# Respondent- and Interview-level predictors of Item Nonresponse in the ESS 9

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#### Introduction

#### Missing Data are Bad

- decreases effective sample size
- nonresponse bias
- indicator of overall data quality (satisficing)<sup>1</sup>

## A Typology of Missingness<sup>2</sup>

- missing completely at random
- missing at random
- not missing at random
- missing by design

<sup>&</sup>lt;sup>1</sup>Krosnick 1991

<sup>&</sup>lt;sup>2</sup>De Leeuw, Hox, and Huisman 2003.

## Item Nonresponse

Item nonresponse: non-substantive answer or refusal by the respondent

Question-Answer-Process<sup>3</sup>: understanding  $\rightarrow$  recalling information  $\rightarrow$  eventually judging  $\rightarrow$  eventually editing  $\rightarrow$  eventually formating  $\rightarrow$  communicating

Two types of item nonresponse

- Don't know
  - not able to answer: mental effort is too high
  - strategy of satisficing
  - likely to be MAR
- Refusal
  - not wanting to answer: privacy and sensitivity
  - likely to be NMAR
- But: mechanisms not perfectly separate<sup>4</sup>

<sup>&</sup>lt;sup>3</sup>De Leeuw, Hox, and Huisman 2003.

<sup>&</sup>lt;sup>4</sup>Shoemaker. Eichholz. and Skewes 2002.

# Predictors of Item Nonresponse I

#### Country

- considerable country differences
- no good explanations to date<sup>5</sup>
- some composition effects<sup>6</sup>

#### Survey

- compositional differences between modes<sup>7</sup>
- design possibilities and likelihood of unintended skipping

<sup>&</sup>lt;sup>5</sup>Meitinger and Johnson 2020.

<sup>&</sup>lt;sup>6</sup>Koch and Blohm 2009.

<sup>&</sup>lt;sup>7</sup>Messer, Edwards, and Dillman 2012.

## Predictors of Item Nonresponse II

#### Interviewer

- considerable interviewer effects
- barely any explanations<sup>8</sup>
- poor interviewer behaviour?: skipping questions or shortening questionnaire

#### Respondent

- ability: age, health, education
- women have higher nonresponse
- ethnic minorities, poor language skills, low literacy
  - ightarrow reflection of broader patterns of inequality<sup>9</sup>
- motivation: political interest, feeling of powerlessness

<sup>&</sup>lt;sup>8</sup>Pickery and Loosveldt 1998.

<sup>&</sup>lt;sup>9</sup>Meitinger and Johnson 2020.

# Predictors of Item Nonresponse III

#### Interview

- sometimes gender matching<sup>10</sup>
- similar age vs older interviewer
- other people present during the interview<sup>11</sup>
- perceived cooperation of respondent<sup>12</sup>

#### Questionnaire

- explicitly offering DK
- complexity

#### Question

• sensitivity: e.g. income and sexual behaviour

<sup>&</sup>lt;sup>10</sup>Vercruyssen, Wuyts, and Loosveldt 2017.

<sup>&</sup>lt;sup>11</sup>Kupek 1998.

<sup>&</sup>lt;sup>12</sup>Tu and Liao 2007.

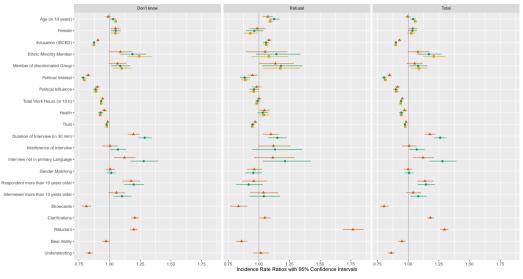
## Aim

- item nonresponse is still not well understood
- ullet most established predictors are respondent characteristics o not changeable
- the aim is of course to ensure and improve data quality in the future
- directing attention to controlable predictors
- fundamental problem: data availability
- ullet ightarrow explore reasonable available predictors especially on the interview level

#### Data and Methods

- ESS Round 9, all countries
- ullet number of refusals and DK o overdispersed count data
- complete questionnaire excluding questions affected by routing to ensure comparability
- nested structure: interviews by interviewers within countries
- $\bullet$  negative binomial regression with interviewer fixed effects, standard errors clustered by interviewer

## **Preliminary Results**



### Issues

- $\bullet$  missing data of included variables are directly linked to value of DV  $\rightarrow$  imputation?
- model comparisons?
- descriptives? (word limit...)

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