

Using Paradata for Nonresponse Adjustments: Translating Research into Application

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Redesigning the NSDUH

- One of the primary functions of the NSDUH is to provide information regarding trends
- Small changes in questionnaire, field processes, field staff composition and processing can lead to non-substantive, methodology-driven changes in estimates.
- If improvements lead to changes, then can't adopt; if they don't then why adopt?
 - shorten processing time, save money, simplify interviewer or respondent burden

Context

- **Part of a comprehensive redesign process**
- **Included in an overall assessment of weighting procedures that is also looking at improving the current methodology– increasing categories, dropping variables and steps.**
- **In addition to the weighting assessment we are:**
 - **Comparing sample designs and frames**
 - **Examining field procedures and materials**
 - **Redesigning the questionnaire**
 - **Comparing existing data sources**
 - **Evaluating processing– editing and imputation**
- **Trade-offs**

Evaluation Criteria

- **No perfect ‘gold standards’ or benchmarks**
- **Time constraints**
- **Cost**
- **Stability over time**
- **Effect on variance and bias**
- **Model sensitivity to definitions**
- **Effect on the field**
- **Other benefits**

Interrelationship with Field Procedures

- **These data are collected to manage, improve and evaluate field procedures**
 - Not intended to be a pure measure of level of effort
 - Level of effort (LOE) is multidimensional, not clearly defined
- **How will changes in field procedures affect LOE data**
 - e.g., not pursuing cases in states/local areas that have met target response rates
- **How will using these paradata in weighting adjustments affect field procedures?**
 - Increase burden on interviewers and supervisors?

Other Useful Paradata

- **Interviewer experience**
 - We found a relationship between interviewer experience on the project and key outcome measures.
 - This is a changing relationship- impact of field management changes
- **Controlled access**
 - Barriers to entrance– door person, gated communities
 - Difficulty coding consistently
- **No overall assessment of the quality of paradata**
 - These data are not standardized
 - Variations across field supervisors?

Other Uses

- **Quantifying nonresponse bias**
 - At a minimum this work may help us quantify the extent of nonresponse bias in NSDUH estimates.
- **Adaptive field operations**
 - Time constraints– decisions on the field occur very soon after the LOE data is obtained

Summary

- **Not always easy to assess benefits due to lack of gold standards**
- **As part of the evaluation of a new procedure we look at cost-time-data quality improvement trade-offs, effects on the field, stability over time**
- **While we do not have answers yet on whether and how to incorporate LOE data in weighting adjustments, these data may help us understand the nature of nonresponse bias in the NSDUH**

Questions?

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