CHAPTER OVERVIEW

3: Measures of Central Tendency

One group of quantitative techniques that are used to summarize data are known as *Measures of Central Tendency.* Another term for measures of central tendency is *averages.* As the name implies**, measures of central tendency** summarize where a group of scores (i.e. data for a variable) tended to fall. The goal of using a measure of central tendency is to simplify by representing all the data for a variable with just one or a few numbers or terms. A separate, but related, set of techniques known as *Measures of Variability* summarize the extent to which a group of scores tended to be different from each other. The foci of this chapter are the three commonly used measures of central tendency and an introduction to deviation, a concept that underlies some measures of variability which we will learn more about in Chapter 4.

Once we have our raw scores, the statistical work must begin. A single piece of data is easy to understand. For example if someone said his age was 18, the datum for age is simply 18. This can be summarized with the statement, “His age is 18.” This statement, which summarizes one datum, is simple. However, statisticians and researchers often need to collect lots of data to understand a variable more broadly. This means that several cases are often measured, each of which will have a raw score for the variable. If we are using these data to understand the variable, then the data will typically be summarized in some way. Summarizing the data is preferable to considering each datum individually because the goal is usually to understand the variable.