




Adaptive survey designs in an  
online panel: useful or not?

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Adaptive survey designs  
in an online panel:  
useful or not?

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**TNS NIPO**  
Author(s)  
Robbert Zandvliet

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# Study Goal

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Adaptive survey designs in an online panel: useful or not?

# Study goal



- Online (access) panels usually contain people who are prepared to participate in surveys
  - However, do differences in response between panel subgroups exist?
  - And if so, online fieldwork in a panel is already standardized and very (cost)efficient, so:
    - Is there any added value in using ASD in an online panel?
    - What are the chances for customized approaches?





# Study design

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Adaptive survey designs in an online panel: useful or not?

# Study design

- Analysis of response behaviour in TNS NIPObase in period 01/12/10 – 01/12/11
  - 1.5 million survey invitations
  - 1.1 million responses ('touches')
- How do different 'steering mechanisms' affect response behaviour differentiated by:
  - age
  - gender
  - education
  - ethnicity
  - social participation
  - household type
- Aim: to identify chances for ASD



# Considerations for ASD in online panels

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# Considerations for ASD in online panels

## ■ Possible advantages

- Higher and more balanced response (decreasing weight factors, data quality)
- Cost reduction (less excess response, implying less incentives)

## ■ Possible disadvantages

- Cost increase (in survey operations)
- Tailor-made approaches for subgroups may in fact influence response behaviour for those groups



# Considerations for ASD in online panels



Online fieldwork: what are possible 'steering mechanisms'?

- Sample size
- Fieldwork duration (pre-communicated)
- Period of year
- Day(s) of week
- Reminders
- Questionnaire length (pre-communicated)
- Topic or invitation (pre-communicated)
- Incentives
- Lay-out

# Considerations for ASD in online panels

- Countless of respondent characteristics are known up front...

- Socio-demographics
- Socio-economics
- Locational characteristics
- Activity-related features
- Life styles

- ...implying many possibilities for developing tailor-made approaches



# About TNS Nipobase

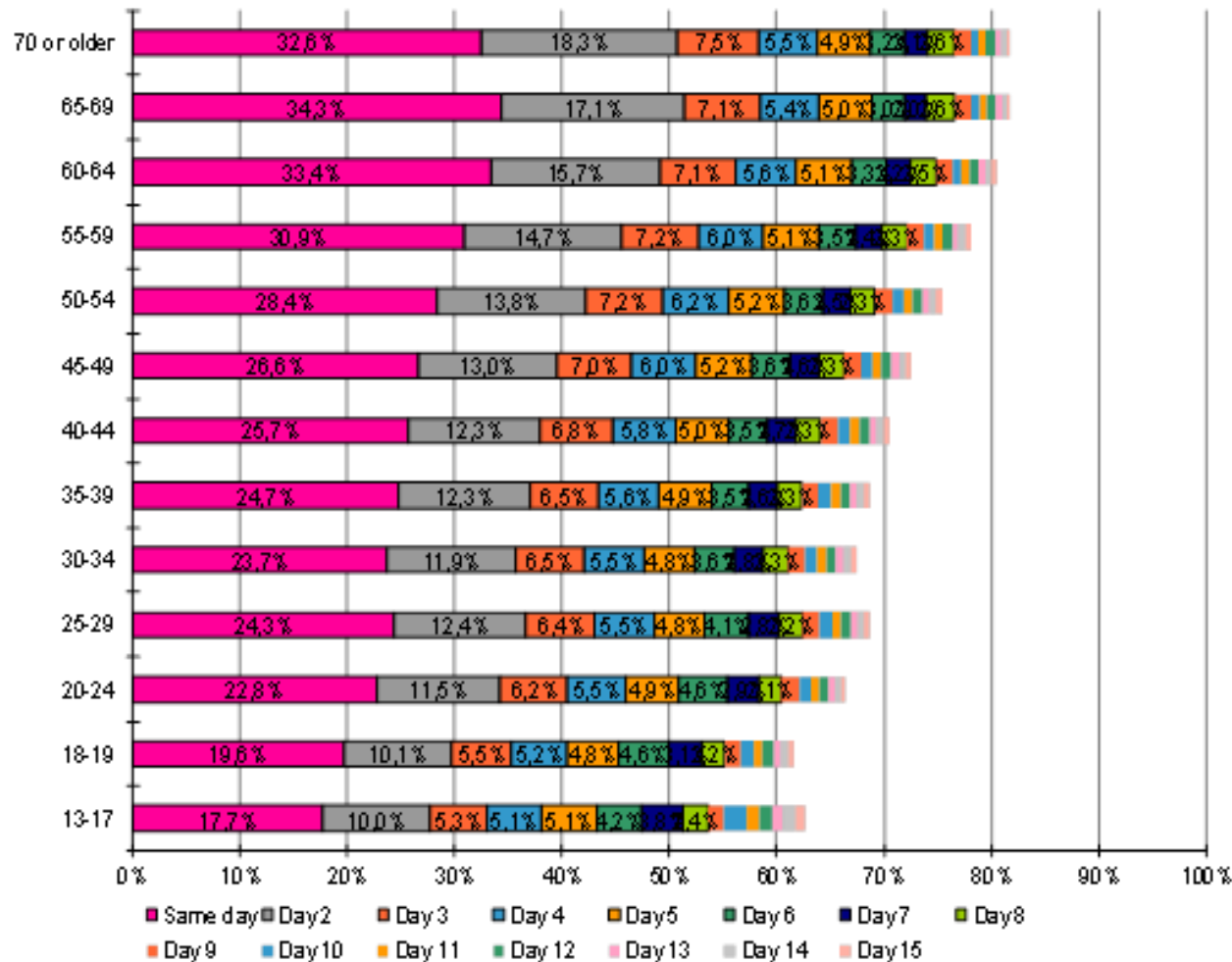
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# About TNS NIPObase

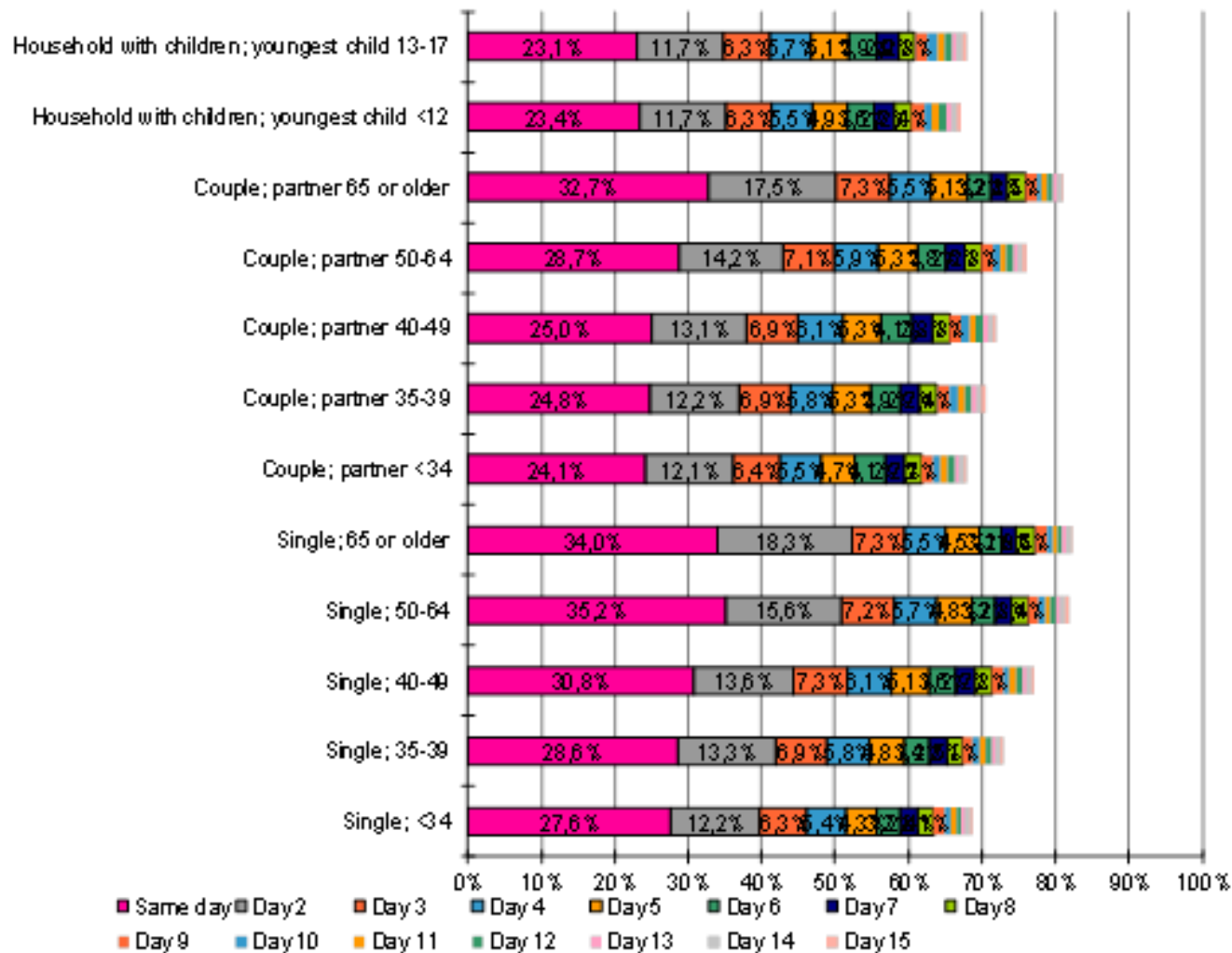
- Online approachable: 58.000 households (133.000 persons) (01/03/2012)
- Approx. one survey invitation per month
- Panel dropout ratio: less than 10% per year
- Acquisition of new panel members
  - 70% via traditional survey methods
  - 20% via external databases
  - 10% via 'snowballing'
  - No self-selection to prevent selection bias

# Days of fieldwork and age



- Increasing age leads to quicker response times and higher overall response
- Overall response may differ up to 20%
- 50% response requires 2 days for senior respondents and 7 for children

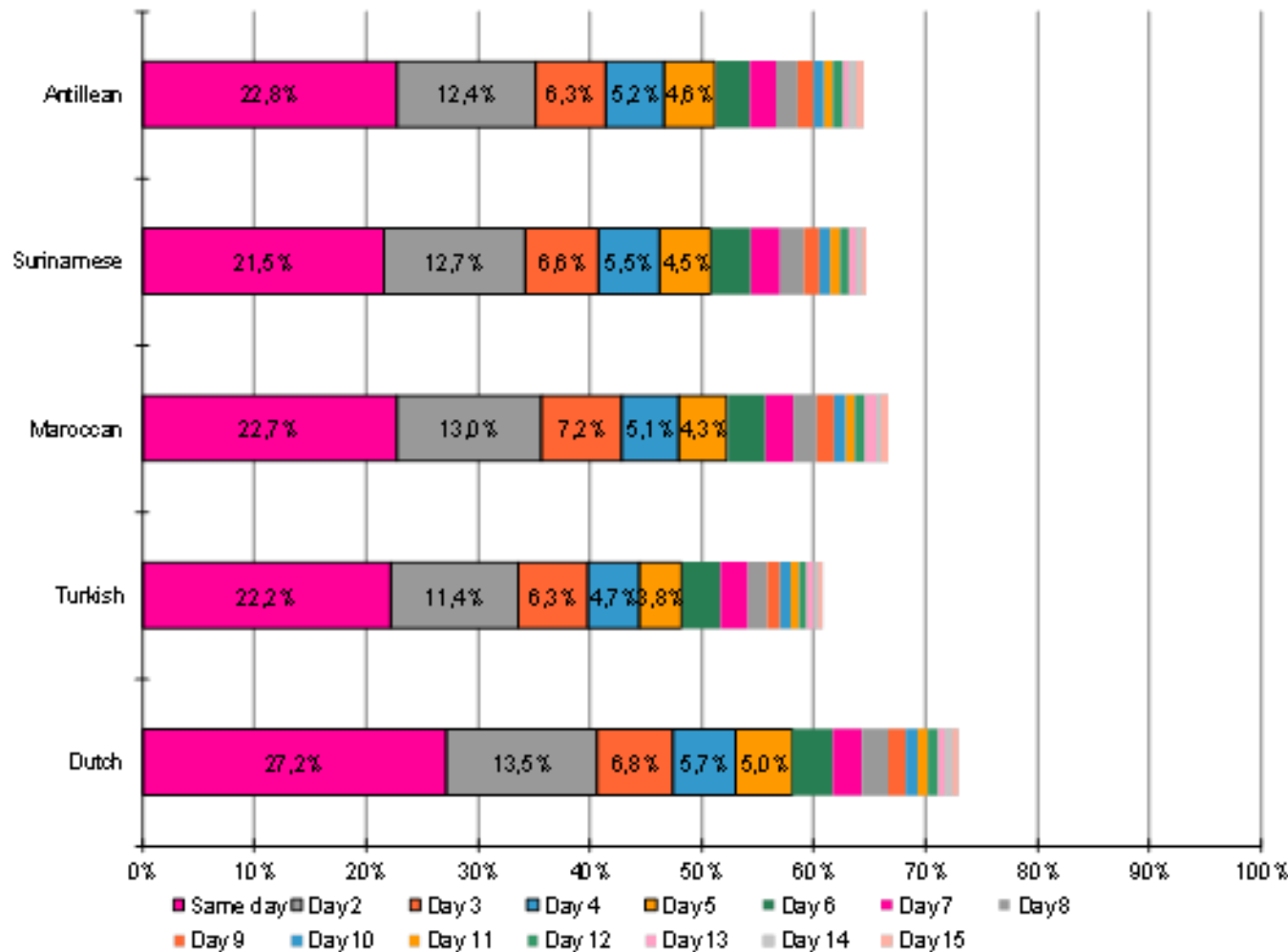
# Days of fieldwork and household type



- Households with young children have slowest response time
- Singles respond more quickly than two-person households

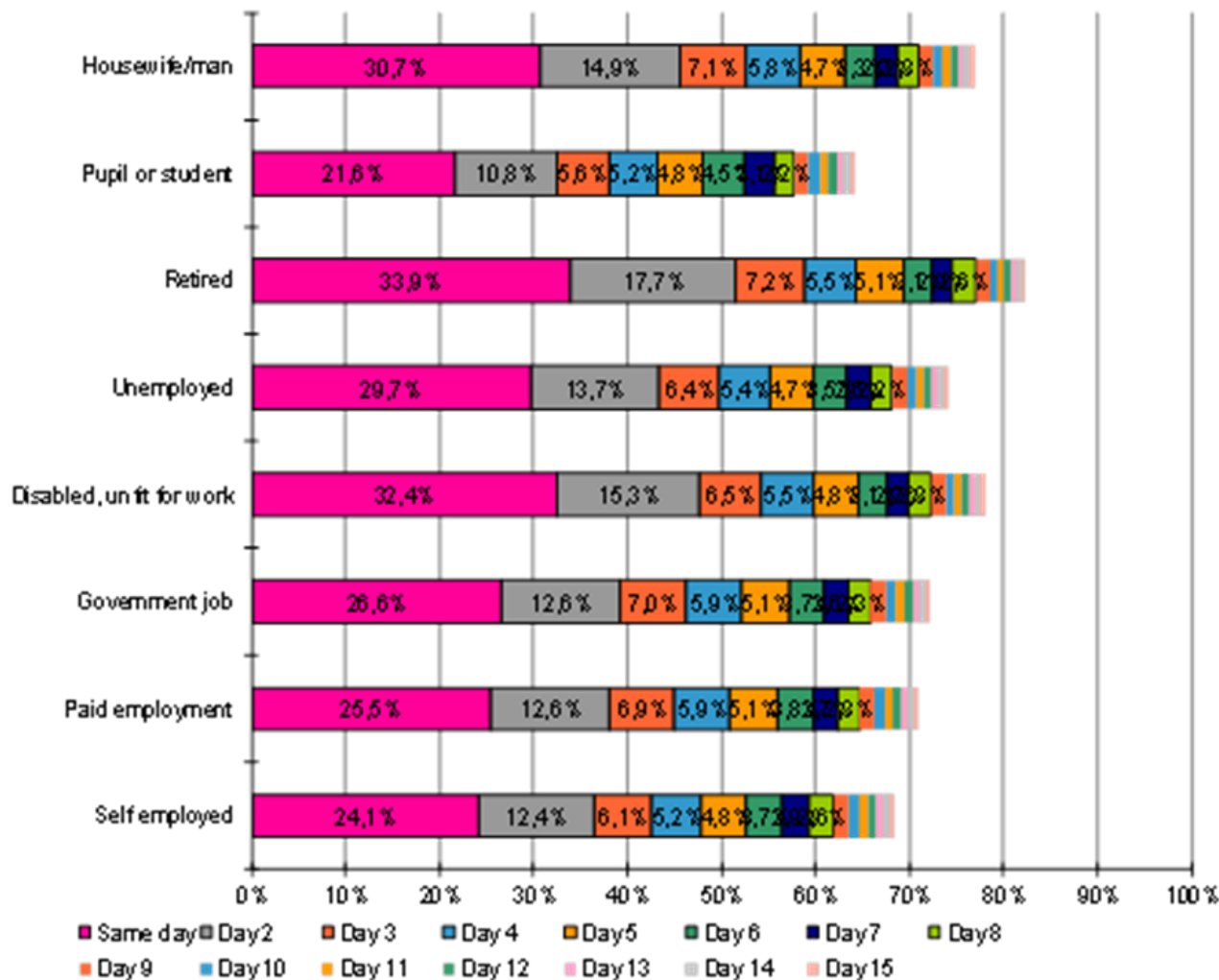


# Days of fieldwork and ethnicity



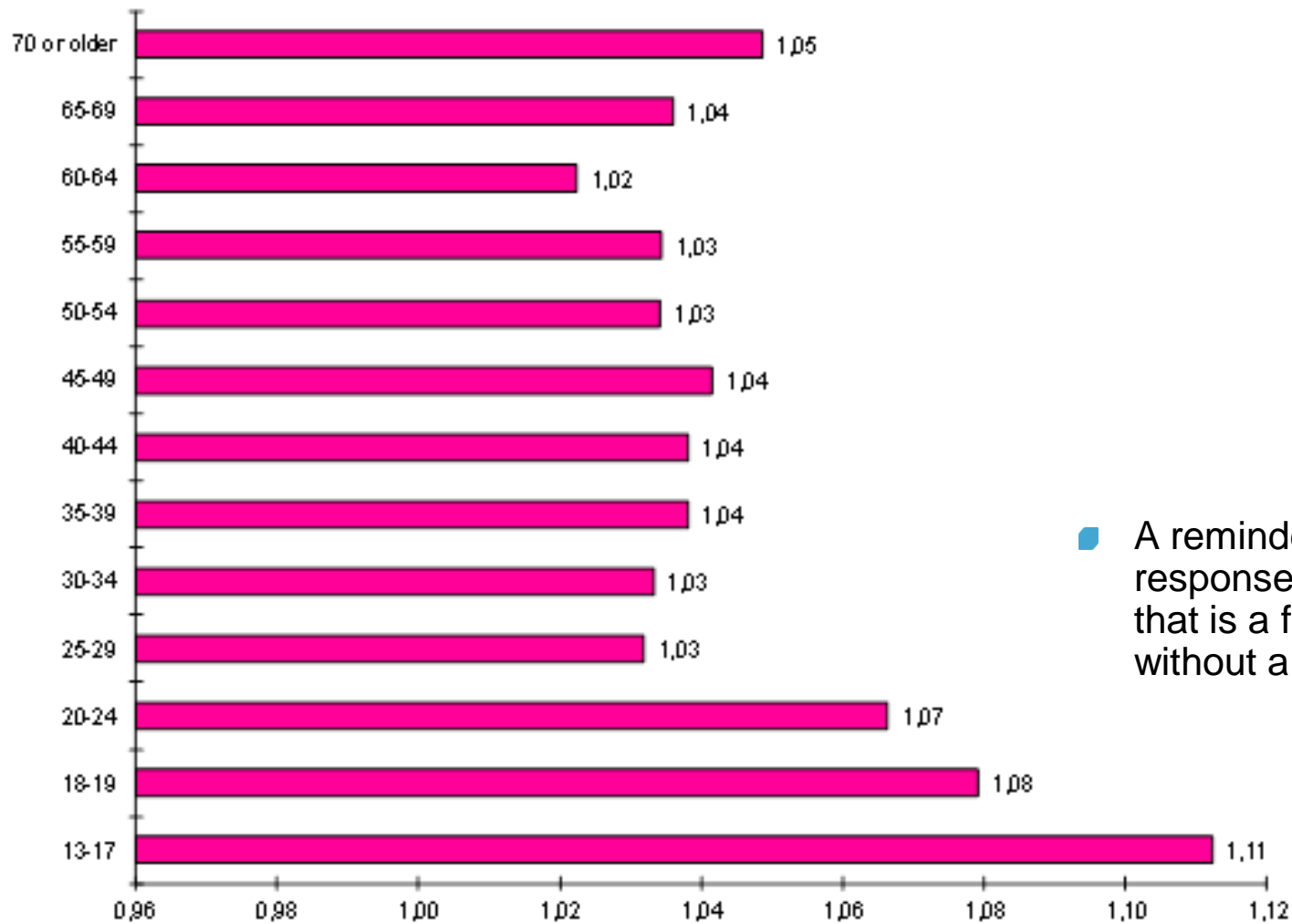
- Respondents with Dutch origin respond better and quicker than TMSA respondents
- Comparable with what you see in non-panel based surveys, but differences are smaller

# Days of fieldwork and social participation



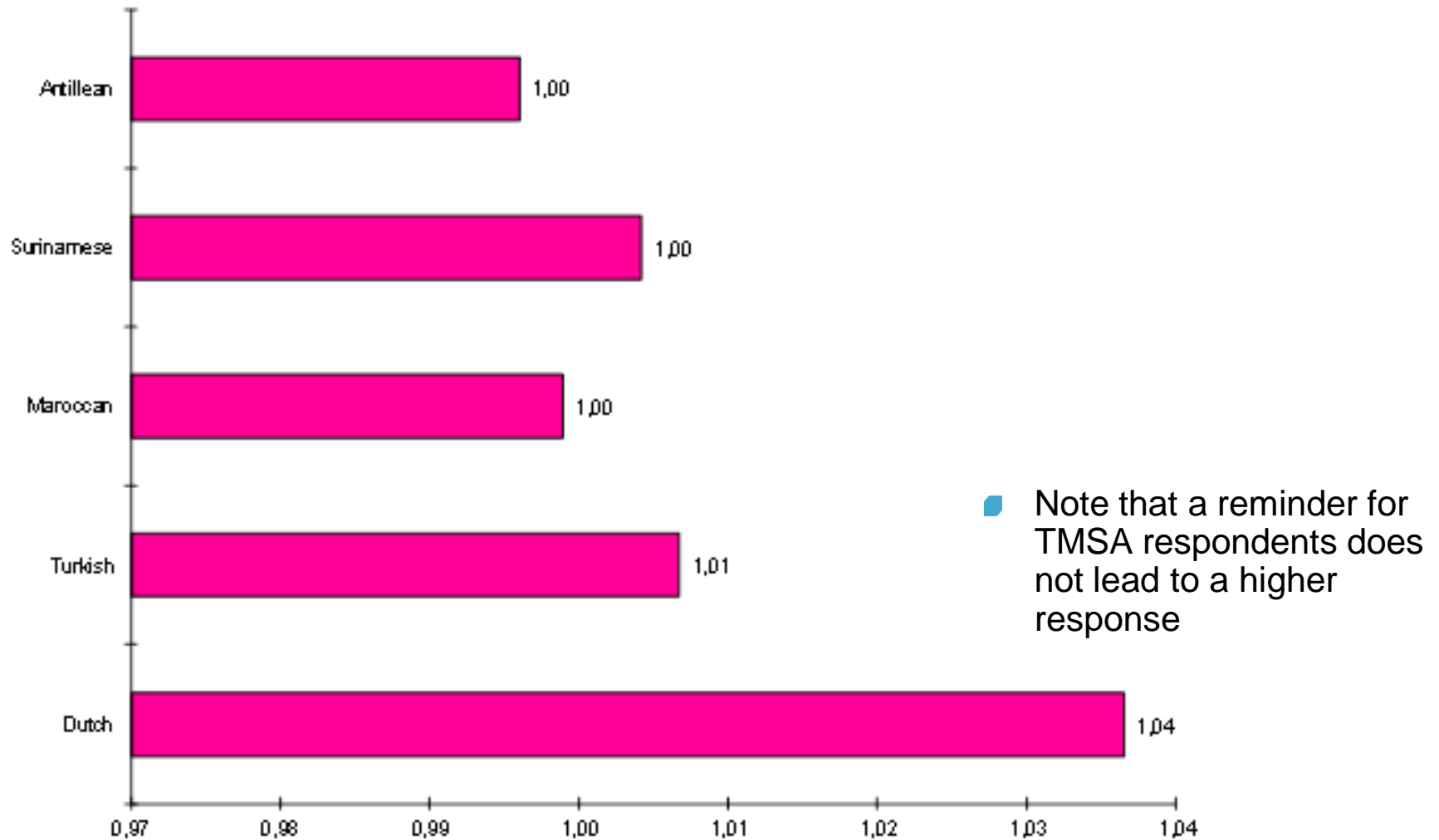
- Again, age seems to have a large impact (compare students and pensioners)
- Unemployed people respond quicker than employed people
- Also, compare type of employment

# Reminder and age

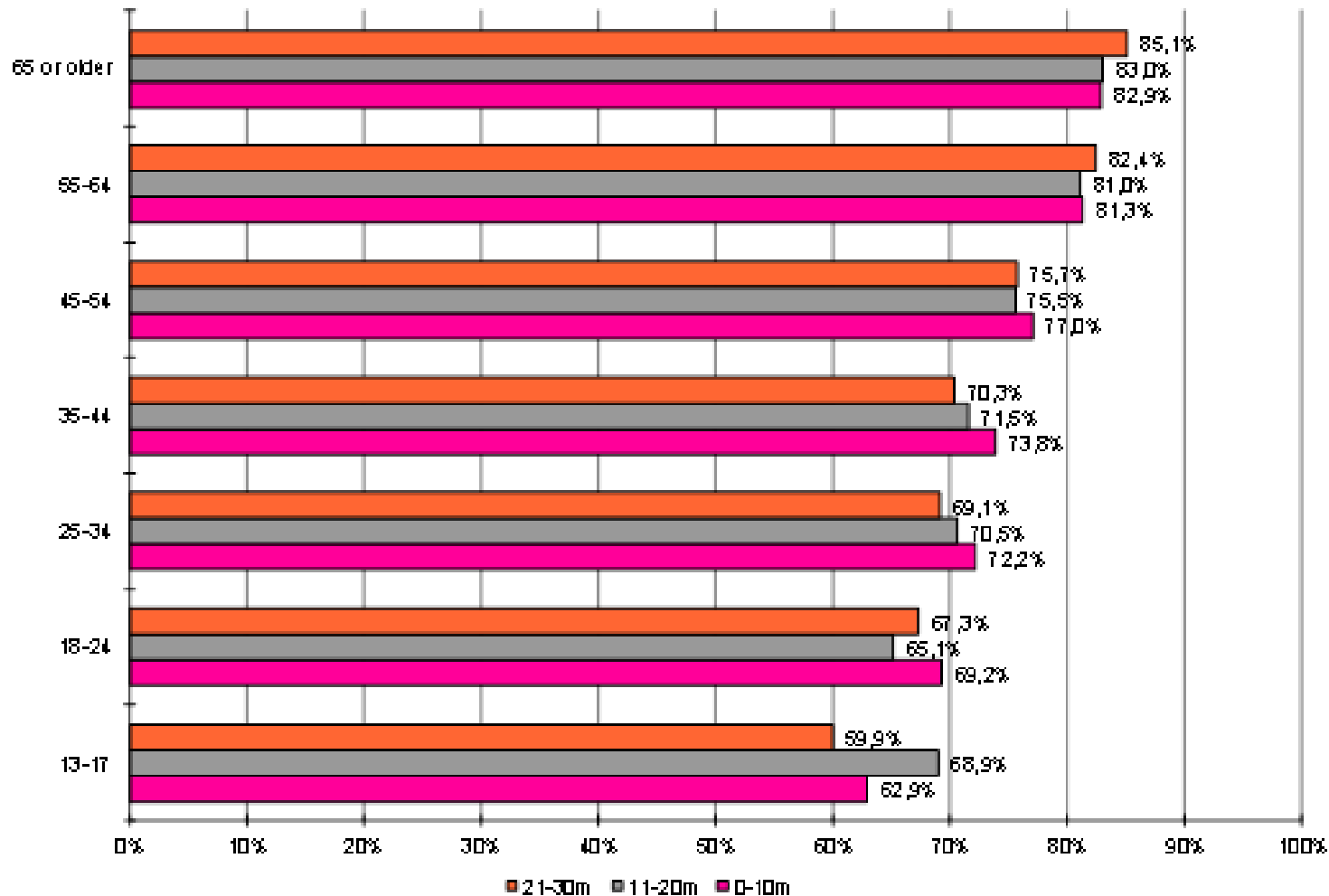


- A reminder leads to a response for young people that is a factor 1.1 larger than without a reminder

# Reminder and ethnicity

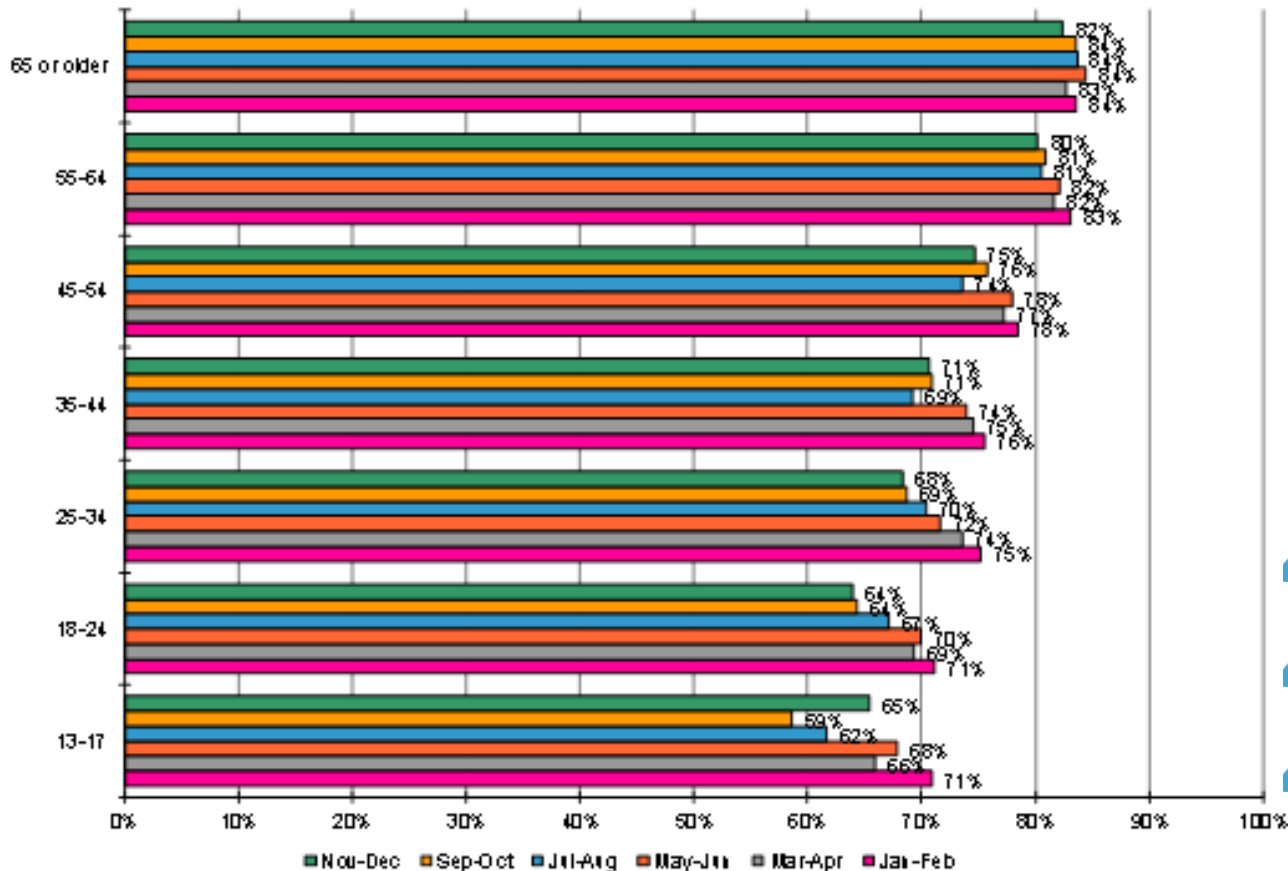


# Questionnaire length and age



- Diffuse image for young people
- 25-45: longer questionnaire leads to lower response
- Seniors: long questionnaire yields highest response

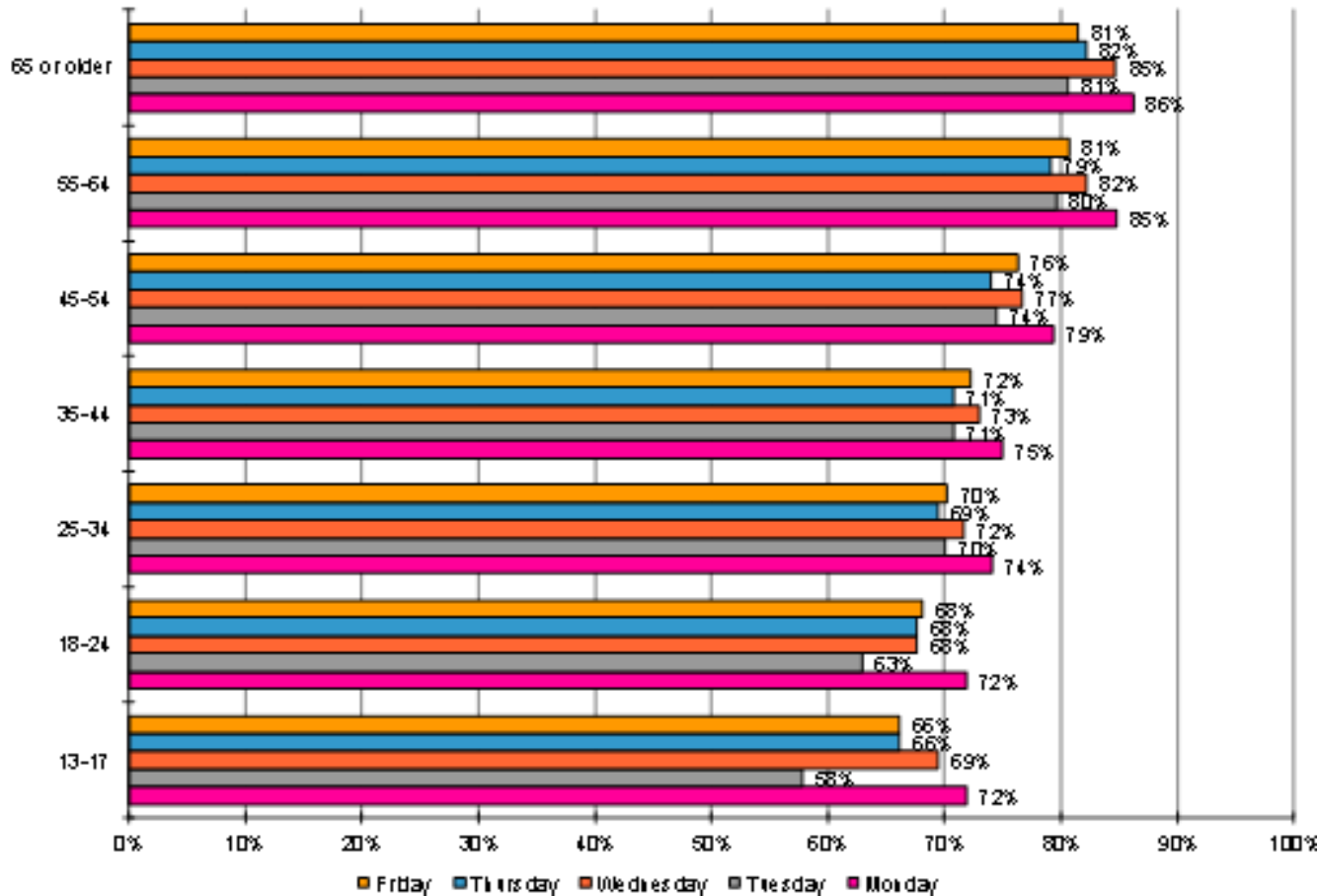
# Month and age



- In general, the earlier in the year, the better
- However, not for older respondents
- Are people more busy in 2nd part of the year?
- Possible explanation: questionnaire length?



# Day of week and age 1/2

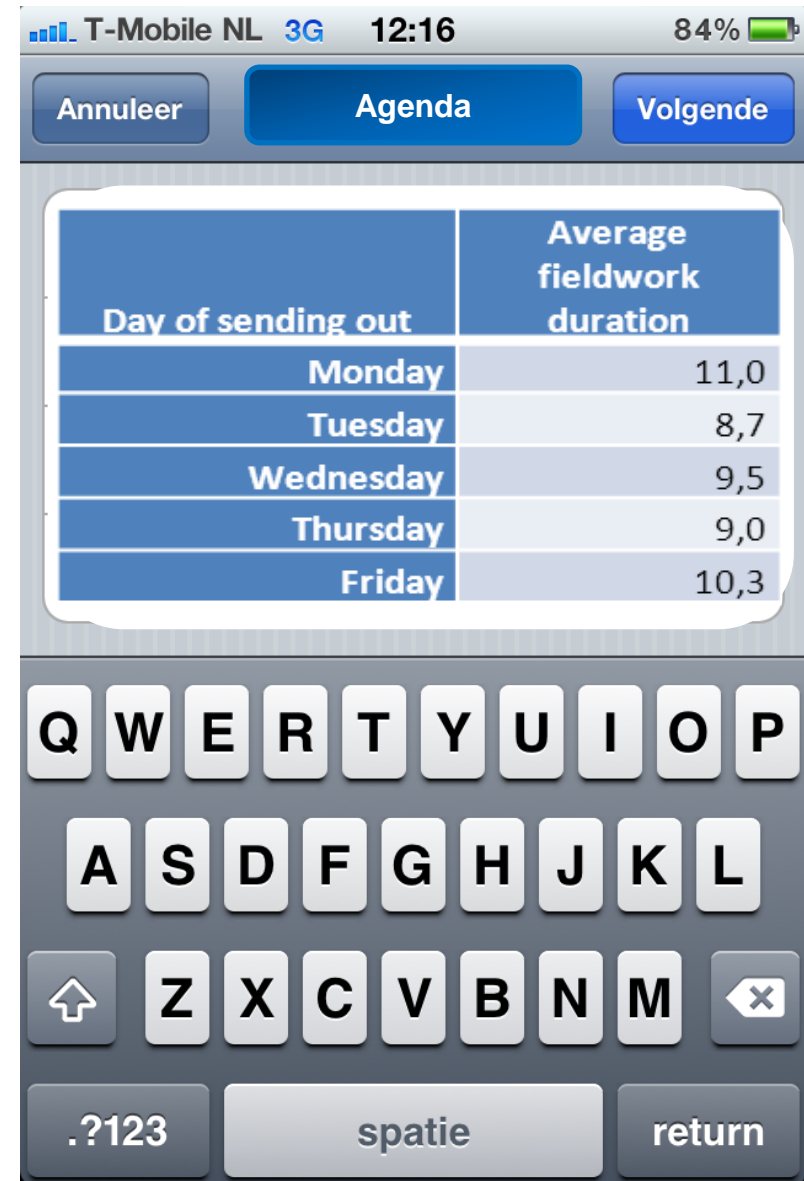


- Fieldwork start on a Monday provides highest response
- Tuesday and Thursday result in low response
- BUT:** effect of fieldwork duration!!

# Day of week and age 2/2

■ Response per starting day, after 7 days of fieldwork

- Monday 66%
- Tuesday 69%
- Wednesday 68%
- Thursday 63%
- Friday 67%



The screenshot shows a mobile application interface. At the top, there is a status bar with 'T-Mobile NL', '3G', '12:16', and '84%' battery. Below the status bar are three buttons: 'Annuleer', 'Agenda' (highlighted in blue), and 'Volgende'. The main content area displays a table with two columns: 'Day of sending out' and 'Average fieldwork duration'. The table lists the days Monday through Friday with their corresponding average durations. Below the table is a virtual QWERTY keyboard.

Day of sending out	Average fieldwork duration
Monday	11,0
Tuesday	8,7
Wednesday	9,5
Thursday	9,0
Friday	10,3



# Conclusions

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# Conclusions

- Young people: don't save on fieldwork duration!
  - If you HAVE to: use reminders
- Accordingly, fieldwork duration for older people may be kept to a minimum
- TMSA respondents → basic rule: response takes time!
  - Time seems to be more effective than a reminder
- Employed persons: consider use of split questionnaire designs instead of one long questionnaire
- In general, organize survey in first part of the year...
- ...and avoid starting fieldwork on a Thursday



# Food for thought.....

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# Food for thought...

- Fieldwork length, questionnaire length and topic are all precommunicated
  - Changing these may affect response behaviour
- Fieldwork capacity limitations: you can not send out all invitations on Tuesday
- 'Extreme' weight factors may be an indicator that ASD is needed
- Response rate is high in TNS NIPObase (70%+), thus need for ASD limited
  - Incentives on household level, so gatekeeper may stimulate other household members to participate
- Current practice ASD in TNS NIPObase: sample size and (sometimes) reminders
  - Increased use of ASD not likely: operational costs > cost savings (less incentives) + data quality improvement (if any)
  - However, if fieldwork duration needs to be short, ASD might be desirable for some groups, such as children, children households, and TMSA respondents
- Smart Sample Management System...



# Further research



Multivariate analysis in which interaction between different steering mechanisms is investigated