

## CHAPTER OVERVIEW

### Chapter 5: Aggregation

#### Learning Objectives

After reading this chapter, you should be able to:

- generate a tabular and graphical representation of a frequency distribution
- understand the importance of data visualisation
- describe different measures of central tendency and dispersion, how they are computed, and which are appropriate under what circumstances
- compute a z-score and describe why they are useful.

As mentioned previously, one of the main ideas behind statistics is the idea of **aggregation**. As a reminder, we discussed the idea that we can better understand the world by throwing away information. In other words, when we aggregate data, that's exactly what we are doing when we summarise a dataset.

We will also delve into another main idea behind statistics: **variation**. As mentioned in Chapter 1, if variation didn't exist, then we wouldn't need statistics. In this chapter, we will discuss why we summarise data and how we can summarise data and explain variation in data in meaningful ways.

[5.1: Why Summarise Data?](#)

[5.2: Summarising Data Using Tables](#)

[5.3: Summarising Data Using Graphs](#)

[5.4: The Middle of the Data](#)

[5.5: Variability - How Spread Out are the Values?](#)

[5.6: Z Scores](#)

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