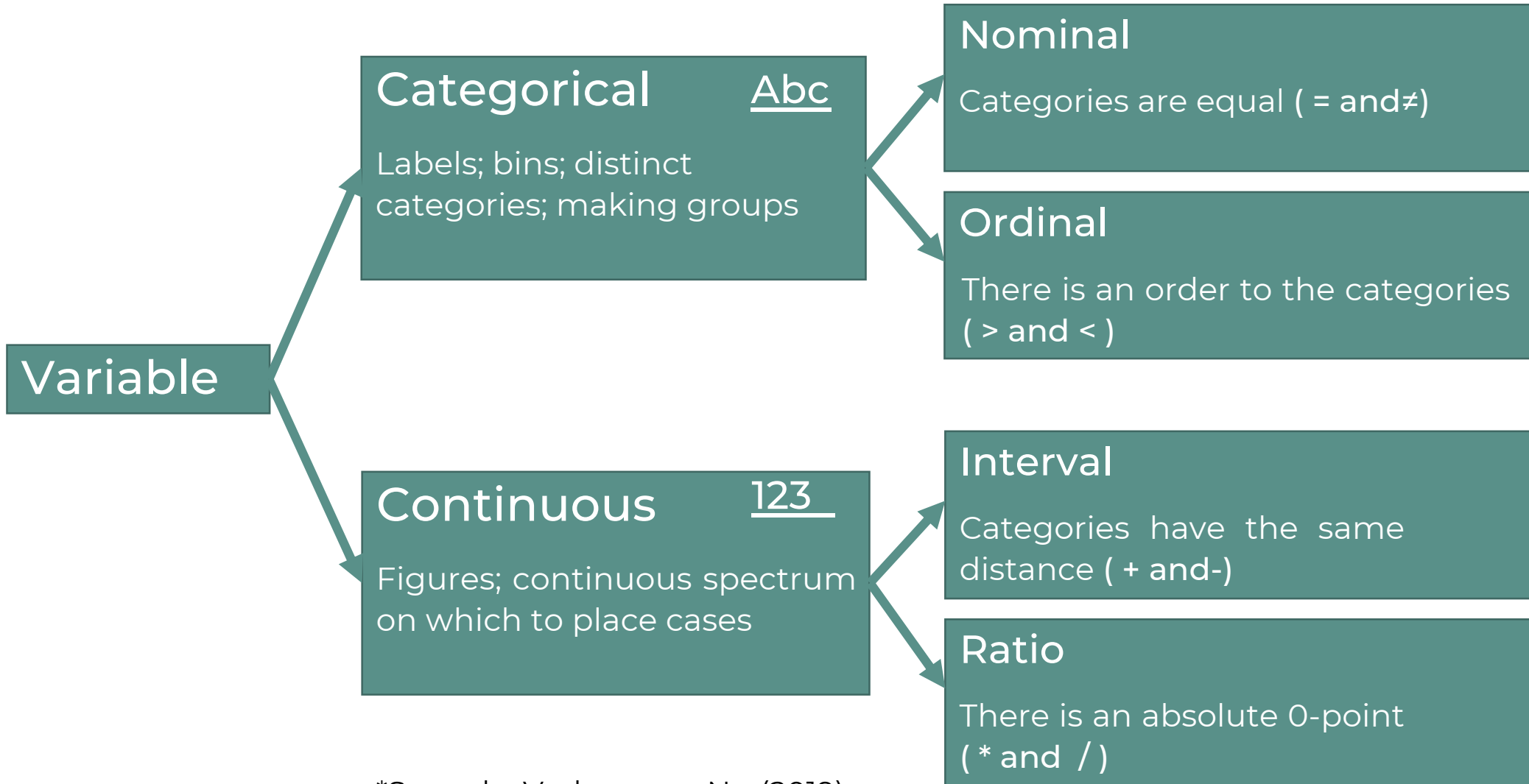


What measurement level?



*See also Verhoeven N. (2019), *Doing research*, pp. 244 –250.

Which chart to use?

Variable

Categorical Abc

Labels; bins; distinct categories; making groups

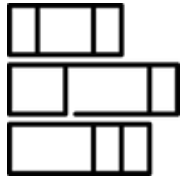
1 variable:

Bar chart or Circle diagram



2 variables:

Clustered or stacked bar chart



1 of each:

Various options: bar charts, box- or error plots, line charts (for time)

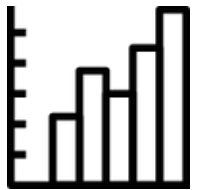


Continuous 123

Figures; continuous spectrum on which to place cases

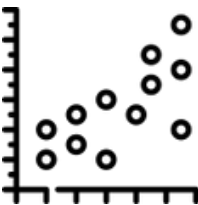
1 variable:

Histogram (for distribution) or Box plot (for descriptive stats)



2 variables:

Scatterplot (checking a relation)



*See also Verhoeven N. (2019), *Doing Research*.

What test to use?

Comparing Means*

*Gemiddelden vergelijken**

> 2 groups

2 groups -paired

2 groups -independent

1 group vs. test value

ANOVA

Paired t-test

Independent t-test

One-sample t-test

Checking relationships

Verbanden aantonen

Interval/Ratio level

Ordinal/ Nominal level

Correlation

Chi-squared

*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.

(un-) equal variances & Post-hoc tests

Equality (homogeneity) of variances, or the **Levene's test**: **equal** or **unequal**
 $P < 0.05$ =unequal; $P > 0.05$ = equal

Comparing means (2 Groups)

Gemiddelden vergelijken

equal

T-Test

unequal

Mann-Whitney U Test

Is there a direction to your H1 expectation?

1-sided testing, divide the resulting P-value by 2

Comparing means (2 > groups)

Gemiddelden vergelijken

equal

ANOVA (F-ratio)

unequal

ANOVA (Welch)

Post-hoc test

Bonferroni or Tukey

Post-hoc test

Games-Howell