

Online Appendix

Table OA1. Definitions of Fieldwork Indicators

Fieldwork Indicators	Definition
<i>Interviewer or data collection effort & status of active sample</i>	<p>Interviewer or data collection effort: Key performance indicators that are basic descriptions of the effort put into data collection (e.g., number of interviewers working), and indicators that show the amount of work that has been done (e.g., number of contacted cases) and has or has not resulted in a completed interview</p> <p>Status of active sample: Statuses and features of cases still considered open and workable (Jans et al. 2013)</p>
Number of uncontacted cases overall	Number of cases without any contact attempt
Number of contacted cases overall	Number of cases with at least one contact attempt
Number of interviewers on study	Number of interviewers who carry out interviews for the study (overall)
Number of interviewers working	Number of interviewers currently conducting interviews for the study
Mean number of contact attempts per case	Number of attempts / Number of cases worked (Jans et al. 2013)
Interviewers per sample point	Number of interviewers working in the sample point
Number of completed sample points	Number of sample points with final disposition codes for all cases / in which all cases were processed
Total number of appointments by fieldwork agency	Number of pre-scheduled appointments by fieldwork agency
Number of contacted cases per sample point	Number of contacted cases for each sample point
Number of uncontacted cases per sample point	Number of uncontacted cases for each sample point
Distribution of contact attempts	Number of contacted cases over time (days, weeks)
Percent of interviewing staff working	Number of interviewers currently working for the study / Overall number of interviewers who carry out interviews for the study (Jans et al. 2013, adapted)
Interviewer-supervisor ratio	Number of interviewers / Number of supervisors (Montalvan et al. 2016)
Mean number of days since last contact attempt	(Date Today-Last Call Date for open cases)/Number of open sample units (Jans et al. 2013)
<i>Interviewer or staff productivity</i>	Productivity describes interviewer effort and how it is related to completed cases (Jans et al. 2013, adapted)
Completed interviews per interviewer	Total number of interviews completed per interviewer (Jans et al. 2013, adapted)
Interviewer-level response rate	Interviews completed / All eligible units assigned to interviewer (Jans et al. 2013)
Mean number of contact attempts per completed interview	Total attempts / Total interviews completed (Jans et al. 2013, adapted)
Refusals per interviewer	Number of refusals per interviewer
Last activity of interviewer	Day of last contact attempt, contact, or interview of each interviewer
Mean number of completed interviews per contact attempt	Number of completed interviews / number of contact attempts
<i>Dataset balance and representativeness</i>	Dataset balance and representativeness refers to the quality of statistical estimates that will be produced from the data (Jans et al. 2013)
Sample composition	Composition of the net sample (eligible units) with regard to key (e.g., socio-demographic) variables (number of cases)
Response rates for key subgroups	Response rates for demographic subgroups or for groups of special interest (Jans et al. 2013, adapted)
Comparison of distribution of key variables with census data	Comparison of the sample with regard to variables covered by microcensus data as a benchmark

Eligibility rate	Number of eligible sample units / all sample units
Unknown eligibility rate (AAPOR 2016)	Units with unknown eligibility / all sample units
Representativity-indicators (R-indicators)	Indicators that assess the representativeness of the realized sample with regard to the target population (Schouten et al. 2009)
<i>Survey output</i>	Survey output refers to meta-data on the data collection process in terms of benchmark reports (e.g., completed interviews).
Response rate	Number of complete interviews / Number of eligible sample units (AAPOR 2016)
Completed interviews	Total number of interviews completed (Jans et al. 2013, adapted)
Refusal rate	The proportion of all cases in which the sample unit refuses to be interviewed, or breaks-off an interview, of all potentially eligible cases (AAPOR 2016)
Soft refusals	Number of refusals where sample units give reasons for not participating that may change (e.g., not having time or being too busy at that moment) (Dutwin et al. 2014). Soft refusals are refusals that can be re-approached in the refusal conversion phase.
Hard refusals	Number of refusals where the sample units stated explicitly “never contact me/us again” and where conversions should not be attempted (Dutwin et al. 2014)
Total number of contacted sample units	Number of contacted cases in the sample
Completion rate	Number of sample units who have provided a usable response / Total number of initial personal invitations requesting participation (AAPOR 2016)
<i>Measurement process quality</i>	Measurement process quality are measures of what happens during the interview (Jans et al. 2013)
Interview duration	Interview end time - Interview start time (Jans et al. 2013)
Item-nonresponse rate all items	Number of cases with missing data / Number of cases receiving the question (Jans et al. 2013, adapted)
Item-nonresponse rate for key items	Number of cases with missing data / Number of cases receiving the question calculated for key items
Interview pace	Interview duration / Number of questions (Jans et al. 2013)
Average rate of items missing, respondent level	Cumulative number of item missing data / Number of respondents
Number of break-offs	Number of interviews where the sample unit starts the interview but then refuses to complete it (Dutwin et al. 2014)

Note: The definitions are based on AAPOR 2016, Dutwin et al. 2016, Jans et al. 2016, Montalvan et al. 2016, Schouten et al. 2009, and own definitions. Where available, the existing definition from the AAPOR standards or the literature is used. However, in several cases, the definition needed to be adapted to the German context. This is indicated in the reference as (author year, adapted).

Table OA2. Definitions of Fieldwork Measures

Fieldwork Measure	Definition
<i>Interviewer training</i>	Training of interviewers conducting the fieldwork
Form of the training	
- Written	Interviewers are mailed a manual that they have to study before starting fieldwork
- Video	Interviewers receive a video that they have to study before starting fieldwork
- Train the trainer	Researchers and managers at the survey organization personally train the regional lead or supervisor interviewer, who in turn train the interviews employed on the survey
- In person	Interviewers receive in-person training
Content of the training	
- General interviewer training	General rules of contacting and gaining the cooperation of sample units as well as conducting a standardized interview are explained
- Study-specific interviewer training	Specifics of the planned studies are explained and potential challenges associated with the project are discussed
Responsibility for the training	
- Fieldwork Agency	Employees of the fieldwork agency conduct training
- Researchers	Researchers working on the survey conduct training
Re-trainings of underperforming interviewers	Underperforming interviewers are identified and receive additional training
<i>Introductory materials</i>	Materials used to inform the sample units about the survey (e.g., purpose, procedure)
General advance letter	Letter informing the sample unit about an upcoming survey that usually contains information on, for example, the topic of the questionnaire, the sponsor of the study, the length of the interview.
Announcement of the visit	Sample units are informed about an upcoming interviewer including day and time
Other introductory materials	Other materials may consist of brochures or additional information such as data privacy sheets to inform the sample units about the survey
<i>Incentives</i>	Small gifts for the sample units that aim to gain his/her cooperation to participate in the survey
Cash	
-Conditional (promised)	Cash incentives that are promised to the sample unit and handed over only if the interview is completed
-Unconditional (prepaid)	Cash incentives that are provided prior to the interview independent whether the sample unit actually participates in the survey
Voucher	
-Conditional	Vouchers that are promised to the sample unit and handed over only if the interview is completed
-Unconditional	Vouchers that are provided prior to the interview independent whether the sample unit actually participates in the survey
Others	
-Conditional	Other types of incentives that are promised to the sample unit and handed over only if the interview is completed
-Unconditional	Other types of incentives that are provided prior to the interview and independents whether the sample unit actually participates in the survey
Larger incentives for refusal conversion	Modification of the incentive scheme during fieldwork to convince reluctant sample units to take part in the survey (e.g., by increasing the value of the incentive)
Testing for incentive effects on KPIs	
- Testing for effects on sample composition	Testing whether incentives affect the sample composition with regard to key demographic subgroups

- Testing for effects on response rate	Testing whether incentives affect the response rate
- Testing for effects on sample R-indicators	Testing whether incentives affect R-indicators and the representativeness of the data set
- Testing for other KPIs	Testing whether incentives affect other key performance indicators
<i>Fieldwork procedures</i>	Other procedures used to optimize survey output and/or to improve data quality
Minimum required contacts	Refers to whether a minimum number of contacts is required for each sample unit
Prioritization of cases with low response propensities?	Refers to whether cases with low response propensities are prioritized and therefore treated differently
Back-Checks	In back-checks, respondents are contacted by the fieldwork agency or the researchers to check whether the interviewer visited them (mainly in order to detect falsifications)
- per phone	Back-checks carried out per phone
- per letter	Back-checks carried out per letter
Audio recording of interviews	Refers to whether some interviews were audio-recorded during the interview (to detect misbehavior of interviewers or falsifications)

Notes: KPI: Key performance indicator. Where available, the definitions from the AAPOR standards or the literature were used. However, in several cases, the definition needed to be adapted to the German context. Those cases are indicated in the reference as (author year, adapted).