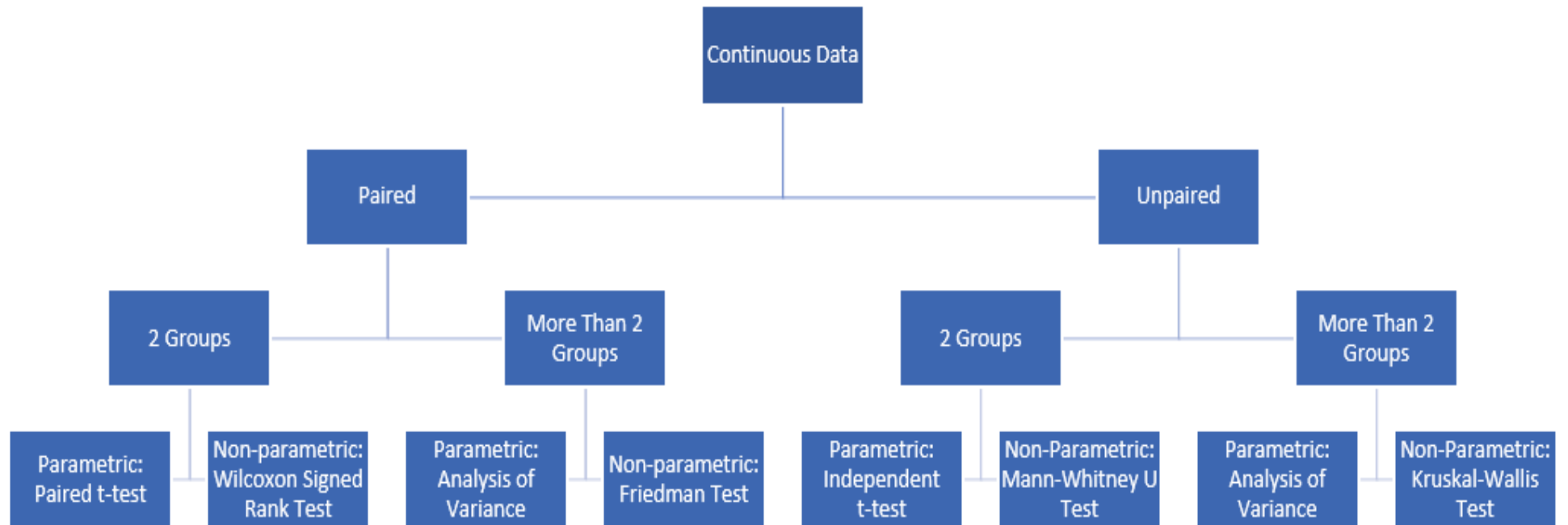


Hypothesis Testing with Python: Step by step hands-on tutorial with practical examples

<https://towardsdatascience.com/hypothesis-testing-with-python-step-by-step-hands-on-tutorial-with-practical-examples-e805975ea96e>



Q1. Independent Samples t Test

The Independent Samples t Test compares the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. The Independent Samples t Test is a parametric test.

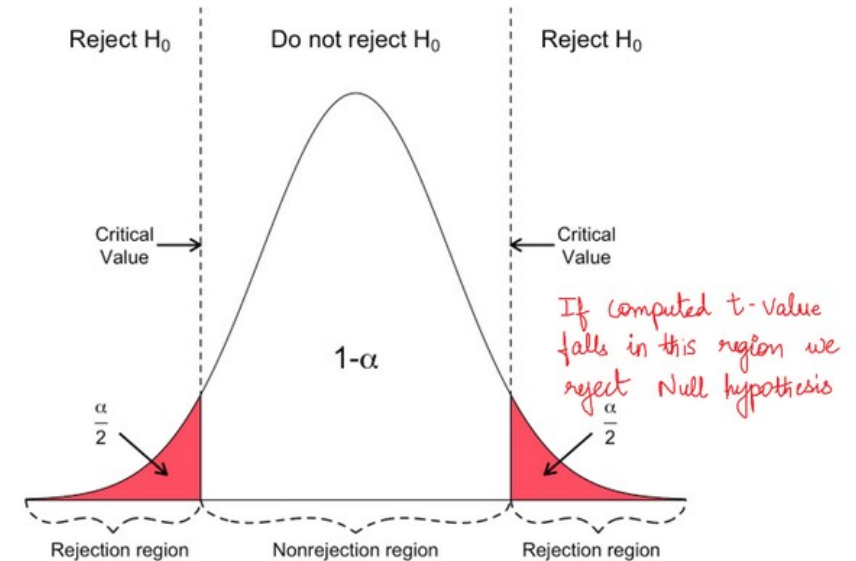
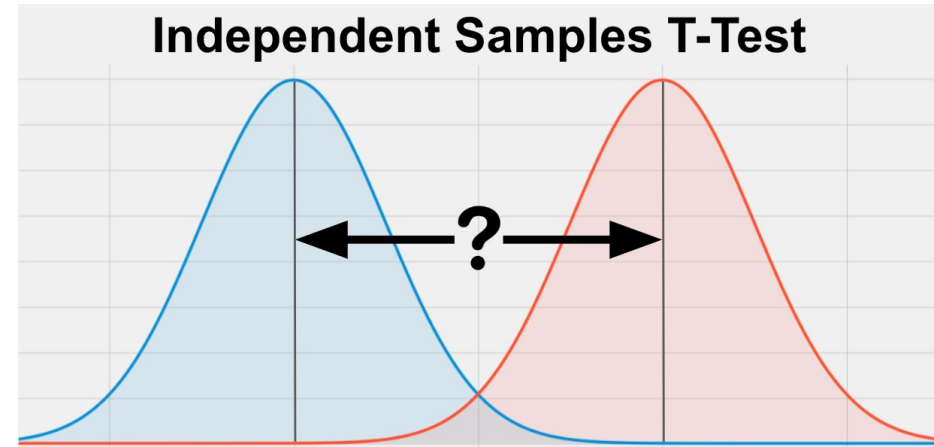
This test is also known as:

Independent t Test, Independent Measures t Test, Independent Two-sample t Test, Student t Test, Two-Sample t Test, Uncorrelated Scores t Test, Unpaired t Test, Unrelated t Test

The variables used in this test are known as:

Dependent variable, or test variable; Independent variable, or grouping variable

<https://libguides.library.kent.edu/spss/independenttttest>



Q2. Anova

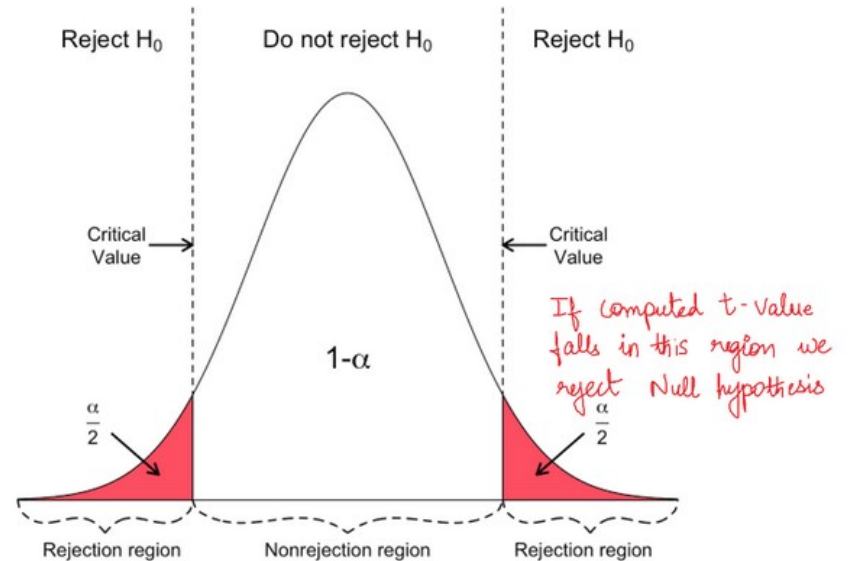
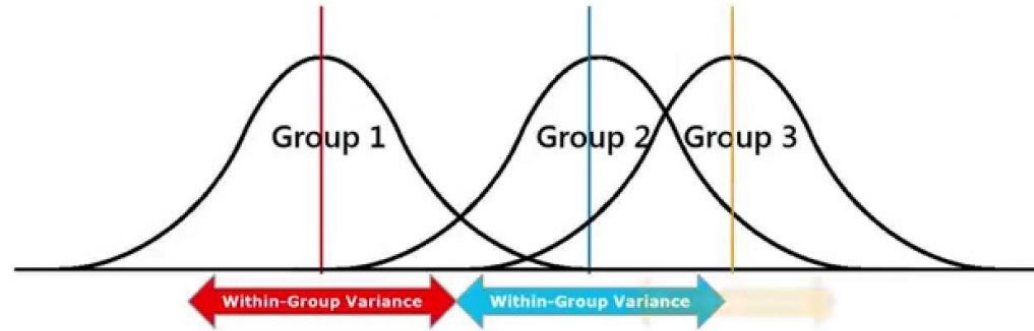
One-Way ANOVA ("analysis of variance") compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. One-Way ANOVA is a parametric test.

This test is also known as:

One-Factor ANOVA, One-Way Analysis of Variance, Between Subjects ANOVA

The variables used in this test are known as:

Dependent variable; Independent variable (also known as the grouping variable, or factor). This variable divides cases into two or more mutually exclusive levels, or groups



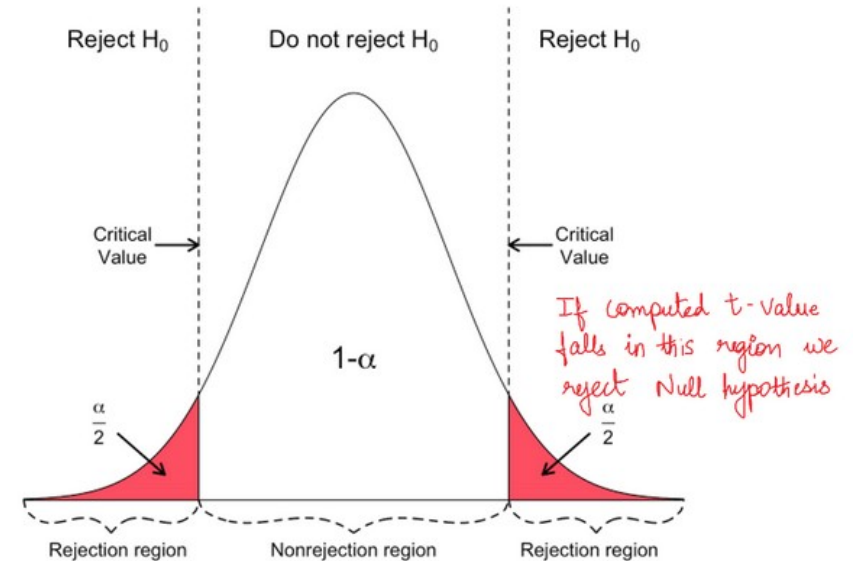
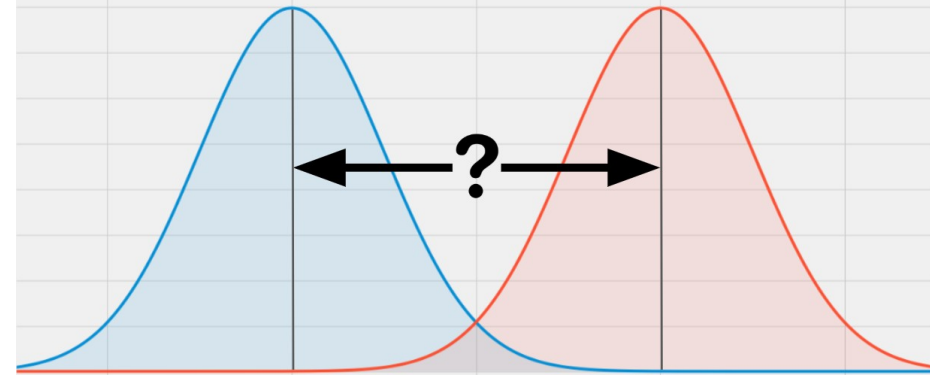
Q3. Mann Whitney U

When one or more of the assumptions for the Independent Samples t Test are not met, you may want to run the nonparametric Mann-Whitney U Test instead.

nonparametric

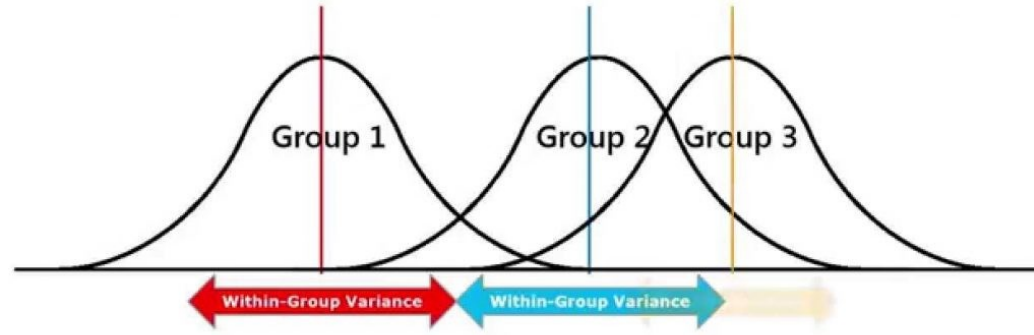
<https://libguides.library.kent.edu/spss/independenttttest>

Independent Samples T-Test

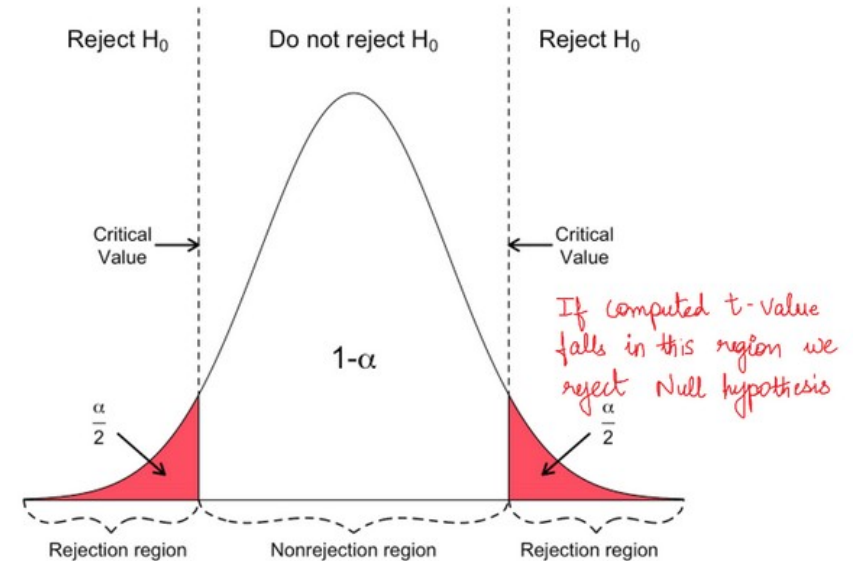


Q4. Kruskal-Wallis

When the normality, homogeneity of variances, or outliers assumptions for One-Way ANOVA are not met, you may want to run the nonparametric Kruskal-Wallis test instead.



nonparametric



Data, please welcome!

<https://archive.ics.uci.edu/ml/index.php>