

## Questionnaire about colors in charts

**NOTE: This is an English translation of the questionnaire that has been distributed in Dutch.**

Charts are becoming increasingly important for Official Statistics, both to analyse and to present results. Since statistical data often contains classifications, we would like to study the usage of color to visualize classifications. Therefore, we would like to invite you to answer a couple of questions. We expect that it will not cost more than 5 minutes of your precious time.

All responses will be treated confidentially. There are no right or wrong answers. Our concern is your judgement and opinion when answering the questions. All examples used in this questionnaire are fictitious.

We thank you for your cooperation!

## Question 1

First we would like to know if you are color blind. Many people do not know whether they are color blind. In the Netherlands about 1 out of 20 people are (partially) color blind.

### 1a)

Are you, for all you know, color blind?

- ☐ No
- ☐ Yes, partially
- ☐ Yes, entirely

If you doubt, there is a possibility to take a color blindness test. Please contact us in that case.

## Question 2

Below two figures are plotted in which the structure of a classification is shown. To exclude prior knowledge, we label the categories with letters. These labels are chosen **at random**.

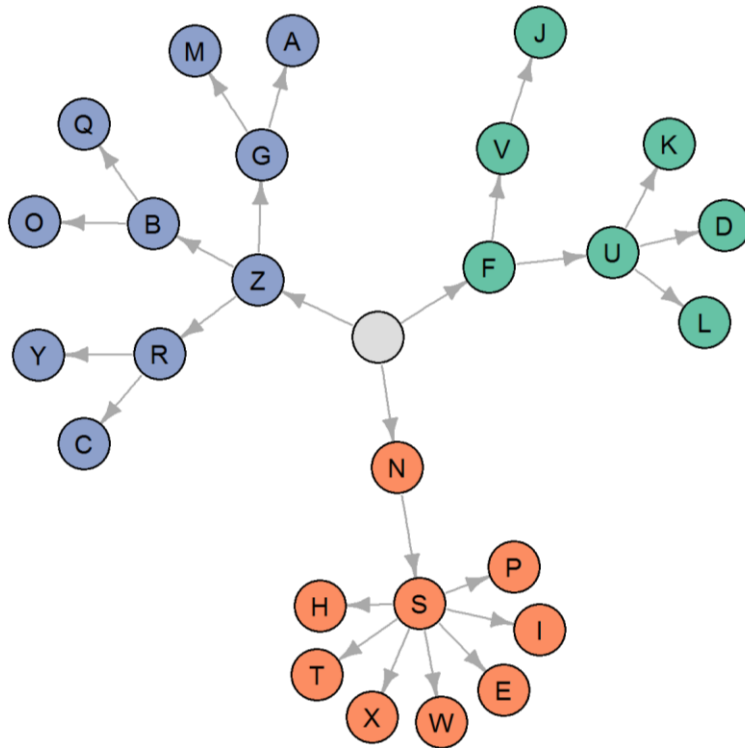


Figure 1

2a)

Which label or labels are, according to you, most similar to K?

☐ J

☐ A

☐ L

2b)

Which labels are descended from B?

2c)

What do you think of the following statement?

*"The colors in Figure 2 helped me to answer questions 2a and 2b. "*

☐ Strongly disagree

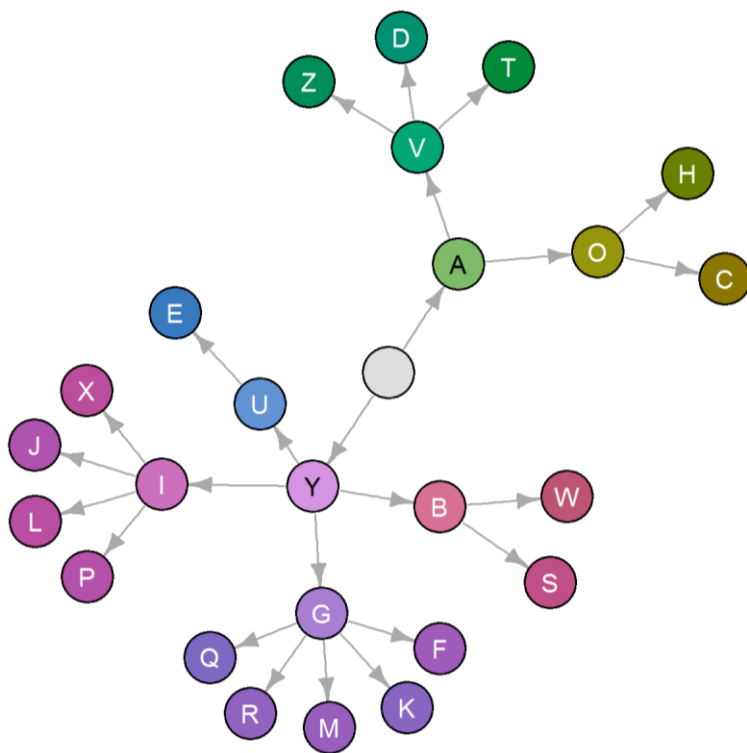
☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly agree

The following questions (2d to 2f) are about Figure 2.



*Figure 2*

2d)

Which label or labels are, according to you, most similar to J?

☐ K

☐ P

☐ C

2e)

Which labels are descended from G?

2f)

What do you think of the following statement?

*"The colors in Figure 2 helped me to answer questions 2d and 2e. "*

☐ Strongly disagree

☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly agree

2g)

Which chart is the prettiest?

- ☐ Figure 1
- ☐ Figure 2
- ☐ Indifferent

2h)

Which colors contributed most in interpreting the charts?

- ☐ Colors from Figure 1
- ☐ Colors from Figure 2
- ☐ Indifferent

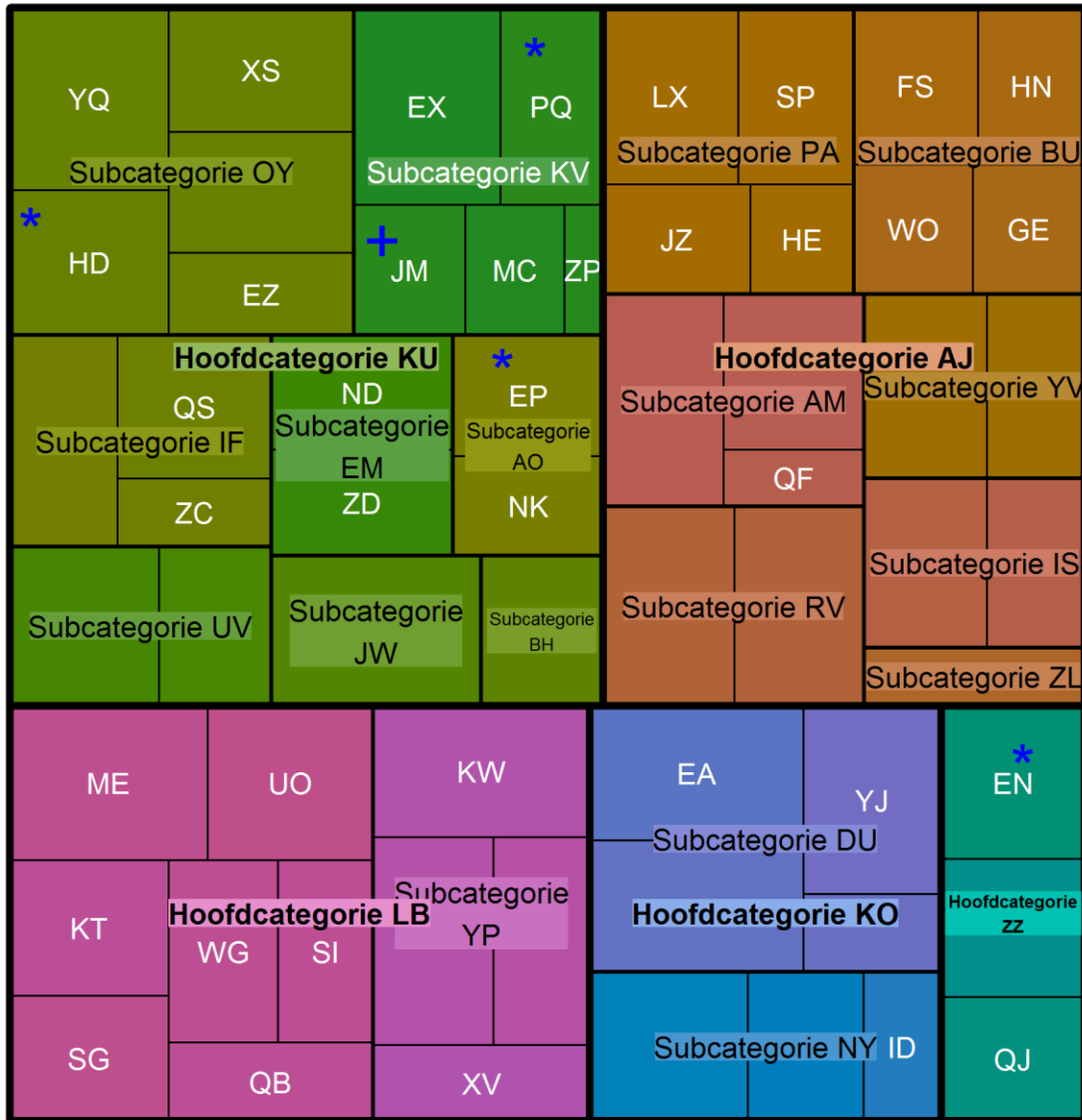
2i)

Which colors provided the best overview?

- ☐ Colors from Figure 1
- ☐ Colors from Figure 2
- ☐ Indifferent

### Vraag 3

Below you see a so-called treemap that shows the amount of turnover per category. The larger the rectangle, the higher the turnover. Again, the used classification is fictitious and the letters are chosen at random.



Treemap 1 (with original Dutch text labels)

3a)

Which label or labels are, according to you, most similar to JM, that is marked with a blue plus sign? The labels below are marked with blue asterisks.

☐ HD

☐ EP

☐ EN

☐ PQ

3b)

How many sub-labels (*Subcategorieën*) does main label (*Hoofdcategorie*) A) have?

3c)

What do you think of the following statement?

*"The colors in Treemap 1 helped me to answer questions 3a and 3b. "*

☐ Strongly disagree

☐ Disagree

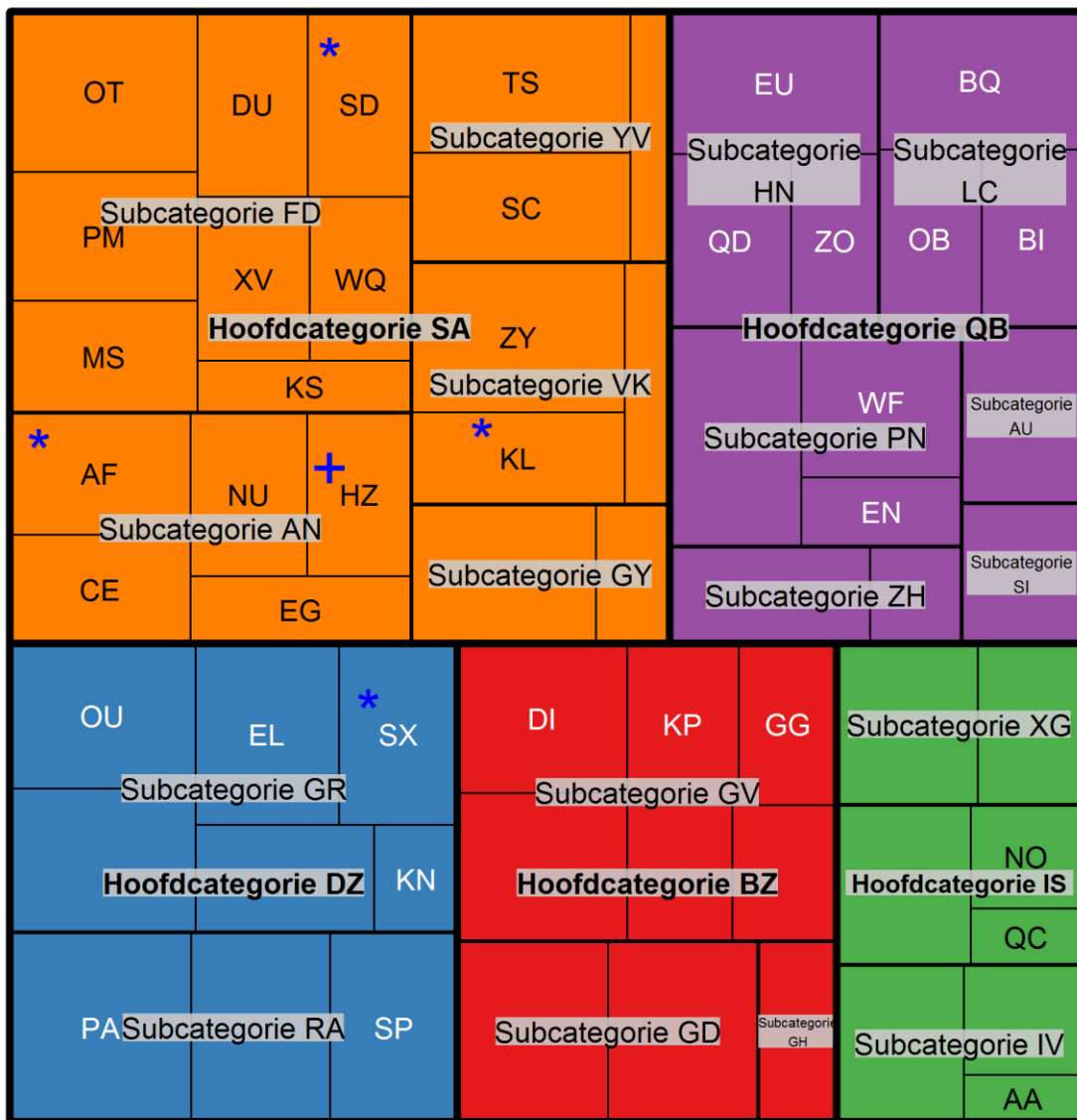
☐ Neutral

☐ Agree

☐ Strongly agree



The next questions (3d to 3f) are about Treemap 2.



Treemap 2 (with original Dutch text labels)

3d)

Which label or labels are, according to you, most similar to HZ, that is marked with a blue plus sign? The labels below are marked with blue asterisks.

☐ AF

☐ SD

☐ KL

☐ SX

3e)

How many sub-labels (*Subcategorieën*) does main label (*Hoofdcategorie*) SA have?

3f)

What do you think of the following statement?

*"The colors in Treemap 2 helped me to answer questions 3d and 3e. "*

☐ Strongly disagree

☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly agree

**3g)**

Which treemap is the prettiest?

- ☐ Treemap 1
- ☐ Treemap 2
- ☐ Indifferent

**3h)**

Which colors contributed most in interpreting the treemaps?

- ☐ Colors from Treemap 1
- ☐ Colors from Treemap 2
- ☐ Indifferent

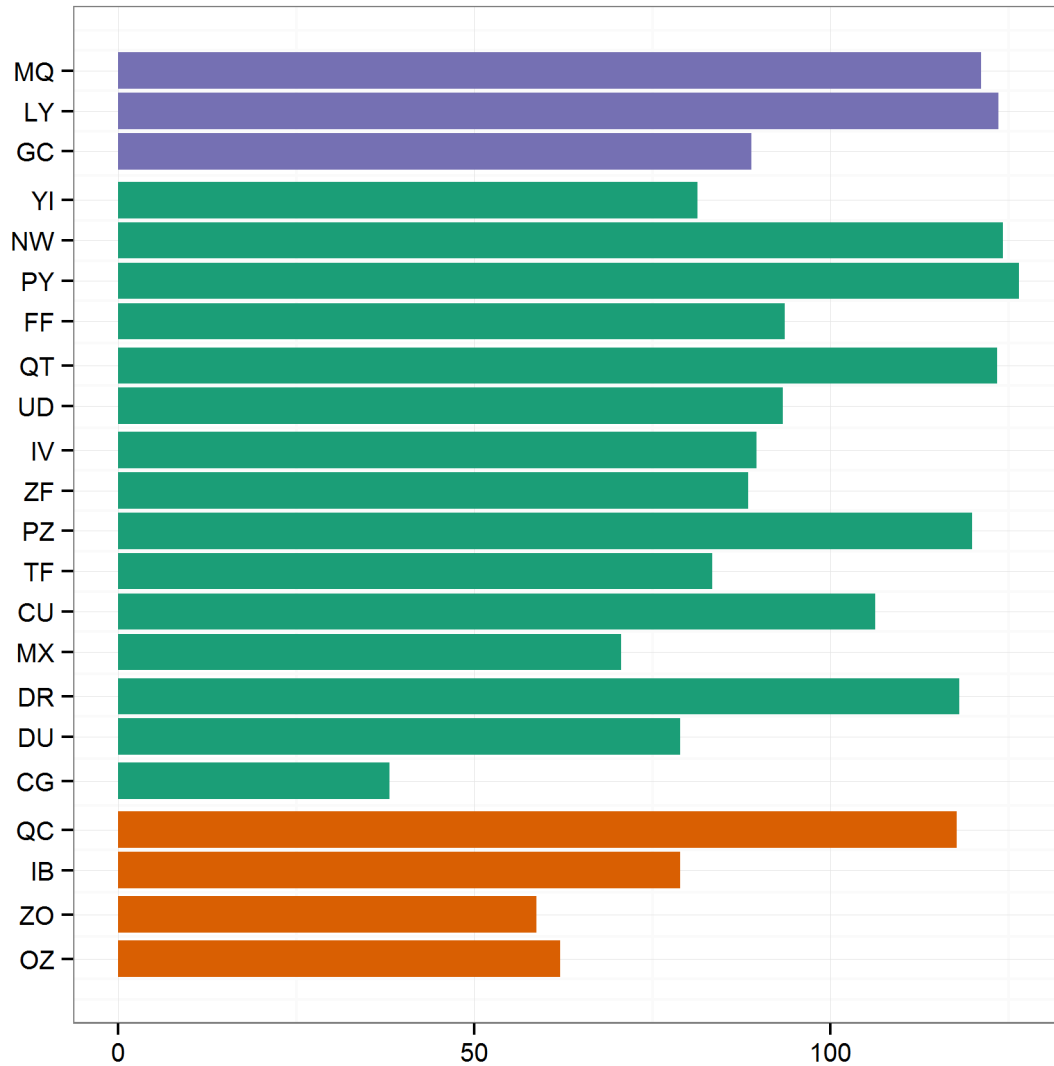
**3i)**

Which colors provided the best overview?

- ☐ Colors from Treemap 1
- ☐ Colors from Treemap 2
- ☐ Indifferent

#### Vraag 4

Below you see a bar chart that shows the turnover per category. Again, the used classification is fictitious and the letters are chosen at random.



Bar chart 1

4a)

Which label or labels are, according to you, most similar to MX:

☐ QT

☐ IV

☐ DR

☐ IB

4b)

What do you think of the following statement?

*"The colors in Bar chart 1 helped me to answer question 4a."*

☐ Strongly disagree

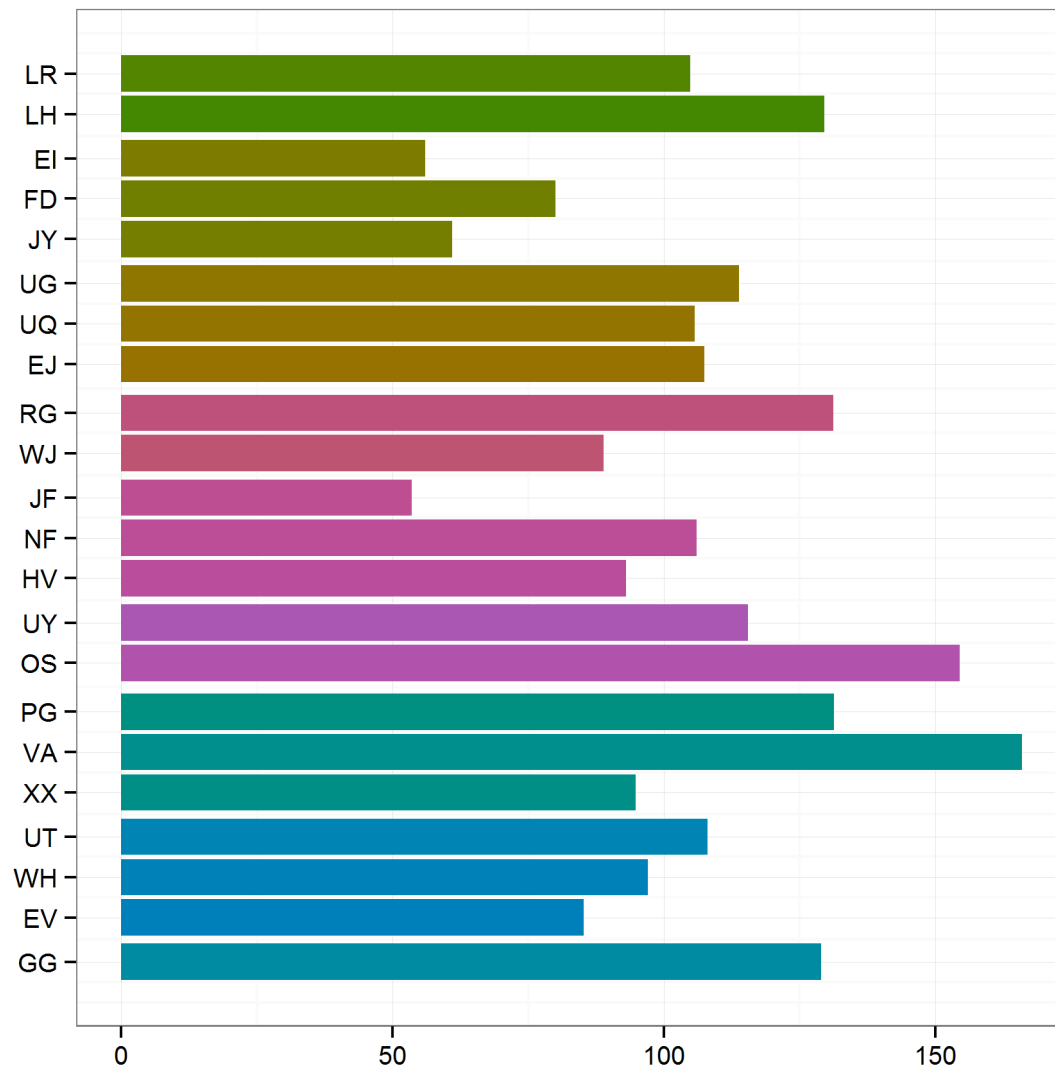
☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly agree

The next questions (4c to 4d) are about Bar chart 2.



*Bar chart 2*

4c)

Which label or labels are, according to you, most similar to UT?

☐ NF

☐ XX

☐ EV

☐ GG

4d)

What do you think of the following statement?

*"The colors in Bar chart 2 helped me to answer question 4c."*

☐ Strongly disagree

☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly agree

4e)

Which bar chart is the prettiest?

☐ Bar chart 1

☐ Bar chart 2

☐ Indifferent

3h)

Which colors contributed most in interpreting the charts?

- ☐ Colors from Bar chart 1
- ☐ Colors from Bar chart 2
- ☐ Indifferent

3i)

Which colors provided the best overview?

- ☐ Colors from Bar chart 1
- ☐ Colors from Bar chart 2
- ☐ Indifferent

This is the end of the questionnaire. Thank you very much for completing it.

If you have any questions, suggestions or remarks, you can write them below:

Thank you for your cooperation!