# QuaDS pipeline

**Data input:** XSLX or CSV

Dataset with quantitative, qualitative variables and the **factor of interest to describe**
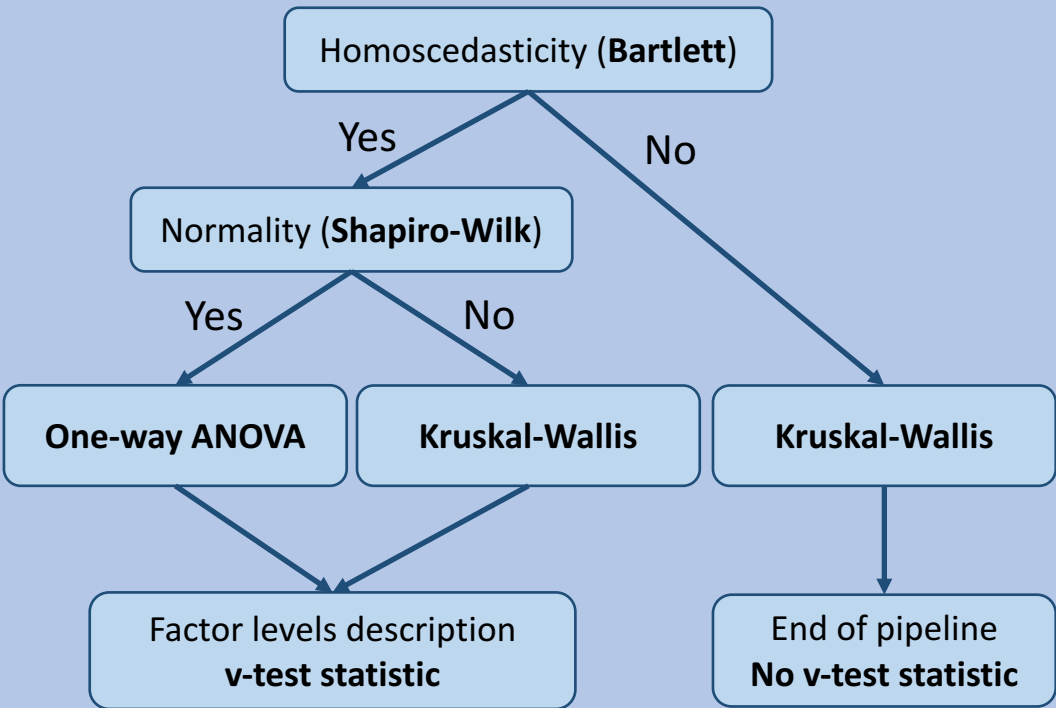
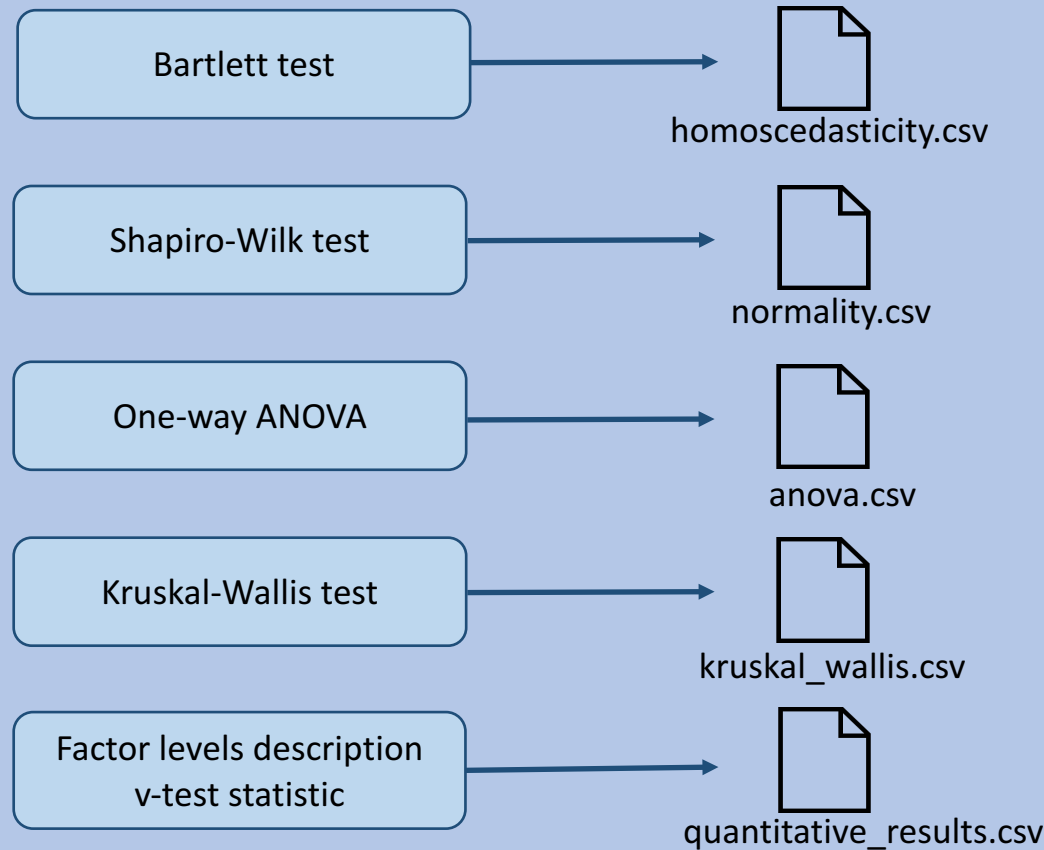**+**

**Configuration:** YML

config_file.yml
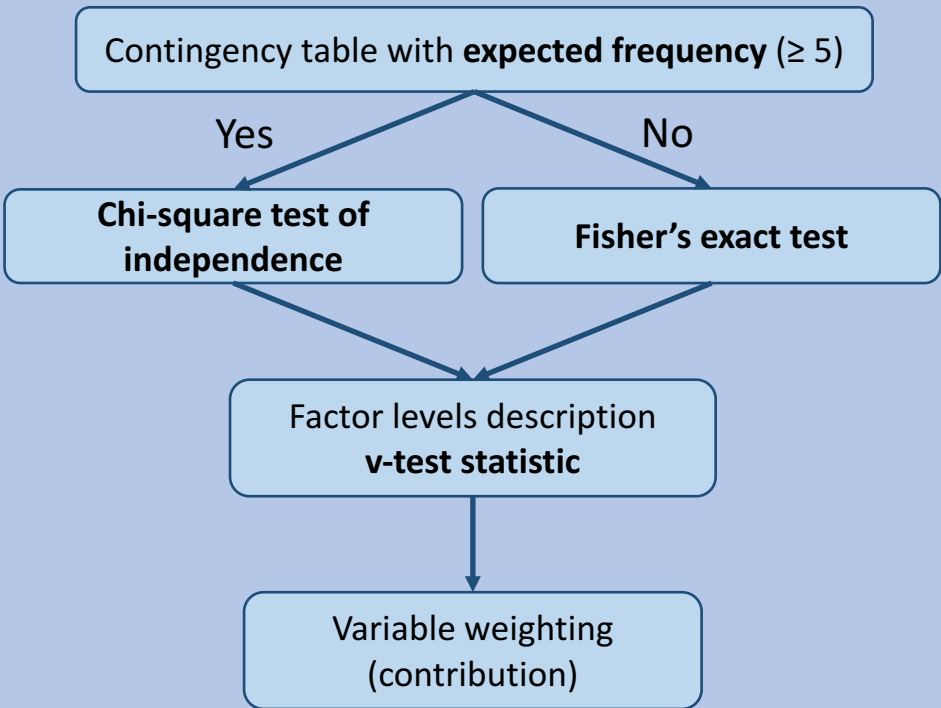
## Quantitative variables

### Analysis for each variable

Homoscedasticity (**Bartlett**)

— Yes → Normality (**Shapiro-Wilk**)

— No → Kruskal-Wallis

From Normality:
- Yes → **One-way ANOVA**
- No → **Kruskal-Wallis**

**One-way ANOVA** / **Kruskal-Wallis** → Factor levels description **v-test statistic**

**Kruskal-Wallis** (No branch) → End of pipeline **No v-test statistic**

### Results for all variables

Bartlett test → homoscedasticity.csv

Shapiro-Wilk test → normality.csv

One-way ANOVA → anova.csv

Kruskal-Wallis test → kruskal_wallis.csv

Factor levels description v-test statistic → quantitative_results.csv

## Qualitative variables

### Analysis for each variable

Contingency table with **expected frequency** (≥ 5)

- Yes → **Chi-square test of independence**
- No → **Fisher's exact test**

→ Factor levels description **v-test statistic**

→ Variable weighting (contribution)

### Results for all variables

Chi-square test of independence → Chi2.csv

Fisher's exact test → fisher_exact.csv

Factor levels description v-test statistic → qualitative_results.csv / Interactive visualisation

Variable weighting → weight.csv