

Avg BMI

24.67

Avg Calories Burned

910

Avg Fat Percentage

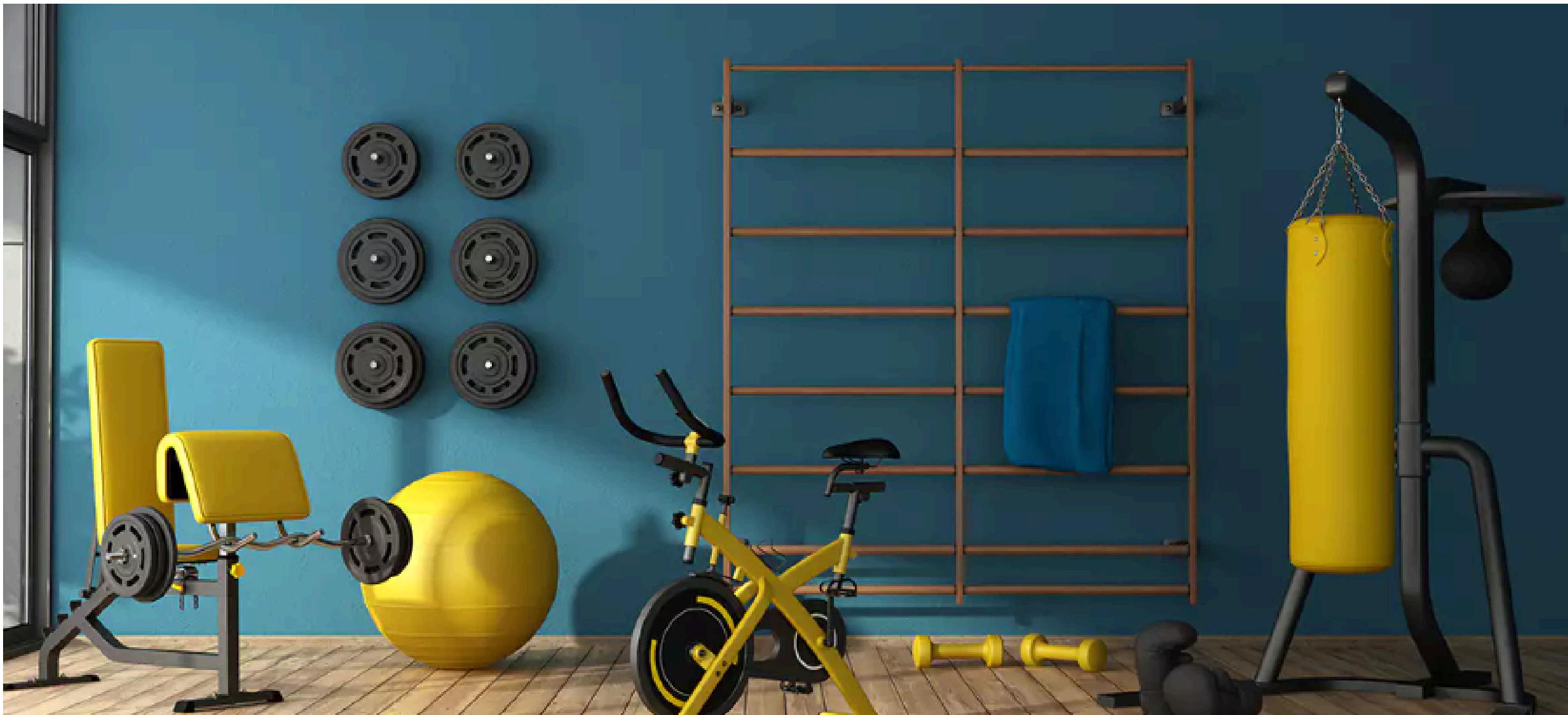
24.88

Avg Session Duration

76.00

Avg Workout Frequency

3.35





Project NO.4

In this project, I used a dataset from Kaggle related to gym workouts.

The main question of the project that I explored is:

How do the physiological, demographic, and behavioral factors of gym members affect their performance during workouts?

Sub-questions:

1) Is there a relationship between age and workout experience?

- Do gym members of different ages burn more or fewer calories during workouts?
- How does age affect BMI, weight, body fat percentage, and Max BPM?

2) What is the relationship between the type of workout and performance?

- Is there a difference in the number of calories burned between different types of workouts (such as cardio, HIIT, yoga)?
- Which type of workout is associated with higher BPM levels?

3) Is there a connection between experience level (Beginner, Intermediate, Expert) and performance metrics (calories, BPM, BMI)?

- Do gym members with higher experience levels burn more calories?
- Do gym members with higher experience levels work with higher BPM?
- Is there a difference in workout frequency per week based on experience levels?

4) What is the relationship between body fat percentage and workout goals?

- Do gym members with higher body fat percentages tend to perform different types of workouts (such as cardio versus strength training)?
- Is there a connection between body fat percentage and the number of calories burned?

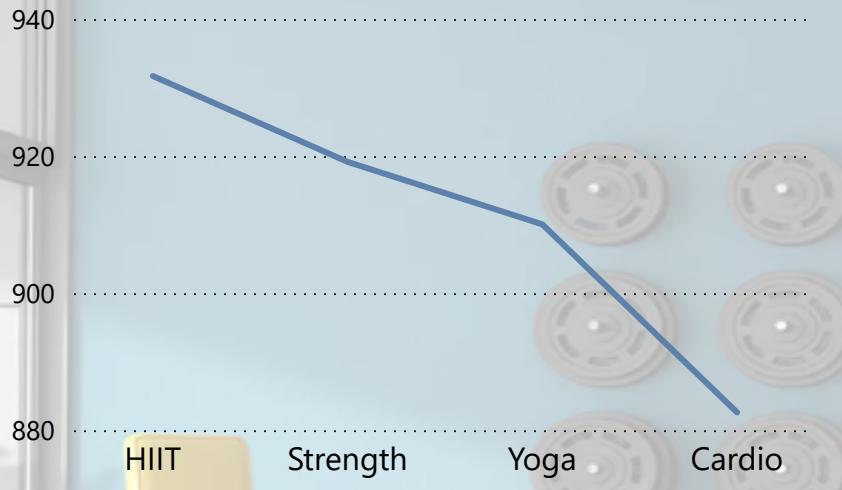
5) Do demographic variables like gender affect performance?



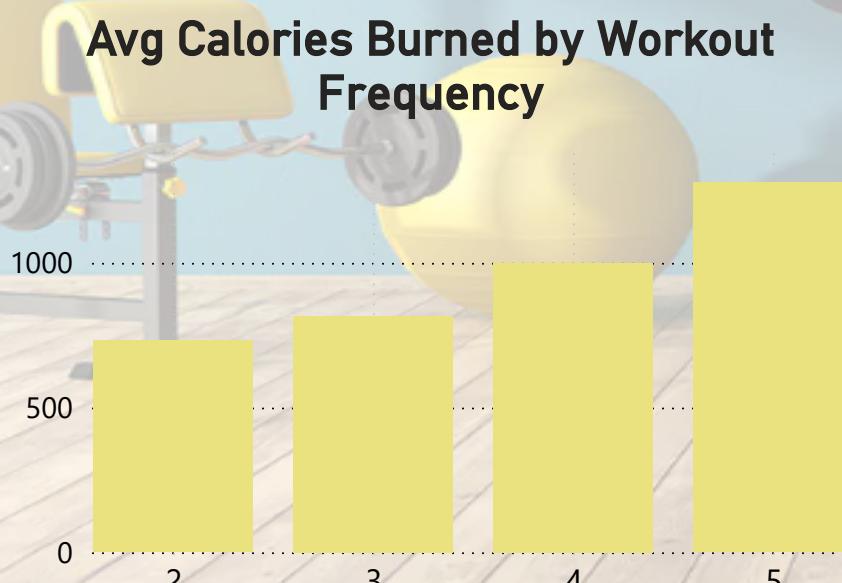
Average Calories Burned By Dependent Variables



Avg Calories Burned by Workout Type



Avg Calories Burned by Workout Frequency



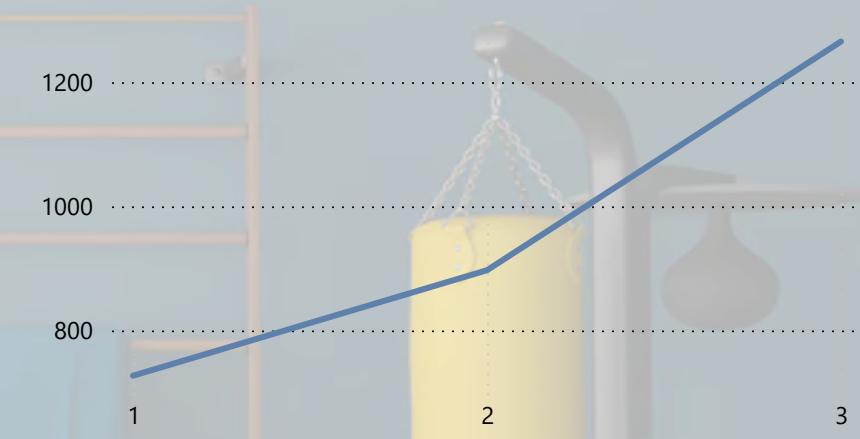
Avg Calories Burned

910

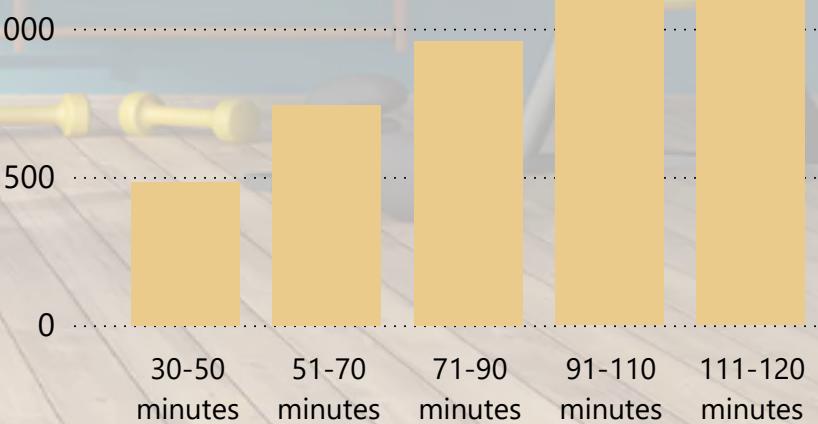
Gender

- Female
- Male

Avg Calories Burned by Experience Level



Avg Calories Burned by Duration Group

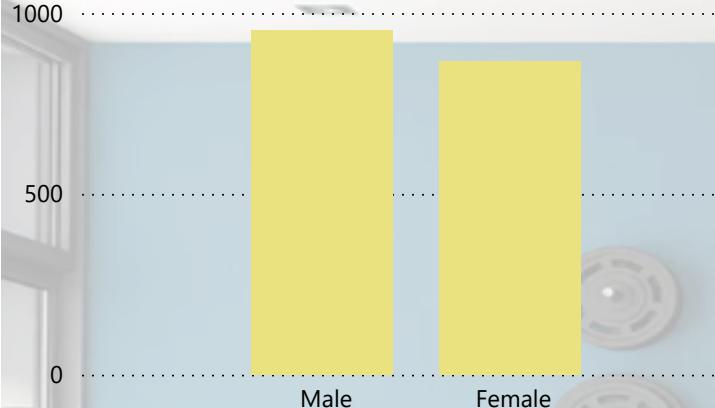




Average Calories Burned By Independent Variables



Avg Calories Burned by Gender



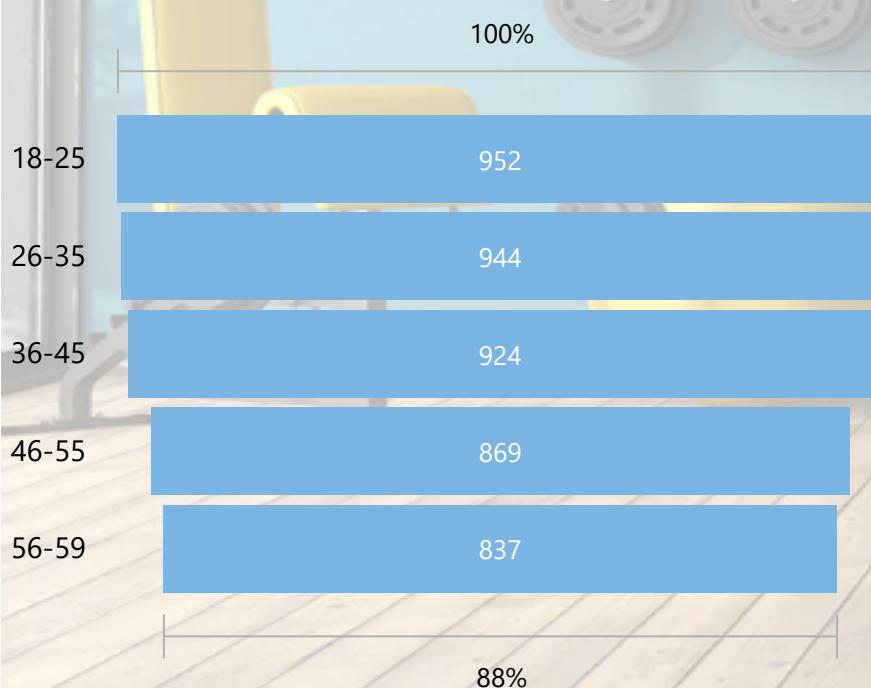
Avg Calories Burned

910

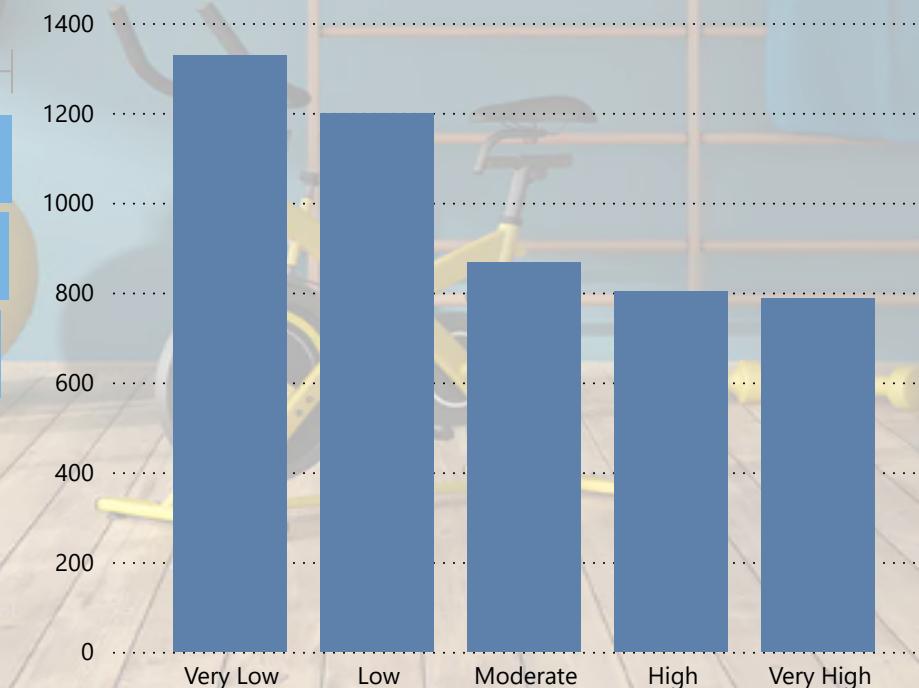
Sum of Calories_Burned

820K

Avg Calories Burned by Age Group



Avg Calories Burned by Fat Group



Avg Calories Burned by BMI Group





Avg Session Duration by BMI Group



Avg BMI

24.67

BMI Group

- Normal
- Obese
- Overweight
- Underweight



80

75

70

Underweight

Normal

Overweight

Obese

Workout Type by BMI Group

Workout_Type • Cardio • HIIT • Strength • Yoga

100

50

0

Underweight

Normal

Overweight

Obese

Avg Workout Frequency by BMI Group

3

2

1

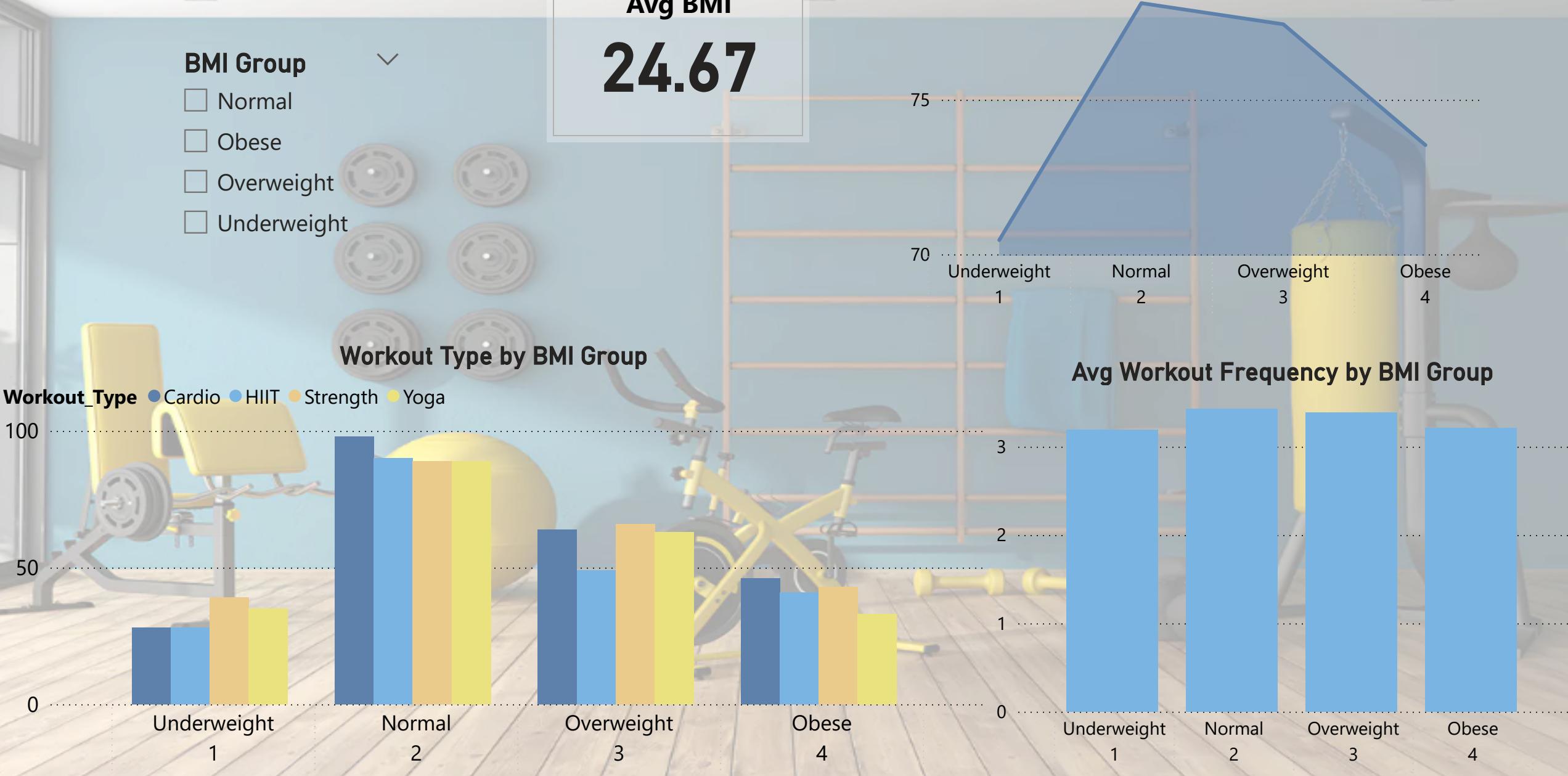
0

Underweight

Normal

Overweight

Obese





Workout Type

Cardio

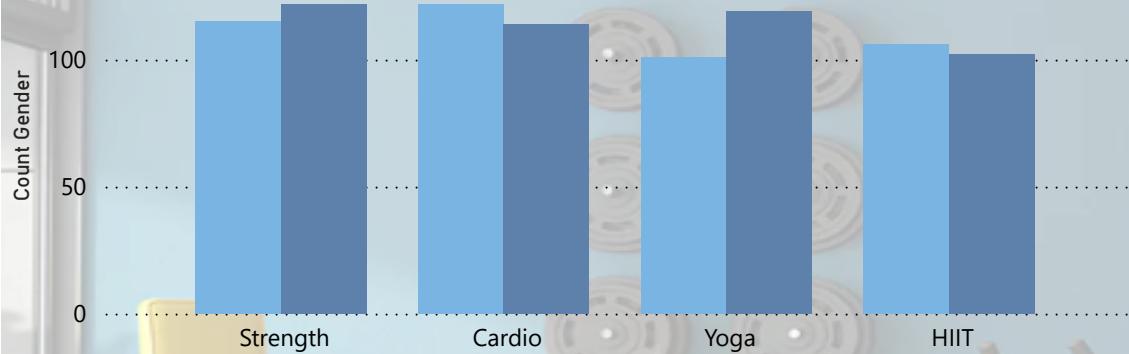
HIIT

Strength

Yoga

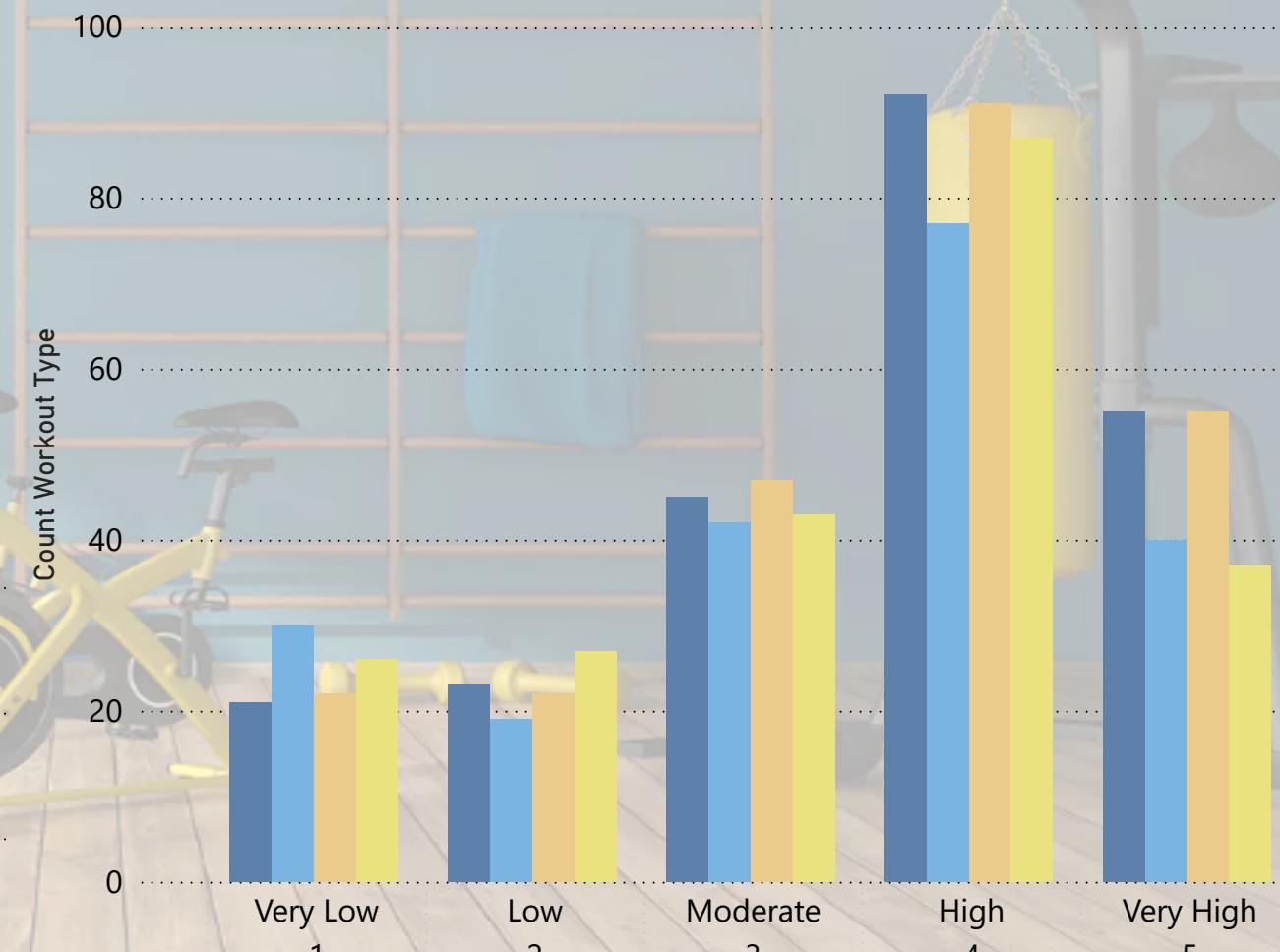
Workout Type by Gender

Gender ● Female ● Male



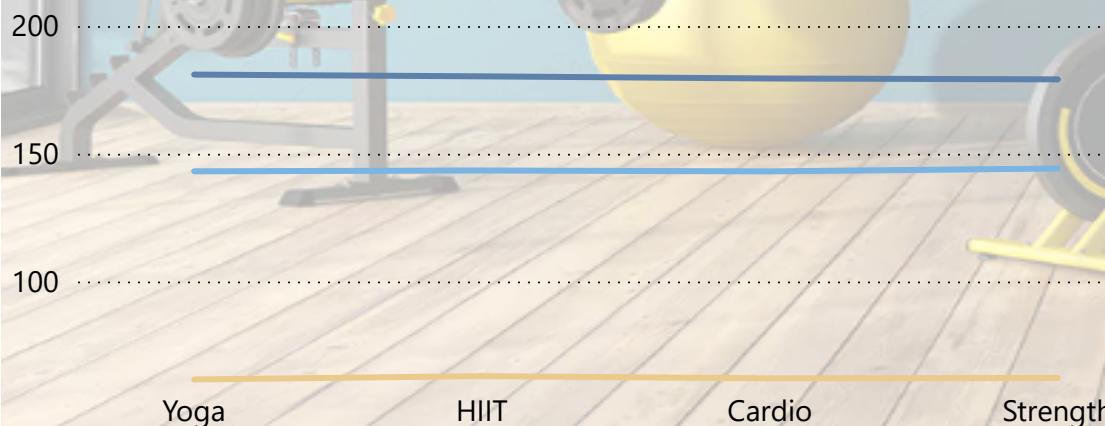
Workout Type by Fat Group

Workout_Type ● Cardio ● HIIT ● Strength ● Yoga



Avg BPM by Workout Type

● Avg Max BPM ● Avg Resting BPM ● Avg BPM





Avg Weight by Age Group



Age Group

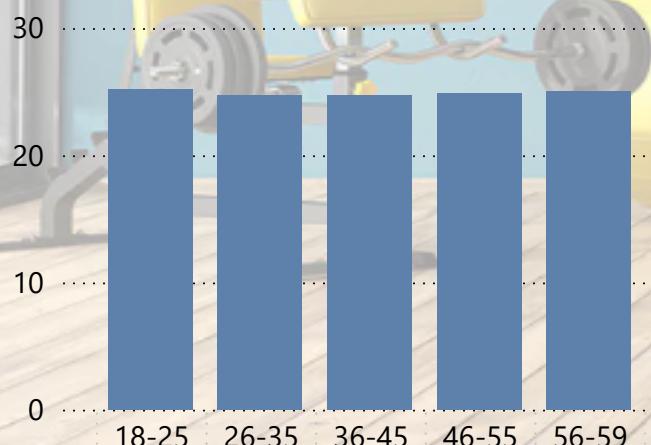
All

Avg BPM by Age Group

● Avg Resting BPM ● Avg Max BPM ● Avg BPM

200

Avg Fat Percentage by Age Group



Avg BMI by Age Group

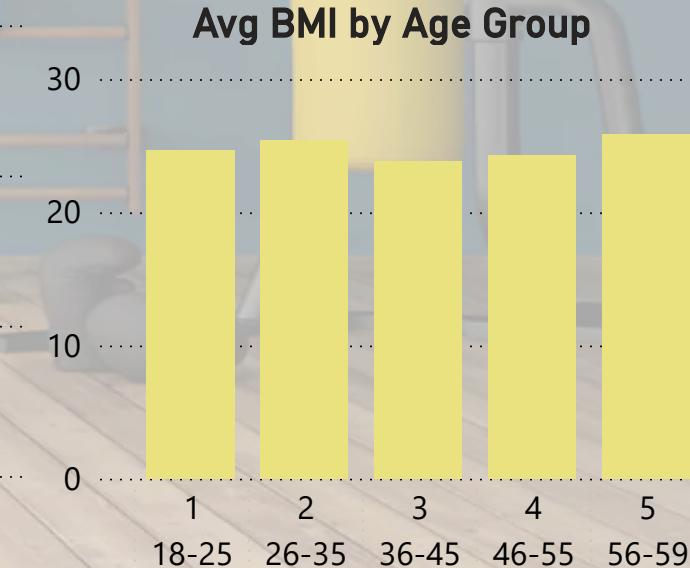
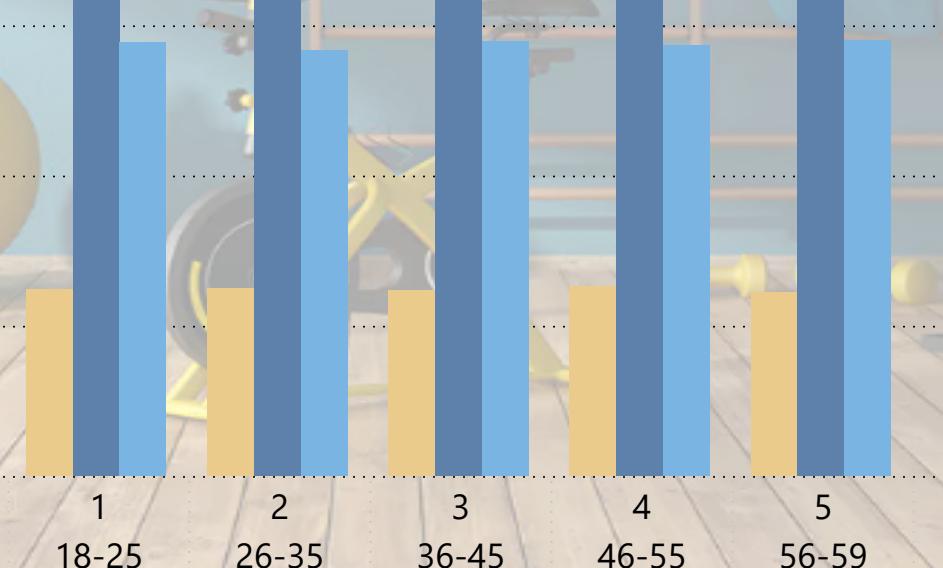
100%

18-25
26-35
36-45
46-55
56-59

24.69
25.42
23.82
24.29
25.85

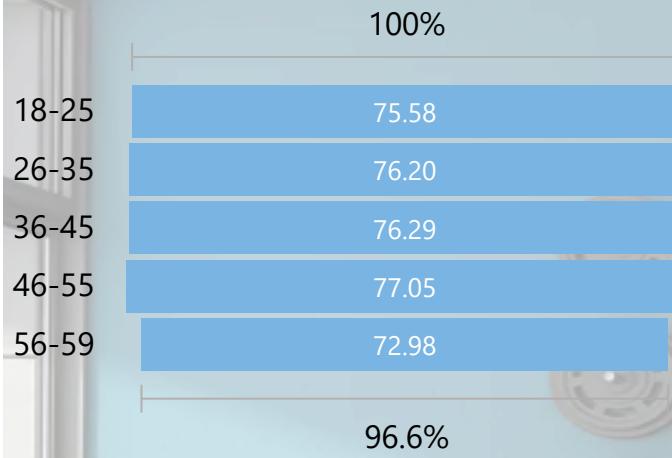
104.7%

Avg BMI by Age Group





Avg Session Duration by Age Group



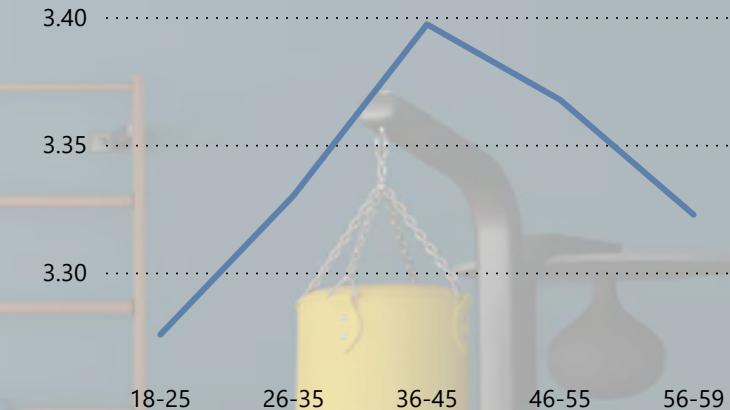
Avg Workout Frequency

3.35

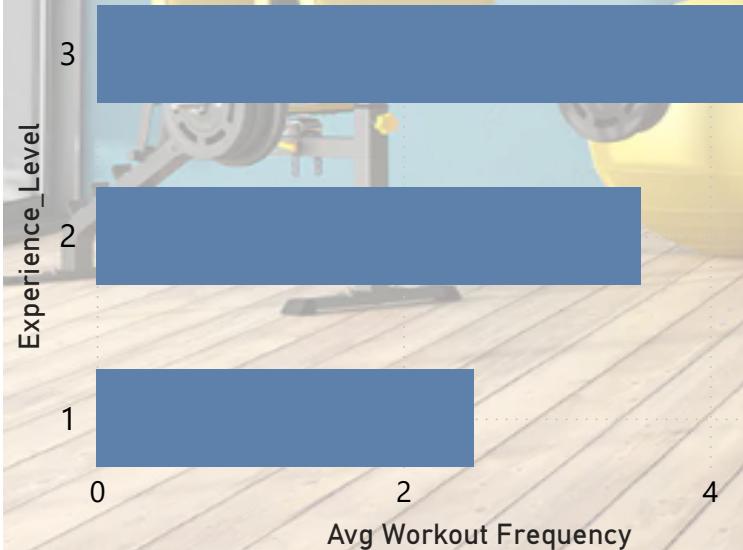
Avg Session Duration

76.00

Avg Workout Frequency by Age Group

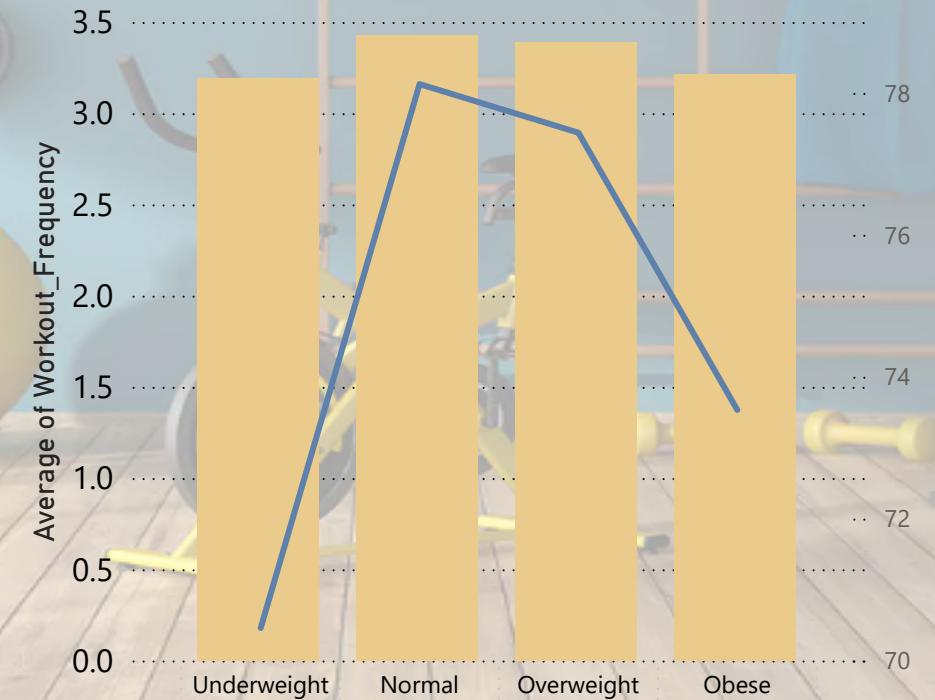


Avg Workout Frequency by Experience Level

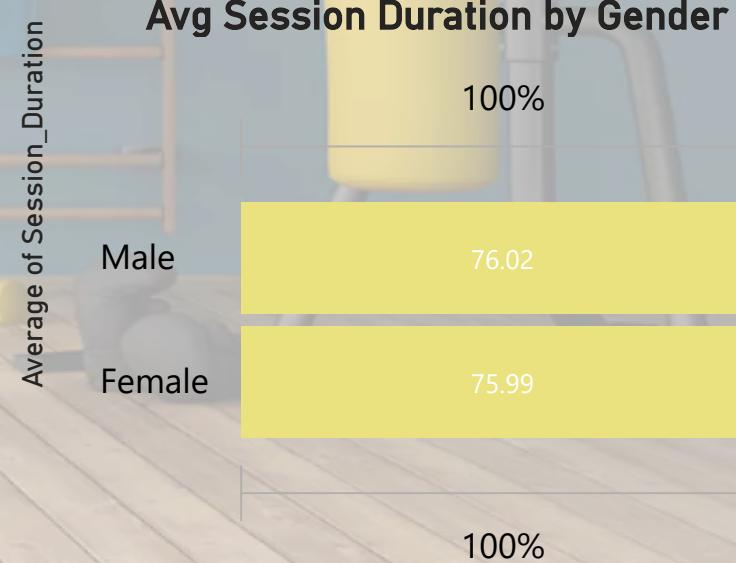


Workout Frequency and Session Duration by BMI Group

Yellow circle: Average of Workout_Frequency Blue circle: Average of Session_Duration

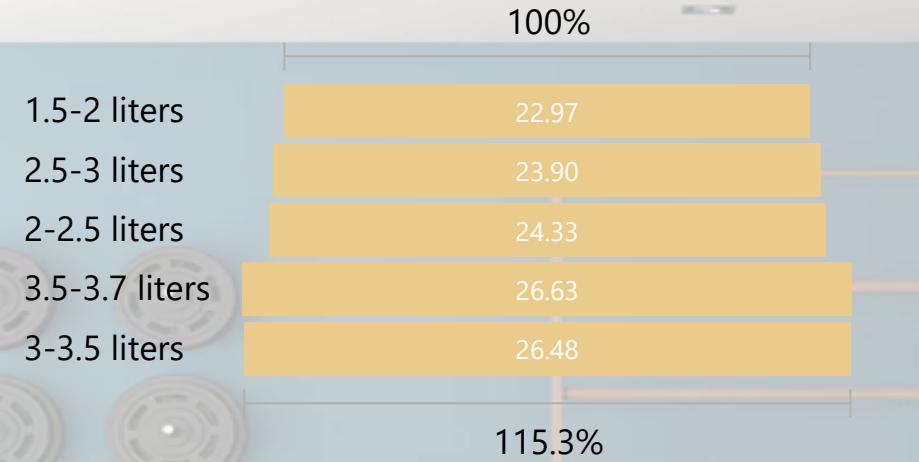


Avg Session Duration by Gender

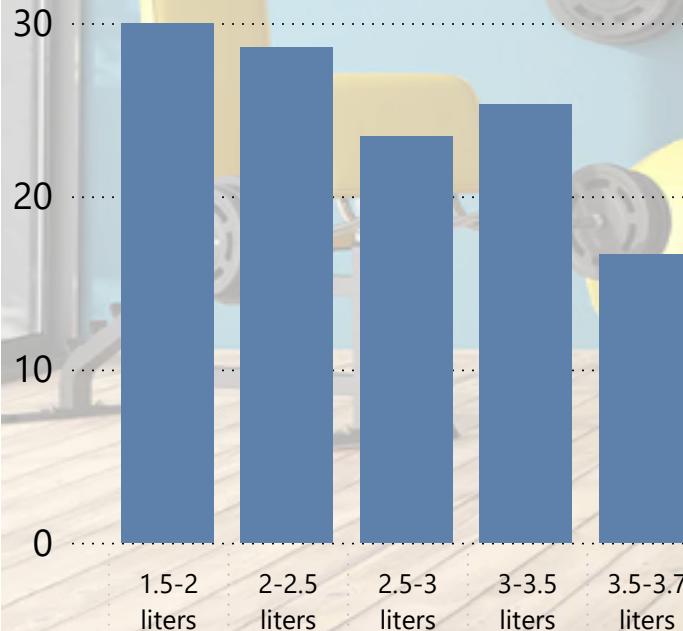




Avg BMI by Water Group



Avg Fat Percentage by Water Group



Avg Calories Burned by Water Sort and Water Group



Avg Weight by Water Group

