



# Error sources and quality in 3MC sampling and field implementation

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#### Field Implementation: Key Challenges

- Contextual factors
- Unanticipated events
- Variation in research traditions
- Variation in survey resources
- Social desirability bias
- Complexity of quality control process



#### Field Implementation: Current Best Practices

- Interviewer recruitment and training
  - Standardized recruitment criteria
  - Standardized training and expectations
- Pilot Testing
  - Standardized criteria
  - Interviewer assessment
- Quality control processes
  - Standardized CAPI system
  - Paradata monitoring
  - Nonresponse analyses



#### Field Implementation: Current Best Practices (con't)

#### Other processes

- Initial mode of contact
- Interviewer assignments/"partially-interpenetrated design"
- Interviewer remuneration
- Data collection firm remuneration
- Respondent incentives



#### Field Implementation: Recent Innovations

- Centralized fieldwork organizational structure
  - Regional hub structure leverages proximity of trusted local partners
- Quality assurance innovations with e-devices
  - Audio
  - Visual
  - GPS
- Quality control innovations
  - Multiple statistical approaches to detect intentional and unintentional deviations



#### Field Implementation: Future Directions

- Increased priority for allocation of resources for quality control
- Increased understanding of respondent privacy concerns and the implications for paradata collection and data quality
- Increased emphasis on intentional deviations as a significant quality control issue in 3MC surveys
- Increased focus on communication and knowledge sharing across practitioners



#### Field Implementation: Recommendations

- Expand opportunities for communication and collaboration across 3MC projects and across disciplines.
- Educate sponsors on costs and resources for all major design and implementation steps.
- Develop and implement a research agenda focused on new methods to educate and train interviewers in order to incentivize adherence to study protocol.



#### Field Implementation: Recommendations (con't)

- Develop and implement a research agenda to investigate the most effective series of analyses to detect both unintentional and intentional deviations from fieldwork protocol.
- Develop and implement a research agenda to investigate interviewer effects across study countries, including measurement metrics, differential impact on data quality, and appropriate analytical methods.
- Develop a low-cost mobile data collection software with an integrated sample management system and ability to capture complex paradata.



#### Field Implementation: Recommendations (con't)

Root causes of errors and deviations from protocols should be investigated in order to prevent them.



# Sampling: Overview

- Probability face-to-face sampling designs are the preferred approach for most high-quality 3MC surveys.
- In 3MC surveys, complete harmonization of sampling designs is not a pre-requisite for comparability.
  - The only stage at which harmonization is necessary and important is in specifying the survey objectives and the definition of the target population.
- Design decisions related to what frame(s) to use, the level of clustering (if any) and stratification variables can and should be optimized on a country-by-country basis.
  - This flexibility is important if the objective of the survey is to minimize Total Survey Error, both within and across the countries covered.



# Sampling: Key Challenges

- Countries differ in available frames and thus in how they select household samples for face-to-face surveys.
- In and of itself, frame variability does not necessarily challenge data comparability.
  - However, the quality of available frames can differ across countries in terms of coverage and accuracy, leading to significant differences in degree of population representation.
  - Variability in understanding of the concept of coverage as well as frame quality can create misunderstandings, complicating design decisions.
- Specifying stratification variables for design and weighting can also be problematic in terms of data quality and comparability.
- Differences in survey research traditions, survey methodology backgrounds, and variation in socio-political contexts across 3MC study countries can lead to a significant effect on data quality.



#### Sampling: Current Best Practices

- A number of approaches have been developed to address the key issues relating to sampling design in 3MC surveys.
- The chapter provides an overview of the most critical aspects in a 3MC survey:
  - Target population, survey population and household definitions
  - Sampling frame assessment
  - Sampling frame development
  - Sample size and effective sample size
  - Sampling stage determination
  - Within household respondent selection
  - Central vs. local coordination models



- Recent innovations to address current challenges to probabilistic sampling in 3MC surveys can be summarized into four main areas:
  - Availability of areal frames
  - Selection bias
  - Frame development in the absence of household registers
  - Respondent selection



# Sampling: Future Directions

- Expectations for the future direction of sampling in 3MC surveys concern:
  - Frame development
  - Assessing availability of registers
  - Documentation of the sampling design process



# Sampling: Recommendations

- Develop and implement a research agenda to empirically examine the performance of new methods as compared to existing sampling frames and other methods of sampling frame development.
- Facilitate opportunities for countries in regions outside Europe to collaborate on initiatives to identify, access, and assess registers and other databases as potentially viable sampling frames.
- Define current best practices for controlling listing procedures, random walk protocols, and selection of household members.
- Develop a standardized process for comprehensively documenting the sampling design in each study country and disseminating the documentation alongside the data.



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