## The "A" of Statistics II

#### Mini Workshop

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#### 1 Introduction

We assume your team has already viewed a "client interview" (or, client discovery) video featuring Professor Esfandiari and Dr. Rootman.

This part is an individual submission. For this part, please read Ruland's First and Second Questions in the book "Guide for the New Statistical Consultant".

#### 2 Your Work

Make sure to include your name on your submission.

Please submit answers as PDF output (Quarto or LaTeX preferred, you can modify the files that produced this document) to the following prompts:

# 2.1 Imagine yourself as Dr. Rootman. Formulate responses to the following three questions.

1. What does one, complete, single observation look like?

A single observation represents a full set of data collected for one participant in the study. In this case, it could include details like:

- a. The participant's demographic information (such as age or gender).
- b. The lighting condition they were exposed to (e.g., natural light, artificial light).
- c. Their rating of perceived attractiveness on a scale (e.g., 1 to 10, with 1 being the least attractive and 10 being the most attractive).

- 2. If you measure this again, will you get the same answer?

  It is unlikely to get the exact same answer if the measurement is repeated. Perceptions of attractiveness are inherently subjective and can fluctuate depending on a variety of factors, like the surrounding and mood of the evaluator.
- 3. If we can answer your research questions, what will you do next?

Practical application: If certain lighting conditions are found to enhance the perception of attractiveness, this information could be applied in marketing, photography, or beauty product development.

A user supplied Excel worksheet is available to help you with the responses: 20201228perceptionOfAttractivenessRawData.xlsx

### 2.2 Looking ahead (not part of the submission)

If you were to analyze this data, what method(s) would you choose. Next, given your method, is the data structured correctly for the requirements of your chosen method?