This report was generated by the EnQuireR package

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July 28, 2010



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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How is my dataset "structured"?

Percentages of variance explained by the first five axes

Axis	Eigenvalue	Percentage of variance
1	0.10727	6.11%
2	0.09214	5.25%
3	0.08752	4.99%
4	0.06631	3.78%
5	0.06013	3.43%

Table: Eigenvalues associated with the first five axes

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Representation of the individuals

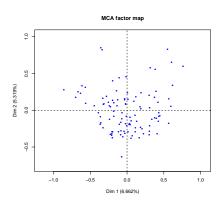


Figure: Raw representation of the individuals on axes 1 and 2

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Representation of the categories

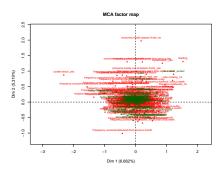


Figure: Raw representation of the categories on axes 1 and 2

How does my dataset look like?

Simplified representation of the categories

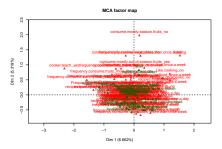


Figure: Simplified representation of the categories on axes 1 and 2

How does my dataset look like?

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Representation of the supplementary quantitative variable(s)

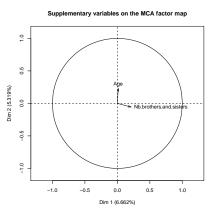


Figure: Representation of the supplementary quantitative variable(s) on axes 1 and 2

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

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

- Possess.cookbooks_no
- Like.cooking_no
- feeding
- frequency.consume.vegetables_once.a.week
- recipes.from.books_no
- consume.mostly.beef_yes
- minimum
- consume.mostly.steam.fish_no
- frequency.consume.starchyfood_once.a.day
- consume.mostly.poultry_no

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

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

- Frequency.fastfood_once.a.week
- little
- consume.mostly.raw.vegetables_no
- recipes.from.cooking.shows_no
- grandparents.teach_no
- Frequency.restaurants_less.than.once.a.month
- Watch.cooking.shows_no
- cooker.teach_no
- consume.mostly.pasta_yes
- consume.mostly.fried.fish_yes

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

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

- not.at.all
- consume.mostly.milk_yes
- frequency.consume.starchyfood_more.than.once.a.week
- recipes.from.newspapers_no
- slightly
- consume.mostly.cream_yes

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

- Possess.cookbooks_yes
- frequency.consume.vegetables_more.than.once.a.day
- Like.cooking_yes
- more.pleasure.than.feeding
- pleasure
- frequency.consume.starchyfood_once.a.week
- recipes.from.books_yes
- Frequency.fastfood_less.than.once.a.month
- a.lot
- consume.mostly.beef_no

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

- frequency.consume.fruits_more.than.once.a.day
- consume.mostly.steam.fish_yes
- consume.mostly.poultry_yes
- consume.mostly.raw.vegetables_yes
- recipes.from.cooking.shows_yes
- grandparents.teach_yes
- Watch.cooking.shows_yes
- cooker.teach_yes
- frequency.consume.meat_once.a.week
- consume.mostly.pasta_no

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

- consume.mostly.fried.fish_no
- consume.mostly.milk_no
- frequency.consume.fish_more.than.once.a.week
- recipes.from.newspapers_yes
- Frequency.restaurants_once.a.week
- quite.a.lot
- completely
- frequency.consume.dairy.products_once.a.week
- Frequency.fastfood_once.a.month
- frequency.consume.eggs_never

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

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

consume.mostly.cream_no

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

- consume.mostly.cheese_no
- consume.mostly.season.fruits_no
- consume.mostly.cooked.vegetables_no
- frequency.consume.vegetables_once.a.week
- frequency.consume.eggs_never
- feeding
- consume.mostly.out.of.season.fruits_yes
- frequency.consume.fish_more.than.once.a.week
- consume.mostly.pasta_no
- not.at.all

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

- Frequency.fastfood_once.a.week
- Like.cooking_no
- Frequency.supermarket_more.than.once.a.week
- Budget.Restaurants_less.than.10euros
- frequency.consume.fruits_never
- consume.mostly.milk_no
- more.than.40euros
- frequency.consume.meat_never
- frequency.consume.dairy.products_never
- consume.mostly.raw.vegetables_yes

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

- myself.teach_yes
- consume.mostly.poultry_no
- consume.mostly.rice_no
- frequency.consume.meat_more.than.once.a.day
- Budget.Fastfood_between.10.20euros
- consume.mostly.potatoes_no

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

- consume.mostly.cheese_yes
- consume.mostly.season.fruits_yes
- consume.mostly.cooked.vegetables_yes
- frequency.consume.vegetables_more.than.once.week
- frequency.consume.eggs_more.than.once.a.week
- frequency.consume.meat_more.than.once.a.week
- frequency.consume.fruits_more.than.once.a.week
- frequency.consume.vegetables_once.a.day
- consume.mostly.out.of.season.fruits_no
- frequency.consume.eggs_once.a.day

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

- frequency.consume.dairy.products_once.a.day
- consume.mostly.pasta_yes
- Frequency.fastfood_twice.a.month
- frequency.consume.fruits_once.a.day
- frequency.consume.meat_once.a.day
- Frequency.restaurants_once.a.month
- medium
- frequency.consume.fish_twice a month
- Like.cooking_yes
- most

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

- consume.mostly.milk_yes
- frequency.consume.fish_once.a.month
- Frequency.supermarket_twice.a.month
- frequency.consume.starchyfood_once.a.day
- consume.mostly.raw.vegetables_no
- myself.teach_no
- consume.mostly.poultry_yes
- both.pleasure.and.feeding
- consume.mostly.rice_yes
- Budget.Restaurants_more.than.20euros

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

- Budget.Restaurants_between.10.20euros
- Frequency.consume.delivered.food_once.a.month
- Budget.Fastfood_less.than.10euros
- consume.mostly.potatoes_yes
- frequency.consume.starchyfood_more.than.once.a.week

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

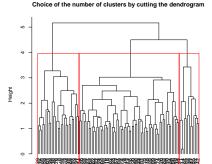


Figure: A number of clusters is chosen

hclust (*, "ward")

How can the groups be displayed?

Representation of the individuals according to the group they belong to

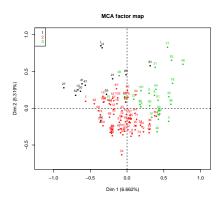
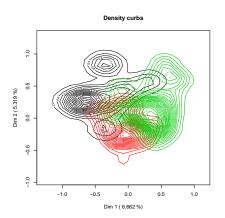


Figure: Correspondence map displaying clusters

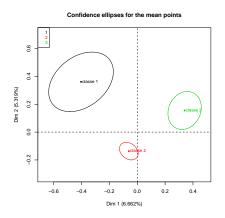
How can the groups be displayed?

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

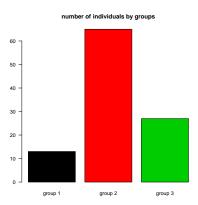


Figure: Number of individuals by cluster

Distribution of the individuals per cluster for the variable Purpose.cooking

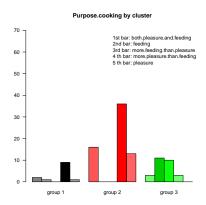
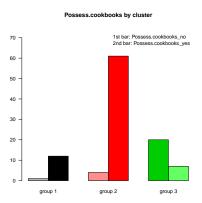


Figure: Variable Purpose.cooking

Distribution of the individuals per cluster for the variable Possess.cookbooks



Distribution of the individuals per cluster for the variable Like.cooking

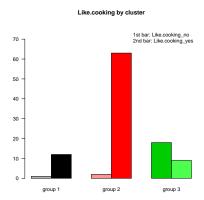
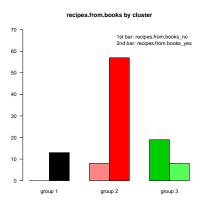


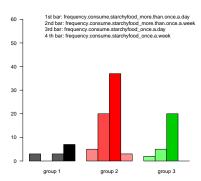
Figure: Variable Like.cooking

Distribution of the individuals per cluster for the variable recipes.from.books

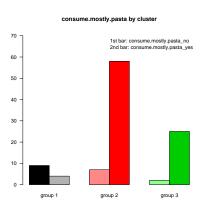


Distribution of the individuals per cluster for the variable frequency.consume.starchyfood

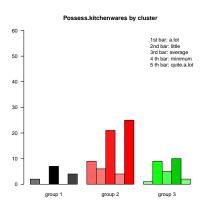
frequency.consume.starchyfood by cluster



Distribution of the individuals per cluster for the variable consume.mostly.pasta

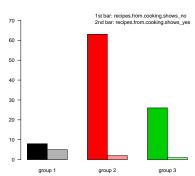


Distribution of the individuals per cluster for the variable Possess kitchenwares



Distribution of the individuals per cluster for the variable recipes.from.cooking.shows

recipes.from.cooking.shows by cluster



Distribution of the individuals per cluster for the variable consume.mostly.cooked.vegetables

consume.mostly.cooked.vegetables by cluster

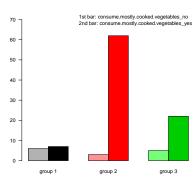
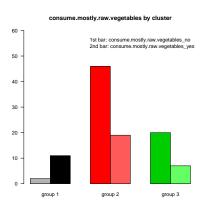


Figure: Variable consume mostly cooked vegetables

Distribution of the individuals per cluster for the variable consume.mostly.raw.vegetables



Description of cluster 1 (1 / 4)

The following modalities are meaningful for cluster 1:

- fre
 - quency.consume.starchyfood=frequency.consume.starchyfood_once.a.wee 9.52 % of the individuals possess this category in the global population versus 53.85% of the individuals within cluster 1;

70 % individuals possessing this category belong to cluster 1

consume.mostly.pasta=consume.mostly.pasta_no 17.14 % of the individuals possess this category in the global population versus 69.23% of the individuals within cluster 1;

50 % individuals possessing this category belong to cluster 1

- con
 - sume.mostly.raw.vegetables=consume.mostly.raw.vegetables_yes 35.24 % of the individuals possess this category in the global population versus 84.62% of the individuals within cluster 1;

29.73 % individuals possessing this category belong to cluster 1

recipes.from.cooking.shows=recipes.from.cooking.shows_yes
 7.62 % of the individuals possess this category in the global population versus 38.46% of the individuals within cluster 1;

62.5~% individuals possessing this category belong to cluster 1

• fre-

quency.consume.fruits=frequency.consume.fruits_more.than.once.a.day
28.57 % of the individuals possess this category in the global population versus 69.23% of the individuals within cluster 1;

30 % individuals possessing this category belong to cluster 1 $\,$



Description of cluster 1 (2 / 4)

The following modalities are meaningful for cluster 1:

consume.mostly.pork=consume.mostly.pork_yes
 43.81 % of the individuals possess this category in the global population versus 84.62% of the individuals within cluster 1;

 $23.91\ \%$ individuals possessing this category belong to cluster 1

fre-

quency.consume.fish=frequency.consume.fish_more.than.once.a.week 18.1 % of the individuals possess this category in the global population versus 53.85% of the individuals within cluster 1;

36.84~% individuals possessing this category belong to cluster 1

con-

sume.mostly.cooked.vegetables=consume.mostly.cooked.vegetables_no 13.33 % of the individuals possess this category in the global population versus 46.15% of the individuals within cluster 1;

42.86 % individuals possessing this category belong to cluster 1

consume.mostly.rice=consume.mostly.rice_no
 67.62 % of the individuals possess this category in the global population versus 100% of the individuals within cluster 1;

 $18.31\ \%$ individuals possessing this category belong to cluster 1

consume.mostly.milk=consume.mostly.milk_no
 59.05 % of the individuals possess this category in the global population versus 92.31% of the individuals within cluster 1;

19.35 % individuals possessing this category belong to cluster 1

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Description of cluster 1 (3 / 4)

The following modalities are meaningful for cluster 1:

- fre
 - quency.consume.vegetables=frequency.consume.vegetables_more.than.on
 41.9 % of the individuals possess this category in the global population versus 76.92% of the individuals within cluster 1;

22.73 % individuals possessing this category belong to cluster 1

- Fre
 - $quency. fastfood=Frequency. fastfood_less.than.once.a.month 51.43\% of the individuals possess this category in the global population versus 84.62\% of the individuals within cluster 1; and the individuals within cluster 1$

20.37 % individuals possessing this category belong to cluster 1

- cooker.teach=cooker.teach_yes
 - 1.9~% of the individuals possess this category in the global population versus 15.38% of the individuals within cluster 1;
 - $100\ \%$ individuals possessing this category belong to cluster 1
- recipes.from.books=recipes.from.books_yes
 - 74.29~% of the individuals possess this category in the global population versus 100% of the individuals within cluster 1;

16.67~% individuals possessing this category belong to cluster 1

30 % individuals possessing this category belong to cluster 1

- Budget.Market=more.than.40euros
 - 19.05~% of the individuals possess this category in the global population versus 46.15% of the individuals within cluster 1;

Description of cluster 1 (4 / 4)

The following modalities are meaningful for cluster 1:

con-

 $\begin{tabular}{ll} sume.mostly.out.of.season.fruits=consume.mostly.out.of.season.fruit 14.29\% of the individuals possess this category in the global population versus 38.46\% of the individuals within cluster 1; \end{tabular}$

33.33 % individuals possessing this category belong to cluster 1

Description of cluster 2 (1 / 2)

The following modalities are meaningful for cluster 2:

- Like.cooking=Like.cooking_yes
 80 % of the individuals possess this category in the global population versus 96.92% of the individuals within cluster 2;
 - 75 % individuals possessing this category belong to cluster 2
 - Possess.cookbooks=Possess.cookbooks_yes
 - 76.19 % of the individuals possess this category in the global population versus 93.85% of the individuals within cluster 2;
 - 76.25 % individuals possessing this category belong to cluster 2
- recipes.from.books=recipes.from.books_yes
 74.29 % of the individuals possess this category in the global population versus 87.69% of the individuals within cluster 2;
 - 73.08 % individuals possessing this category belong to cluster 2
- con-
- sume.mostly.cooked.vegetables=consume.mostly.cooked.vegetables_yes
 86.67 % of the individuals possess this category in the global population versus 95.38% of the individuals within cluster 2;
- 68.13 % individuals possessing this category belong to cluster 2
- Frequency.supermarket=Frequency.supermarket_twice.a.month 42.86 % of the individuals possess this category in the global population versus 53.85% of the individuals within cluster 2;
 - 77.78 % individuals possessing this category belong to cluster 2

Description of cluster 2 (2 / 2)

The following modalities are meaningful for cluster 2 :

- Purpose.cooking=pleasure
 - 13.33 % of the individuals possess this category in the global population versus 20% of the individuals within cluster 2;
 - $92.86\ \%$ individuals possessing this category belong to cluster 2
- Possess.kitchenwares=quite.a.lot
 - 29.52~% of the individuals possess this category in the global population versus 38.46% of the individuals within cluster 2;
 - $80.65\ \%$ individuals possessing this category belong to cluster 2
- Purpose.cooking=more.pleasure.than.feeding
 45.71 % of the individuals possess this category in the global population versus 55.38% of the individuals within cluster 2:
 - 75 % individuals possessing this category belong to cluster 2
- consume.mostly.milk=consume.mostly.milk_yes
 40.95 % of the individuals possess this category in the global population versus 49.23% of the individuals within cluster 2:
 - 74.42 % individuals possessing this category belong to cluster 2

Multivariate exploration of the questionnaire

Description of cluster 3 (1 / 3)

The following modalities are meaningful for cluster 3:

- Possess.cookbooks=Possess.cookbooks_no
 23.81 % of the individuals possess this category in the global population versus 74.07% of the individuals within cluster 3;
 - $80\ \%$ individuals possessing this category belong to cluster 3
- Like.cooking=Like.cooking_no
 20 % of the individuals possess this category in the global population versus 66.67% of the individuals within cluster 3;

85.71 % individuals possessing this category belong to cluster 3

recipes.from.books=recipes.from.books_no
 25.71 % of the individuals possess this category in the global population versus 70.37% of the individuals within cluster 3;

70.37~% individuals possessing this category belong to cluster 3

Purpose.cooking=more.feeding.than.pleasure
 9.52 % of the individuals possess this category in the global population versus 37.04% of the individuals within cluster 3;
 100 % individuals possessing this category belong to cluster 3.

100 % individuals possessing this category belong to cluster 3

Purpose.cooking=feeding
 11.43 % of the individuals possess this category in the global population versus 40.74% of the individuals within cluster 3;

91.67~% individuals possessing this category belong to cluster 3

Multivariate exploration of the questionnaire

Description of cluster 3 (2 / 3)

The following modalities are meaningful for cluster 3:

- Possess.kitchenwares=minimum
 - 13.33 % of the individuals possess this category in the global population versus 37.04% of the individuals within cluster 3;

71.43 % individuals possessing this category belong to cluster 3

- Possess.kitchenwares=little
 - 14.29 % of the individuals possess this category in the global population versus 33.33% of the individuals within cluster 3;
 - 60 % individuals possessing this category belong to cluster 3
- Sex=male
 - 25.71 % of the individuals possess this category in the global population versus 48.15% of the individuals within cluster 3;
 - 48.15~% individuals possessing this category belong to cluster 3
- Frequency.fastfood=Frequency.fastfood_once.a.week

10.48 % of the individuals possess this category in the global population versus 25.93% of the individuals within cluster 3;

63.64 % individuals possessing this category belong to cluster 3

- consume.mostly.steam.fish=consume.mostly.steam.fish_no
 41.9 % of the individuals possess this category in the global population versus 62.96% of the individuals within cluster 3;
 - 38.64 % individuals possessing this category belong to cluster 3

Description of cluster 3 (3/3)

The following modalities are meaningful for cluster 3 :

myself.teach=myself.teach_yes
 2.86 % of the individuals possess this category in the global population versus 11.11% of the individuals within cluster 3;

 $100\ \%$ individuals possessing this category belong to cluster 3