Gym Workout Data

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Summary

- Gym workout data from males and females ages 18 to 59.

- Two types of data
  - Physical vitals metrics: Height, Weight, BMI, Fat %, Average BPM, Resting BPM, Maximum BPM, Calories Burned, and Water Intake.
  - Workout descriptive data: include Workout type, Workout duration, Experience Level, and Workout Frequency.

Objectives

- Which workout type burns the most calories for each gender?
- Is there a correlation between experience level and session duration?
- Do higher workout frequencies result in lower BMIs?
- Is there a specific workout more common among gym members with higher experience? How about for lower experience level?
- What is the mode for workout frequency?
- What portions of males and females participate in every type of workout?
- What is the correlation between experience and water intake?

Which Workout Type Burns the Most Calories?
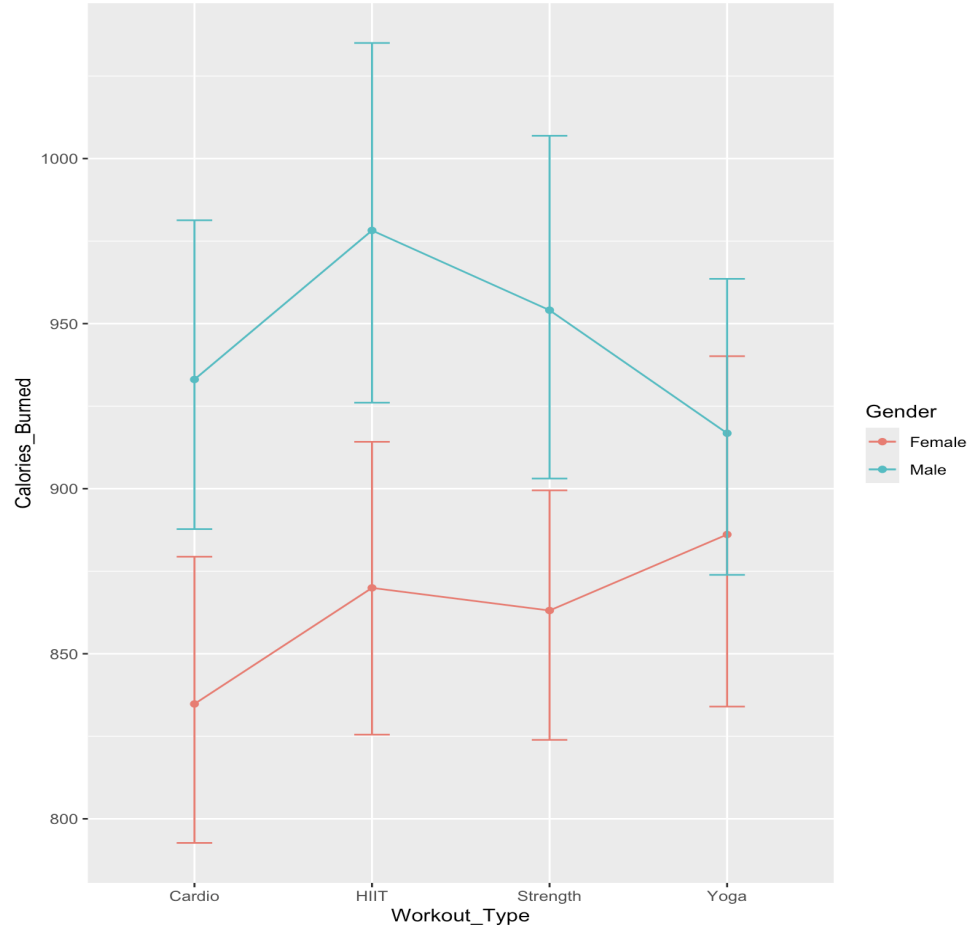
-For men HIIT burns the most calories and Yoga burns the most calories for women.
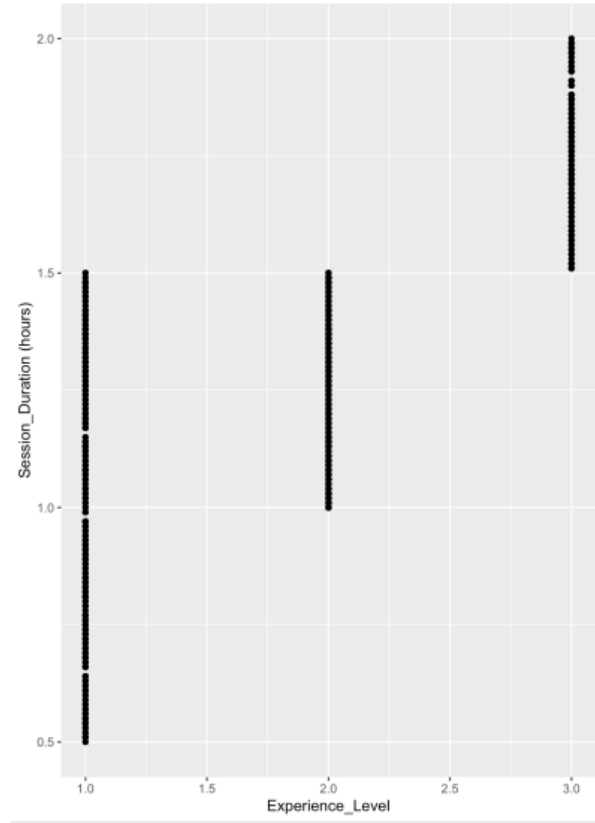
Experience Vs. Workout Type
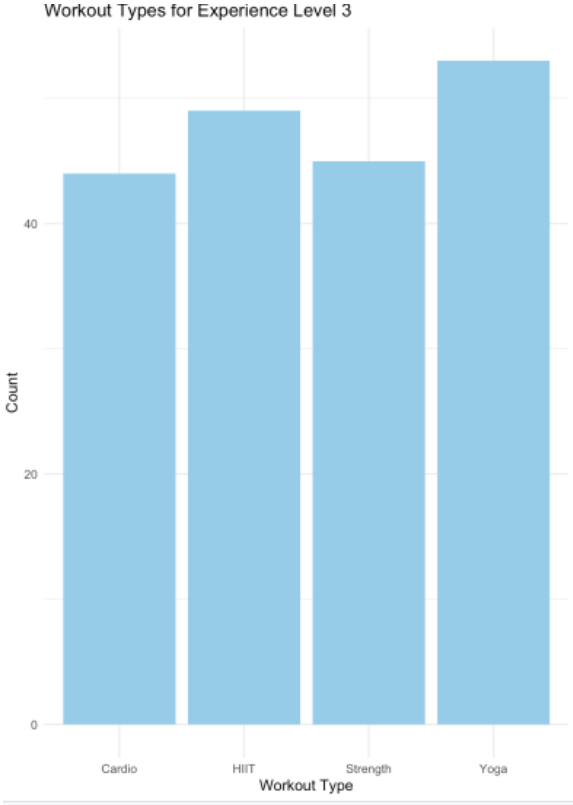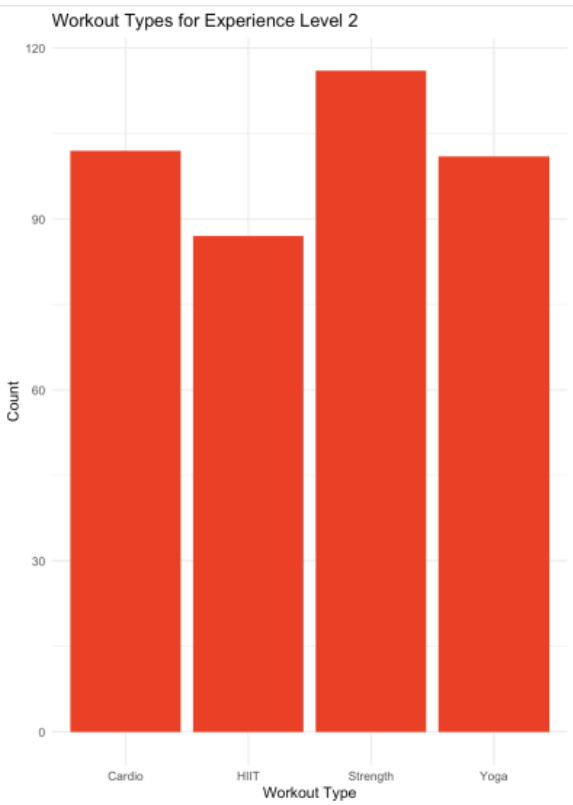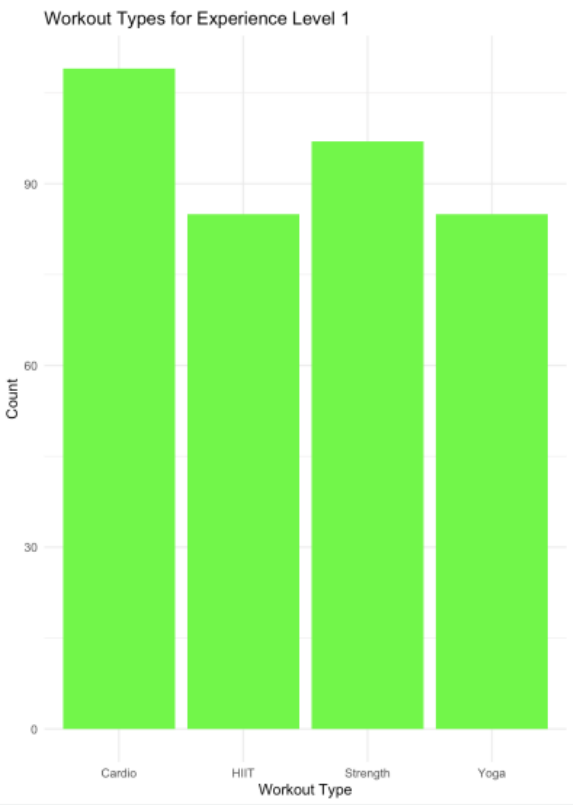
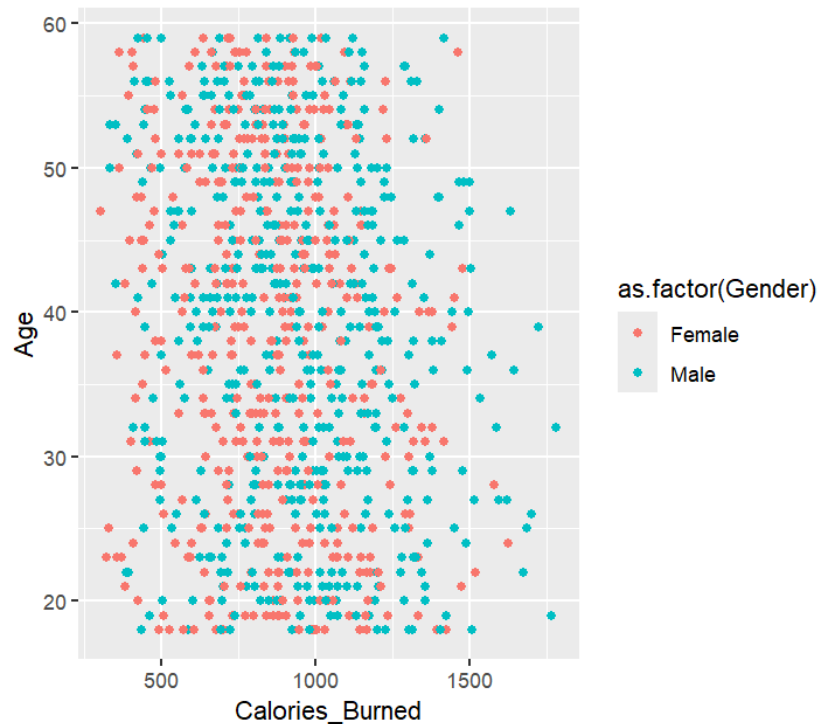# Does Experience Correlate to Session Hours?

-Only 3 levels of experience

-Clearly the highest experience level has the session duration.

How does age affect calories burned between males and female working out cardio?

- NOTE: Only workouts between one and two hours were included.
- There is no correlation between age and calories burned.

What is the mode for workout frequency by workout type

- There is no difference between the modes of the workout types.
- All of them are equivalent to three, this does not account for age, experience, or time spent working out.
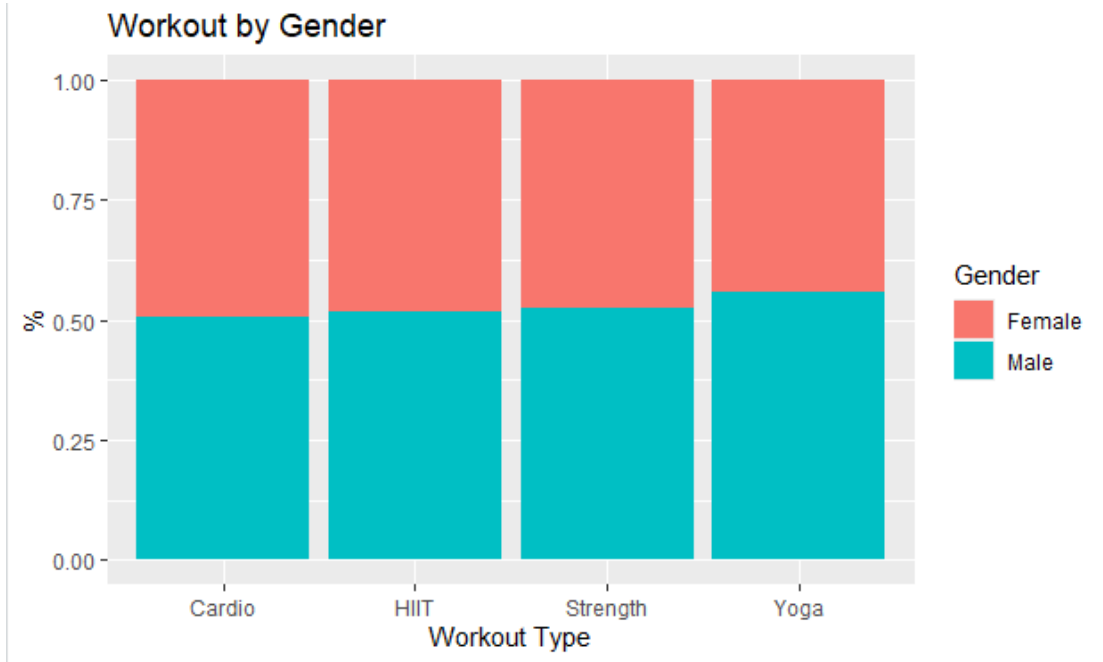

Mode of Workout Frequency by Workout Type
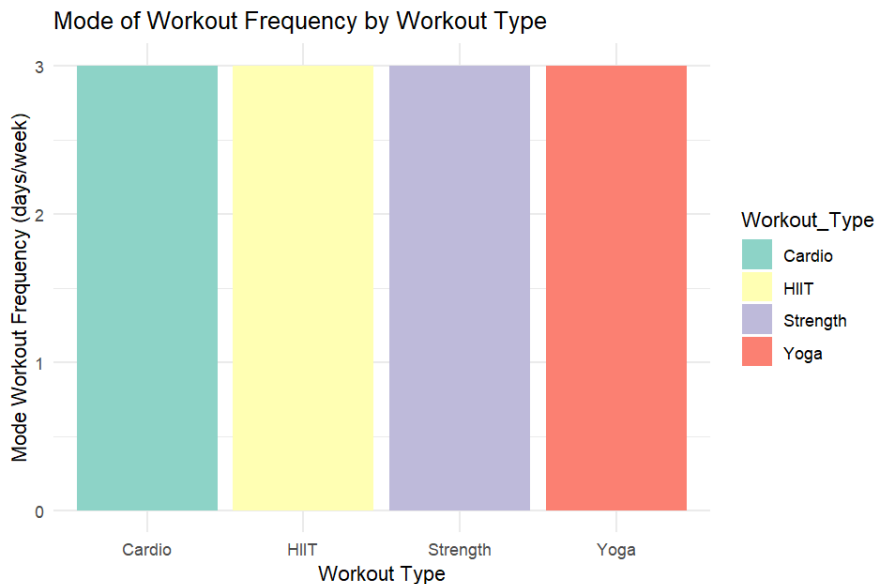
Does Workout Frequency reduce BMI

- The average BMI is relatively the same within all the frequencies.

- The more frequent the workouts, the skinnier the boxes become.

- Outliers become more interesting as the workouts increase.
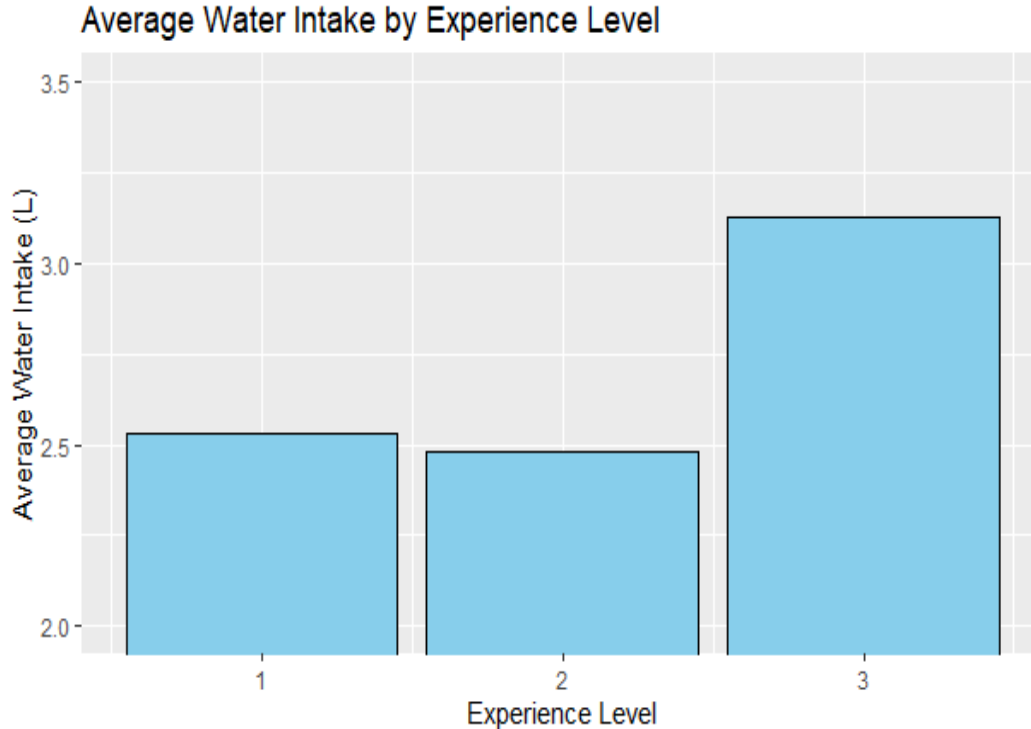

Frequency of Workouts per Week Relation to BMI
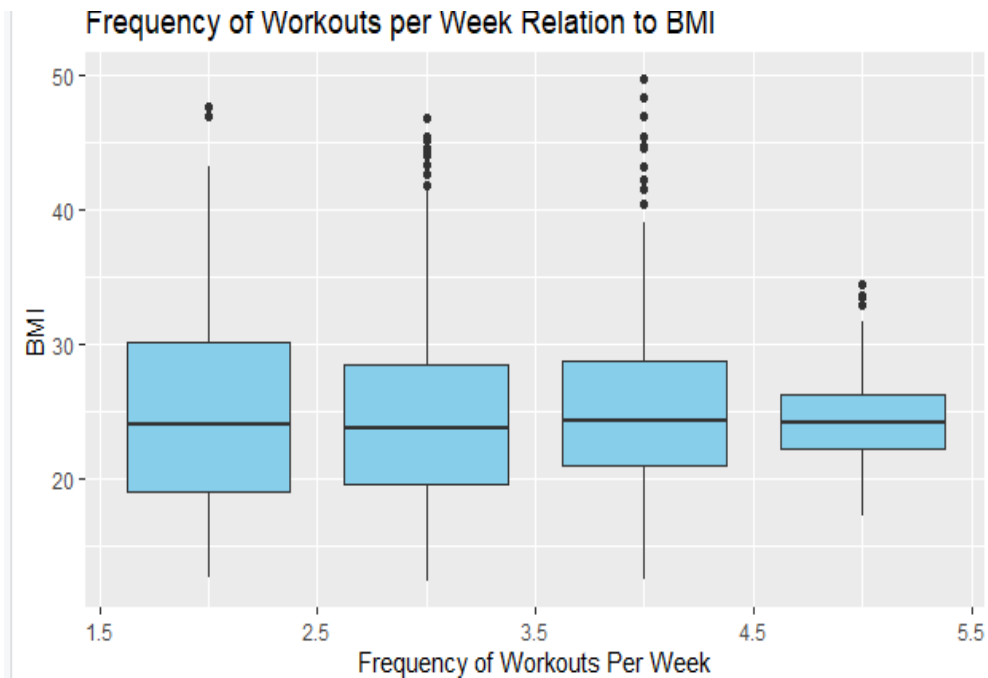
Gender proportions per workout

Workout by Gender

- Gender is split 50/50 between all workout types.

- Surprising lack of variance.

- Yoga is the only one with any preference by gender.
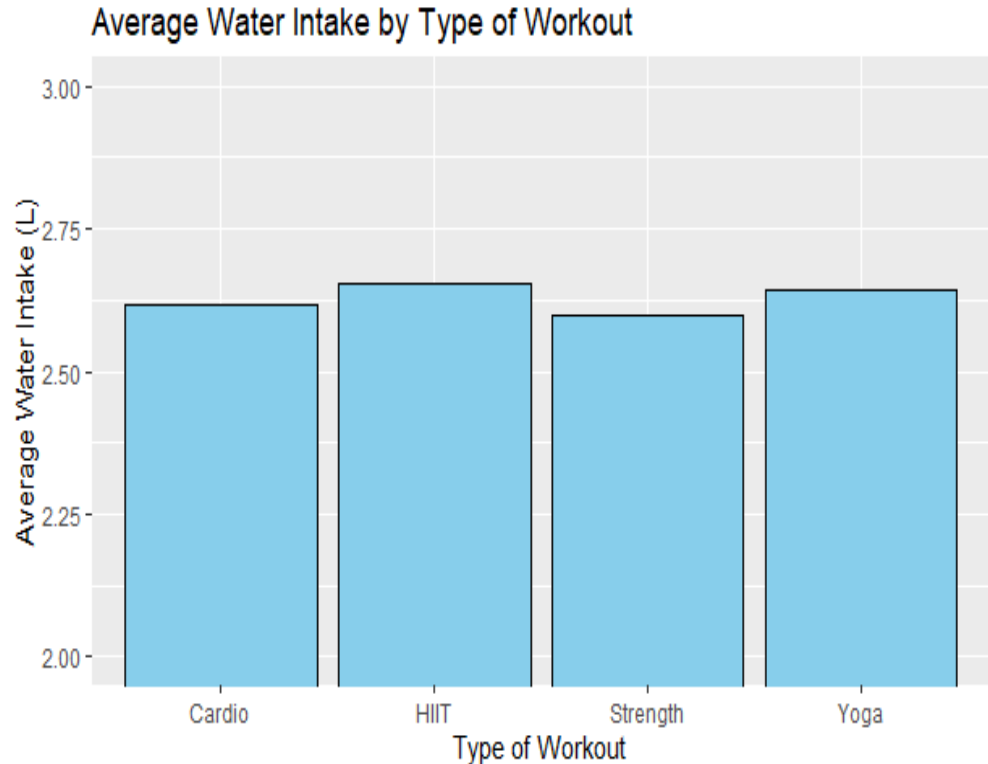
Water Intake relation to Experience Level

Average Water Intake by Experience Level

- Average water intake is stable at the first two experience levels.

- A drastic increase in the third level.

- Water intake related to a better understanding of physical needs.

Average Water Intake by Workout Type

- Average water intake by workout type is relatively equal across groups.

- Surprising, considering calories burned per workout has a significant deviation.

- Surprisingly, there is a lack of correlation between water intake and the severity of the workout.

Average Water Intake by Type of Workout

Summary of Observations on the Slides

- HIIT workouts burn more calories for men and Yoga burns more calories for women.

-Those who have higher experience levels, spend more time in the gym.

-No link between age and calories burned in cardio workouts. Gender also does not play a role.

-All workouts have equal modes for workout frequency.

-Regardless of the workout frequency, the average BMI stays the same, but it has been found that the difference between the third and first quartile shrinks, indicating that BMI and workout frequency have a link.

-No link between gender and type of workout.

-Average water intake is stable at first two experience levels. Drastic increase of water intake in third level.

-Average water intake is almost equal across all workout types.