

2.1: Visually Summarizing Data Univariately

To do research we must start with a question and follow this by collecting or acquiring data to help us answer that question. It is important that we use valid and reliable measures and that our data are collected in a way that allows us to do the type of analysis we wish to do. Therefore, as researchers in the behavioral sciences (such as psychology, education, and sociology) we start with a theory, generate our hypotheses (testable expectations based on previous theory, findings, or arguments), and collect and analyze data that will allow us to test our hypotheses. Statistics are used to summarize and analyze data as part of this process. One way to summarize data is to display it visually using tables or graphs. Tables and graphs simplify the data and can be a good place to start one's analyses. Therefore, the focus of this chapter will be how to summarize and read data visually using tables and graphs.

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