

A treatment is given to $N = 25$ people, and the sample mean score for the treatment group was $\bar{X} = 48$, with $SS = 864$. Compute a 95% confidence interval for μ , the population mean score of the treatment group.

Two groups of $N = 18$ are enrolled in an experimental trial. The first group (who receives an experimental drug) had a mean score of $\bar{X}_1 = 86.4$ with $SS_1 = 1550$. The second group (a control group who received a placebo) had a mean score of $\bar{X}_2 = 78.8$ with $SS_2 = 1204$. Compute a 95% confidence interval for $\mu_1 - \mu_2$, the population mean difference between the experimental and control groups.