



Mixed Mode Data Collection in Surveys

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NOSMO

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Survey Research

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



How good is your website?		
	Yes	No
I am proud of our website	<input type="checkbox"/>	<input type="checkbox"/>
Our website brings in as much business as we want	<input type="checkbox"/>	<input type="checkbox"/>
Our website does highly on the search engines	<input type="checkbox"/>	<input type="checkbox"/>
Customers regularly visit our company website	<input type="checkbox"/>	<input type="checkbox"/>
The website reflects our image and brand	<input type="checkbox"/>	<input type="checkbox"/>
We updated our website within the last 3 months	<input type="checkbox"/>	<input type="checkbox"/>



Why Mix Modes?

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

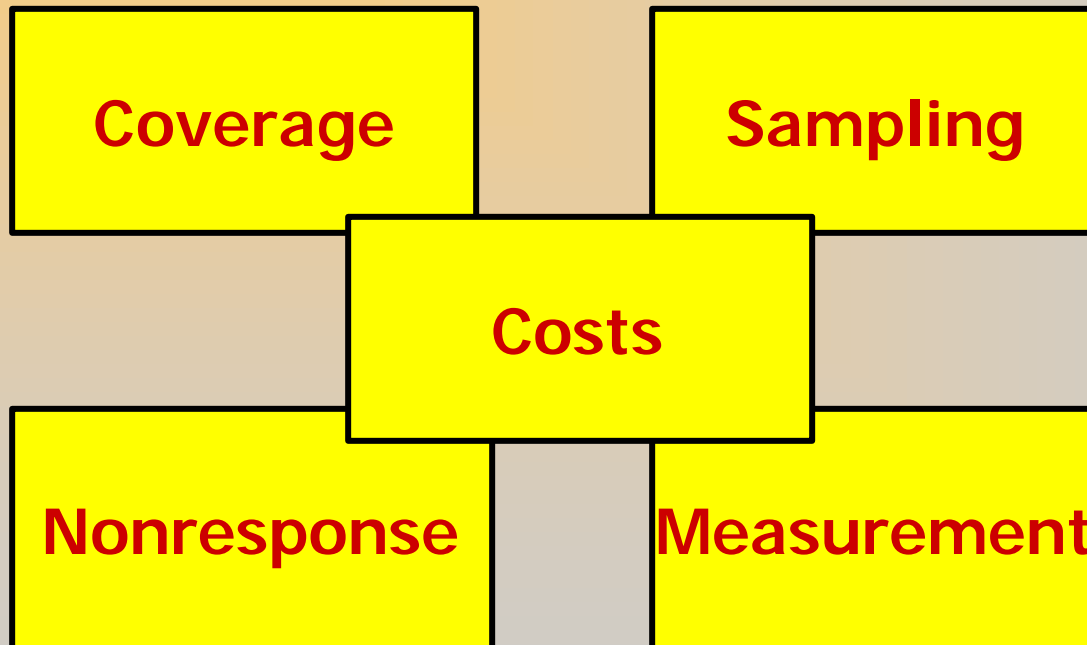


Best *Affordable* Method

- 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

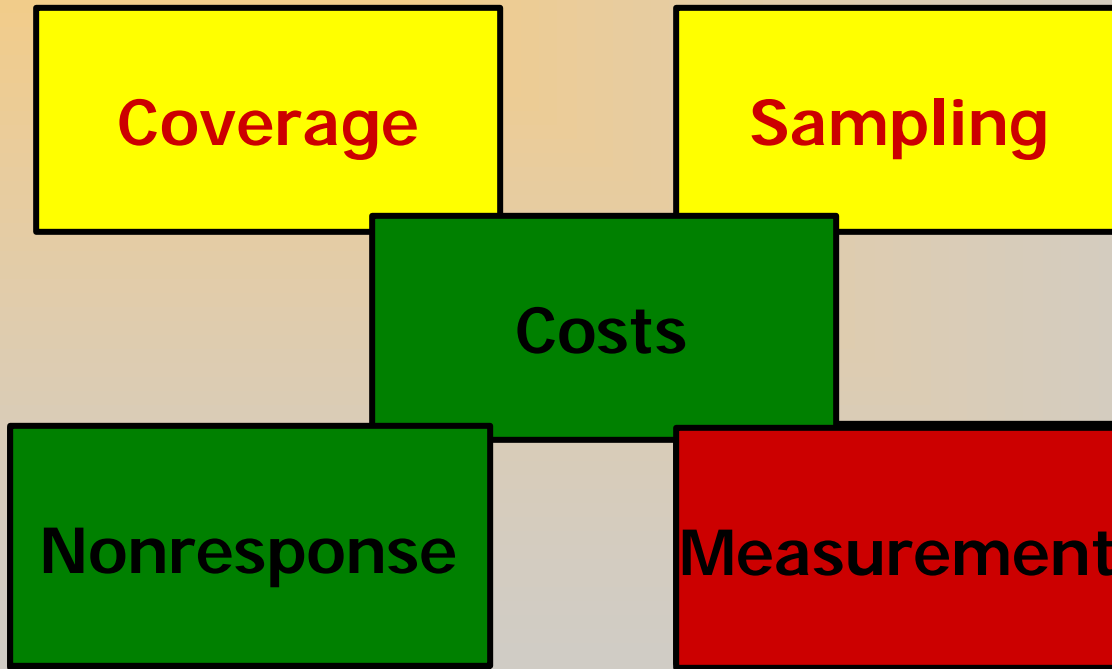


Balance Costs & Errors



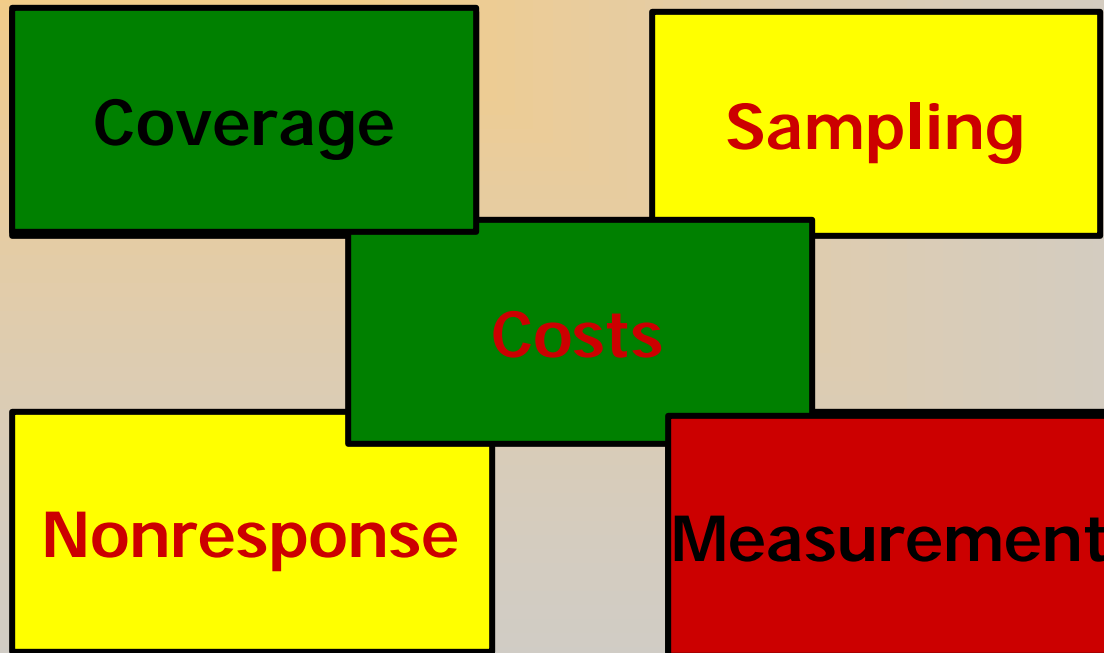


Survey Nonresponse Mixed Mode





Second Example Web





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 vs. 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 clear **win-win** situation 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



Problems Mixed Mode in Data Collection Phase

- Risk
 - Introducing *mode effects* in responses
- Result:
 - Increasing measurement bias or 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: all 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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