This report was generated by the EnQuireR package

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EnQuireR: Multivariate Exploratory Analysis of Questionnaires

Multivariate exploration of the questionnaire

How is my dataset "structured"? How does my dataset look like?

How can the main axes of variability be interpreted?

Typology of the individuals

How many groups are there in my dataset? How can the groups be displayed? How different are the groups? How can the groups be described?

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Percentages of variance explained by the first five axes

Axis	Eigenvalue	Percentage of variance
1	0.2568	6.58%
2	0.16333	4.19%
3	0.14138	3.63%
4	0.12906	3.31%
5	0.12164	3.12%

Table: Eigenvalues associated with the first five axes

How does my dataset look like?

Representation of the individuals

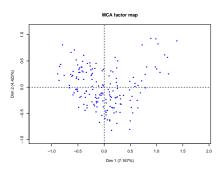


Figure: Raw representation of the individuals on axes 1 and 2

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Representation of the categories

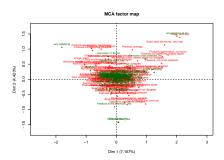


Figure: Raw representation of the categories on axes 1 and 2

How does my dataset look like?

Simplified representation of the categories

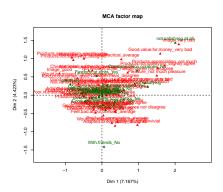


Figure: Simplified representation of the categories on axes 1 and 2

Description of the first axis: positive side (1/3)

The following categories are meaningful for the first axis (positive side):

- Image_very bad
- Kind.of.consumer_very bad
- Products.not.satisfying_agree
- Would.be.missed.if.gone_not at all
- Good.value.for.money_very bad
- Pleasure_no pleasure
- Products.appreciation_not much
- Products.appreciation_not at all
- Not.balanced.meals_well balanced
- Image_bad

Description of the first axis: positive side (2/3)

The following categories are meaningful for the first axis (positive side):

- Pleasure_not much pleasure
- Not.varied.enough_agree
- Convivial_not convivial
- Poor.nutritionnal.quality_agree
- Feel.bad.about.oneself_not much
- Fast.food.pollute_agree
- Products.not.satisfying_slightly agree
- Cheaper.meal_disagree
- Not.enough.to.eat_neither agree nor disagree
- Would.be.missed.if.gone_not much

Description of the first axis: positive side (3 / 3)

The following categories are meaningful for the first axis (positive side):

- Good.value.for.money_bad
- Not.enough.to.eat_slightly agree
- Kind.of.consumer_bad
- Pleasant.side_nothing pleasant
- Pleasant.side_average
- Poor.nutritionnal.quality_slightly agree
- Pleasant.side_few pleasant things

Description of the first axis: negative side (1/3)

- Products.not.satisfying_slightly disagree
- Products.not.satisfying_disagree
- Products.appreciation_quite a lot
- Products.appreciation_enormously
- Pleasure_quite a lot pleasure
- Image_good
- Pleasure_great pleasure
- Image_very good
- Kind.of.consumer_good
- Convivial_quite convivial

Description of the first axis: negative side (2/3)

- Products.not.satisfying_neither agree nor disagree
- Would.be.missed.if.gone_enormously
- Not.balanced.meals_average
- Good.value.for.money_very good
- Would.be.missed.if.gone_quite a lot
- Not.varied.enough_disagree
- Not.balanced.meals_quite well balanced
- Adapted.to.everybody_slightly agree
- Not.varied.enough_slightly disagree
- Good.value.for.money_good

Description of the first axis: negative side (3/3)

- Pleasure_average
- Products.appreciation_average
- Not.balanced.meals_badly balanced
- Convivial_very convivial
- Kind.of.consumer_very good
- Pleasant.side_a lot of pleasant things
- Image_normal
- Expensive_a little expensive
- Not.enough.to.eat_disagree
- Feel.bad.about.oneself_a little

Description of the second axis: positive side (1/2)

- Products.not.satisfying_agree
- Image_very good
- Not.balanced.meals_well balanced
- Kind.of.consumer_very good
- Good.value.for.money_very good
- Would.be.missed.if.gone_enormously
- Practical_average
- Products.appreciation_not at all
- Pleasant.side_a lot of pleasant things
- Pleasure_great pleasure

Description of the second axis: positive side (2 / 2)

- Not.enough.to.eat_agree
- Cheaper.meal_neither agree nor disagree
- Products.appreciation_enormously
- Pleasure_no pleasure
- Adapted.to.everybody_slightly agree
- Not.varied.enough_agree
- Image_very bad
- never
- Adapted.to.everybody_agree

Description of the second axis: negative side (1/4)

- Products.not.satisfying_neither agree nor disagree
- Image_bad
- Products.appreciation_average
- Image_normal
- Products.not.satisfying_slightly disagree
- Pleasure_average
- Good.value.for.money_average
- Good.value.for.money_bad
- Products.appreciation_quite a lot
- Kind.of.consumer_bad

Description of the second axis: negative side (2 / 4)

- Would.be.missed.if.gone_not much
- Not.balanced.meals_not balanced
- Not.balanced.meals_badly balanced
- Kind.of.consumer_normal
- Adapted.to.everybody_disagree
- Pleasure_quite a lot pleasure
- Pleasant.side_nothing pleasant
- Products.not.satisfying_slightly agree
- Cheaper.meal_slightly disagree
- Not.enough.to.eat_slightly agree

Description of the second axis: negative side (3 / 4)

- Not.balanced.meals_quite well balanced
- Would.be.missed.if.gone_average
- Good.value.for.money_good
- Feel.bad.about.oneself_average
- Image_good
- Not.enough.to.eat_slightly disagree
- Practical_not much practical
- sometimes
- Not.balanced.meals_average
- often

Description of the second axis: negative side (4 / 4)

- Expensive_very expensive
- Not.varied.enough_slightly disagree

EnQuireR: Multivariate Exploratory Analysis of Questionnaires

Multivariate exploration of the questionnaire

How is my dataset "structured"?

How does my dataset look like?

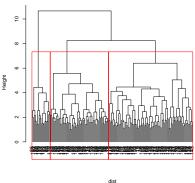
How can the main axes of variability be interpreted?

Typology of the individuals

How many groups are there in my dataset? How can the groups be displayed? How different are the groups? How can the groups be described? How many groups are there in my dataset?

Number of clusters chosen by the analyst

Choice of the number of clusters by cutting the dendrogram



dist hclust (*, "ward")

Figure: A number of clusters is chosen

How can the groups be displayed?

Representation of the individuals according to the group they belong to

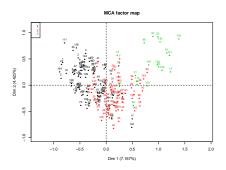
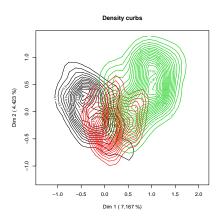


Figure: Correspondence map displaying clusters

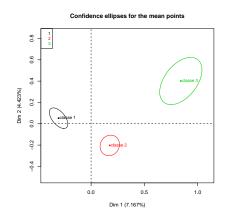
How can the groups be displayed?

Simplified representation of the individuals according to the group they belong to



How can the groups be displayed?

Representation of the barycenter of each group enhanced with confidence ellipses



Number of individuals per cluster

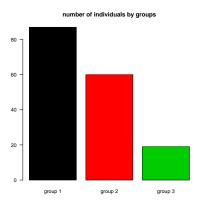
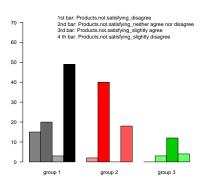


Figure: Number of individuals by cluster

Distribution of the individuals per cluster for the variable Products.not.satisfying

Products.not.satisfying by cluster



Distribution of the individuals per cluster for the variable Global.appreciation

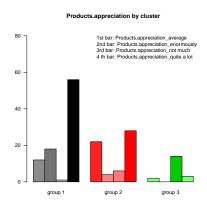
group 1

Global.appreciation by cluster 1st bar: normal satisfying 2nd bar: not satisfying 3rd bar: not satisfying 3rd bar: not satisfying at all 4 th bar: satisfying at 3 bar: very satisfying 5 th bar: very satisfying

group 2

group 3

Distribution of the individuals per cluster for the variable Products.appreciation



Distribution of the individuals per cluster for the variable Image

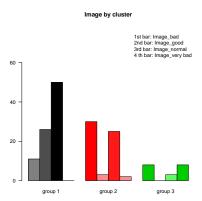


Figure: Variable Image

Distribution of the individuals per cluster for the variable Kind.of.consumer

Kind.of.consumer by cluster

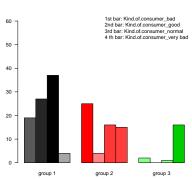
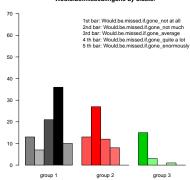


Figure: Variable Kind.of.consumer

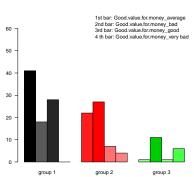
Distribution of the individuals per cluster for the variable Would.be.missed.if.gone

Would.be.missed.if.gone by cluster



Distribution of the individuals per cluster for the variable Good.value.for.money

Good.value.for.money by cluster



Distribution of the individuals per cluster for the variable Pleasure

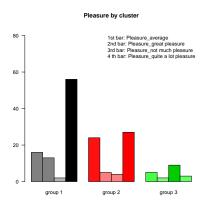
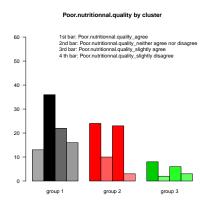


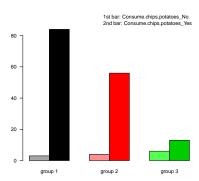
Figure: Variable Pleasure

Distribution of the individuals per cluster for the variable Poor.nutritionnal.quality



Distribution of the individuals per cluster for the variable Consume.chips.potatoes

Consume.chips.potatoes by cluster



How can the groups be described?

Description of cluster 1 (1/5)

The following modalities are meaningful for cluster 1 :

- Global.appreciation= satisfying
 34.34 % of the individuals possess this category in the global population versus 55.17% of the individuals within cluster 1;
 - 84.21 % individuals possessing this category belong to cluster 1
- Image=Image_good
 - 17.47 % of the individuals possess this category in the global population versus 29.89% of the individuals within cluster 1;
 - $89.66\ \%$ individuals possessing this category belong to cluster 1
- Kind.of.consumer=Kind.of.consumer_good
 - 18.67~% of the individuals possess this category in the global population versus 31.03% of the individuals within cluster 1;
 - 87.1 % individuals possessing this category belong to cluster 1
- Would.be.missed.if.gone=Would.be.missed.if.gone_quite a lot 27.11 % of the individuals possess this category in the global population versus 41.38% of the individuals within cluster 1;
 - $80\ \%$ individuals possessing this category belong to cluster 1
- •

Poor.nutritionnal.quality=Poor.nutritionnal.quality_neither agree

- agree 28.92 % of the individuals possess this category in the global population versus 41.38% of the individuals within cluster 1;
- 75 % individuals possessing this category belong to cluster 1

Description of cluster 1 (2/5)

The following modalities are meaningful for cluster 1:

- Prod
 - ucts.not.satisfying=Products.not.satisfying_slightly disagree

42.77 % of the individuals possess this category in the global population versus 56.32% of the individuals within cluster 1;

- 69.01 % individuals possessing this category belong to cluster 1
- Good.value.for.money=Good.value.for.money_good
- 21.69 % of the individuals possess this category in the global population versus 32.18% of the individuals within cluster 1;
 - 77.78 % individuals possessing this category belong to cluster 1
- Pleasure=Pleasure_quite a lot pleasure
 51.81 % of the individuals possess this category in the global population versus 64.37% of the individuals within cluster 1;
 - $65.12\ \%$ individuals possessing this category belong to cluster 1
- Convivial=Convivial_quite convivial
 34.34 % of the individuals possess this category in the global population versus 45.98% of the individuals within cluster 1;
 - 70.18 % individuals possessing this category belong to cluster 1
- Adapted.to.everybody=Adapted.to.everybody_slightly agree
 24.1 % of the individuals possess this category in the global population versus 34.48% of the individuals within cluster 1;
 - 75 % individuals possessing this category belong to cluster 1

Description of cluster 1 (3 / 5)

The following modalities are meaningful for cluster 1:

- Products.appreciation=Products.appreciation_quite a lot 52.41 % of the individuals possess this category in the global population versus 64.37% of the individuals within cluster 1;
 64.37 % individuals possessing this category belong to cluster 1
- Couple=Couple_Yes
 25.3 % of the individuals possess this category in the global population versus 35.63% of the individuals within cluster 1;
 73.81 % individuals possessing this category belong to cluster 1
- Consume.fizzy.drinks=Consume.fizzy.drinks_Yes
 63.25 % of the individuals possess this category in the global population versus 74.71% of the individuals within cluster 1;
 61.9 % individuals possessing this category belong to cluster 1
- Would.be.missed.if.gone=Would.be.missed.if.gone_enormously 6.02 % of the individuals possess this category in the global population versus 11.49% of the individuals within cluster 1;
 100 % individuals possessing this category belong to cluster 1
- Products.not.satisfying=Products.not.satisfying_disagree 10.24 % of the individuals possess this category in the global population versus 17.24% of the individuals within cluster 1;

88.24~% individuals possessing this category belong to cluster 1

Description of cluster 1 (4 / 5)

The following modalities are meaningful for cluster 1:

- Products.appreciation=Products.appreciation_enormously
 13.25 % of the individuals possess this category in the global population versus 20.69% of the individuals within cluster 1;
 81.82 % individuals possessing this category belong to cluster 1
- Kind.of.consumer=Kind.of.consumer_normal
 32.53 % of the individuals possess this category in the global population versus 42.53% of the individuals within cluster 1;
 68.52 % individuals possessing this category belong to cluster 1
- Image=Image_normal
 46.99 % of the individuals possess this category in the global population versus 57.47% of the individuals within cluster 1;
 64.1 % individuals possessing this category belong to cluster 1
- Good.value.for.money=Good.value.for.money_average
 38.55 % of the individuals possess this category in the global population versus 47.13% of the individuals within cluster 1;
 64.06 % individuals possessing this category belong to cluster 1
- Cheaper.meal=Cheaper.meal_slightly agree
 20.48 % of the individuals possess this category in the global population versus 27.59% of the individuals within cluster 1;

70.59~% individuals possessing this category belong to cluster 1

Description of cluster 1 (5 / 5)

The following modalities are meaningful for cluster 1:

- With.family=With.family_Yes
 17.47 % of the individuals possess this category in the global population versus 24.14% of the individuals within cluster 1;
 72.41 % individuals possessing this category belong to cluster 1
- Consume.fruit.juice=Consume.fruit.juice_No 87.35 % of the individuals possess this category in the global population versus 93.1% of the individuals within cluster 1;
 - $55.86\ \%$ individuals possessing this category belong to cluster 1

Description of cluster 2 (1 / 4)

The following modalities are meaningful for cluster 2:

- Prod
 - ucts.not.satisfying=Products.not.satisfying_neither agree nor disagree
 - 37.95 % of the individuals possess this category in the global population versus 66.67% of the individuals within cluster 2;
 - 63.49~% individuals possessing this category belong to cluster 2
- Would.be.missed.if.gone=Would.be.missed.if.gone_not much
 22.29 % of the individuals possess this category in the global population versus 45% of the individuals within cluster 2;
 - 72.97~% individuals possessing this category belong to cluster 2
- Image=Image_bad
 - 29.52~% of the individuals possess this category in the global population versus 50% of the individuals within cluster 2;
 - $61.22\ \%$ individuals possessing this category belong to cluster 2
- Cheaper.meal=Cheaper.meal_slightly disagree
 36.75 % of the individuals possess this category in the global population versus 55% of the individuals within cluster 2;
 - 54.1 % individuals possessing this category belong to cluster 2
- Expensive=Expensive_very expensive
 - 6.02 % of the individuals possess this category in the global population versus 15% of the individuals within cluster 2;
 - 90 % individuals possessing this category belong to cluster 2

Description of cluster 2 (2 / 4)

The following modalities are meaningful for cluster 2:

- Products.appreciation=Products.appreciation_average
 21.69 % of the individuals possess this category in the global population versus 36.67% of the individuals within cluster 2;
 - 61.11~% individuals possessing this category belong to cluster 2
- Global.appreciation= normal satisfying
 46.39 % of the individuals possess this category in the global population versus 63.33% of the individuals within cluster 2;

 49.35 % individuals possessing this category belong to cluster 2
- Adapted.to.everybody=Adapted.to.everybody_disagree
 15.66 % of the individuals possess this category in the global population versus 28.33% of the individuals within cluster 2;
 65.38 % individuals possessing this category belong to cluster 2
- Kind.of.consumer=Kind.of.consumer_bad
 27.71 % of the individuals possess this category in the global population versus 41.67% of the individuals within cluster 2;
 54.35 % individuals possessing this category belong to cluster 2
- Pleasure=Pleasure_average
 27.11 % of the individuals possess this category in the global population versus 40% of the individuals within cluster 2;
 53.33 % individuals possessing this category belong to cluster 2

Description of cluster 2 (3 / 4)

The following modalities are meaningful for cluster 2:

- Poor.nutritionnal.quality=Poor.nutritionnal.quality_agree
 27.11 % of the individuals possess this category in the global population versus 40% of the individuals within cluster 2;
 - 53.33 % individuals possessing this category belong to cluster 2
- Not.enough.to.eat=Not.enough.to.eat_slightly agree
 7.23 % of the individuals possess this category in the global population versus 15% of the individuals within cluster 2;
 - 75 % individuals possessing this category belong to cluster 2
- Diet.after.fastfood=sometimes
 19.28 % of the individuals possess this category in the global population versus 30% of the individuals within cluster 2;
 - 56.25~% individuals possessing this category belong to cluster 2
- Practical=Practical_quite practical
 50.6 % of the individuals possess this category in the global population versus 63.33% of the individuals within cluster 2;
- 45.24 % individuals possessing this category belong to cluster 2
- Not.balanced.meals=Not.balanced.meals_not balanced
 36.14 % of the individuals possess this category in the global population versus 48.33% of the individuals within cluster 2;
 - 48.33~% individuals possessing this category belong to cluster 2

Description of cluster 2 (4 / 4)

The following modalities are meaningful for cluster 2 :

- Consume.fizzy.drinks=Consume.fizzy.drinks_No
 36.75 % of the individuals possess this category in the global population versus 48.33% of the individuals within cluster 2;
 47.54 % individuals possessing this category belong to cluster 2
- Good.value.for.money=Good.value.for.money_bad
 33.73 % of the individuals possess this category in the global population versus 45% of the individuals within cluster 2;
 48.21 % individuals possessing this category belong to cluster 2
- Fast.food.pollute=Fast.food.pollute_agree
 30.72 % of the individuals possess this category in the global population versus 41.67% of the individuals within cluster 2;
 49.02 % individuals possessing this category belong to cluster 2
- Not.varied.enough=Not.varied.enough_slightly agree
 22.29 % of the individuals possess this category in the global population versus 31.67% of the individuals within cluster 2;
 - 51.35 % individuals possessing this category belong to cluster 2

Description of cluster 3 (1 / 4)

The following modalities are meaningful for cluster 3:

- Products.appreciation=Products.appreciation_not much
 12.65 % of the individuals possess this category in the global population versus 73.68% of the individuals within cluster 3;
 - 66.67 % individuals possessing this category belong to cluster 3
- Prod-

 ${\tt ucts.not.satisfying=Products.not.satisfying_slightly} \ \ agree 9.04\,\% \ \ of the individuals possess this category in the global population versus 63.16\% \ \ of the individuals within cluster 3;$

 $80\ \%$ individuals possessing this category belong to cluster 3

- Kind.of.consumer=Kind.of.consumer_very bad
 21.08 % of the individuals possess this category in the global population versus 84.21% of the individuals within cluster 3;
 - 45.71 % individuals possessing this category belong to cluster 3
- Would.be.missed.if.gone=Would.be.missed.if.gone_not at all 24.7 % of the individuals possess this category in the global population versus 78.95% of the individuals within cluster 3;

 $36.59\ \%$ individuals possessing this category belong to cluster 3

Image=Image_very bad

6.02% of the individuals possess this category in the global population versus 42.11% of the individuals within cluster 3;

80 % individuals possessing this category belong to cluster 3

Description of cluster 3 (2 / 4)

The following modalities are meaningful for cluster 3:

- Global.appreciation= not satisfying at all
 3.61 % of the individuals possess this category in the global population versus 31.58% of the individuals within cluster 3;
 100 % individuals possessing this category belong to cluster 3
- Pleasure=Pleasure_not much pleasure
 9.04 % of the individuals possess this category in the global population versus 47.37% of the individuals within cluster 3;
 60 % individuals possessing this category belong to cluster 3
- Global.appreciation= not satisfying
 15.06 % of the individuals possess this category in the global population versus 52.63% of the individuals within cluster 3;

 40 % individuals possessing this category belong to cluster 3
- Good.value.for.money=Good.value.for.money_very bad 6.02 % of the individuals possess this category in the global population versus 31.58% of the individuals within cluster 3; 60 % individuals possessing this category belong to cluster 3
- Consume.chips.potatoes=Consume.chips.potatoes_No
 7.83 % of the individuals possess this category in the global population versus 31.58% of the individuals within cluster 3;
 - 46.15 % individuals possessing this category belong to cluster 3

Description of cluster 3 (3 / 4)

The following modalities are meaningful for cluster 3:

- Couple=Couple_No
 74.7 % of the individuals possess this category in the global population versus 100% of the individuals within cluster 3;
 - $15.32\ \%$ individuals possessing this category belong to cluster 3
- Feel.bad.about.oneself=Feel.bad.about.oneself_not much
 6.63 % of the individuals possess this category in the global population versus 26.32% of the individuals within cluster 3;
 - 45.45~% individuals possessing this category belong to cluster 3
- Practical=Practical_average
 10.84 % of the individuals possess this category in the global population versus 31.58% of the individuals within cluster 3;
 33.33 % individuals possessing this category belong to cluster 3
- Good.value.for.money=Good.value.for.money_bad
 33.73 % of the individuals possess this category in the global population versus 57.89% of the individuals within cluster 3;
 - 19.64 % individuals possessing this category belong to cluster 3
- With.family=With.family_No 82.53 % of the individuals possess this category in the global population versus 100% of the individuals within cluster 3;
 - 13.87~% individuals possessing this category belong to cluster 3

Description of cluster 3 (4 / 4)

The following modalities are meaningful for cluster 3 :

Budget=less than 5 Euros

3.61~% of the individuals possess this category in the global population versus 15.79% of the individuals within cluster 3;

 $50\ \%$ individuals possessing this category belong to cluster 3