

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	0.24255	6.06%
2	0.21192	5.3%
3	0.20203	5.05%
4	0.19331	4.83%
5	0.16078	4.02%

**Table:** Eigenvalues associated with the first five axes

How does my dataset look like?

## Representation of the individuals

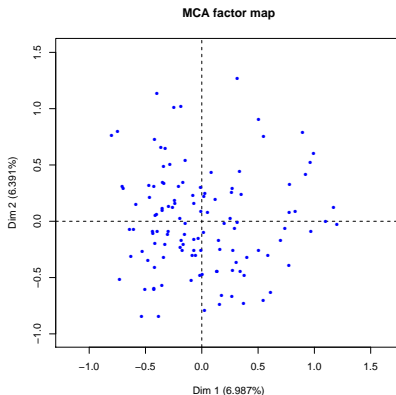


Figure: Raw representation of the individuals on axes 1 and 2

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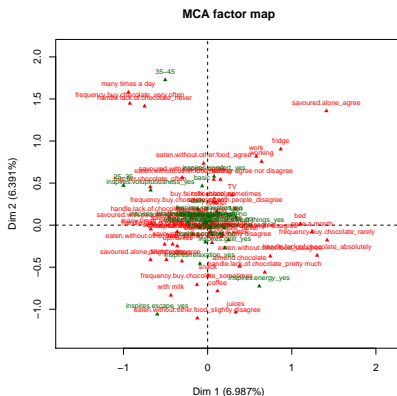


Figure: Raw representation of the categories on axes 1 and 2

How does my dataset look like?

## Simplified representation of the categories

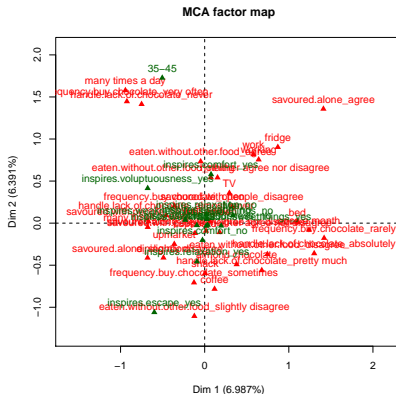


Figure: Simplified representation of the categories on axes 1 and 2

How can the main axes of variability be interpreted?

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

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

- `handle.lack.of.chocolate_absolutely`
- `frequency.eat.chocolate_never`
- `frequency.buy.chocolate_rarely`
- `alcohol`
- `frequency.buy.chocolate_never`
- `white chocolate`
- `buy.fair.chocolate_always`
- `working`
- `savoured.alone_agree`
- `fridge`





How can the main axes of variability be interpreted?

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

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

- `frequency.eat.chocolate_once` a month
- `eaten.without.other.food_disagree`
- `water`
- `bed`



How can the main axes of variability be interpreted?

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

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

- `frequency.eat.chocolate_many` times a week
- `frequency.buy.chocolate_often`
- `frequency.eat.chocolate_many` times a day
- `frequency.buy.chocolate_very often`
- `tea`
- `handle.lack.of.chocolate_almost never`
- `handle.lack.of.chocolate_never`
- `nothing`
- `handle.lack.of.chocolate_sometimes`
- `frequency.buy.chocolate_sometimes`



How can the main axes of variability be interpreted?

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

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

- with milk
- `frequency.eat.chocolate_once` a week
- cupboard
- dining room
- `eaten.without.other.food_slightly` agree
- coffee
- `buy.fair.chocolate_often`
- juices
- `buy.fair.chocolate_rarely`
- before sleep



How can the main axes of variability be interpreted?

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

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

- savoured.alone\_slightly disagree
- lined chocolate



How can the main axes of variability be interpreted?

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

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

- `handle.lack.of.chocolate_never`
- `frequency.buy.chocolate_very often`
- `white chocolate`
- `alcohol`
- `eaten.without.other.food_agree`
- `fridge`
- `savoured.with.people_agree`
- `TV`
- `before sleep`
- `frequency.eat.chocolate_many times a day`

How can the main axes of variability be interpreted?

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

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

- `buy.fair.chocolate_sometimes`
- `savoured.alone_agree`

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

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

- snack
- almond chocolate
- `handle.lack.of.chocolate_pretty` much
- milk chocolate
- juices
- `savoured.alone_neither` agree nor disagree
- cupboard
- `savoured.with.people_neither` agree nor disagree
- coffee
- `frequency.eat.chocolate_once` a week

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

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

- black chocolate
- with milk
- frequency.eat.chocolate\_once a month
- frequency.buy.chocolate\_sometimes
- eaten.without.other.food\_slightly disagree
- handle.lack.of.chocolate\_sometimes
- handle.lack.of.chocolate\_almost never
- well-known
- eaten.without.other.food\_slightly agree
- handle.lack.of.chocolate\_absolutely



How can the main axes of variability be interpreted?

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

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

- cooking chocolate

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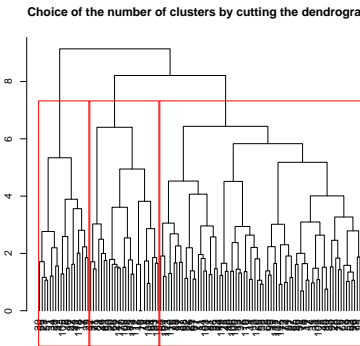


Figure: A number of clusters is chosen

How can the groups be displayed?

## Representation of the individuals according to the group they belong to

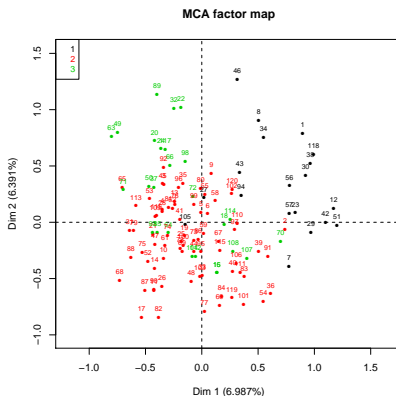


Figure: Correspondence map displaying clusters

How can the groups be displayed?

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

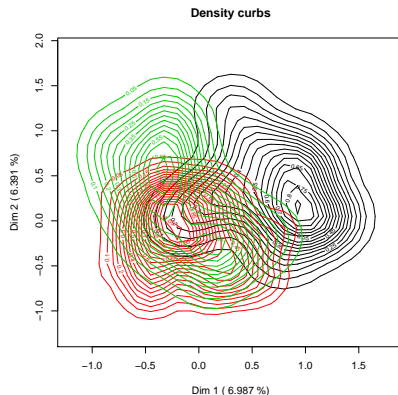


Figure: Levelling curves around each cluster

How can the groups be displayed?

## Representation of the barycenter of each group enhanced with confidence ellipses

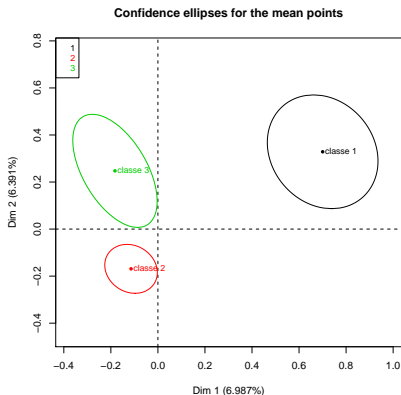


Figure: Confidence ellipses around each cluster

How different are the groups?

## Number of individuals per cluster

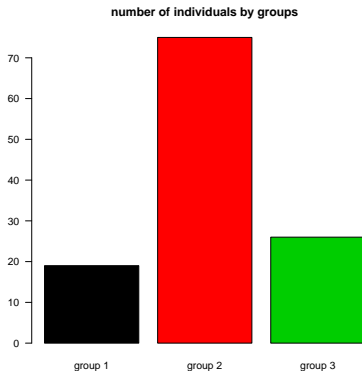


Figure: Number of individuals by cluster

100

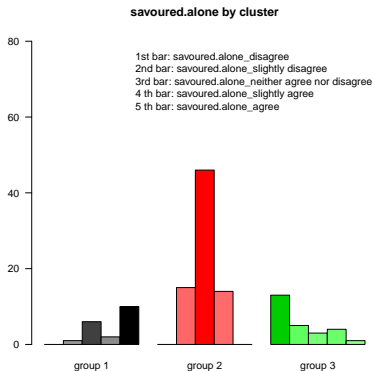


Figure: Variable savoured.alone



How different are the groups?

## Distribution of the individuals per cluster for the variable frequency.eat.chocolate

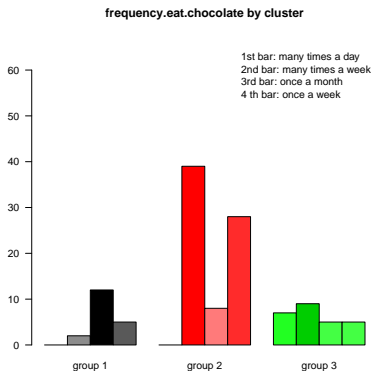
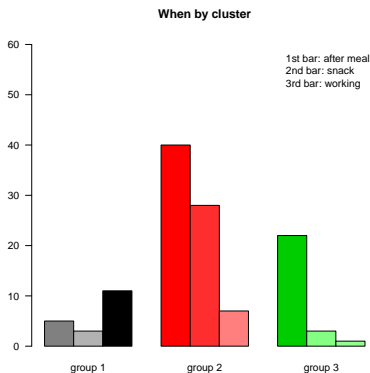


Figure: Variable frequency eat chocolate

1. *Journal of Management Studies*, 1997, 34, 1, 1-14.



How different are the groups?

## Distribution of the individuals per cluster for the variable frequency.buy.chocolate

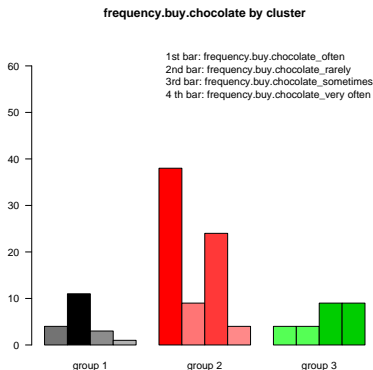
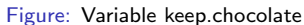
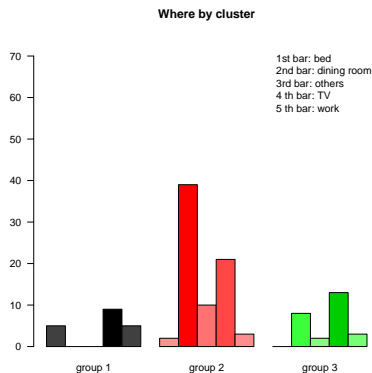


Figure: Variable frequency buy chocolate

### Distribution of the individuals per cluster for the variable keep.chocolate





How different are the groups?

## Distribution of the individuals per cluster for the variable handle.lack.of.chocolate

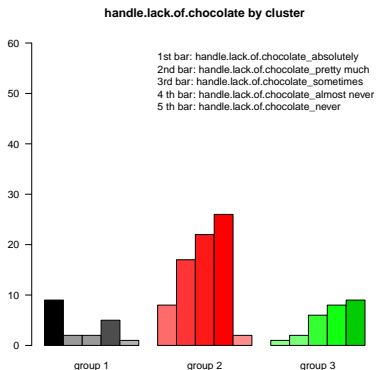


Figure: Variable handle lack of chocolate

How different are the groups?

## Distribution of the individuals per cluster for the variable savoured.with.people

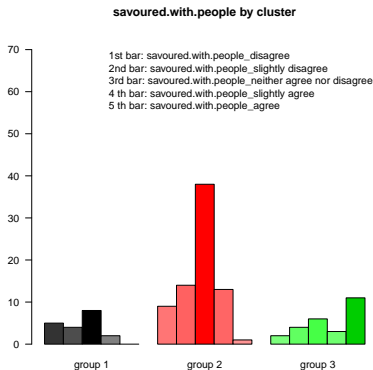


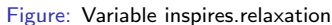
Figure: Variable savoured with people

### Distribution of the individuals per cluster for the variable sex





### Distribution of the individuals per cluster for the variable inspires.relaxation



## Description of cluster 1 ( 1 / 3 )

The following modalities are meaningful for cluster 1 :

- **savoured.alone=savoured.alone\_agree**  
9.17 % of the individuals possess this category in the global population versus 52.63% of the individuals within cluster 1;  
90.91 % individuals possessing this category belong to cluster 1
- **When=working**  
15.83 % of the individuals possess this category in the global population versus 57.89% of the individuals within cluster 1;  
57.89 % individuals possessing this category belong to cluster 1
- **frequency.eat.chocolate=once a month**  
20.83 % of the individuals possess this category in the global population versus 63.16% of the individuals within cluster 1;  
48 % individuals possessing this category belong to cluster 1
- **keep.chocolate=fridge**  
11.67 % of the individuals possess this category in the global population versus 47.37% of the individuals within cluster 1;  
64.29 % individuals possessing this category belong to cluster 1
- **frequency.buy.chocolate=frequency.buy.chocolate\_rarely**  
20 % of the individuals possess this category in the global population versus 57.89% of the individuals within cluster 1;  
45.83 % individuals possessing this category belong to cluster 1

## Description of cluster 1 ( 2 / 3 )

The following modalities are meaningful for cluster 1 :

- **sex=Man**  
 21.67 % of the individuals possess this category in the global population versus 57.89% of the individuals within cluster 1;  
 42.31 % individuals possessing this category belong to cluster 1
- **han-**  
**dle.lack.of.chocolate=handle.lack.of.chocolate\_absolutely**  
 15 % of the individuals possess this category in the global population versus 47.37% of the individuals within cluster 1;  
 50 % individuals possessing this category belong to cluster 1
- **Where=bed**  
 5.83 % of the individuals possess this category in the global population versus 26.32% of the individuals within cluster 1;  
 71.43 % individuals possessing this category belong to cluster 1
- **side.drink=nothing**  
 52.5 % of the individuals possess this category in the global population versus 78.95% of the individuals within cluster 1;  
 23.81 % individuals possessing this category belong to cluster 1
- **Where=work**  
 9.17 % of the individuals possess this category in the global population versus 26.32% of the individuals within cluster 1;  
 45.45 % individuals possessing this category belong to cluster 1

How can the groups be described?

## Description of cluster 1 ( 3 / 3 )

The following modalities are meaningful for cluster 1 :

- **inspires.comfort=inspires.comfort\_yes**  
25.83 % of the individuals possess this category in the global population versus 47.37% of the individuals within cluster 1;  
29.03 % individuals possessing this category belong to cluster 1

## Description of cluster 2 ( 1 / 2 )

The following modalities are meaningful for cluster 2 :

- savoured.alone=savoured.alone\_neither agree nor disagree**  
 45.83 % of the individuals possess this category in the global population versus 61.33% of the individuals within cluster 2;  
 83.64 % individuals possessing this category belong to cluster 2
- Where=dining room**  
 39.17 % of the individuals possess this category in the global population versus 52% of the individuals within cluster 2;  
 82.98 % individuals possessing this category belong to cluster 2
- frequency.buy.chocolate=frequency.buy.chocolate\_often**  
 38.33 % of the individuals possess this category in the global population versus 50.67% of the individuals within cluster 2;  
 82.61 % individuals possessing this category belong to cluster 2
- keep.chocolate=cupboard**  
 88.33 % of the individuals possess this category in the global population versus 96% of the individuals within cluster 2;  
 67.92 % individuals possessing this category belong to cluster 2
- inspires.relaxation=inspires.relaxation\_yes**  
 18.33 % of the individuals possess this category in the global population versus 26.67% of the individuals within cluster 2;  
 90.91 % individuals possessing this category belong to cluster 2

How can the groups be described?

## Description of cluster 2 ( 2 / 2 )

The following modalities are meaningful for cluster 2 :

- **frequency.eat.chocolate=many times a week**

41.67 % of the individuals possess this category in the global population versus 52% of the individuals within cluster 2;

78 % individuals possessing this category belong to cluster 2

- **When=snack**

28.33 % of the individuals possess this category in the global population versus 37.33% of the individuals within cluster 2;

82.35 % individuals possessing this category belong to cluster 2

## Description of cluster 3 ( 1 / 2 )

The following modalities are meaningful for cluster 3 :

- **savoured.alone=savoured.alone\_disagree**  
10.83 % of the individuals possess this category in the global population versus 50% of the individuals within cluster 3;  
100 % individuals possessing this category belong to cluster 3
- **savoured.with.people=savoured.with.people\_agree**  
10 % of the individuals possess this category in the global population versus 42.31% of the individuals within cluster 3;  
91.67 % individuals possessing this category belong to cluster 3
- **frequency.eat.chocolate=many times a day**  
5.83 % of the individuals possess this category in the global population versus 26.92% of the individuals within cluster 3;  
100 % individuals possessing this category belong to cluster 3
- **handle.lack.of.chocolate=handle.lack.of.chocolate\_never**  
10 % of the individuals possess this category in the global population versus 34.62% of the individuals within cluster 3;  
75 % individuals possessing this category belong to cluster 3
- **frequency.buy.chocolate=frequency.buy.chocolate\_very often**  
11.67 % of the individuals possess this category in the global population versus 34.62% of the individuals within cluster 3;  
64.29 % individuals possessing this category belong to cluster 3

How can the groups be described?

## Description of cluster 3 ( 2 / 2 )

The following modalities are meaningful for cluster 3 :

- **When=after meal**

55.83 % of the individuals possess this category in the global population versus 84.62% of the individuals within cluster 3;

32.84 % individuals possessing this category belong to cluster 3

- **inspires.relaxation=inspires.relaxation\_no**

81.67 % of the individuals possess this category in the global population versus 96.15% of the individuals within cluster 3;

25.51 % individuals possessing this category belong to cluster 3