

APPLIED STATISTICS INSTRUCTION SHEET

ONE-SAMPLE T-TESTS IN SPSS

Instructions

The one-sample t-test is used to compare the mean of a distribution to a hypothesized value for the population.

Instructions

- Toggle the numeric variable into the Test Variable(s) box on the upper right-hand side. You can perform multiple t-tests at the same time by toggling in multiple numeric variables.
- Type the hypothesized value for the population in Test Value.
- Click the box for “Estimated effect sizes” if it is not already turned on.
- Click the OK button to run.
- By default, the procedures tests for a 95% confidence interval. The size of the confidence interval can be changed using the Options button, which results in a change in the Lower and Upper Bounds of the confidence interval in the output.

Written Interpretation

Written comments should highlight the mean difference, statistical significance, and effect size. The interpretation of the effect size is passed on the absolute value of Cohen’s d or the Hedges’ correction with the following thresholds:

Weak	.02
Medium	.05
Strong	.08

Statistics can be included in the text parenthetically when accompanied by a statement that conveys the key result in plain English ($t=3.85$, $d=.47$, $p<.01$). If there is no significant effect, this fact should be stated in the text.