



# Questionnaire Complexity and Respondent Burden

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# Overview

- Study Background
- Methods
- Response Rates
- Methods of Gaining/Maintaining Cooperation
- Respondent Incentives
- Question Repetition
- Questionnaire Complexity
- Respondent Recall for Open-ended Questions
- Conclusions

## Burden & Reduced Cooperation

- Attrition and nonresponse may have severe implications for study outcomes including biased estimates.
  - Sources of attrition and nonresponse include question difficulty and questionnaire length (Dillman et al., 2002).
  
- Researchers should proactively employ a multi-pronged defense (de Leeuw, Hox, & Huisman, 2003).
  - Active refusal conversion
  - Maintaining contact with respondents
  - Employing well-trained and attentive interviewers
  - Administration using appropriate survey technologies
  - Instrument testing

# Background

## **Community Advantage Panel Survey (CAPS)**

- Conducted by the Center for Community Capital at University of North Carolina at Chapel Hill with funding from Ford Foundation.
- A longitudinal study designed to assess the economic and social impacts of homeownership on low- to moderate-income homeowners and renters
- Homeowners-list sample
- Renters-RDD sample

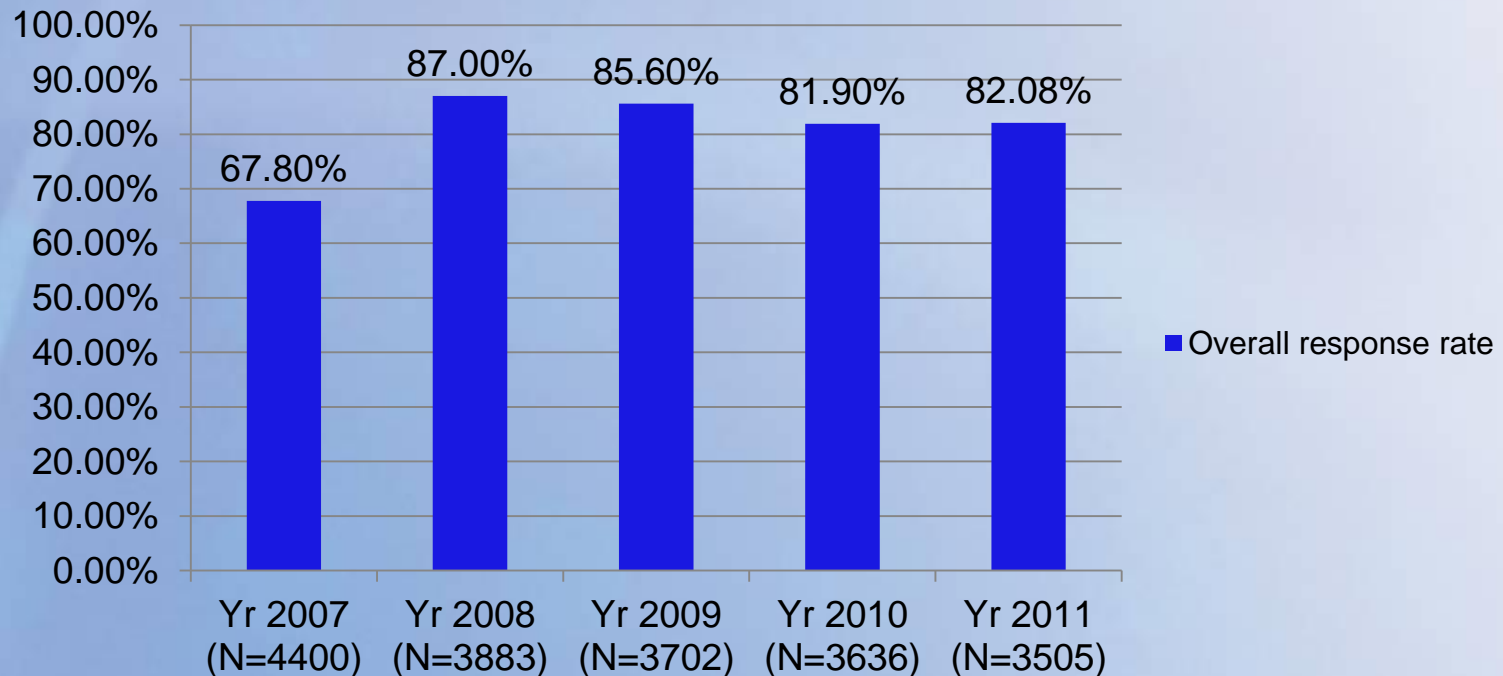
# Methods and Design for CAPI and CATI Data Collection

- Longitudinal self-report
  - Mobile population; currently residing across 36 states
  - Administered in English and Spanish
  
- Multimode data collection for both Renters and Owners
  - CAPI—2005 and 2008
  - CATI—2004, 2006-2011
    - Batch, interactive, and field tracing when necessary
    - Non response letters
    - Quality control meetings
    - Monitoring

# Response Rates

RTI International conducted annual telephone and in-person interviews for owners and renters samples starting 2007.

## Response Rates Yrs 2007 - 2011



# Gaining and Maintaining Cooperation

## ■ Newsletters

- Mailed annually
- Feel good, informative articles
- Promotes respondent contact

## ■ Panel Maintenance

- Mailed annually
- \$5 thank you
- Promotes respondent contact

## ■ Incentives

- Helps reengage refusers
- Increased gradually across study years from \$20 to \$50
- Additional \$25 incentive for refusals

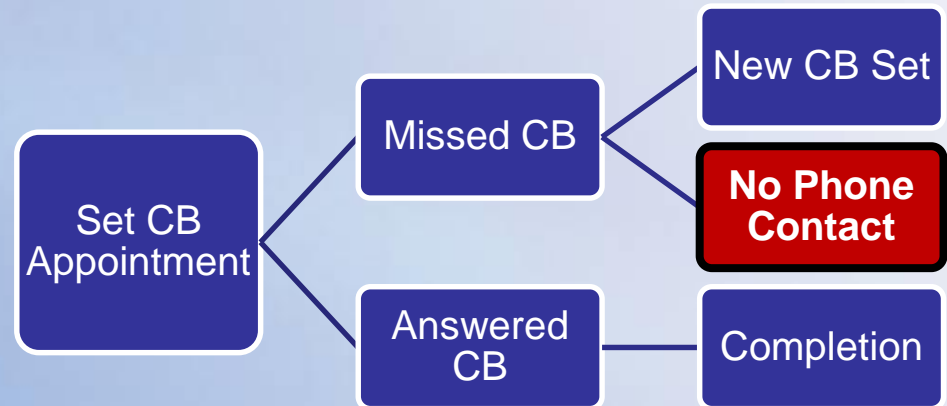
## ➤ Questionnaire Design

- Reduces cognitive burden
- Reduce respondent frustration due to repetition



# Follow-up Mailings for Missed Appointments

- CATI respondents may set and subsequently miss call back appointments
- UNC approach
  - Identify which respondents have scheduled call back appointments and missed them
  - Special type of refusal conversion
  - Reminder letters are sent to respondents
  - 54% completion rate among these respondents



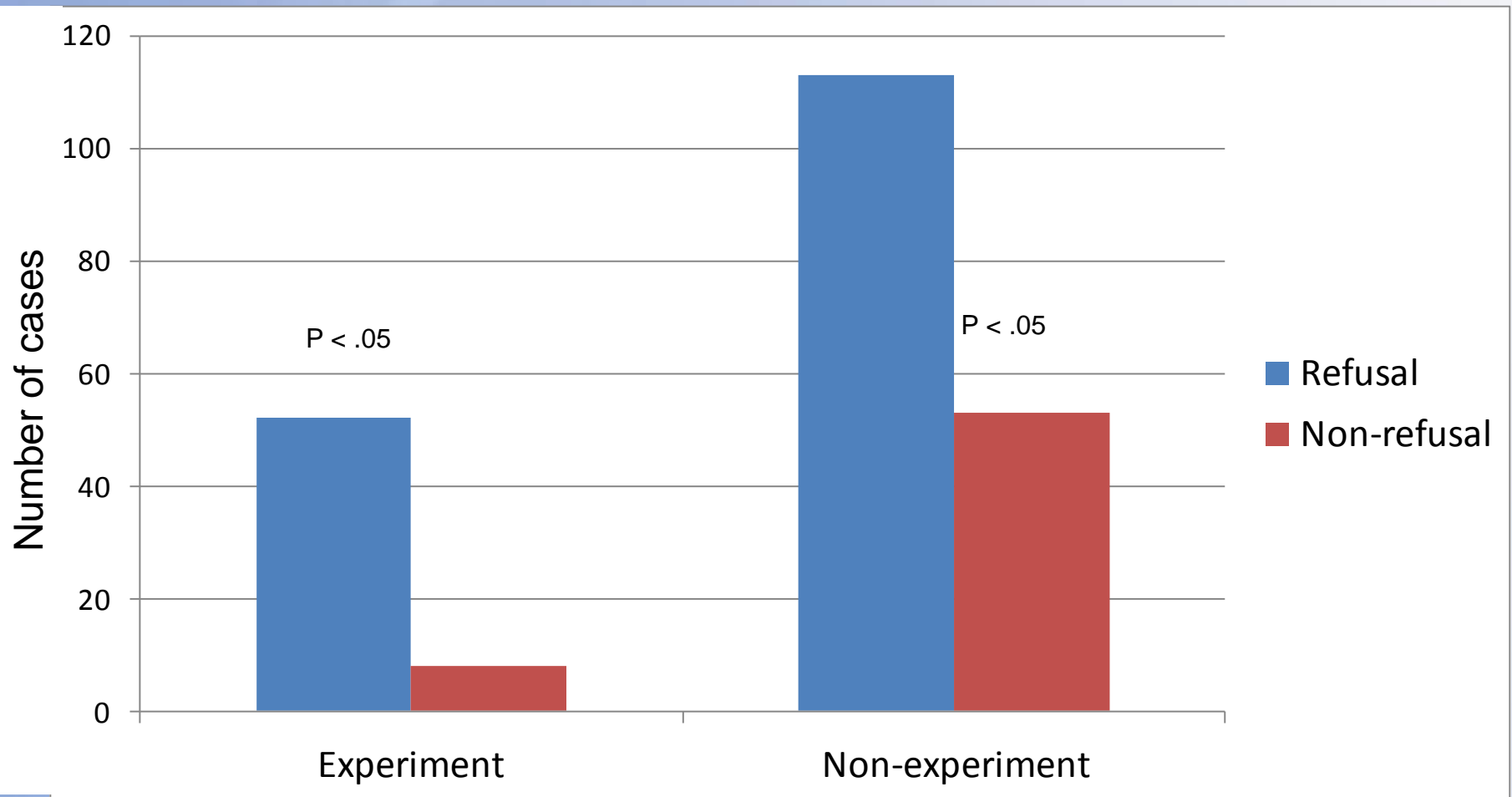
# Using incentives to increase cooperation

- General concerns
  - Incentive forms (e.g., cash, check, gift card, donation to charity)
    - Cash incentives may be more desirable given it's tangibility (Birnholtz, et al., 2003).
  - Refusal conversion incentive increases may be costly
- Concerns more relevant to longitudinal research
  - Incentives may impact previous refusers more than others
  - Employing incentive increases over study years may help re-engage refusers (Zargorsky & Rhoton, 2008)
- UNC incentive approach
  - Increased incentives for converting refusals
  - Double incentive experiment

# Refusal Conversion Rates

Year	Total initial refusals	Total converted	Percentage
2007	425	115	27.1%
2008	368	178	48.4%
2009	581	319	54.9%
2010	261	81	31.0%
2011	145	47	32.4%

# Doubling incentives decreases refusals



\* Among those with prior refusal status

# Question Repetition

- Repetition is necessary to track longitudinal changes.
- Repetition may bore or frustrate respondents.
  - UNC Respondent:

“For 10 years I have been telling you the purchase price of my original home, and since 2006 I have been telling you the sale price of that original home plus the purchase price of my new one.”
- Alternatives we have employed
  - Remove nonessential questions
  - Use data verification strategies
  - Ask if a respondent’s status has changed or not since the last interview

# Question Complexity

- Contributors to question complexity
  - Question length and wordiness
  - Number of response choices
  - Modality (e.g., show cards)
  - Question wording
  
- Example Question from UNC
  - Aside from a vacation property, do you currently hold a mortgage or a deed for a home? (used prior to 2009)
  - Do you currently hold a mortgage or a deed for a non-vacation home? (used in 2009-2011)
  - Do you currently own a residential home? (used in 2012)

## Respondent Recall for Open-ended Questions

- Questions requiring recall of detailed information may be burdensome
  - UNC Respondent:

“The survey asks for information (such as net worth) that requires some research/tracking down files. Asking this information in a phone survey results in an off-the-cuff response, rather than accurate info.”
- UNC solutions
  - Reminding respondents of the nature of the survey in the lead letters.
  - Training interviewers to be patient with respondents who choose to look up information during interview
  - Considering interviewer notes and comments about respondents’ reactions in future survey waves

## Conclusion

- Reducing burden to encourage respondent cooperation and response requires a multi-pronged approach
  - Refusal conversion strategies
  - Continued contact with respondents
  - Careful consideration of questionnaire design
  - Examining paradata associated with interviewers' and respondents' comments about the survey



## More Information

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- 4-Question Block Format
  - Used to collect *open-ended* monetary values for both modes
  - CATI- interviewer reads ranges out loud
  - CAPI- interviewer administers a show card
  - Answers of Don't Know or Refused are followed with:
    - 1) suggested dollar range with high/low values
    - 2) categories with an explicit range (e.g., \$0-10,000 in 16 categories).

- Additional areas to consider
  - Quality Control- monitoring and verification
  - Instrument testing
  - Study-specific interviewer training
  - Modality

# Questionnaire Length

- Possible Implications
  - May lead to panel mortality
  - May encourage item non-response and DK responses
- Possible solutions
  - Missing by design approach
  - Carefully reassessing questionnaire content prior to each wave

# Completers vs. Refusers by Experiment