Input harmonization

Target population

Sampling frame

Sample

Respondents

Post survey adjustments

Output harmonization

Contributors to error

Coverage error

- Definition of the survey population
- Sample screening and respondent selection procedures
- Frame availability and quality
- Treatment of cultural and linguistic minorities, other hard-to-reach populations

Sampling error

- Sample size
- Mode choice
- Clustering, stratification, and weighting in sampling designs
- Different sampling practices (e.g., random walk, substitution)
- Definitions (e.g., household, resident, housing unit)

Nonresponse error

- Survey “climate”
- Rules about the number of contacts, treatment of refusals, the use of incentives, etc.
- Definitions (e.g., household, resident, housing unit)
- Treatment of cultural and linguistic minorities, other hard-to-reach populations

Adjustment error

- Varying capacity, available data, and practices for post-survey adjustments
- Rules and procedures for disclosure avoidance

Survey statistic

Cost, burden, professionalism, ethical considerations, constraints

Design

Implementation

Evaluation

Contributors to error validity

Validity

- Does the conceptexist?
- Adaptation or operationalization of the construct

Measurement error

Response process

- Comprehension – Translation and adaptation, context (i.e., question order)
- Retrieval – Ecological factors, social determinants
- Judgment and estimation – Declarative versus procedural knowledge, tendency to estimate
- Response – Self-presentation, social desirability

Adapted from Tourangeau et al. (2000)

Structural aspects

- Frame/mode limitations
- Interviewer/respondent interaction
- Communication norms
- Third party presence
- Respondent burden

Processing error

- Varying capacity and practices for data editing

Survey statistic

Adapted from Groves et al. (2009)