

Establishing **Evidence** Elevating **Standards** Enriching **Policy**



The Effect of Interview Experience on Follow-Up Response Propensity in a Longitudinal Survey

**Presentation to the American Association for Public Opinion
Research Conference**

May 16, 2009

**Matt Sloan
Debra Wright**

Mathematica Policy Research, Inc.

Introduction

- Attrition in longitudinal surveys is potentially a significant problem.
- Attrition can be caused by:
 - Problems with locating respondents
 - Difficulty making contact
 - Inability to obtain cooperation
- There is considerable interest in identifying factors related to propensity to respond in future rounds.

Purpose

- **Examine how interview experience affects propensity to respond to future survey rounds.**
- **Investigate interview experience related to surveying persons with disabilities.**
- **Assess how interview experience affects respondents' rating of the value of future survey rounds.**

Background

- **Studies of response propensity focus mainly on survey design and sample unit characteristics:**
 - **Studies of survey design focus mainly on interview characteristics that may increase respondent burden.**
 - **Studies of sample unit characteristics focus on differential attrition and compensation methods.**
- **An expanded definition of respondents' survey experience may be an equally powerful determinant of propensity to respond.**

Research Questions

- Is the decision to participate in a future wave influenced by respondents' experience in an earlier interview?
- In a survey of persons with disabilities, is future response affected by the use of assisted technologies, an assistant, or proxy to complete a prior round?
- Does a prior interview experience affect ratings of the value of the interview in subsequent rounds?

National Beneficiary Survey (NBS)

- **Part of evaluation of Ticket to Work (TTW) program sponsored by SSA.**
- **Collects data from national samples of SSDI and SSI beneficiaries and TTW participants.**
- **Data collected by CATI with follow-up by CAPI.**
- **Multiround survey conducted in 2004 (round 1), 2005 (round 2), and 2006 (round 3).**
- **Post-paid incentive of \$10. During last 4 weeks, non-respondents sent pre-paid incentive of \$10.**

NBS Sample

- **TTW program rolled out in three phases to three groups of states.**
- **Includes cross-sectional samples of nationally representative disability beneficiaries and TTW participants in each phase.**
- **Includes longitudinal TTW participant sample:**
 - **TTW participants from first set of states active in round 1 (phase 1)**
 - **TTW participants from second set of states active in round 2 (phase 2)**

Longitudinal Sample

- For this analysis, we focus on phase 1 and phase 2 TTW participants who completed round 2 and their propensity to respond at round 3.

	Completed Round 2		Completed Round 2 and 3		
	Count	Rate	Count	Rate	Total Sample
Sample					
Phase 1	916	69.9	759	57.9	1,311
Phase 2	900	73.2	744	60.5	1,230
Total	1,816	71.5	1,503	59.1	2,541

Note: All analyses use unweighted data

Analyses

- **Tested impact of round 2 interview experience on response at round 3**
 - 0 = did not complete round 3 interview
 - 1 = completed round 3 interview
- **Tested impact of same experience on respondent rating of the value of the interview:**
 - On a scale of 1 to 10, where 1 was not a good use of time and 10 was a good use of time, which number best describes how you feel about your experience today?

Variables Included in Regression Models

- Interview mode
- Length of interview
- Number of call attempts
- Refusal conversion
- Item non-response
- TTY interview
- Assisted interview
- Respondent type
- Interview tiring
- Pre-paid incentive
- Multiple rounds
- Sex
- Adult/child disability onset
- Ethnicity
- Race
- Age
- Education
- Disabling condition
- Type of benefit received

Logistic Regression Results for Round 3 Response

R2 Interview Variable	Beta	Sig	S.E.	Exp (B)
Interview mode (CAPI)	-.531	+	.321	.588
Refusal conversion	-.888	*	.465	.411
Number of calls	-.023	***	.005	.977
Prepaid incentive	-.703	+	.285	.495
Item nonresponse	-.188	***	.063	.829
Interview length	.005		.004	1.005
TTY interview	-1.636		1.00	.195
Assisted interview	.099		.421	1.104
Respondent type (proxy)	-.255	*	.117	.775
Interview tiring for respondent	-.158		.127	1.171
Multiple rounds	.072		.139	1.076

+ = $p \leq .10$; * = $p \leq .05$; ** = $p \leq .01$; *** = $p \leq .001$

OLS Regression Results for Rating of Interview Value

R2 Interview Variable	Beta	Sig	S.E.
Interview mode (CAPI)	-.043		.115
Refusal conversion	.983		.613
Number of calls	-.009		.006
Item nonresponse	-.173	**	.059
Prepaid incentive	-.064		.324
Interview length	-.004		.003
TTY interview	.315		1.224
Assisted interview	-.170		.362
Respondent type (proxy)	-.065		.120
Interview tiring for respondent	-.330	***	.432
Multiple rounds	-.126		.120

+ = $p \leq .10$; * = $p \leq .05$; ** = $p \leq .01$; *** = $p \leq .001$

Round 2 Interview Experience Predicts Round 3 Response

- **Reluctant respondents at a prior round had lower response propensity. At round 2, they:**
 - Had higher levels of missing data
 - Received more calls or required refusal conversion
 - Completed a CAPI interview
 - Were sent a pre-paid incentive
- **Total interview length and whether tiring were not significant.**

Results Summary for Response

- Interview experience unique to surveys of persons with disabilities had less impact on response propensity.
 - Proxies were less likely to respond at round 3.
 - Survey completed with assistance at round 2 was not a significant predictor.
 - Similarly, interview conducted by TTY at round 2 was not significant.

Results Summary for Value of Interview

- Few round 2 interview characteristics predict round 3 rating of value.
 - Those with higher levels of missing data on key survey items rated value lower than those with less missing data.
 - Interviewer observation that interview tiring for respondent associated with lower ratings of interview value.

Conclusions

- Respondents who showed reluctance in a previous round were less likely to respond in the future (e.g., unwillingness to participate or lack of interest).
- There was no strong evidence that characteristics of the interview specific to surveying persons with disabilities had an impact on response propensity.

Conclusions (cont'd)

- Respondents who are more difficult to locate, contact, and convince just as likely to value the interview experience once they take part.
- Overall interview length not negatively associated with response or rating of value.
- Interview burden does appear to have a negative effect on respondents' feeling about the value of the survey, which may be pronounced for this population.