

What measurement level?

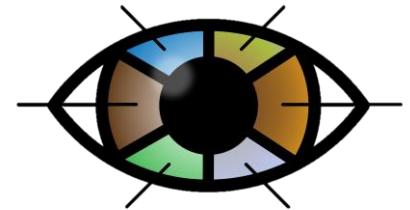
Variable
data

Categorical ABC
*Labels, making groups,
distinct categories*

Continuous 123
*Measured, scale,
ranges, values*

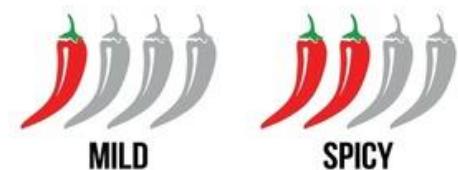
Nominal

Categories are equal (= and ≠)



Ordinal

There is an order to the categories (> and <)



Ratio

*There is an absolute 0 point (* and /)*



Interval

Equal distance between the values (+ and -)



Which chart to use?

Variable
data

Categorical ABC
*Labels, making groups,
distinct categories*

Continuous 123
*Measured, scale,
ranges, values*

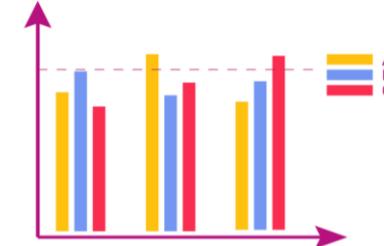
1 variable

Bar chart or pie chart



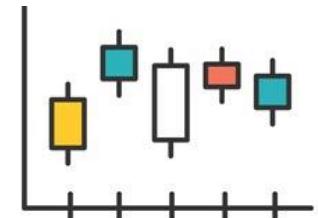
2 variables

Clustered or stacked bar chart



1 of each

*Various options: Bar chart, error bar plot,
box chart*



1 variable

Histogram



2 variables

Scatterplot or line graph (over time)



What test to use?

*Comparing means
*Gemiddelden vergelijken

>2 groups

ANOVA

2 groups

T-test

One sample
1 group vs test value

Paired sample
One group before vs after

Independent sample
2 separate groups

Mann-Whitney U Test
Levene's test significant

Checking relationships
Verbanden aantonen

Nominal / Ordinal
Categorical

Chi²

Expected counts >5

Ratio / Interval
Continuous

Correlation
Linear data only

*When comparing means, you always have to have one variable as your grouping or factor variable (to define groups), which is thus measured at nominal or ordinal level. The other (test-) variable is measured at either interval or ratio level.

Unequal variance and/or post-hoc?

