Mixed Mode Data Collection Strategies in Surveys

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Mixed Mode Data Collection in Comparative Social Surveys

City University London 15 September 2005
Survey Research

- Methods of data collection
  - Face-to-face interviews/CAPI
  - Telephone interviews/CATI
  - Self-Administered Questionnaires (SAQ)
    - Mail surveys
    - Diaries
    - CASI
    - Web / Internet
    - .........
Why Mix Modes?

- Optimize data collection procedure
  - Research question
  - Population
- Reduce total survey error
- Respect survey ethics/privacy
- Within available time
- Within available budget
Best Affordable Method

- Mixed-mode explicit trade-off
  - Costs
  - Errors
- Example: Nonresponse follow-up
  - Mail survey
  - Telephone follow-up
  - Face-to-face for sub sample of remaining nonrespondents
Balance Costs & Errors

- Coverage
- Sampling
- Costs
- Nonresponse
- Measurement
Survey Nonresponse
Mixed Mode

Coverage

Sampling

Costs

Nonresponse

Measurement
Second Example Web

Coverage  Costs  Nonresponse

Sampling  Measurement
To Mix or Not to Mix

- Mixing modes has advantages, but
  - Will the answers provided by respondents differ by mode?
  - Can data that are collected through different modes be combined in one study?
    - Cross-sectional?
    - Longitudinal?
  - Can data that are collected through different modes be compared over studies or countries?
Multi Mode Survey Systems

- Survey more than data collection
- Communication with Respondent
  - Contact Phase
    - Pre-notification
    - Screening
  - Data collection
  - Follow-up
    - Reminders
- Mixed-modes of Communication in One Survey System!
Contact Phase
Advance Notification
Different Mode from Data Collection

Rationale
- Correct sampling frame
- Raise response rate
- Enhance credibility and trust

Effect on Quality
- Reduce coverage and nonresponse error
- No threats to measurement if data collection itself is UNI-modal
Contact Phase
Recruitment / Screening
Different Mode from Data Collection

Rationale
- Reduce costs
- Enhance efficiency
- Update or expand contact information for main mode

Effect on Quality
- Improved timeliness
- *If* pure screening (data collection itself is UNIModal) no threats to measurement
- *If* screening plus first part of data collection different from main mode:
  - risk of mode effects
  - threat to measurement
Follow-up Phase Reminder(s) in Different Mode from Data Collection

Rationale

- Simple reminder, such as postcard, short telephone call, etc has low costs
- Raise response rate

Effect on Quality

- Reduce nonresponse error
- *If* pure reminder, letter, call (data collection itself is UNI-modal) no threats to measurement
- *If* reminder plus additional questions, part of data collection different from main mode:
  - risk of mode effects
  - threat to measurement
Data Collection Phase

- Mixed mode for interaction in Contact Phase and Follow-up Phase mostly Win-Win situation
- More complicated in Data Collection Phase
- Only win-win situation in mixing interview mode with SAQ for sensitive questions
  - E.g. CAPI/CASI
    - Interviewer guidance for non sensitive questions
    - More privacy, less social desirability sensitive questions
Implications Mixed Mode in Data Collection Phase

- Risk
  - Introducing mode effects in data set
- Result:
  - Increasing measurement error
- However:
  - Reduction of other errors
    - E.g., Coverage in web-mail
- Careful consideration needed
- Careful design for *optimal mixed mode*
Problems Mixed Mode in Data Collection Phase

- Incomparability
  - Changing methods over time in longitudinal surveys
    - Confounding of time effects and mode effects
  - Different subgroups different modes (e.g. nonresponse follow-up, web mixes)
    - Confounding
      - Are groups different or is it mode effect (e.g. Soc. Des.)
  - Different samples, different modes (e.g., comparative research, international)
Main Differences Modes

- Presence or absence of interviewer
- Channels of communication
  - Aural (Oral) vs. Visual

Also:
- Different modes, different tradition question format
- Question format effects!
Design for Mix

- Some studies found hardly any effect mixing
  - Well designed experiments!

- Two Situations:
  - One main method, other methods auxiliary
    - Nonresponse follow-up. Some longitudinal designs
  - Truly multiple mode design: modes equally important
    - Web mix. Respondents may choose
Design for Optimal Mix

- One **main** method, other methods **auxiliary**
  - Use main methods to its maximum potential
  - Auxiliary methods equivalent (e.g. same # response categories, same format) perhaps suboptimal, but avoids measurement error
- **Multiple mode** design: **equally** important
  - Uni-mode design
    - Same question in same lay-out
  - Universal or generalized design
    - Same stimulus
Finally

- Designing for Mixed modes
- Embedding small experiments / mode comparisons
- Empirically based adjustment
- Research agenda for future

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