Submodule 0: Introduction

Self-assessment quiz

File folder structure

1. I can organize my files into hierarchical folders:

    a. True

    b. False

2. What is a working directory?

    a. File folder in a hierarchical system that you last opened

    b. List of file folders and subfolders in your hierarchical system

    c. File folder in a hierarchical system where you are currently operating

    d. File folder in a hierarchical system where your program is installed

    e. Unsure/do not know

Summary statistics (mean, median, proportion, etc.)

1. You find the mean by:

    a. Ordering all data points and picking out the data point in the middle

    b. Adding all data points and dividing by the number of data points

    c. Counting how many times the unique values of the data points occur and picking the highest frequency

    d. Unsure/do not know

2. You find the median by:

    a. Ordering all data points and picking out the data point in the middle

    b. Adding all data points and dividing by the number of data points

c. Counting how many times the unique values of the data points occur and picking the highest frequency

d. Unsure/do not know

3. You find the mode by:

a. Ordering all data points and picking out the data point in the middle

b. Adding all data points and dividing by the number of data points

c. Counting how many times the unique values of the data points occur and picking the highest frequency

d. Unsure/do not know

4. To calculate range, you do not need:

a. Maximum value

b. Median value

c. Minimum value

d. Unsure/do not know

5. Standard deviation can be negative:

a. True

b. False

c. Unsure/do not know

6. If there are 10 study participants:

Age	Number of participants
0 years old	2
1 year old	3

2 years old	1
3 years old	4

then _____ is the relative frequency of 2-year-olds:

       a. 1

       b. 0.1

       c. 0.6

       d. Unsure/do not know

Data visualization types (bar charts, histograms, scatter plots)

1. To visualize a poll that asks for participants' favorite color, I should use a:

       a. Bar chart

       b. Histogram

       c. Box and whisker plot

       d. Scatterplot

       e. Unsure/do not know

2. To visualize the relationship between height and weight in a surveyed group, I should use a:

       a. Bar chart

       b. Histogram

       c. Box and whisker plot

       d. Scatterplot

       e. Unsure/do not know

3. To visualize a grade distribution where students are graded on a 0 to 100% scale, I should use a:

  a. Bar chart

  b. Histogram

  c. Box and whisker plot

  d. Scatterplot

  e. Unsure/do not know

GitHub

1. I have a GitHub account

  a. True

  b. False

2. I have created a repository on GitHub

  a. True

  b. False

Programming & Software

1. I have used SPSS

  a. True

  b. False

2. I have used SAS

  a. True

  b. False

3. I have used Stata

  a. True

  b. False

4. I have used MATLAB

  a. True

b. False

5. I have previously written code in the following non-R languages:

   a. _____

6. I have previously written code in R:

   a. True

   b. False