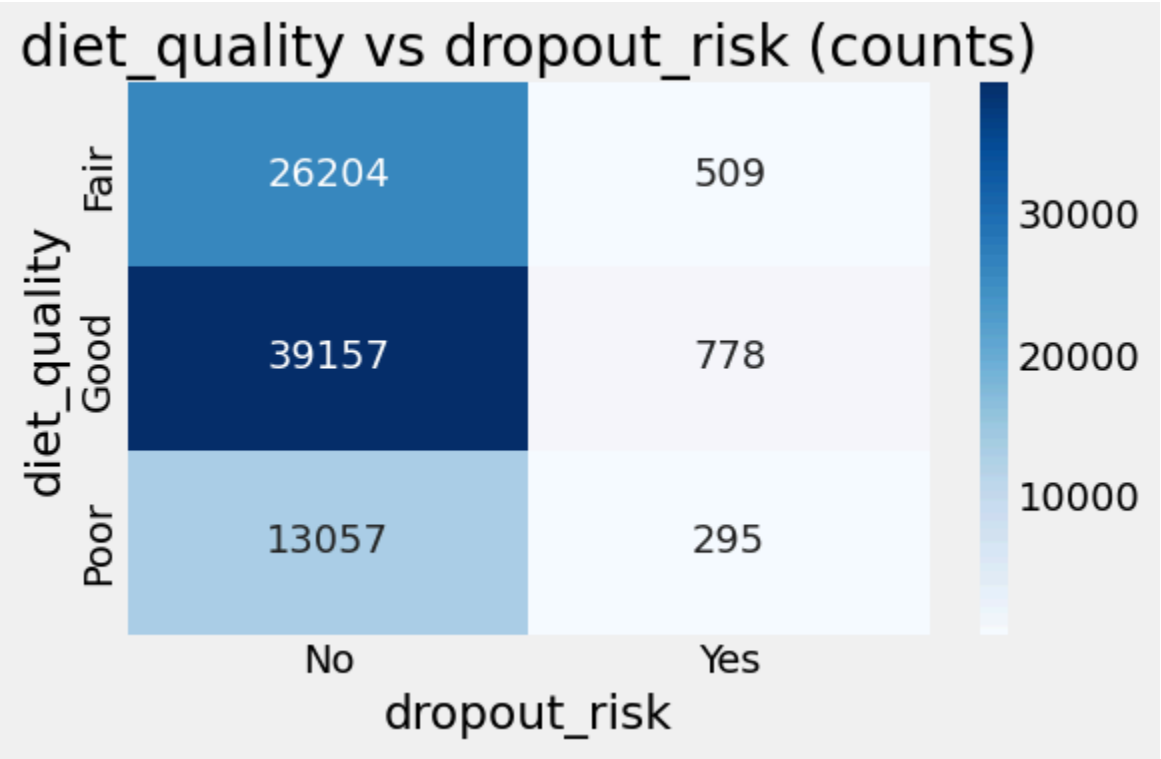

part_time_job vs family_income_range (counts)
part_time_job
No
Yes
13317
13460
13418
13336
13260
13209
High
Low
Medium
family_income_range
13450
13400
13350
13300
13250

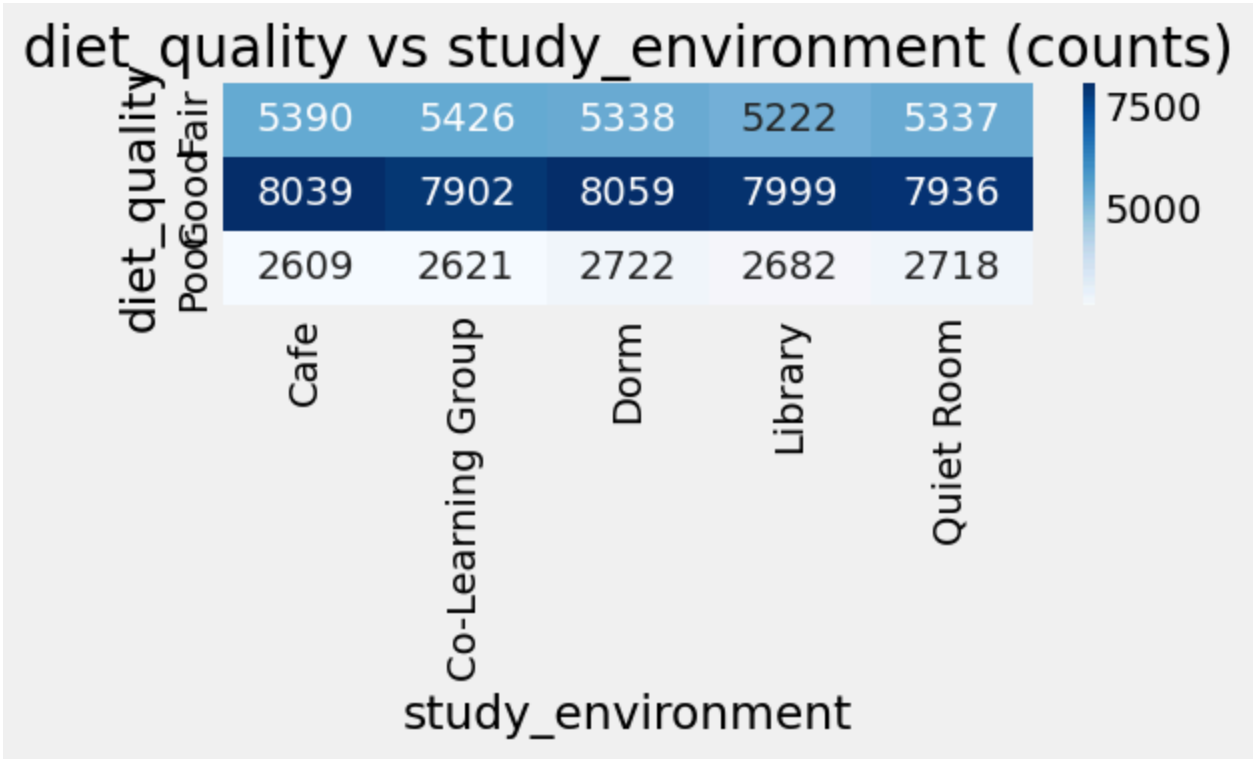

part_time_job vs learning_style (counts)
part_time_job
No
Yes
9870
10078
10123
10124
9932
10065
9874
9934
Auditory
Kinesthetic
Reading
Visual
learning_style
10100
10050
10000
9950
9900

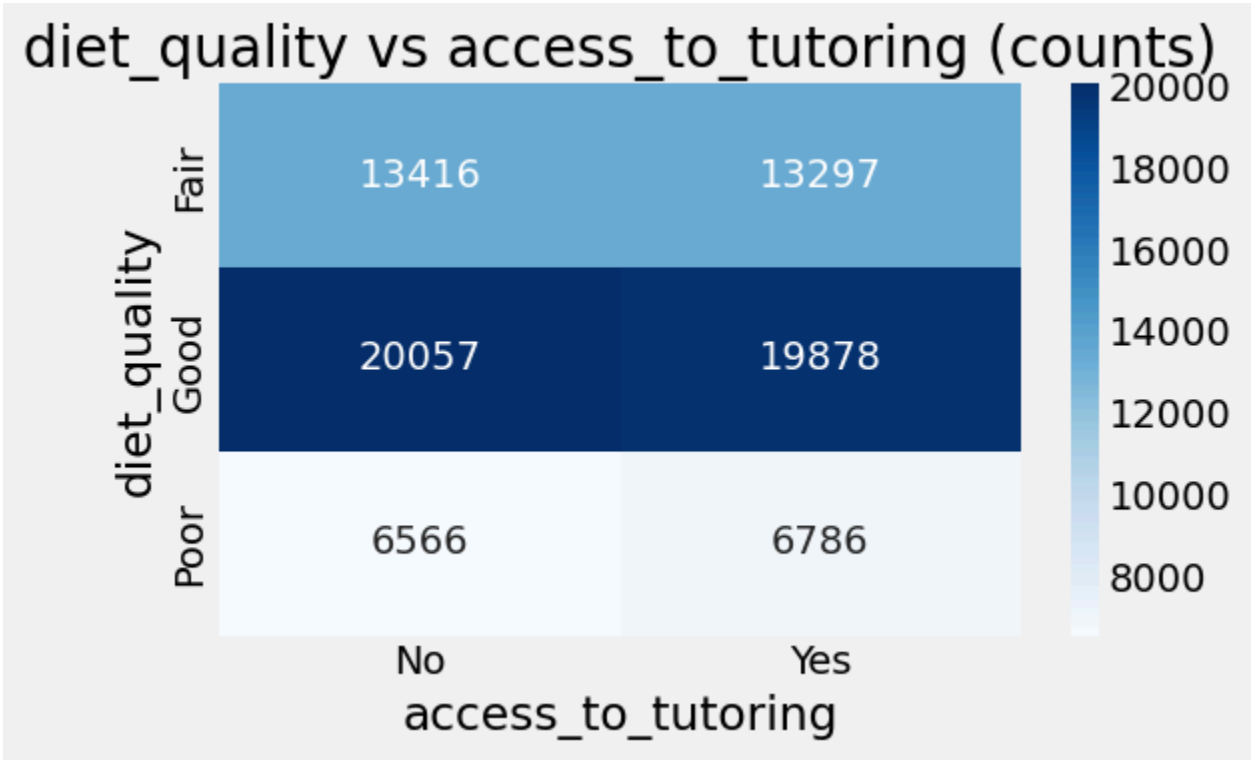

diet_quality vs parental_education_level (counts)
diet_quality
Fair
Good
Poor
5378
5250
5430
5262
5393
7907
8203
7817
7998
8010
2701
2653
2661
2625
2712
8000
6000
4000
Bachelor
High School
Master
PhD
Some College
parental_education_level

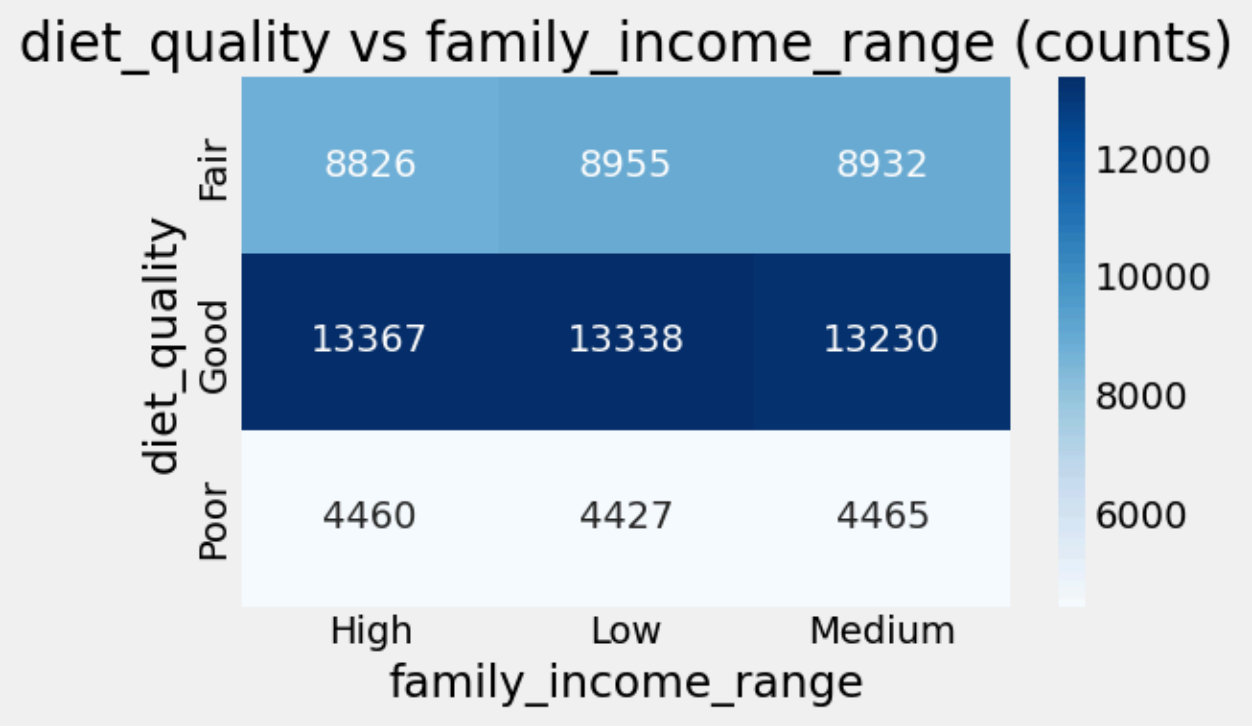

diet_quality vs internet_quality (counts)
diet_quality
Fair
Good
Poor
8926
8984
8803
13403
13183
13349
4420
4547
4385
12000
10000
8000
6000
High
Low
Medium
internet_quality

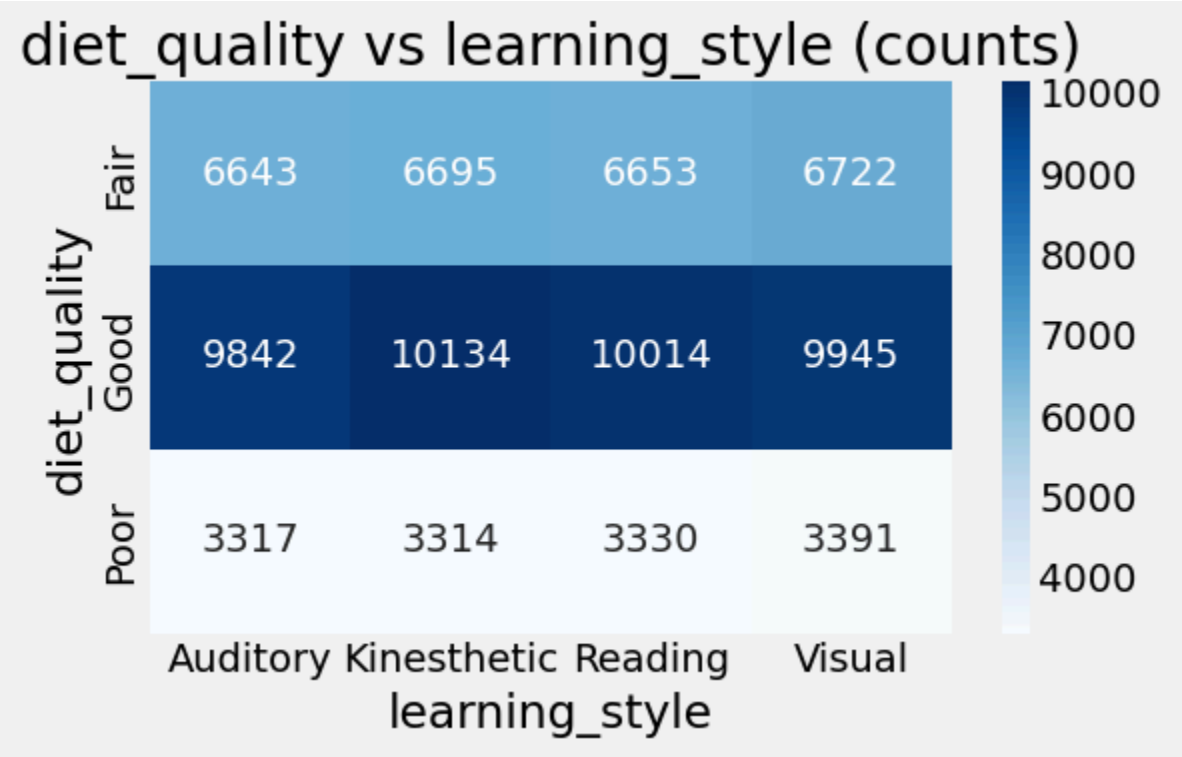

diet_quality vs extracurricular_participation (counts)
diet_quality
Fair
Good
Poor
13384
13329
19987
19948
6687
6665
No
Yes
extracurricular_participation
18000
16000
14000
12000
10000
8000

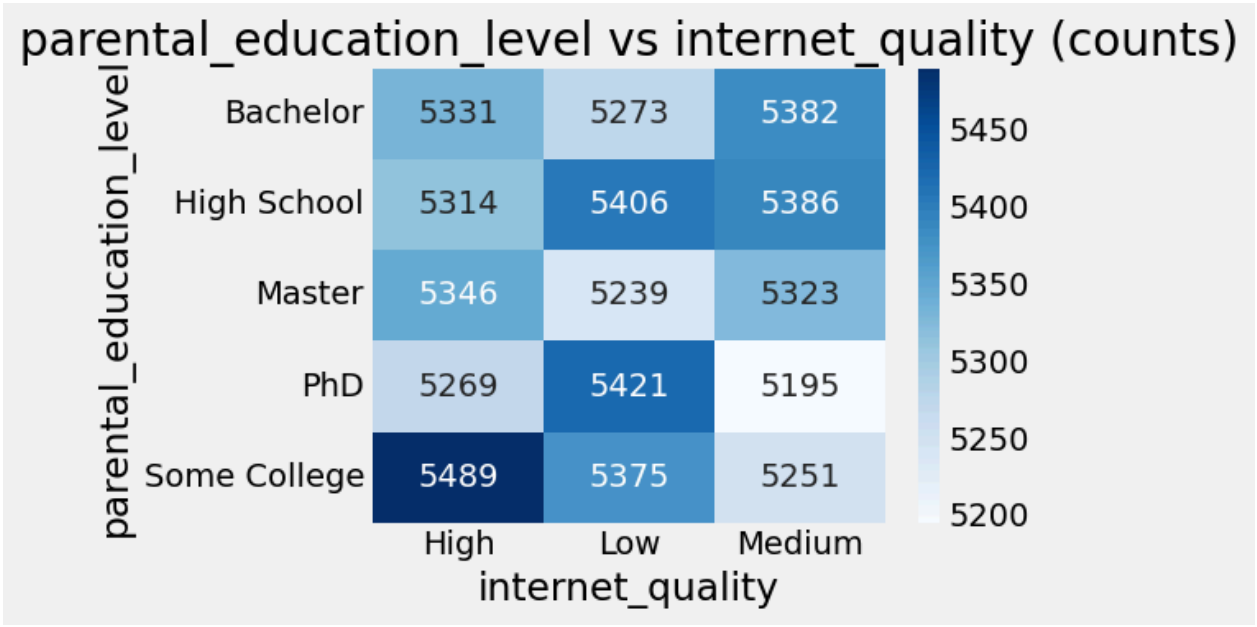

diet_quality vs dropout_risk (counts)
diet_quality
Fair
Good
Poor
26204
509
39157
778
13057
295
No
Yes
dropout_risk
30000
20000
10000

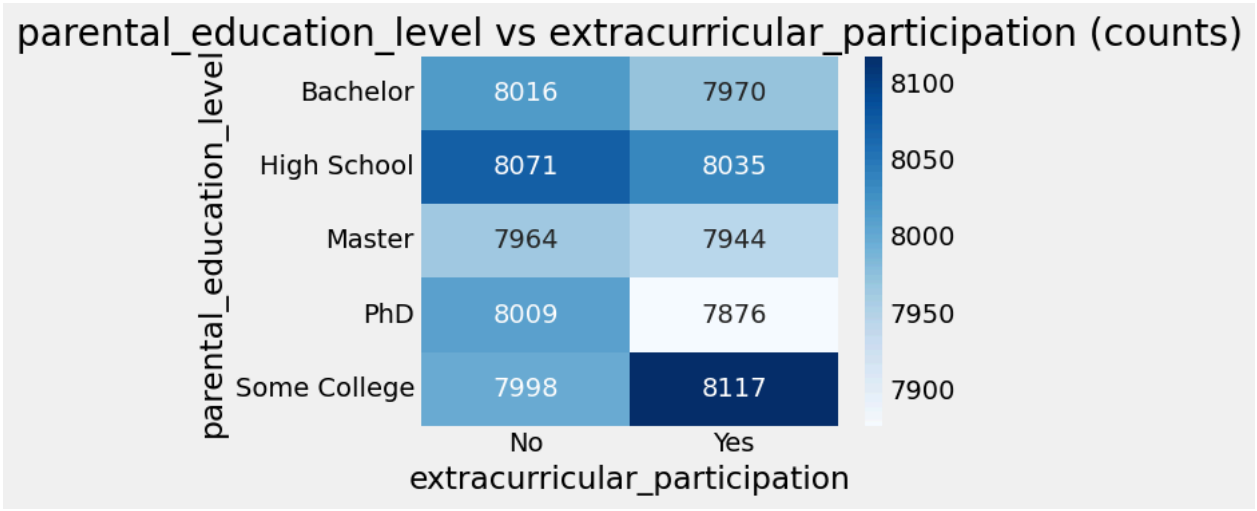

diet_quality vs study_environment (counts)
diet_quality
Fair
Good
Poor
5390
5426
5338
5222
5337
8039
7902
8059
7999
7936
2609
2621
2722
2682
2718
7500
5000
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
study_environment

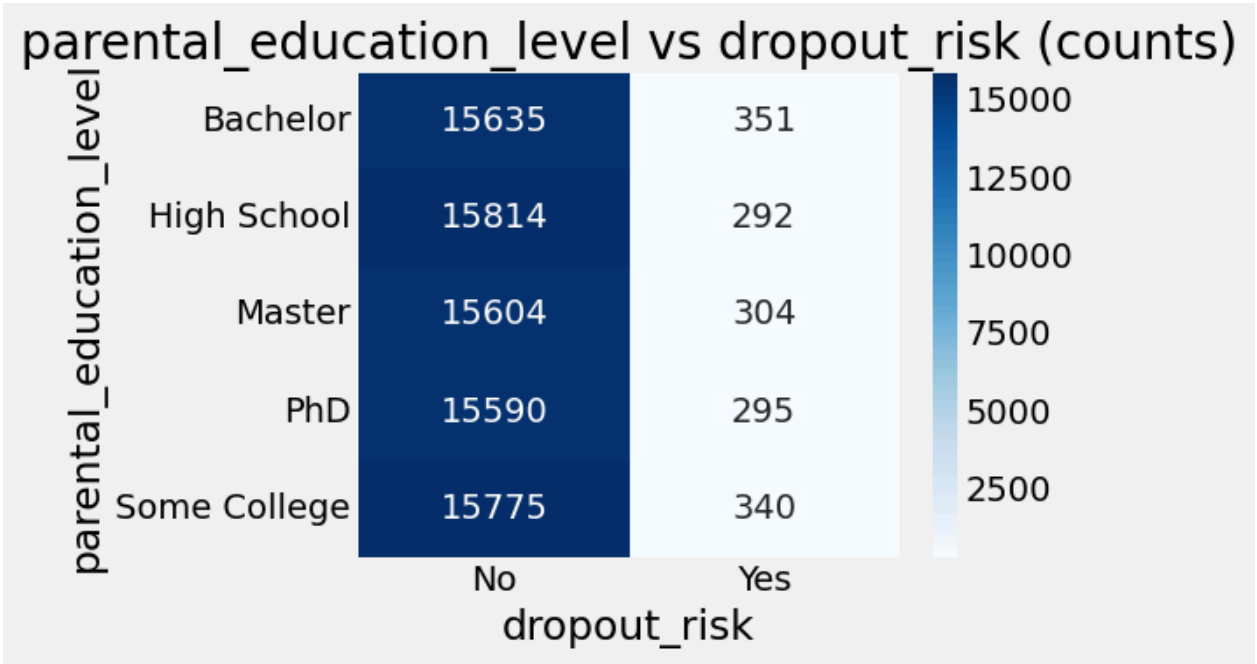

diet_quality vs access_to_tutoring (counts)
diet_quality
Fair
Good
Poor
13416
13297
20057
19878
6566
6786
20000
18000
16000
14000
12000
10000
8000
No
Yes
access_to_tutoring

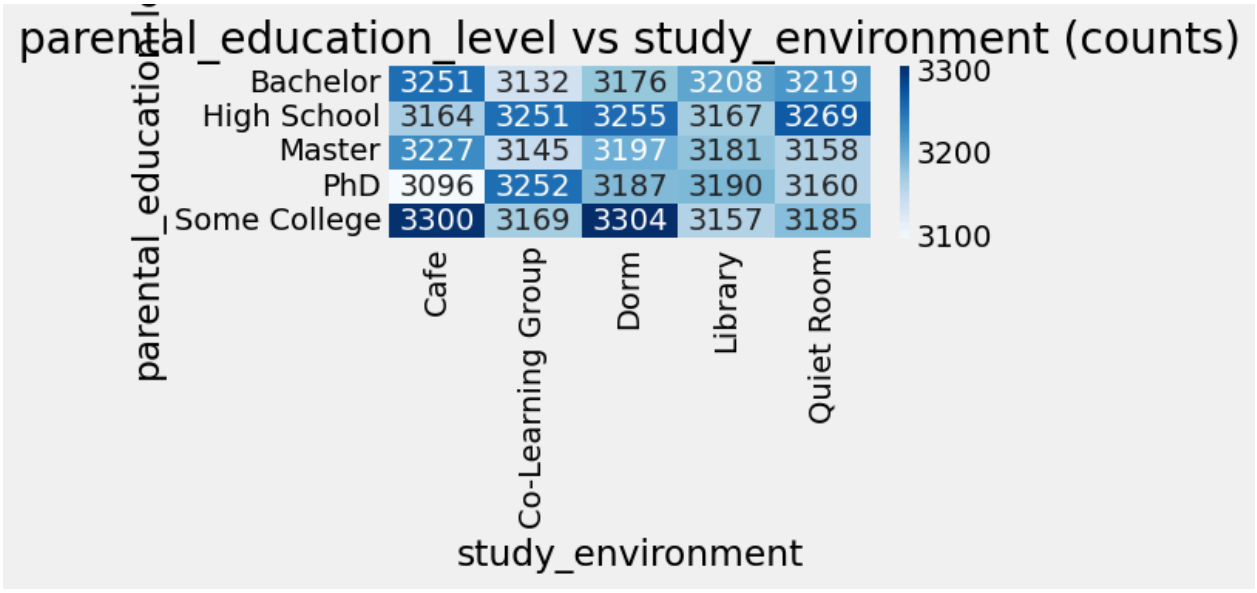

diet_quality vs family_income_range (counts)
diet_quality
Fair
Good
Poor
8826
8955
8932
13367
13338
13230
4460
4427
4465
12000
10000
8000
6000
High
Low
Medium
family_income_range

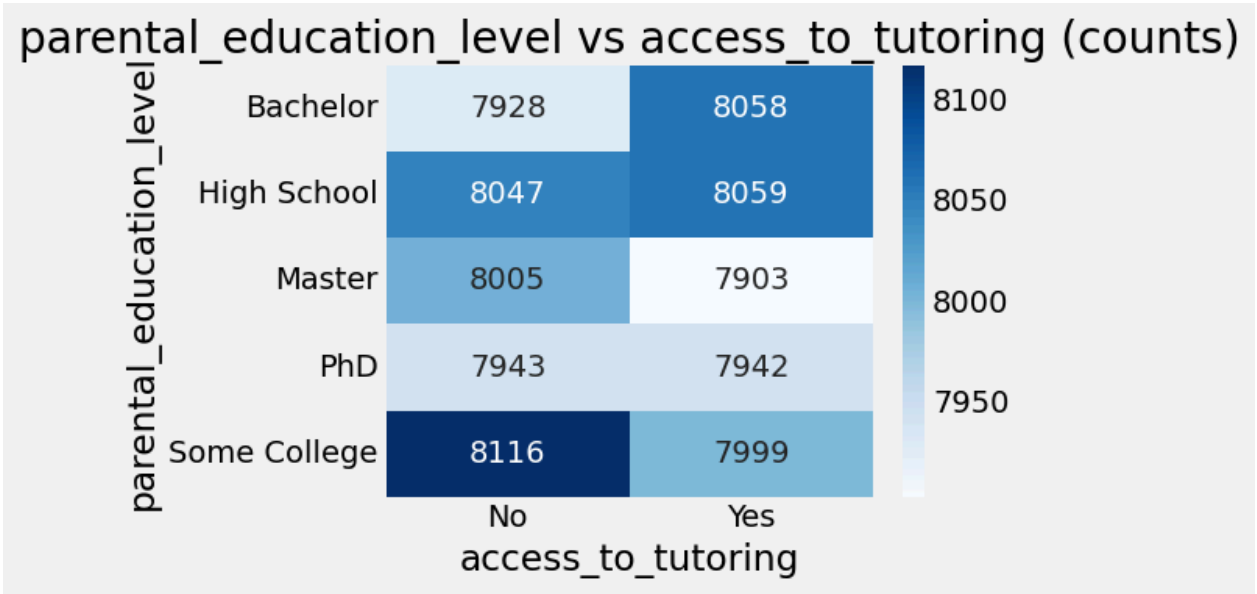

diet_quality vs learning_style (counts)
diet_quality
Fair
Good
Poor
6643
6695
6653
6722
9842
10134
10014
9945
3317
3314
3330
3391
10000
9000
8000
7000
6000
5000
4000
Auditory
Kinesthetic
Reading
Visual
learning_style

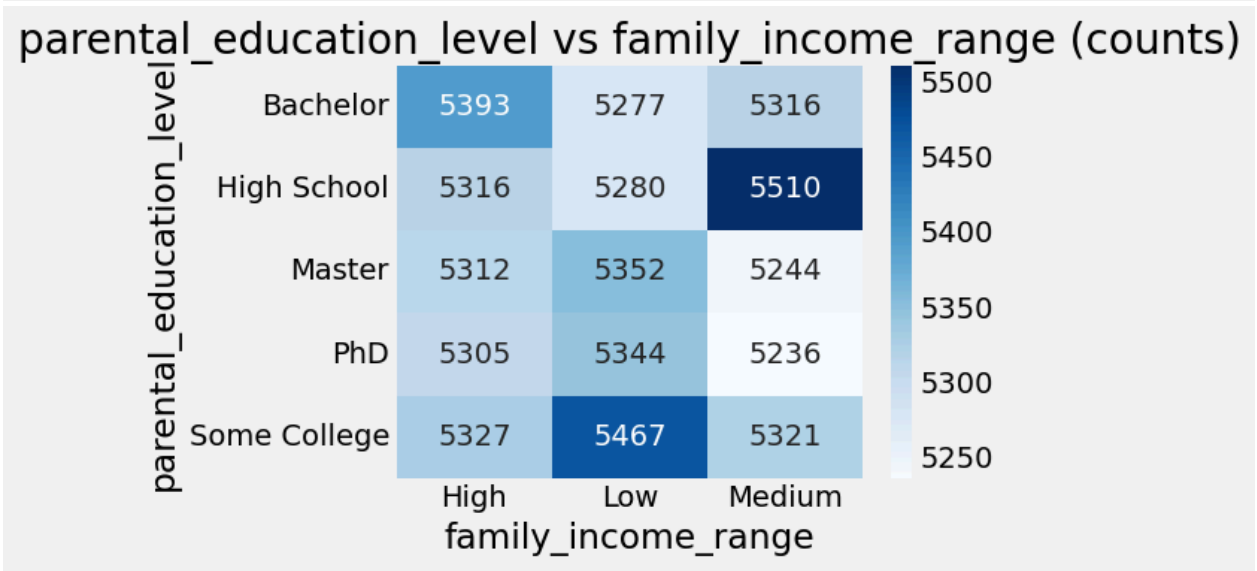

parental_education_level vs internet_quality (counts)
parental_education_level
Bachelor
High School
Master
PhD
Some College
5331
5273
5382
5314
5406
5386
5346
5239
5323
5269
5421
5195
5489
5375
5251
High
Low
Medium
internet_quality
5450
5400
5350
5300
5250
5200

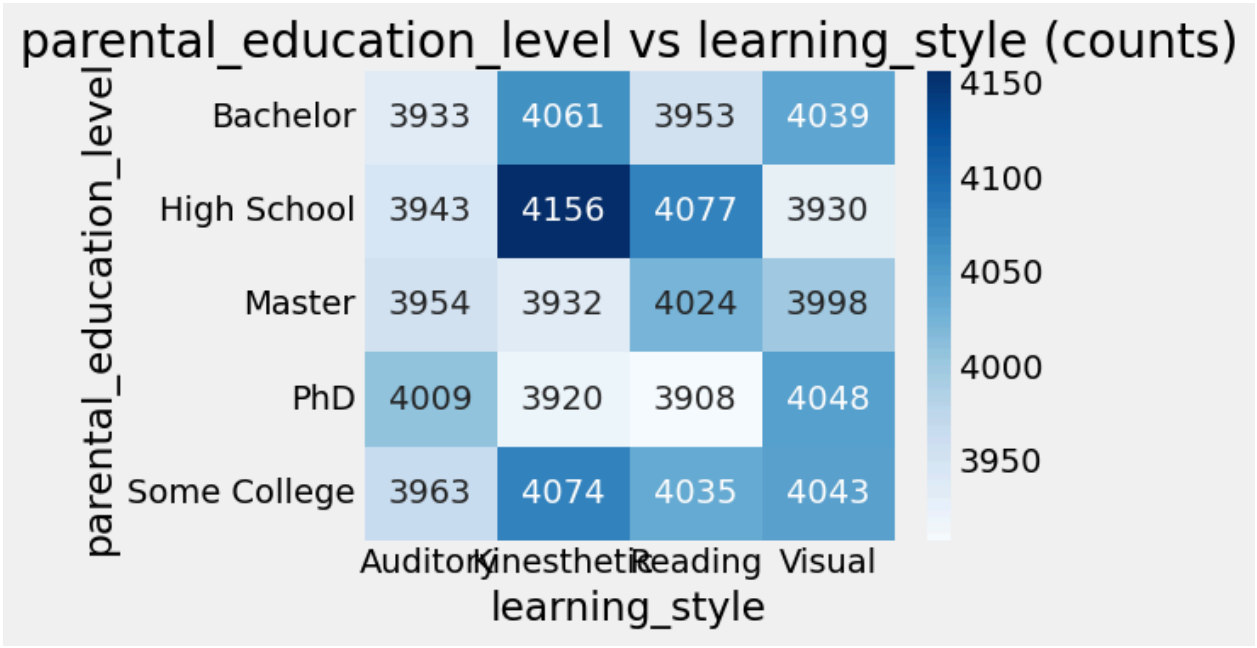

parental_education_level vs extracurricular_participation (counts)
parental_education_level
Bachelor
High School
Master
PhD
Some College
8016
7970
8071
8035
7964
7944
8009
7876
7998
8117
No
Yes
extracurricular_participation
8100
8050
8000
7950
7900

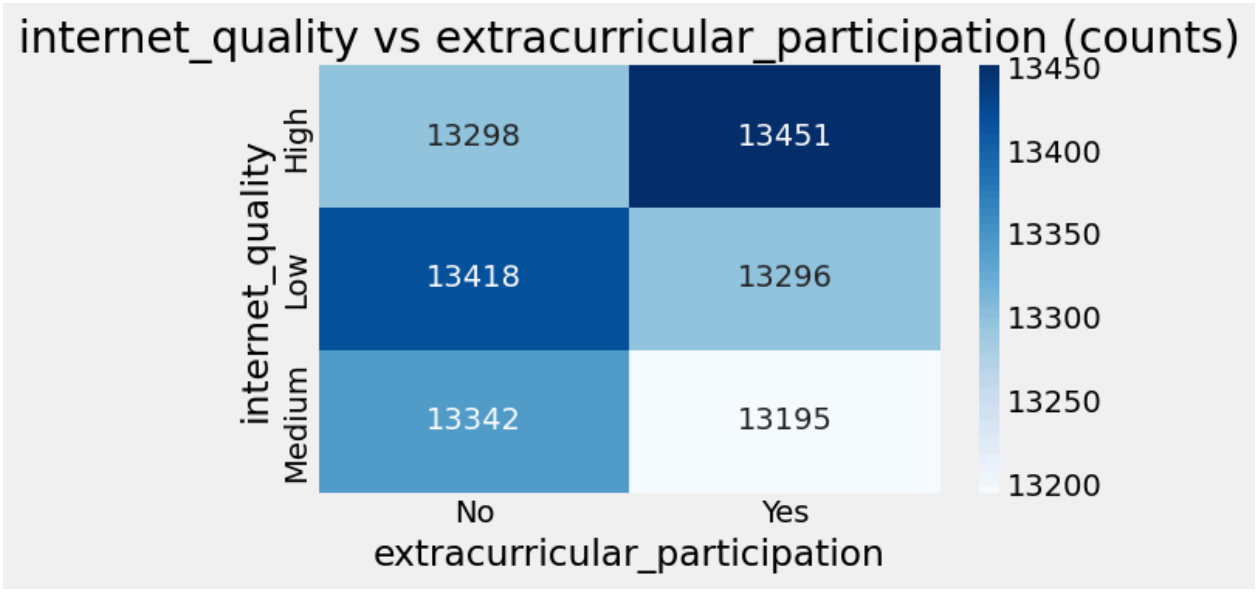

parental_education_level vs dropout_risk (counts)
parental_education_level
Bachelor
High School
Master
PhD
Some College
15635
351
15814
292
15604
304
15590
295
15775
340
No
Yes
dropout_risk
15000
12500
10000
7500
5000
2500

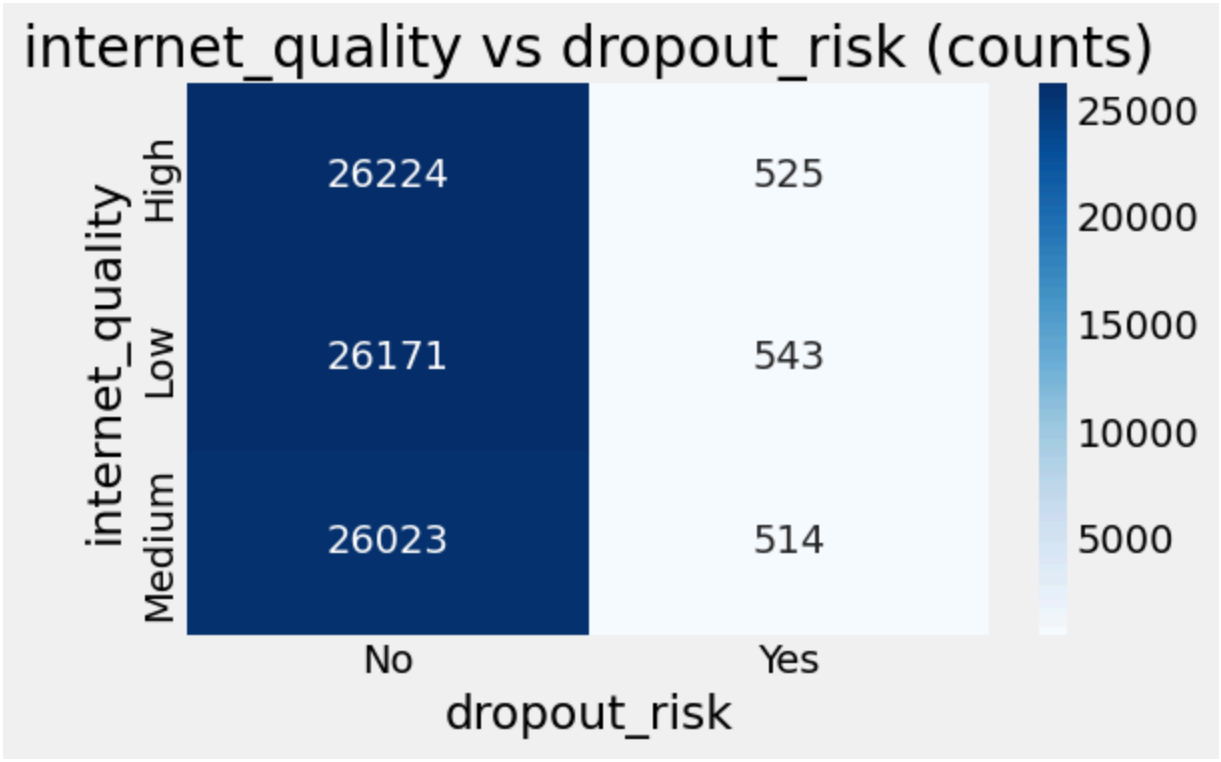

parental_education_level vs study_environment (counts)
parental_education_level
Bachelor 3251 3132 3176 3208 3219
High School 3164 3251 3255 3167 3269
Master 3227 3145 3197 3181 3158
PhD 3096 3252 3187 3190 3160
Some College 3300 3169 3304 3157 3185
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
study_environment
3300
3200
3100

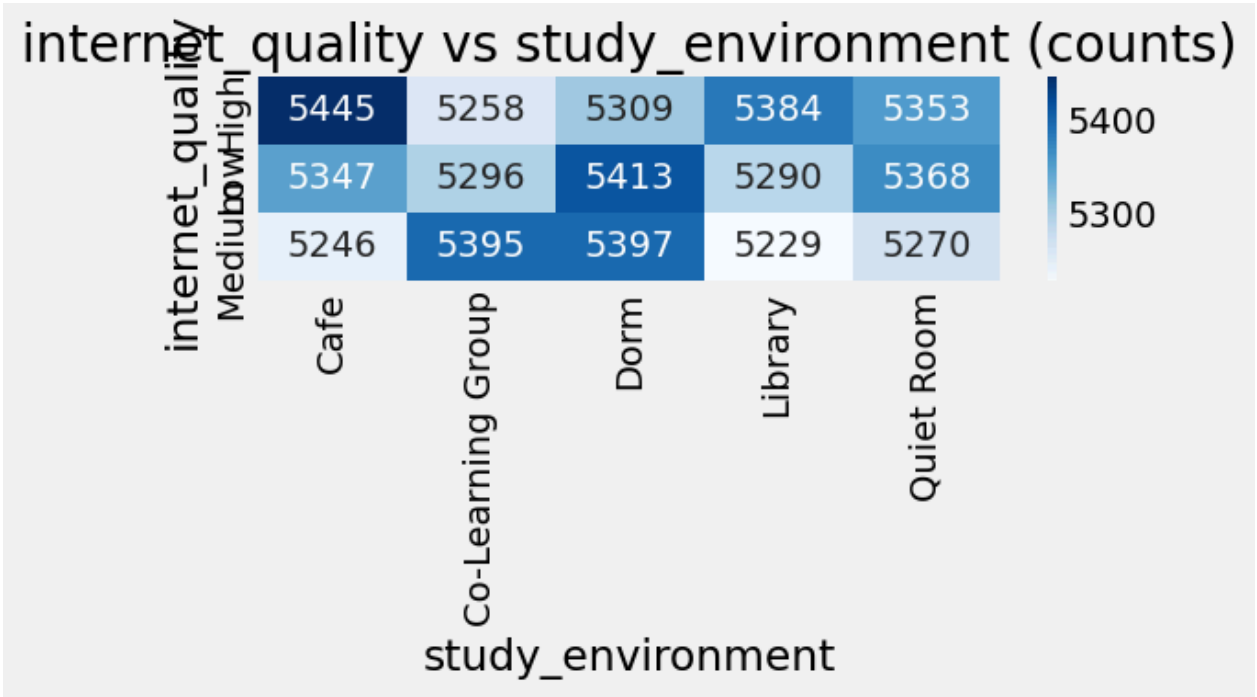

parental_education_level vs access_to_tutoring (counts)
parental_education_level
Bachelor 7928 8058
High School 8047 8059
Master 8005 7903
PhD 7943 7942
Some College 8116 7999
No
Yes
access_to_tutoring
8100
8050
8000
7950

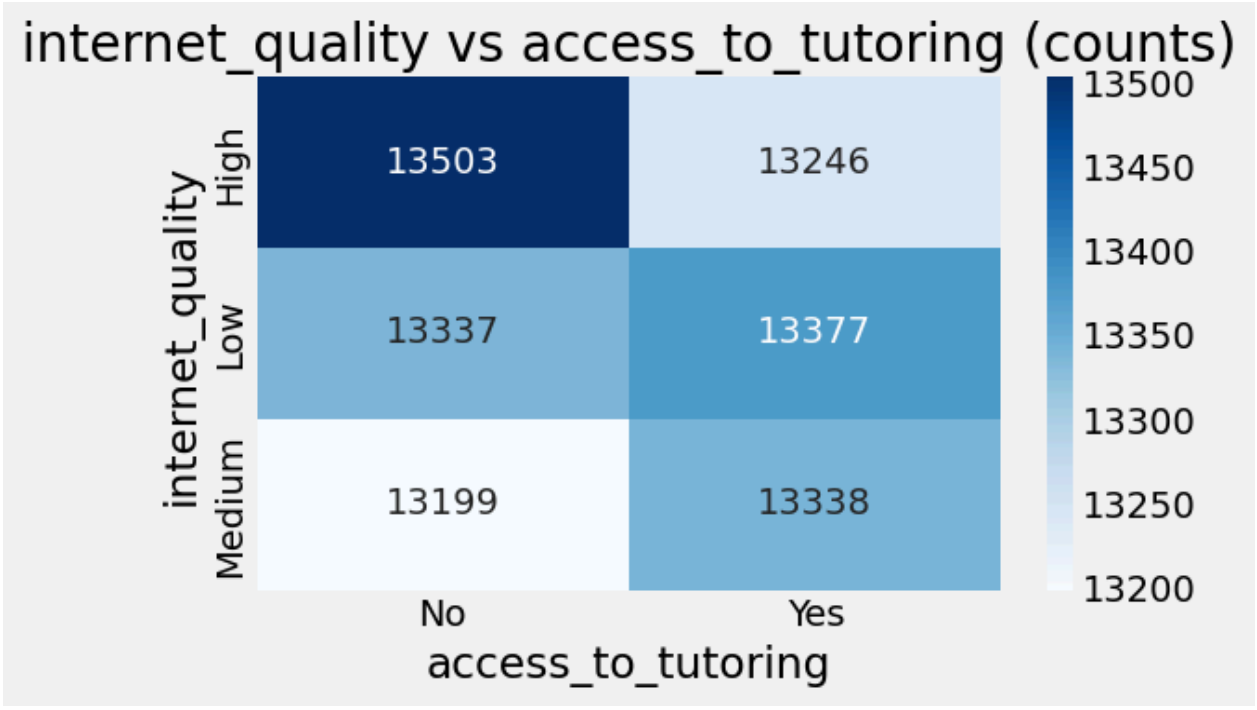

parental_education_level vs family_income_range (counts)
parental_education_level
Bachelor 5393 5277 5316
High School 5316 5280 5510
Master 5312 5352 5244
PhD 5305 5344 5236
Some College 5327 5467 5321
High
Low
Medium
family_income_range
5500
5450
5400
5350
5300
5250

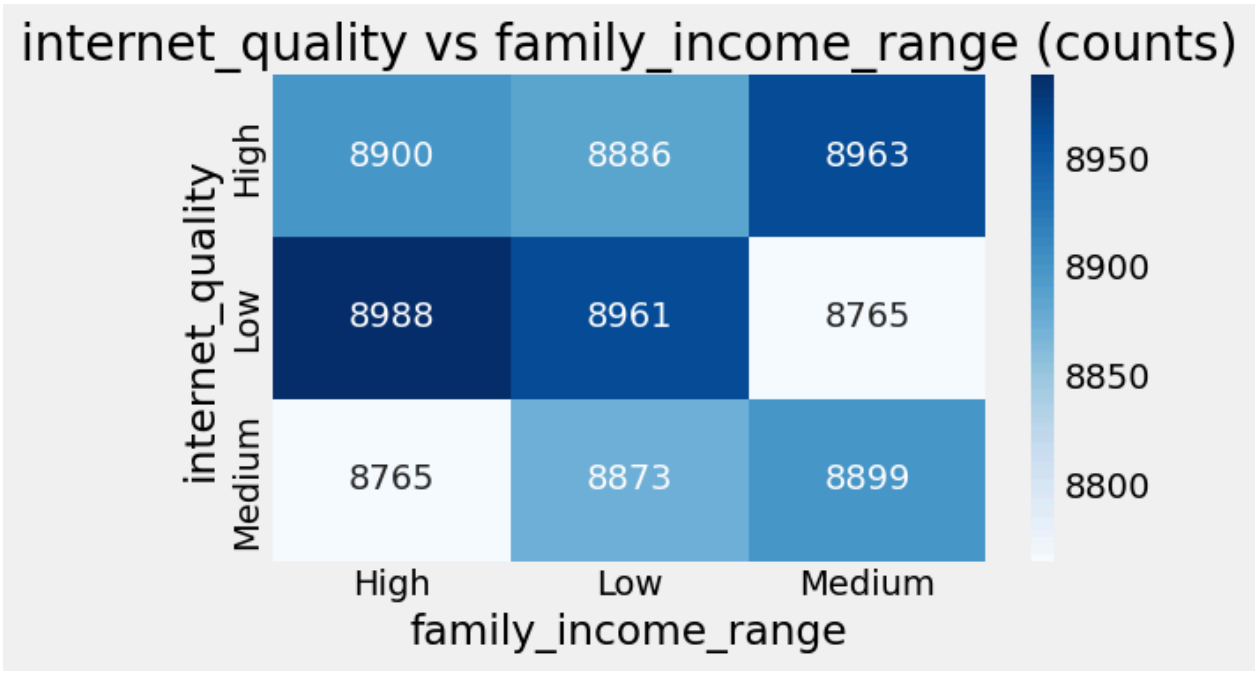

parental_education_level vs learning_style (counts)
parental_education_level
Bachelor
High School
Master
PhD
Some College
3933
4061
3953
4039
3943
4156
4077
3930
3954
3932
4024
3998
4009
3920
3908
4048
3963
4074
4035
4043
Auditory
Kinesthetic
Reading
Visual
learning_style
4150
4100
4050
4000
3950

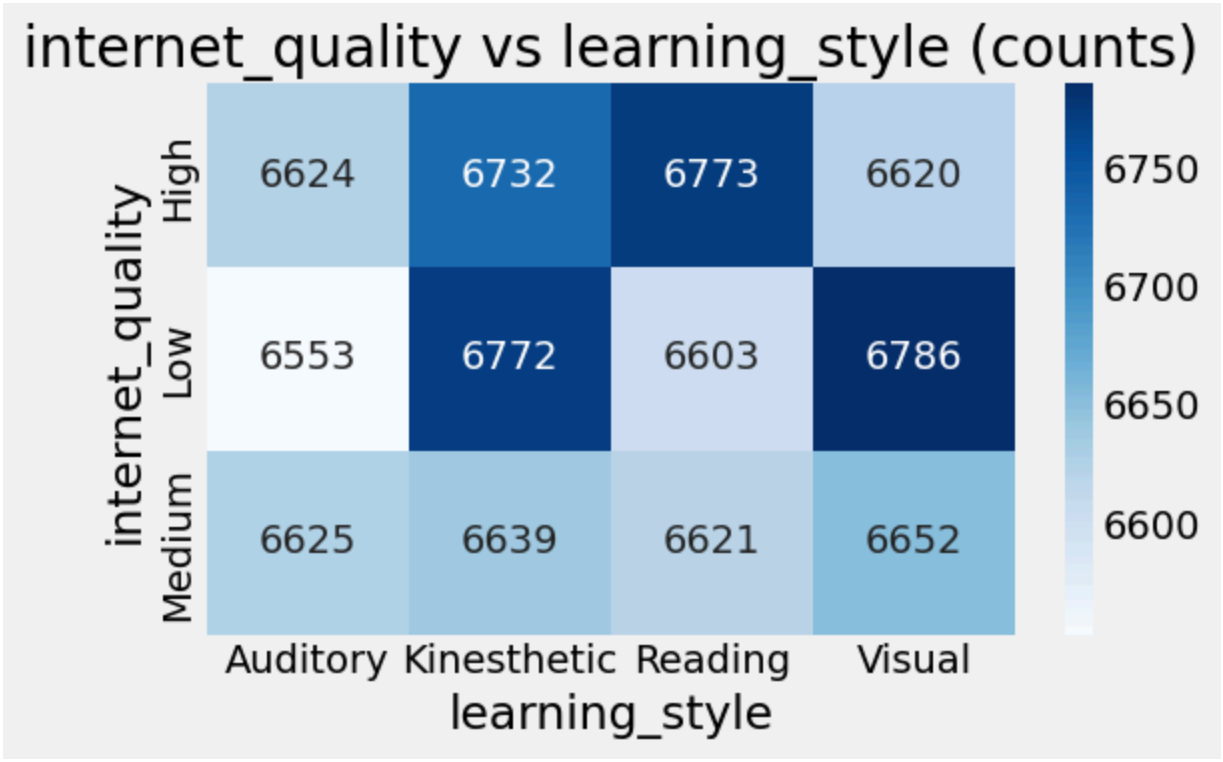

internet_quality vs extracurricular_participation (counts)
internet_quality
High
Low
Medium
13298
13451
13418
13296
13342
13195
No
Yes
extracurricular_participation
13450
13400
13350
13300
13250
13200

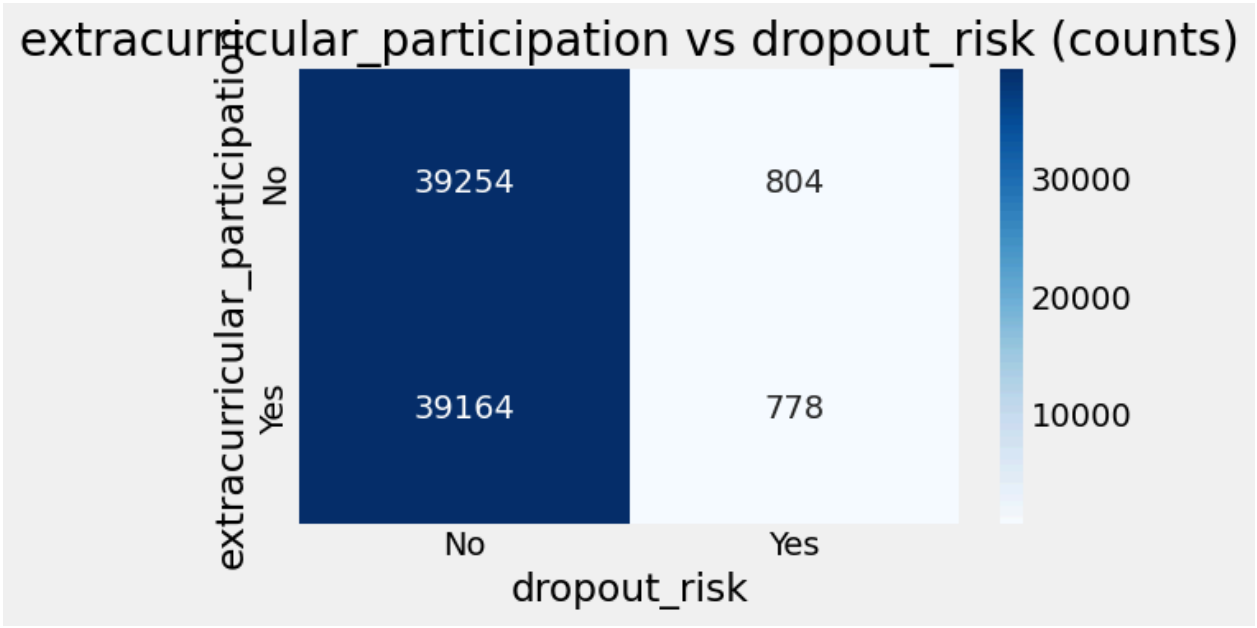

internet_quality vs dropout_risk (counts)
internet_quality
High
Low
Medium
26224
525
26171
543
26023
514
No
Yes
dropout_risk
25000
20000
15000
10000
5000

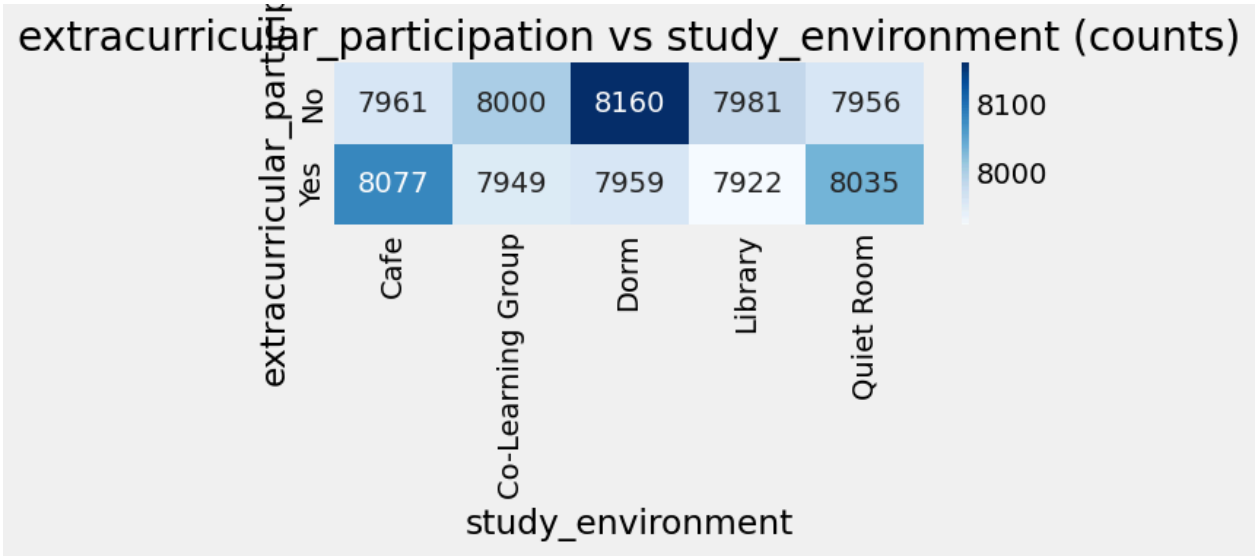

internet_quality vs study_environment (counts)
internet_quality
High
Low
Medium
5445
5258
5309
5384
5353
5347
5296
5413
5290
5368
5246
5395
5397
5229
5270
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
study_environment
5400
5300

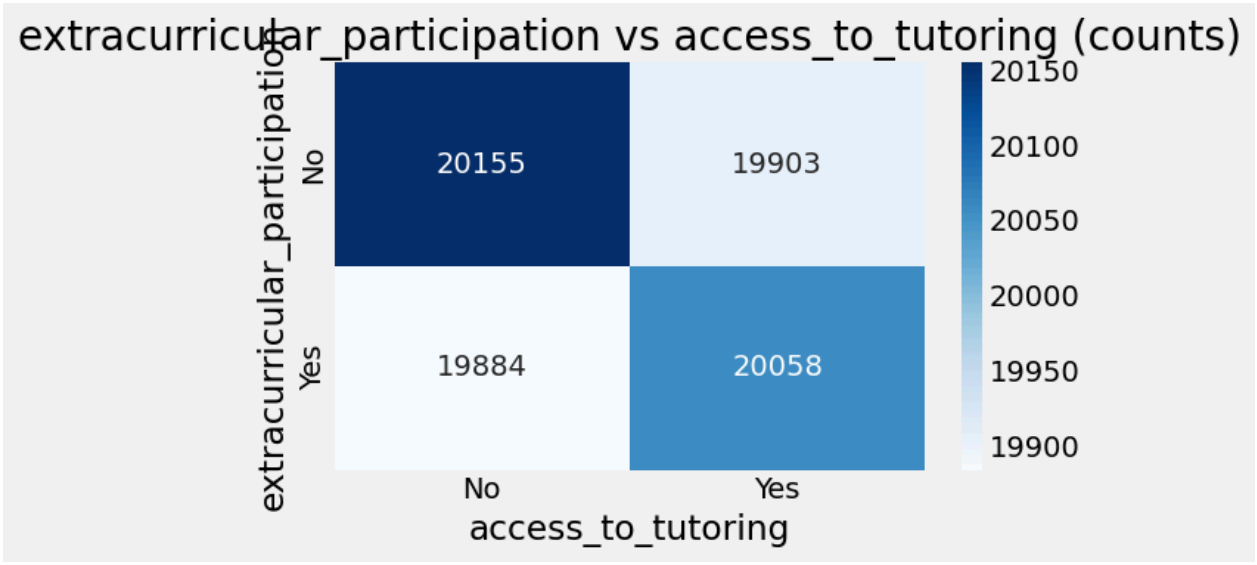

internet_quality vs access_to_tutoring (counts)
internet_quality
High
Low
Medium
13503
13246
13337
13377
13199
13338
No
Yes
access_to_tutoring
13500
13450
13400
13350
13300
13250
13200

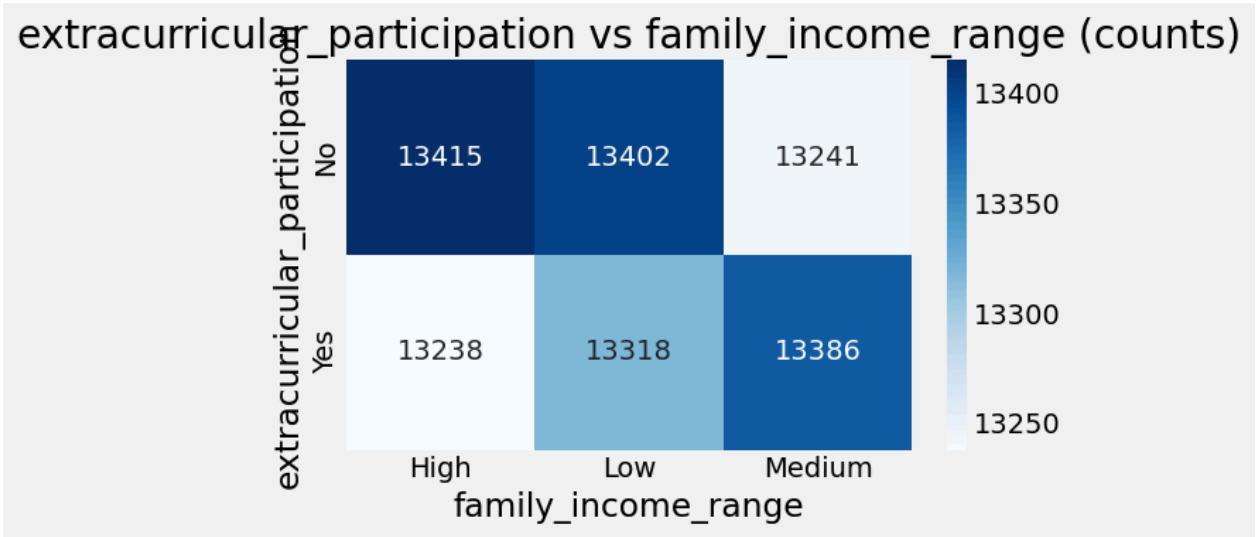

internet_quality vs family_income_range (counts)
internet_quality
High
Low
Medium
8900
8886
8963
8988
8961
8765
8765
8873
8899
High
Low
Medium
family_income_range
8950
8900
8850
8800

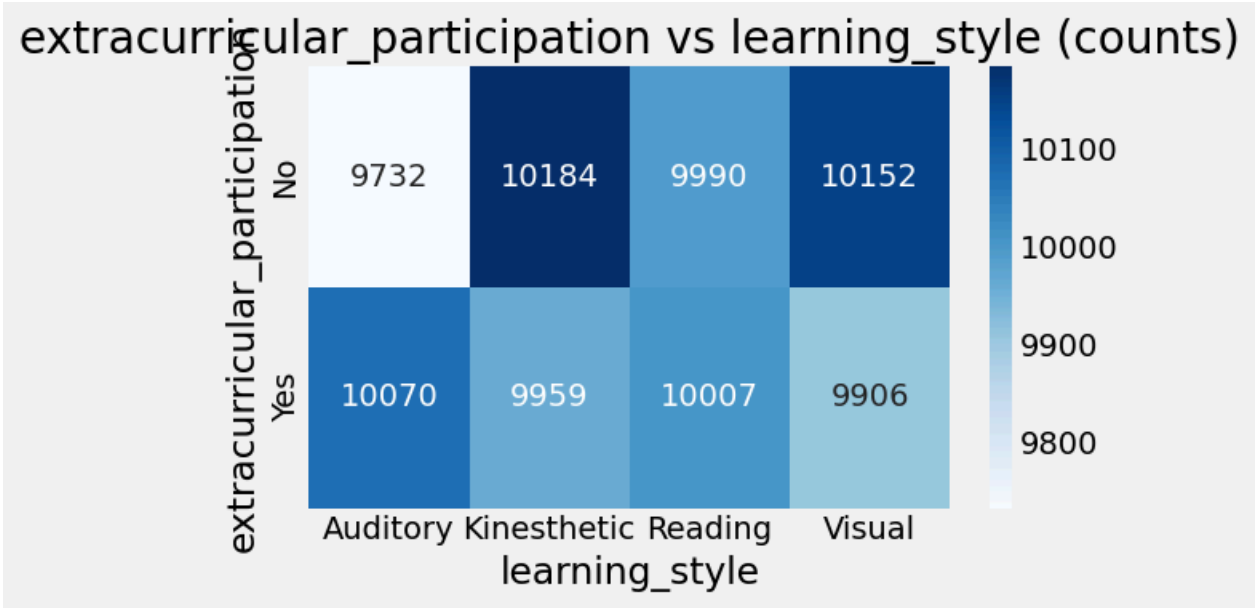

internet_quality vs learning_style (counts)
internet_quality
High
Low
Medium
6624
6732
6773
6620
6553
6772
6603
6786
6625
6639
6621
6652
Auditory
Kinesthetic
Reading
Visual
learning_style
6750
6700
6650
6600

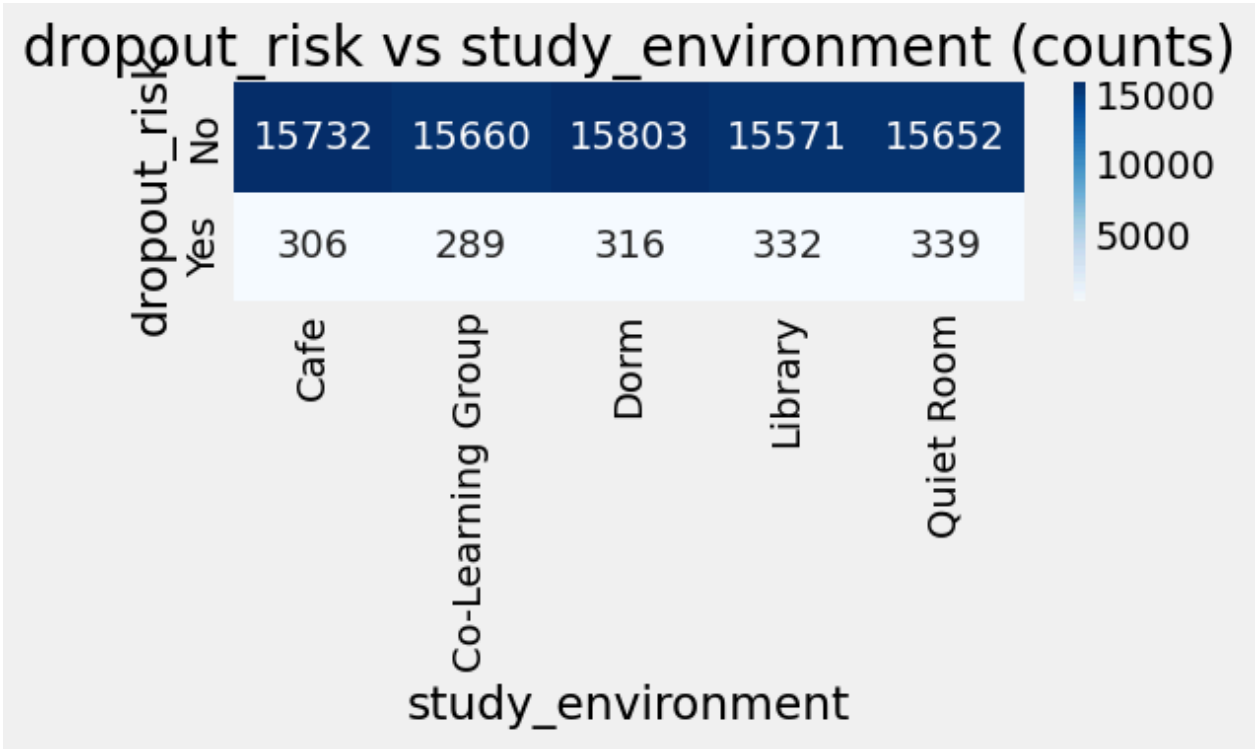

extracurricular_participation vs dropout_risk (counts)
extracurricular_participation
No
Yes
39254
804
39164
778
No
Yes
dropout_risk
30000
20000
10000

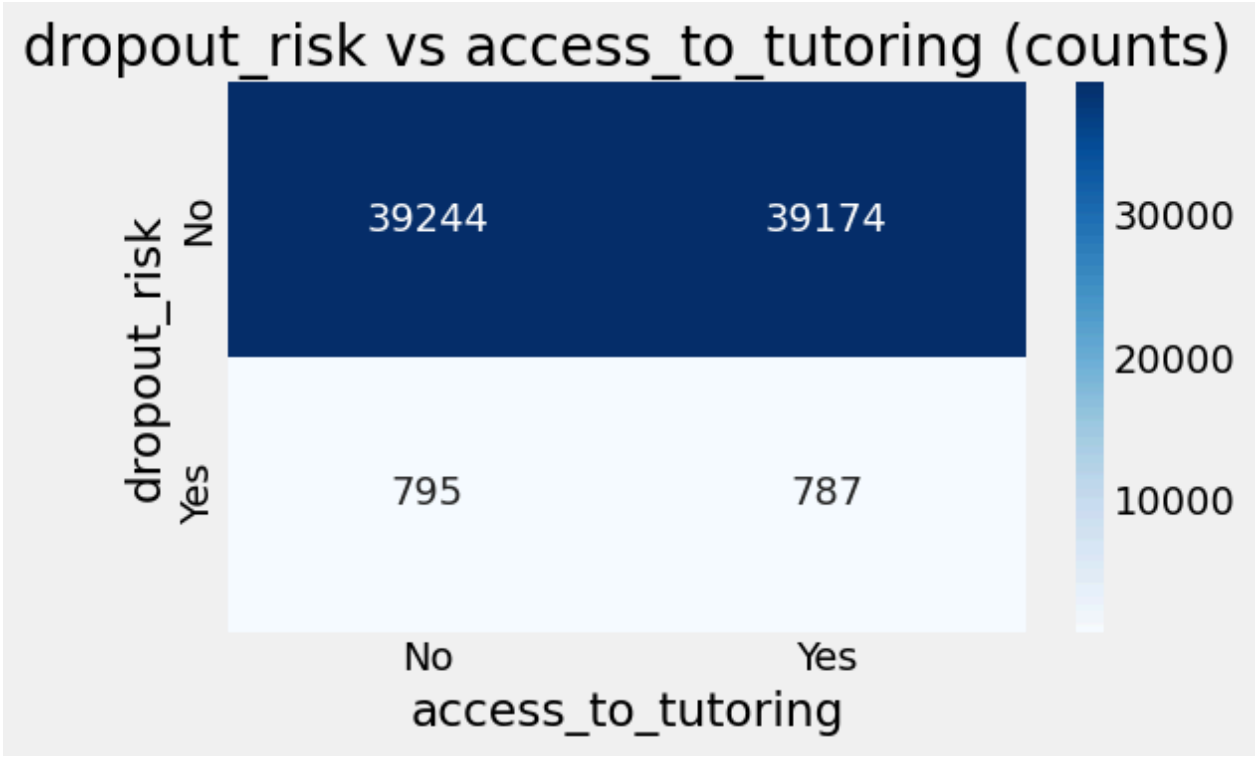

extracurricular_participation vs study_environment (counts)
extracurricular_participation
No
Yes
7961
8000
8160
7981
7956
8077
7949
7959
7922
8035
8100
8000
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
study_environment

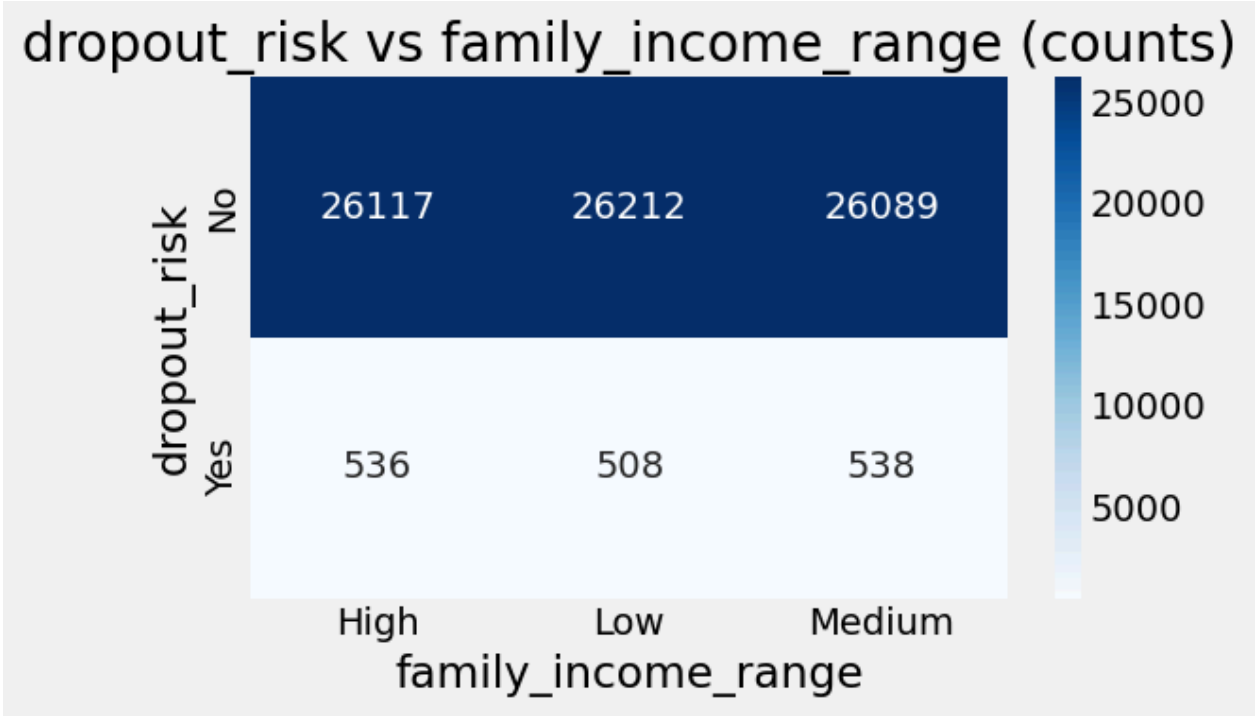

extracurricular_participation vs access_to_tutoring (counts)
extracurricular_participation
No
Yes
20155
19903
19884
20058
20150
20100
20050
20000
19950
19900
No
Yes
access_to_tutoring

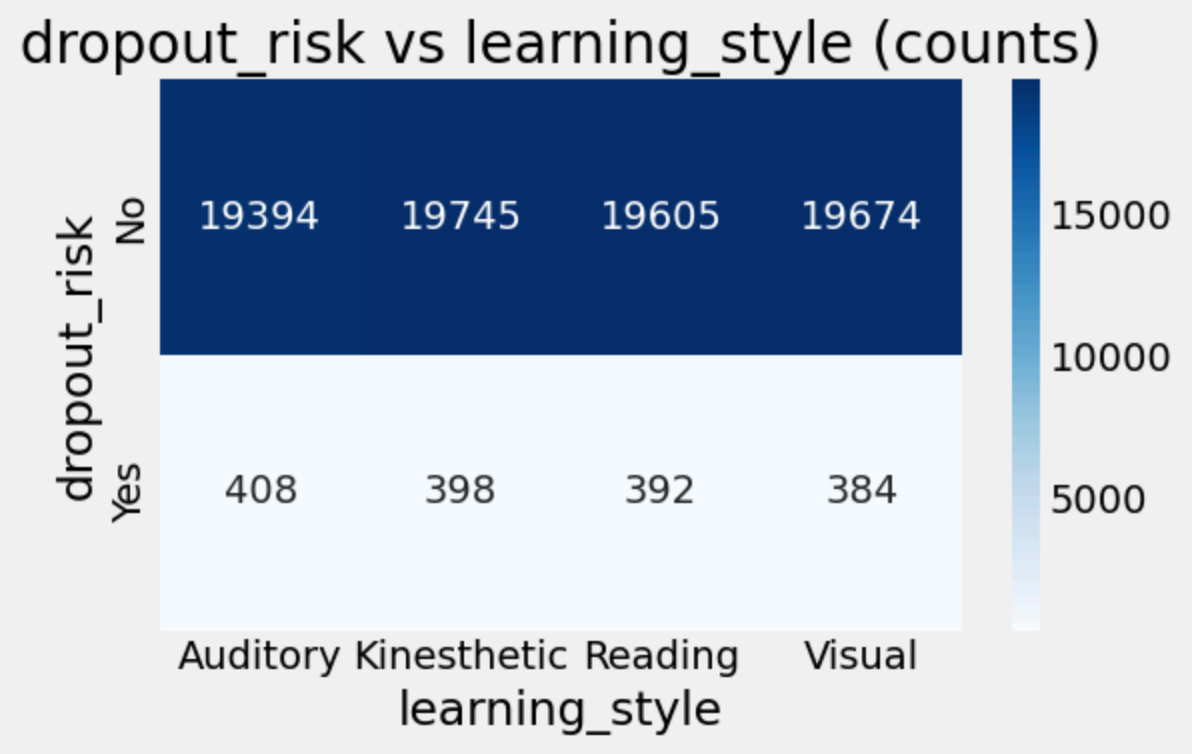

extracurricular_participation vs family_income_range (counts)
extracurricular_participation
No
Yes
13415
13402
13241
13238
13318
13386
13400
13350
13300
13250
High
Low
Medium
family_income_range

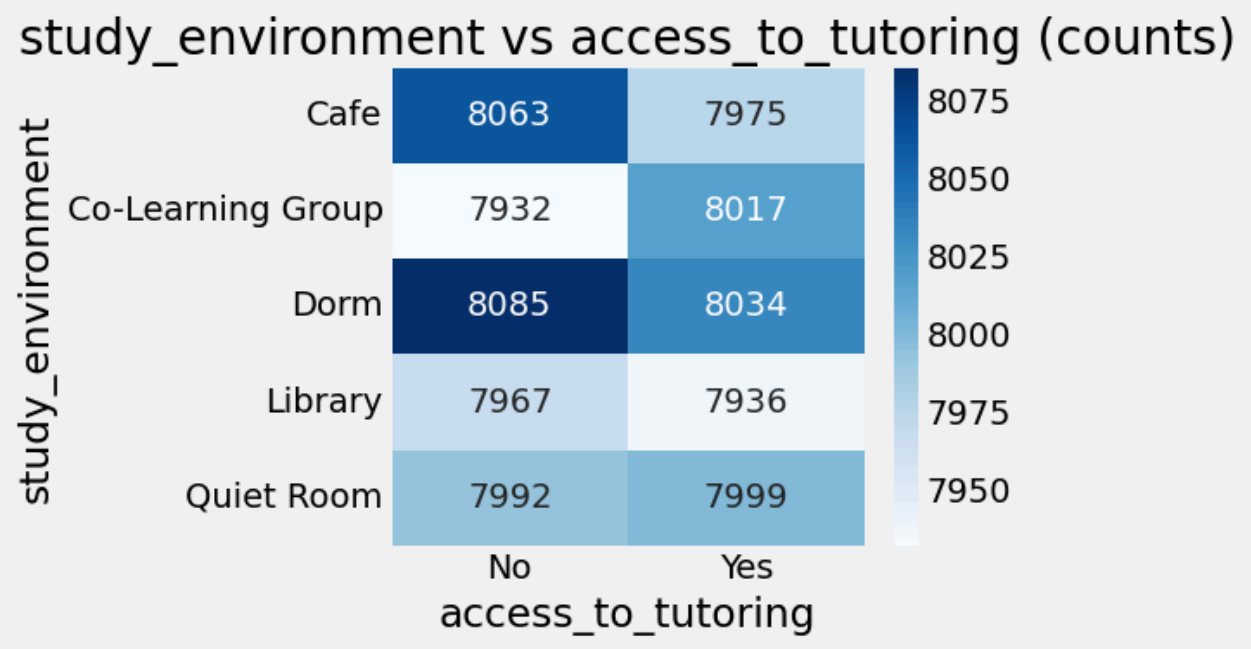

extracurricular_participation vs learning_style (counts)
extracurricular_participation
No
Yes
9732
10184
9990
10152
10070
9959
10007
9906
Auditory
Kinesthetic
Reading
Visual
learning_style
10100
10000
9900
9800

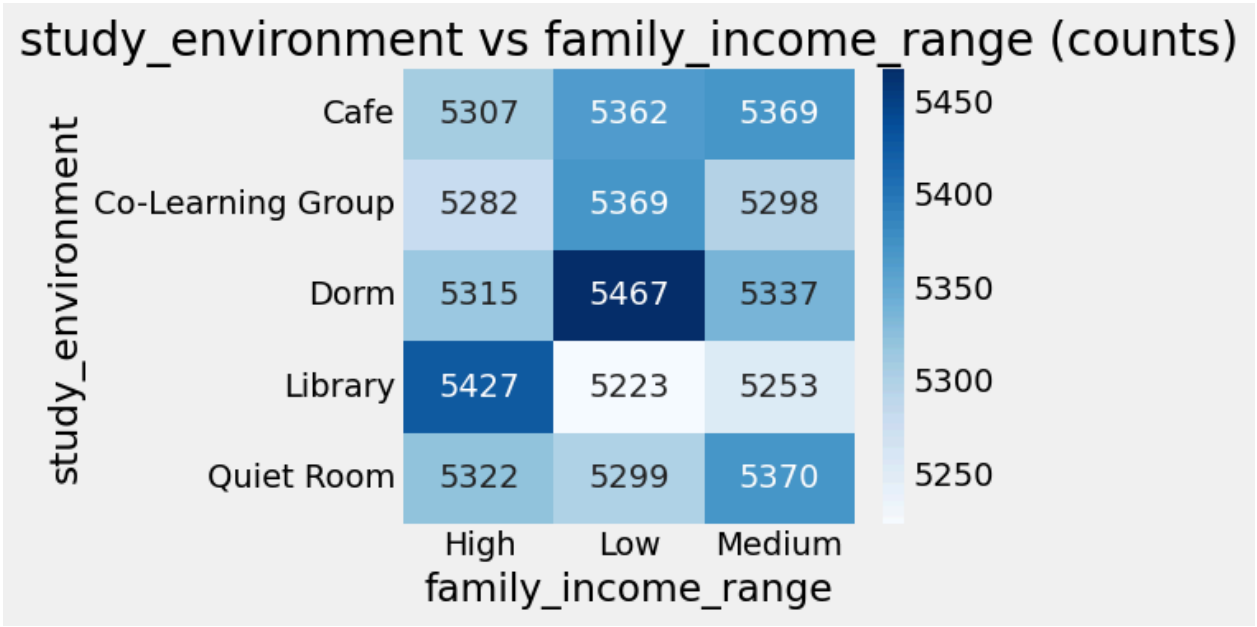

dropout_risk vs study_environment (counts)
dropout_risk
No
Yes
15732
15660
15803
15571
15652
306
289
316
332
339
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
study_environment
15000
10000
5000

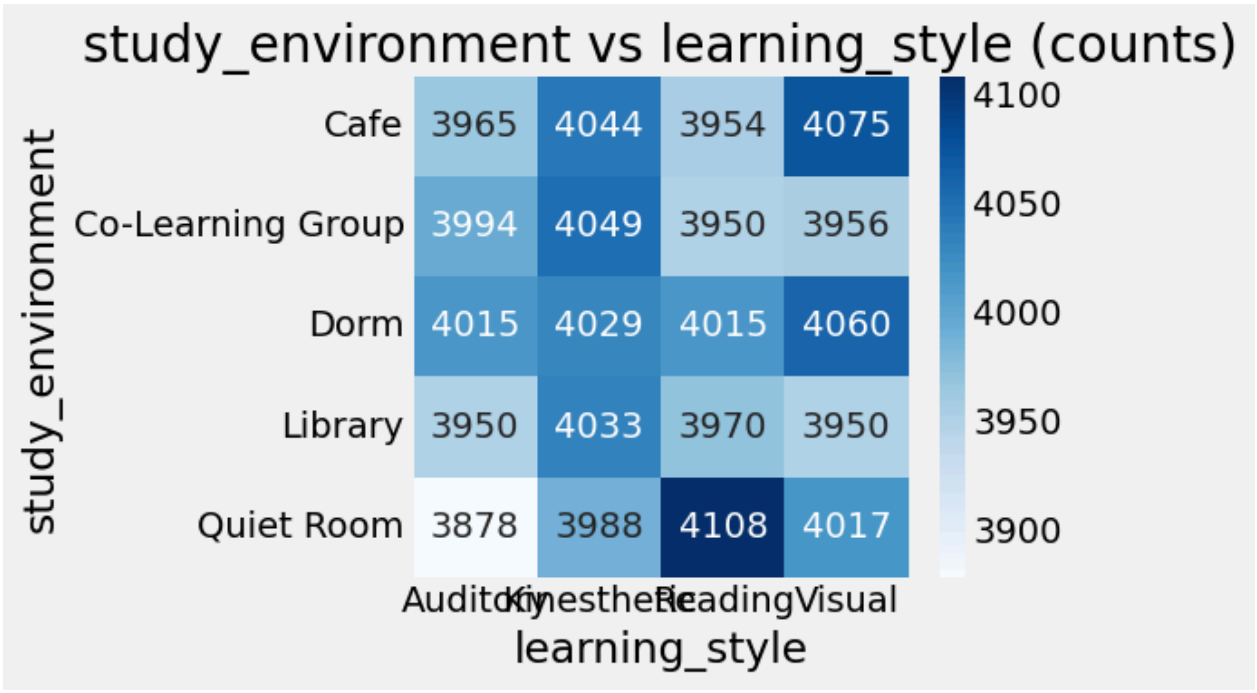

dropout_risk vs access_to_tutoring (counts)
dropout_risk
No
Yes
39244
39174
795
787
30000
20000
10000
No
Yes
access_to_tutoring

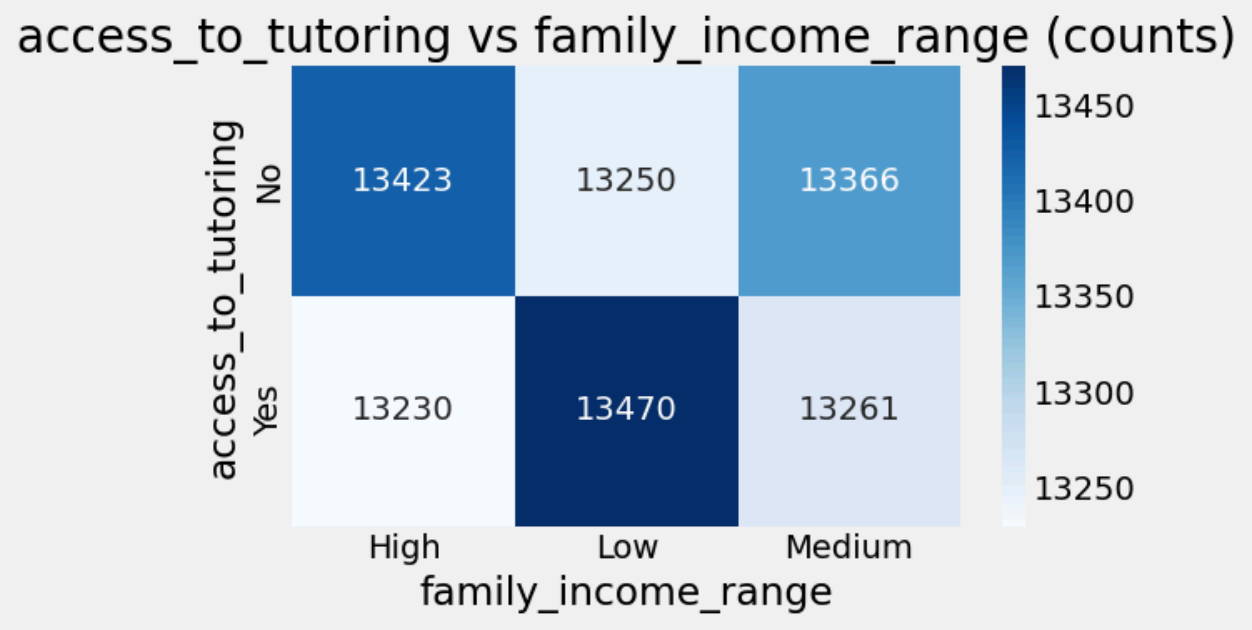

dropout_risk vs family_income_range (counts)
dropout_risk
No
Yes
26117
26212
26089
536
508
538
25000
20000
15000
10000
5000
High
Low
Medium
family_income_range

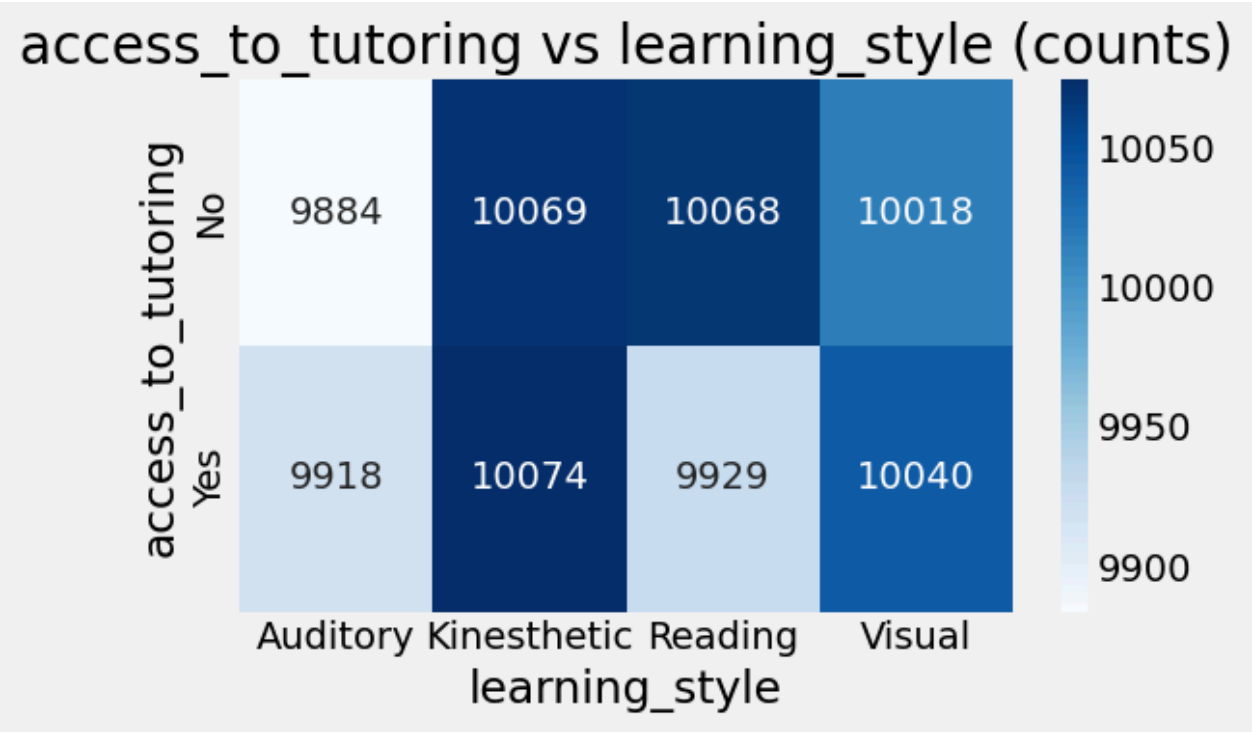

dropout_risk vs learning_style (counts)
dropout_risk
No
Yes
19394
19745
19605
19674
408
398
392
384
15000
10000
5000
Auditory
Kinesthetic
Reading
Visual
learning_style

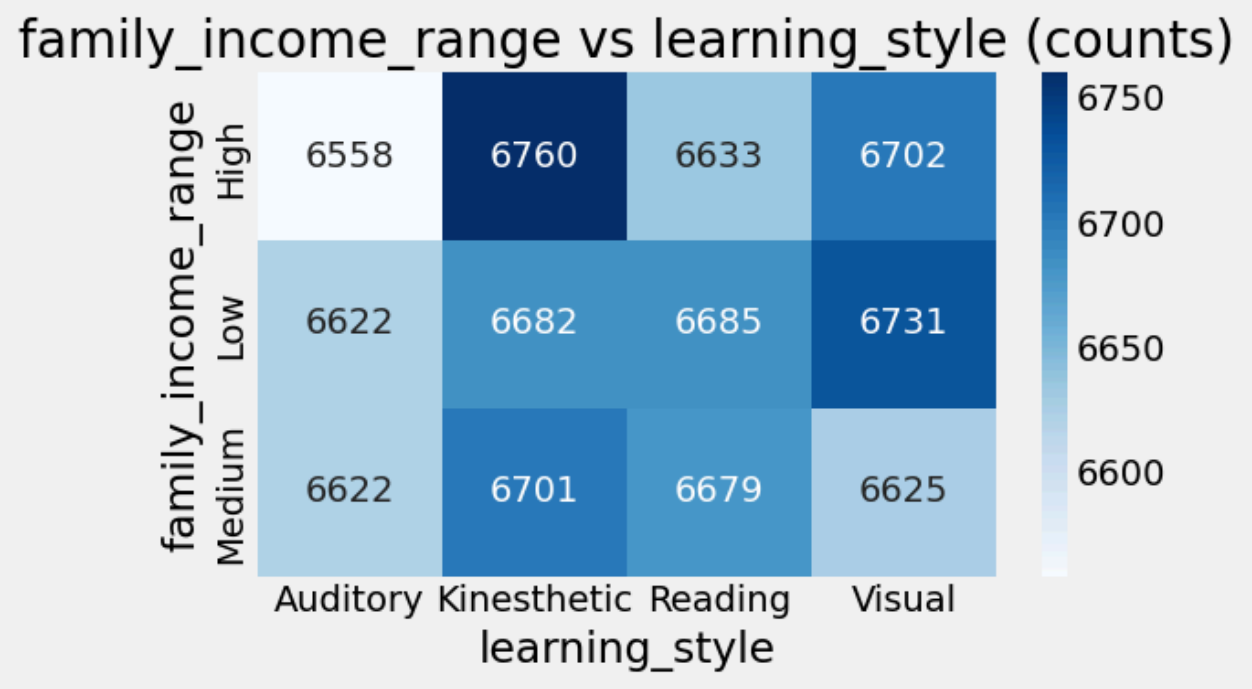

study_environment vs access_to_tutoring (counts)
study_environment
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
8063
7975
7932
8017
8085
8034
7967
7936
7992
7999
8075
8050
8025
8000
7975
7950
No
Yes
access_to_tutoring


study_environment vs family_income_range (counts)
study_environment
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
5307
5362
5369
5282
5369
5298
5315
5467
5337
5427
5223
5253
5322
5299
5370
High
Low
Medium
family_income_range
5450
5400
5350
5300
5250


study_environment vs learning_style (counts)
study_environment
Cafe
Co-Learning Group
Dorm
Library
Quiet Room
3965
4044
3954
4075
3994
4049
3950
3956
4015
4029
4015
4060
3950
4033
3970
3950
3878
3988
4108
4017
Auditory
Kinesthetic
Reading
Visual
learning_style
4100
4050
4000
3950
3900


access_to_tutoring vs family_income_range (counts)
access_to_tutoring
No
Yes
13423
13250
13366
13230
13470
13261
High
Low
Medium
family_income_range
13450
13400
13350
13300
13250


access_to_tutoring vs learning_style (counts)
access_to_tutoring
No
Yes
9884
10069
10068
10018
9918
10074
9929
10040
Auditory
Kinesthetic
Reading
Visual
learning_style
10050
10000
9950
9900



In [ ]:
```
students.sort("previous_gpa").select("previous_gpa","time_management_score").g
```

In [14]:
```
ed_level = students["parental_education_level"]
ed_level
```

Out[14]:
```
0        Some College
1                 PhD
2         High School
3              Master
4                 PhD
             ...
79995     High School
79996    Some College
79997          Master
79998             PhD
79999    Some College
Name: parental_education_level, Length: 80000, dtype: object
```

In [ ]:
```
good_gpa=students.where("previous_gpa",are.above_or_equal_to(3.5))
good_gpa
```

In [ ]:
```
pass_exam=students.where("exam_score",are.above_or_equal_to(90))
pass_exam
```

In [ ]:
```
def stem(x):
    if x=="Psychology":
        return "Nonstem"
    if x== "Biology":
        return "Stem"
    if x== "Engineering":
        return "Stem"
```

```
    if x=="Computer Science":
        return "Stem"
    if x=="Arts":
        return "Nonstem"
    if x=="Business":
        return "Nonstem"
```

In [ ]:
```
stem_nonstem=students.apply(stem,"major")
```

In [ ]:
```
stem_categorized=students.with_column("Stem/Nonstem",stem_nonstem)
```

In [ ]:
```
stem_only=stem_categorized.where("Stem/Nonstem","Stem")
```

In [ ]:
```
pass_stem=stem_only.where("exam_score",are.above_or_equal_to(75))
```

In [ ]:
```
np.average(pass_stem.column("study_hours_per_day"))
```

In [ ]:
```
np.average(pass_stem.column("social_media_hours"))
```

In [ ]:
```
np.average(fail_stem.column("study_hours_per_day"))
```

In [ ]:
```
np.average(fail_stem.column("social_media_hours"))
```

In [ ]:
```
fail_stem=stem_only.where("exam_score",are.below(75))
```

In [ ]:
```
nonstem_only=stem_categorized.where("Stem/Nonstem","Nonstem")
```

In [ ]:
```
nonstem_only.group("dropout_risk")
```

In [ ]:
```
np.average(pass_exam.column("time_management_score"))
```

In [ ]:
```
np.average(fail_exam.column("time_management_score"))
```

In [ ]:
```
fail_exam=students.where("exam_score",are.below(75))
fail_exam
```

In [ ]:
```
np.average(good_gpa.column("time_management_score"))
```

In [ ]:
```
np.average(good_gpa.column("sleep_hours"))
```

In [ ]:
```
np.average(bad_gpa.column("sleep_hours"))
```

In [ ]:
```
bad_gpa=students.where("previous_gpa",are.below(2))
bad_gpa
```

In [ ]:
```
np.average(bad_gpa.column("study_hours_per_day"))
```

In [ ]:
```
Table.read_table("CollegeScores4yr.csv")
```

In [ ]:
```
bad_gpa.select("motivation_level").group("motivation_level")
```

In [ ]:
```
good_gpa.select("motivation_level").group("motivation_level")
```

In [ ]:
```
time_manage=students.select("time_management_score","previous_gpa").sort("time
```

In [ ]:
```
factors_affecting=Table.read_table("Factors_ affecting_ university_student_gra
```

In [ ]:
```
factors_affecting.group("Motivation")
```

In [ ]:
```
study_habits=Table.read_table("student_study_habits.csv")
study_habits
```

In [ ]:
```
stem_2019=Table.read_table("stem_2019.csv")
stem_2019
```

In [ ]:
```
stem_emp_2019=stem_2019.select("STEM_group","tot_emp").take(0).relabeled("tot_
stem_emp_2019
```

In [ ]:
```
stem_2020=Table.read_table("stem_2020.csv")
stem_emp_2020=stem_2020.select("STEM_group","tot_emp").take(0).relabeled("tot_
stem_emp_2020
```

In [ ]:
```
two_years=stem_emp_2019.join("STEM_group",stem_emp_2020,"STEM_group")
```

In [ ]:
```
stem_emp_table=Table().with_columns("Year",make_array(2019,2020,2021,2022,2023
                    "STEM Employment Total",make_array(9345230,9321470,926319
```

In [ ]:
```
stem_emp_years=stem_emp_table.column("Year")
stem_emp_tot=stem_emp_table.column("STEM Employment Total")

plt.plot(stem_emp_years,stem_emp_tot)
plt.title('STEM Employment Over the Years')
plt.xlabel('Year')
plt.ylabel('STEM Employment Total')
plt.ylim(9200000, 10300000)  # optional: set y-axis range   # shows the labels
plt.grid(True)
```

In [ ]:
```

```

In [ ]:
```
stem_2021=Table.read_table("stem_2021.csv")
stem_emp_2021=stem_2021.select("STEM_group","tot_emp").take(0)
stem_emp_2021
```

In [ ]:
```
stem_2022=Table.read_table("stem_2022.csv")
stem_emp_2022=stem_2022.select("STEM_group","tot_emp").take(0)
stem_emp_2022
```

In [ ]:
```
stem_2023=Table.read_table("stem_2023.csv")
stemp_emp_2023=stem_2023.select("STEM_group","tot_emp").take(0)
stemp_emp_2023
```

In [ ]:
```
stem_2024=Table.read_table("stem_2024.csv")
stem_emp_2024=stem_2024.select("STEM_group","tot_emp").take(0)
stem_emp_2024
```

In [ ]:
```
stem_degrees=Table.read_table("tabn318.45.csv")
stem_degrees
```

In [ ]:
```
stem_degrees.take(np.arange(6,16)).select(0,1)#.relabeled("Table 318.45. Numbe
```

In [ ]:
```
privileged=stem_degrees.take(np.arange(6,16)).select(1,2)
```

In [ ]:
```
privileged
```

In [ ]:
```
privileged_table=Table().with_columns("Total", make_array(556696,574000,604167
                                      "White",make_array(333652,337241,348586,
privileged_table.column(1)/privileged_table.column(0)
```

In [ ]:
```
stem_degree_table=Table().with_columns("Year",np.arange(2012,2022),
                                       "Total STEM Degrees", make_array(556696
stem_degree_table
```

In [ ]:
```
stem_degree_years=stem_degree_table.column("Year")
stem_degree_granted=stem_degree_table.column("Total STEM Degrees")

plt.plot(stem_degree_years,stem_degree_granted)
plt.title('STEM Degrees Granted Over the Years')
plt.xlabel('Year')
plt.ylabel('Total STEM Degrees')
plt.ylim(500000, 800000)  # optional: set y-axis range   # shows the labels
plt.grid(True)
```

In [ ]:
```
Table.read_table("education_2024.csv")
```

In [16]:
```
women=Table.read_table("women_in_stem.csv")
women
#female_enrollment=women.sort("Year").select("Year","Female Enrollment (%)").g
```

Out[16]:

Country	Year	Female Enrollment (%)	Female Graduation Rate (%)	STEM Fields	Gender Gap Index
China	2018	20.4	43.2	Engineering	0.52
China	2005	35.6	29.3	Mathematics	0.98
China	2005	53.7	32.4	Biology	0.6
Germany	2007	65	63.6	Mathematics	0.69
Canada	2010	54.4	28.8	Engineering	0.74
India	2001	53	54.5	Computer Science	0.54
Canada	2002	69	23.2	Engineering	0.86
India	2000	29.5	38.1	Engineering	0.9
USA	2014	57.1	35.7	Biology	0.61
China	2020	36.7	64.3	Computer Science	0.96

... (490 rows omitted)

In [ ]:
```
women.where("Country","Australia").select("Year","Female Enrollment (%)").grou
```

In [ ]:
```
india_gender_gap=women.where("Country","India").sort("Year").select("Year","Ge
india_gender_gap.plot("Year","Gender Gap Index average")
```

In [ ]:
```
print(india_grad)
print(us_grad)
```

In [17]:
```
years=women.where("Country","USA").sort("Year").select("Year","Female Graduati
india_grad=women.where("Country","India").sort("Year").select("Year","Female G
us_grad=women.where("Country","USA").sort("Year").select("Year","Female Gradua
australia_grad=women.where("Country","Australia").select("Year","Female Gradua
china_grad=women.where("Country","China").sort("Year").select("Year","Female G
canada_grad=women.where("Country","Canada").sort("Year").select("Year","Female
germany_grad=women.where("Country","Germany").sort("Year").select("Year","Fema

plt.plot(india_years,india_grad,label="India",marker="o")
plt.plot(india_years,australia_grad,label="USA")
#plt.plot(years,australia_grad,label="Australia")
#plt.plot(years,china_grad,label="China")
#plt.plot(years,canada_grad,label="Canada")
#plt.plot(years,germany_grad,label="Germany")

plt.title('Female STEM Graduation Rates')
plt.xlabel('Year')
plt.ylabel('Percentage')
plt.ylim(0, 60)  # optional: set y-axis range
plt.legend()     # shows the labels
```

```
plt.grid(True)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[17], line 9
      6 canada_grad=women.where("Country","Canada").sort("Year").select("Yea
r","Female Graduation Rate (%)").group("Year",np.average).column("Female Gradua
tion Rate (%) average")
      7 germany_grad=women.where("Country","Germany").sort("Year").select("Yea
r","Female Graduation Rate (%)").group("Year",np.average).column("Female Gradua
tion Rate (%) average")
----> 9 plt.plot(india_years,india_grad,label="India",marker="o")
     10 plt.plot(india_years,australia_grad,label="USA")
     11 #plt.plot(years,australia_grad,label="Australia")
     12 #plt.plot(years,china_grad,label="China")
     13 #plt.plot(years,canada_grad,label="Canada")
     14 #plt.plot(years,germany_grad,label="Germany")

NameError: name 'india_years' is not defined
```

In [ ]:
```
change_majors=Table.read_table("pre_and_post_semester_majors.csv")
stem_pre=change_majors.where("premaj","stem")
stem_pre.select("premaj","pstmaj").group("pstmaj")
```

In [ ]:
```
grad_students=Table.read_table("graduated_students.csv")
first_gen=grad_students.where("generation","first").where("persist",are.not_eq
no_first=grad_students.where("generation","notfst").where("persist",are.not_eq

first_gen.barh("persist","count")
```

In [ ]:
```
categories=make_array("Stayed STEM", "Left STEM")
first_genners=make_array(76,24)
non_firsty=make_array(561,70)

x = np.arange(len(categories))  # positions for groups
width = 0.35  # bar width

fig, ax = plt.subplots(figsize=(8,6))

bars1 = ax.bar(x - width/2, first_genners, width, label='First-Gen', color='#f
bars2 = ax.bar(x + width/2, non_firsty, width, label='Non-First-Gen', color='#


ax.set_ylabel('Number of Students')
ax.set_title('STEM Retention: First-Gen vs. Non-First-Gen')
ax.set_xticks(x)
ax.set_xticklabels(categories)
ax.legend()


for bars in [bars1, bars2]:
    for bar in bars:
        height = bar.get_height()
```

```
        ax.text(bar.get_x() + bar.get_width()/2., height + 5,
                f'{height}', ha='center', va='bottom')
```

In [ ]:
```
categories_gen=make_array("First Gen", "Not First Gen")
first_genners=make_array(76,24)
non_firsty=make_array(561,70)

x = np.arange(len(categories))  # positions for groups
width = 0.35  # bar width

fig, ax = plt.subplots(figsize=(8,6))

bars1 = ax.bar(x - width/2, first_genners, width, label='First-Gen', color='#f
bars2 = ax.bar(x + width/2, non_firsty, width, label='Non-First-Gen', color='#


ax.set_ylabel('Number of Students')
ax.set_title('STEM Retention: First-Gen vs. Non-First-Gen')
ax.set_xticks(x)
ax.set_xticklabels(categories)
ax.legend()


for bars in [bars1, bars2]:
    for bar in bars:
        height = bar.get_height()
        ax.text(bar.get_x() + bar.get_width()/2., height + 5,
                f'{height}', ha='center', va='bottom')
```

In [ ]:
```
grad_students.group("generation")
```

In [ ]:
```
grad_students.where("generation","notfst").group("persist")
```

In [ ]:
```
us_grad_avg=np.average(women.where("Country","USA").column("Female Graduation
india_grad_avg=np.average(women.where("Country","India").column("Female Gradua
china_grad_avg=np.average(women.where("Country","China").column("Female Gradua
germany_grad_avg=np.average(women.where("Country","Germany").column("Female Gr
canada_grad_avg=np.average(women.where("Country","Canada").column("Female Grad
australia_grad_avg=np.average(women.where("Country","Australia").column("Femal

bargraph_table=Table().with_columns("Country",make_array("China","USA","Germar
                                    "Average Female STEM Graduation Rate (%)",
bargraph_table.barh("Country","Average Female STEM Graduation Rate (%)")
```

In [ ]:
```
us_enrollment=women.where("Country","USA").sort("Year").select("Year","Female
india_enrollment=women.where("Country","India").sort("Year").select("Year","Fe
india_years=women.where("Country","India").sort("Year").select("Year","Female
india_grad=women.where("Country","India").sort("Year").select("Year","Female G

plt.plot(india_years,india_grad,label="USA graduation rate")
plt.plot(india_years,india_enrollment,label="USA enrollment")
```

```
plt.title('Female STEM Graduation Rates vs Enrollment')
plt.xlabel('Year')
plt.ylabel('Percentage')
plt.ylim(0, 60)  # optional: set y-axis range
plt.legend()     # shows the labels
plt.grid(True)
```

In [ ]:
```
india_years
```

In [ ]:
```
india_graduation=women.where("Country","India").sort("Year").select("Year","Fe
```

In [ ]:
```
us_gender_gap=women.where("Country","USA").sort("Year").select("Year","Gender
us_gender_gap
us_gender_gap.plot("Year","Gender Gap Index average")
```

In [ ]:
```
female_enrollment.plot("Year","Female Enrollment (%) average")
```

In [ ]:
```
us_enroll=women.where("Country","USA").sort("Year").select("Year","Female Enro
```

In [ ]:
```
us_enroll.plot("Year","Female Enrollment (%) average")
```

In [ ]:
```
us_grad=women.where("Country","USA").sort("Year").select("Year","Female Gradua
us_grad.plot("Year","Female Graduation Rate (%) average")
```

In [ ]:
```
australia_grad=women.where("Country","Australia").sort("Year").select("Year","
australia_grad.plot("Year","Female Graduation Rate (%) average")
```

In [ ]:
```
india_enroll=women.where("Country","India").sort("Year").select("Year","Female
```

In [ ]:
```
india_enroll.plot("Year","Female Enrollment (%) average")
```

In [ ]:
```
female_grad=women.sort("Year").select("Year","Female Graduation Rate (%)").gro
```

In [ ]:
```
india_women=women.where("Country","India").sort("Year").select("Year","Female
```

In [ ]:
```
india_women.plot("Year","Female Graduation Rate (%) average")
```

In [ ]:
```
australia_grad=women.where("Country","Australia").select("Year","Female Gradua
australia_grad
```

In [ ]:
```
all_stem=Table.read_table("UNESCO_UIS_GRAD_STEM.csv")
india_all=all_stem.where("REF_AREA_LABEL",are.equal_to("India")).sort("TIME_PE
india_all
```

In [ ]:
```
usa_all=all_stem.where("REF_AREA_LABEL",are.equal_to("United States")).sort("T
usa_all
```

In [ ]:
```
all_stem.where("REF_AREA_LABEL","United States").where("SEX","_T")
```

In [ ]:
```
student_data=Table.read_table("student_performance_dataset.csv")
student_data
```

In [ ]:
```
student_data.where("Final_Exam_Score",50)
```

In [ ]:
```
student_data.sort("Study_Hours_per_Week").select("Study_Hours_per_Week","Final
```

In [ ]:
```
Table.read_table("ResearchInformation3.csv").group("Department")
```

In [ ]:
```

```