

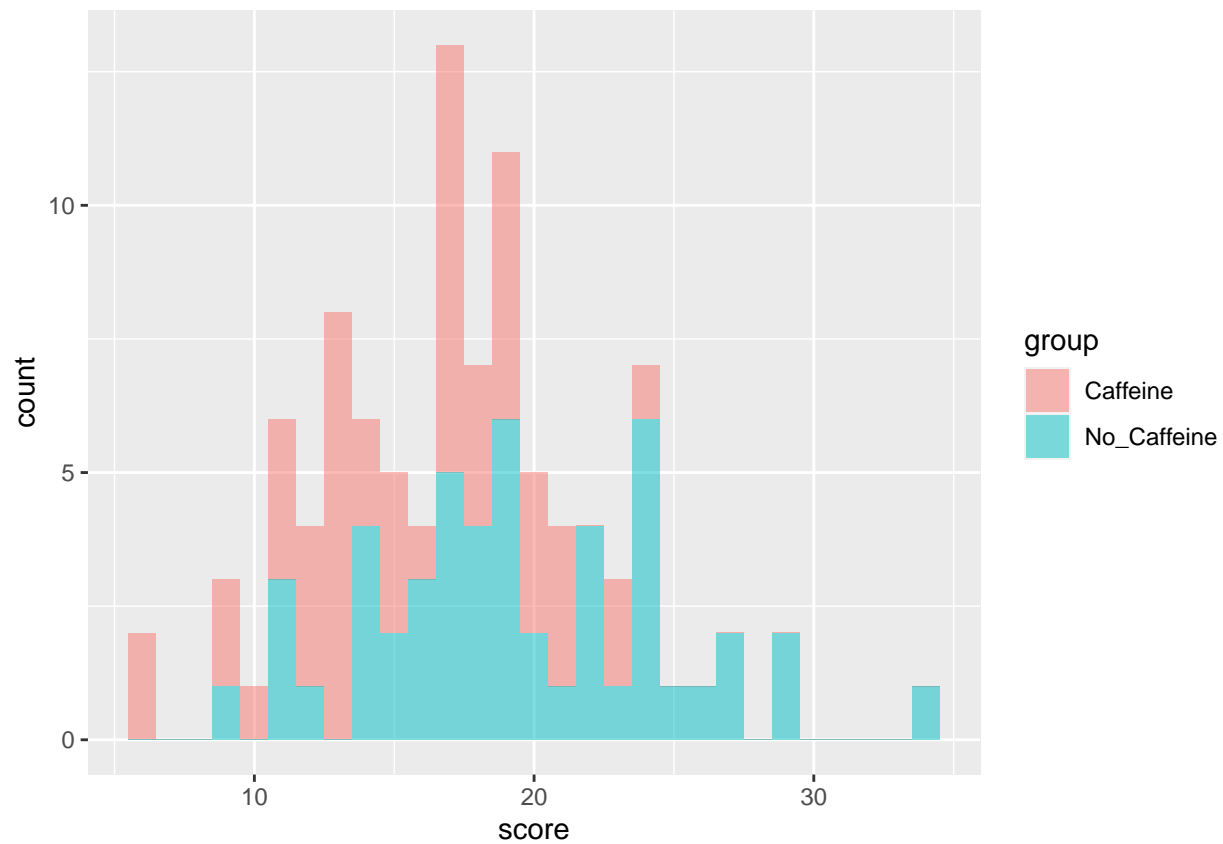
High level overview

Example of two groups

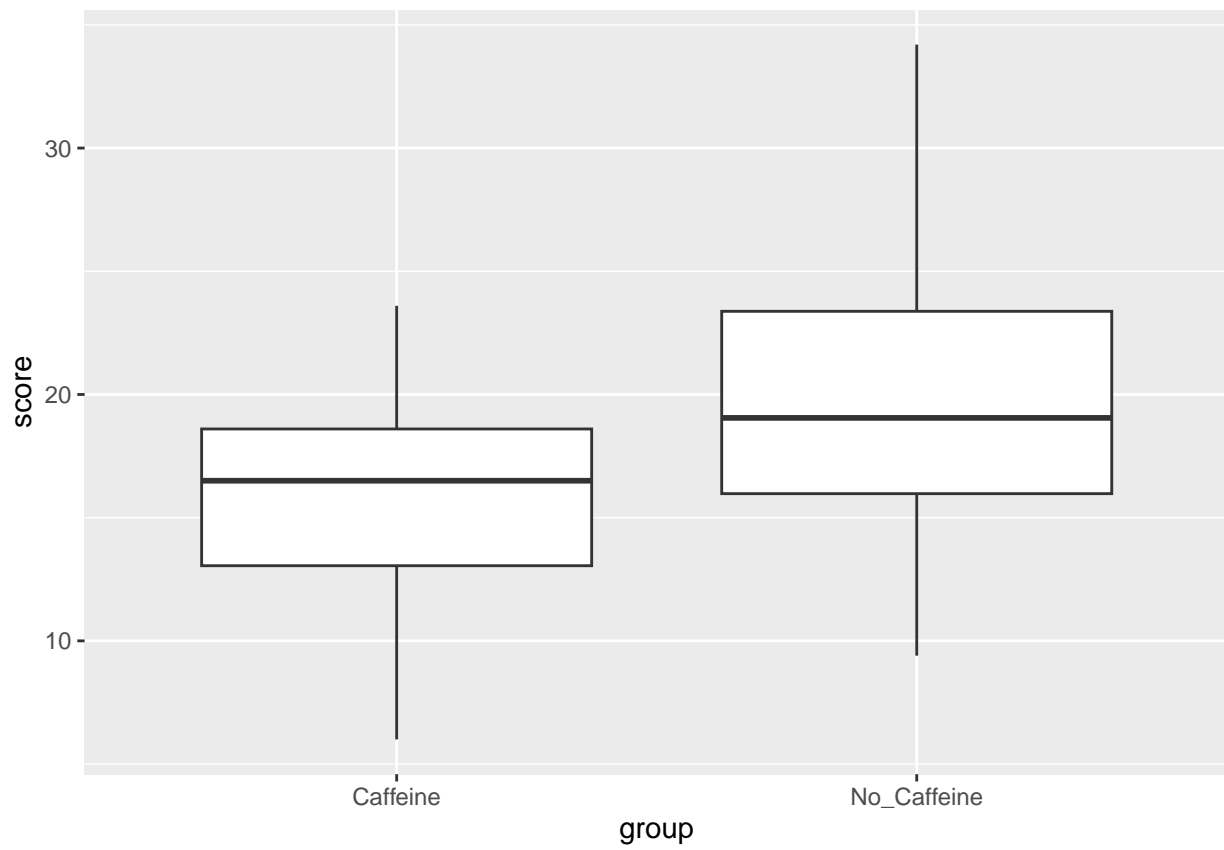
Experimental setup

A researcher wants to test whether caffeine consumption can help you perform better on exams. Two groups of $n=50$ were given a general knowledge exam. The morning of the exam, one group consumed caffeine and the other consumed a placebo.

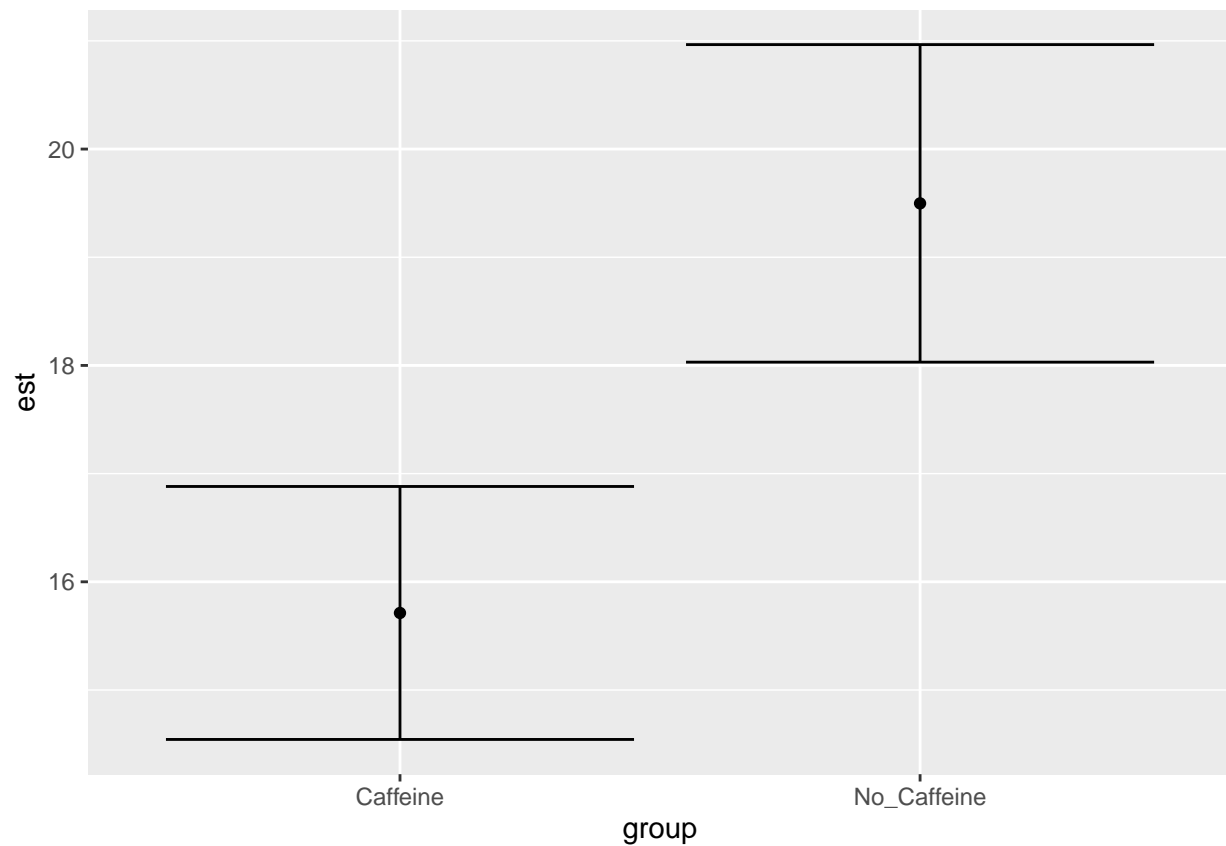
Data summary 1: histograms



Data summary 2: Boxplots



Inferential summary: Confidence interval plot



Looks like the caffeine may actually be harmful to performance!

Example of X vs Y

Experimental setup

A researcher wants to test whether longer essays written for a standardized test lead to better scores. The researcher obtains records of past exams. Each exam is scored from 2 to 12 points, and length is measured as the number of paragraphs.

Data summary 1: Descriptives of each variable