

CHAPTER OVERVIEW

9: Inferences with Two Samples

You have learned to conduct hypothesis tests on single means and single proportions. You will expand upon that in this chapter. You will compare two means or two proportions to each other. The general procedure is still the same, just expanded. To compare two means or two proportions, you work with two groups. The groups are classified either as independent or matched pairs. Independent groups consist of two samples that are independent, that is, sample values selected from one population are not related in any way to sample values selected from the other population. Matched pairs consist of two samples that are dependent. The parameter tested using matched pairs is the population mean. The parameters tested using independent groups are either population means or population proportions.

[9.1: Prelude to Hypothesis Testing with Two Samples](#)

[9.2: Inferences for Two Population Means- Large, Independent Samples](#)

[9.3: Inferences for Two Population Means - Unknown Standard Deviations](#)

[9.4: Inferences for Two Population Means - Paired Samples](#)

[9.5: Inferences for Two Population Proportions](#)

[9.6: Which Analysis Should You Conduct?](#)

[9.E: Hypothesis Testing with Two Samples \(Optional Exercises\)](#)

Contributors and Attributions

- Barbara Illowsky and Susan Dean (De Anza College) with many other contributing authors. Content produced by OpenStax College is licensed under a Creative Commons Attribution License 4.0 license. Download for free at <http://cnx.org/contents/30189442-699...b91b9de@18.114>.

This page titled [9: Inferences with Two Samples](#) is shared under a [CC BY 4.0](#) license and was authored, remixed, and/or curated by [OpenStax](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.