

CHAPTER OVERVIEW

9: Two-Sample Problems

The previous two chapters treated the questions of estimating and making inferences about a parameter of a single population. In this chapter we consider a comparison of parameters that belong to two different populations. For example, we might wish to compare the average income of all adults in one region of the country with the average income of those in another region, or we might wish to compare the proportion of all men who are vegetarians with the proportion of all women who are vegetarians. We will study construction of confidence intervals and tests of hypotheses in four situations, depending on the parameter of interest, the sizes of the samples drawn from each of the populations, and the method of sampling. We also examine sample size considerations.

[9.1: Comparison of Two Population Means- Large, Independent Samples](#)

[9.2: Comparison of Two Population Means - Small, Independent Samples](#)

[9.3: Comparison of Two Population Means - Paired Samples](#)

[9.4: Comparison of Two Population Proportions](#)

[9.5: Sample Size Considerations](#)

[9.E: Two-Sample Problems \(Exercises\)](#)

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