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1. How to enter data to do a Kruskal-Wallis test.

For general advice on data entry see the "How to enter data into SPSS" help sheet.

Kruskal-Wallis tests are used on unrelated data: Data for the dependent variable go in one column and data for the independent variable goes in another. In this example, the dependent variable is *Nitrogen* and the independent variable is *Site*. *Nitrogen* is measured as % nitrogen of dry weight and is scale level of measurement. *Site* refers to the area within the reed bed that the samples of reeds were taken from measured at the nominal level: either 1 (value label = Site 1), 2 (value label = Site 2) or 3 (value label = Site 3).

Variable View

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2. How to do a Kruskal-Wallis test

To get SPSS to conduct a Kruskal-Wallis test :

Open your data file.

Select: Analyze - Nonparametric Tests - Independent Samples...

This will bring up the **Nonparametric Tests Two or More Independent Samples Tests** window which has three tabs:

1. Objective. Select Customize analysis.

2. Fields. Either use the default Use predefined roles or select Use custom field assignments and send your dependent variable (in this case *Nitrogen*) to the Test Field box and your independent variable (in this case *Site*) to the Groups box.

3. Settings. Select Customize tests, then Kruskal-Wallis 1-way ANOVA (k samples) in the Compare distributions across Groups. Select None from Multiple Comparisons drop down menu or leave it as the default, All pairwise.



Nonparametric Tests: Two or More Independent Samples	2
Dijective Fields Settings	
Identifies differences between two or more groups using nonparametric tests. Nonparametric tests do not assume your data follow the normal distribution.	
r What is your objective?	
Each objective corresponds to a distinct default configuration on the Settings Tab that you can further customize, if desired.	
O Automatically compare distributions across groups	
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r Description	
Customize analysis allows you tine-grained control over the tests performed and their options. Other tests available on the Settings tab are the Kotmoporov-Simimov, Moses auterne reaction, and Waid-Woldowitz for 2 aamples, and the Jonchkere-Terpstra for k samptes. An optional contidence interval (Hodges-Limanne stramals) is also available for 2 aamples.	
Run Baste Reset Cancel O Help	



Press **Run** on any and then double click on the **Hypothesis Test Summary** table in the **Output** window to bring up the **Model Viewer** window. This will produce the following in the **Output** window.

