

## CHAPTER OVERVIEW

### 8: Fitting Models to Data



- Describe the basic equation for statistical models (outcome=model + error)
- Describe different measures of central tendency and dispersion, how they are computed, and which are appropriate under what circumstance.
- Describe the concept of a Z-score and when they are useful.

One of the fundamental activities in statistics is creating models that can summarize data using a small set of numbers, thus providing a compact description of the data. In this chapter we will discuss the concept of a statistical model and how it can be used to describe data.

[8.1: Appendix](#)

[8.2: What Is a Model?](#)

[8.3: Statistical Modeling- An Example](#)

[8.4: What Makes a Model “Good”?](#)

[8.5: Can a Model Be Too Good?](#)

[8.6: The Simplest Model- The Mean](#)

[8.7: The Mode](#)

[8.8: Variability- How Well Does the Mean Fit the Data?](#)

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[8.10: Z-scores](#)

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