

Response to “Experiments for Evaluating Survey Questions”

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Some factors in experimental design

- Random assignment to treatment and control groups
- Minimize other potential confounds
- Designs for internal and external validity
- Experiments with questions
 - Between-subjects design
 - Within-subjects design
- Potential problems
 - Randomization error
 - Confounds
 - Carryover effects

Designs for pretesting and for research

Experiments for research

- Discover knowledge
- Strongly controlled conditions
- Findings derived statistically
- Must be replicable
- Results reported to scientific community
(in peer-reviewed journals)

Experiments for pretesting

- Improve questions
- Conditions controlled as much as feasible
- Findings derived by multiple means, both quantitative and qualitative
- Usually need not be replicable
- Results reported to questionnaire developer
(Documented in project methodology report)

Coordinating experiments with other pretest methods

- Pretest methods
 - Conventional pretesting
 - Behavioral observation
 - Cognitive pretesting
- Possible measures
 - Reaction times
 - Test-retest reliability
 - Predictive validity

Coordinating cognitive interviewing and experiments

Fowler (2004) “The case for more split-sample experiments in developing survey instruments”

- 1st Cognitive interviews
 - Identify question problems
- 2nd Field experiment
 - Probability samples
 - Larger sample size
 - Quantitative measures

Experiments using vignettes or debriefings

Martin (2004) “Vignettes and respondent debriefing for questionnaire design and evaluation”

Field experiments

- Current Population Survey (CPS)
 - Post-CATI interview vignettes
- National Crime Victimization Survey (NCVS) Screener
 - Post-CATI interview respondent debriefing questions

Also see: Martin, Groves, Matlin and Miller (1986)

Verbal reports in experimental designs

Verbal report data have been collected in experiments for other purposes

- Research in psychology (e.g. Brown 1995)
- Usability testing (e.g. Saraiya, North and Duca 2005)
- Comparing cognitive interviewing to other methods (e.g. Presser and Blair 1994)

Cognitive interviews in an experimental design

- Cognitive interviewing can:
 - Identify different types response problems
 - Be designed to test conjectures about question flaws
 - Provide information about reasons for problem occurrence
- Qualitative data would be the dependent variable in experiments with small sample sizes
- Larger samples may support statistical tests

Potential uses of cognitive interviews in an experimental design

- Comparing a question's initial draft and revision
- Comparing a question version from an earlier survey with a proposed revision
- Comparing alternative approaches to a question problem; or finding tradeoff in dealing multiple problems in a question

Rent system question

PREF3: I'm going to ask you some more detailed questions about your preferences for a rent system for the public housing and voucher program. Just like the previous question, I'll present two options and you tell me which one of the two choices you would prefer for yourself. Would you prefer..... a rent system with: (Option A) or a rent system with (Option B)

Rent system question response choices

Option A

- The current income-based rent system—30 cents for each dollar of income—and the same amount of time you spend waiting for housing assistance
- The current assisted housing income-based rent—30 cents for each dollar of income—and the same amount of time you spend waiting for housing assistance
- A rent of \$350 adjusted only for inflation that does not change when your income goes up or down.
- Rent that starts at \$200 and increases by \$50 each year. For example, it would be \$250 in the second year and \$300 in the third year.

Option B

- A rent system where you paid extra \$100 in monthly rent, but one year less time waiting for housing assistance
- A rent system where you paid extra \$100 in monthly rent, but two years less time waiting for housing assistance
- Rent that is 30 cents for each dollar of income and changes when your net income goes up or down.
- Rent that is 30 cents for each dollar of income and changes when your income goes up or down. You would only be allowed to (stay in your public housing unit/use your voucher) for 6 years.

Rent question response tasks

- understanding that the basic task was to compare hypothetical system to current system; or to compare pairs of rent systems
- .understanding each of the two system options
- .not confusing the two options; or, in some instance, comparing the options in the survey with the present option they lived under
- .keeping relevant information in mind
- .selecting one of the offered choices

Alternative versions of rent preference questions

- the introductory description of the task
- providing a explicit opportunity for having either the question and/or pairs of options repeated
- some changes in the description of the options, e.g. “30 cents for each dollar” versus “30%”
- Bulleted form for each response option

Response problem code categories

- Understanding general task
- Understanding response option A
- Identifying the key elements that differ between options
- Understanding response option B
- Remembering information in each option
- Selecting one of the offered options

Values of cognitive interview experiments for pretesting

- Alternative question versions can be varied systematically, one element at a time, to create discrete experimental conditions
- .Probes can be written to explore potential problems
- .An experimental design does not preclude using un-coded verbal reports
- .Either between-subjects or within-subjects designs are possible
- For small to moderate samples, qualitative data serve as dependent measures

Summary

- Need more study on how experiments can be coordinated or combined with other pretest methods
 - Contributes to the neglected area of how best to combine available pretesting methods
- Cognitive interviews within an experimental design may have value
 - Larger samples needed
 - Choice of between-subjects and within-subjects designs
 - Experiments require verbal reports to be analyzed more systematically

Rent system question A

PREF2 For the next few questions, I am going to ask you about different systems that can be used to determine the level of rent families pay to live in public housing or to rent a housing unit with a voucher.

I will read two choices for each question. Please tell me which one of the two choices you would prefer for yourself. There are no right or wrong answers, we just want to know what you think.

Would you prefer a rent system with: (Option A) or a rent system with (Option B)

Rent system question A

response choices

Option A

- Lower rent, but a longer time waiting for assistance
- Rent that does not change when your income goes up or down
- Rent that increases each year you receive assistance
- A lower rent, but the housing authority verifies your income every year.

Option B

- Higher rent, but a shorter time waiting for assistance
- Rent that goes up when your income goes up and down when your income goes down
- Rent that stays the same, but has a time limit on the number of years you can receive assistance
- A higher rent, but the housing agency does not verify your income after the first year.