

Data analysis methods

FactoMineR

1. Are there groups of variables?



yes → MFA

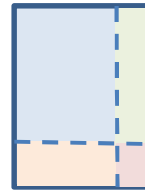
2. What kind of information?

Contingency table → CA or MFA (if several tables)

Dataset: individuals – variables → PCA, CA, FAMD or MFA

3. Active elements?

Which elements should be used to calculate distances between individuals or between rows?



ind.sup, quanti.sup, quali.sup,
row.sup, col.sup, group.sup

4. Are variables quantitative and/or qualitative?

Quantitative → PCA

Qualitative → if 2 variables, build a contingency table → CA
→ else MCA

Both → FAMD

MFA if groups

5. Should we standardize the variables?

yes → standardize PCA scale.unit = TRUE

6. Is there any missing data? yes → use the package missMDA to impute the dataset

Run principal component method

PCA, CA, MCA, FAMD
or MFA

See results and construct plots

summary, plot

Describe the dimensions in terms of the initial variables

dimdesc

(optional) Do clustering of the individuals (and describe the clusters)

HCPC