

## CHAPTER OVERVIEW

### 9: Nonparametric Statistics

Hello everyone, and welcome to the ninth chapter of the University of Southern Queensland's online, open access textbook.

The aim of this ninth chapter is to discuss the idea of nonparametric statistics. Nonparametric statistics are types of test statistics with related formulas that can be used to estimate associations between two or more variables without basing these associations on changes from the mean. The arithmetic mean can be seriously influenced by extreme values and values that are dispersed in non-normal ways. Essentially if collections of data are not arranged according to the *normal distribution*, and when researchers can be reasonably sure that the actual distribution of variable values in a population is *not* normal, nonparametric statistics can then be used to better estimate associations between variables.

There are some slides that appear via links within Chapter Nine. Please look for these as you review the current chapter.

[9.1: Nonparametric Definitions](#)

[9.2: Choosing Appropriate Tests](#)

[9.3: Comparing Two Independent Conditions- The Mann– Whitney U Test](#)

[9.4: Comparing Two Dependent Conditions or Paired Samples – Wilcoxon Sign-Rank Test](#)

[9.5: Differences Between Several Independent Groups- The Kruskal–Wallis Test](#)

[9.6: Chapter Nine Self-Test](#)

---

This page titled [9: Nonparametric Statistics](#) is shared under a [CC BY 4.0](#) license and was authored, remixed, and/or curated by [Erich C Fein, John Gilmour, Tayna Machin, and Liam Hendry](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.