



The Effectiveness of Incentives Used in the Second Phase of a Two-phase Survey

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The views presented in this paper are those of the authors and do not represent the official views of the United States Department of Education.

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National Household Education Survey (NHES)

- Sponsored by the National Center for Education Statistics
- Covers learning at all ages
- Surveys roughly every 2 years 1991-2007
- All surveys through 2007: RDD/CATI



Motivation for Redesign

- Declining response rates
 - Screener response: Low 80's in early years – 53% in 2007
 - Topical rates: 90% in early years – 75% in 2007
- Declining coverage rates for landline RDD
 - January-June 2009: 22.7% of households were cell-only, and another 1.9% were phoneless (Blumberg and Luke 2009)
 - Exclusion of about 20% of landline telephone households (Fahimi, Kulp, and Brick, *POQ* 2009)



NHES 2009 Pilot Study

- From RDD to an address based design
- Methodological in nature
- Data Collection Instruments
 - Early Childhood Program Participation (ECPP), for children who have not yet started kindergarten
 - Parent and Family Involvement in Education (PFI), for children and youth enrolled in K-12
- Encourage participation from parents/guardians of eligible children



Incentive Usage in Surveys

- Rewards offered to encourage participation or action
- Various Conditions
 - Type
 - Monetary
 - Non-cash
 - Timing
 - Pre-paid
 - Promised
- Used in survey research to address the issue of survey non-response

Review of Incentive Usage in Survey Research

| Author | Observed Effects |
|---------------------------------------------------------------------|------------------------------------------------------------------------------|
| (Trussell & Lavarkas, 2004; Church, 1993) | -Incentives contribute to significant increases in response rates |
| (Shaw et al. 2001; James and Bolstein, 1992) | -Incentives > \$1 significantly increase response rates |
| (Nederhof, 1983; James and Bolstein, 1990; Arzheimer & Klein, 1999) | -Correlations between incentives and respondent characteristics |
| (Dillman 1991, 2000) | -Incentives paired with multiple contacts improve mail survey response rates |



Incentive Experiment Methodology

- Use of Incentives with the Two-phase Approach for NHES
 - Screener Phase: Non-Experimental
 - Households were sent a screener survey that included a pre-paid \$2 incentive
 - Returned screeners were used to determine household eligibility, ECPP or PFI
 - Sub-sample of non-response cases were assigned to receive all future screener contacts by phone
 - If a screener was completed by telephone, the parent/guardian was asked to complete the topical survey by phone, if eligible



Incentive Experiment Methodology (cont'd)

- Use of Incentives with the Two-phase Approach for NHES
 - Topical Phase: Experimental
 - Mailed topical questionnaires included a random assignment of either no cash, \$5 or \$15
 - For topical questionnaires attempted by phone, a random 50% subsample of those respondents were offered a promised \$5 incentive for their participation

Does the inclusion of an incentive have an effect on response rates?

Table 1. Mail Response Rates and Sample Sizes for Topical Surveys, by Incentive Amount

| | \$0 | \$5 | \$15 |
|----------------------------------|-------|-------|--------|
| Total Sampled | 479 | 510 | 530 |
| Combined ECPP/PFI Response Rates | 69.5% | 73.5% | 80.6%* |

*Significant ly different from the \$0 group at the .05 level

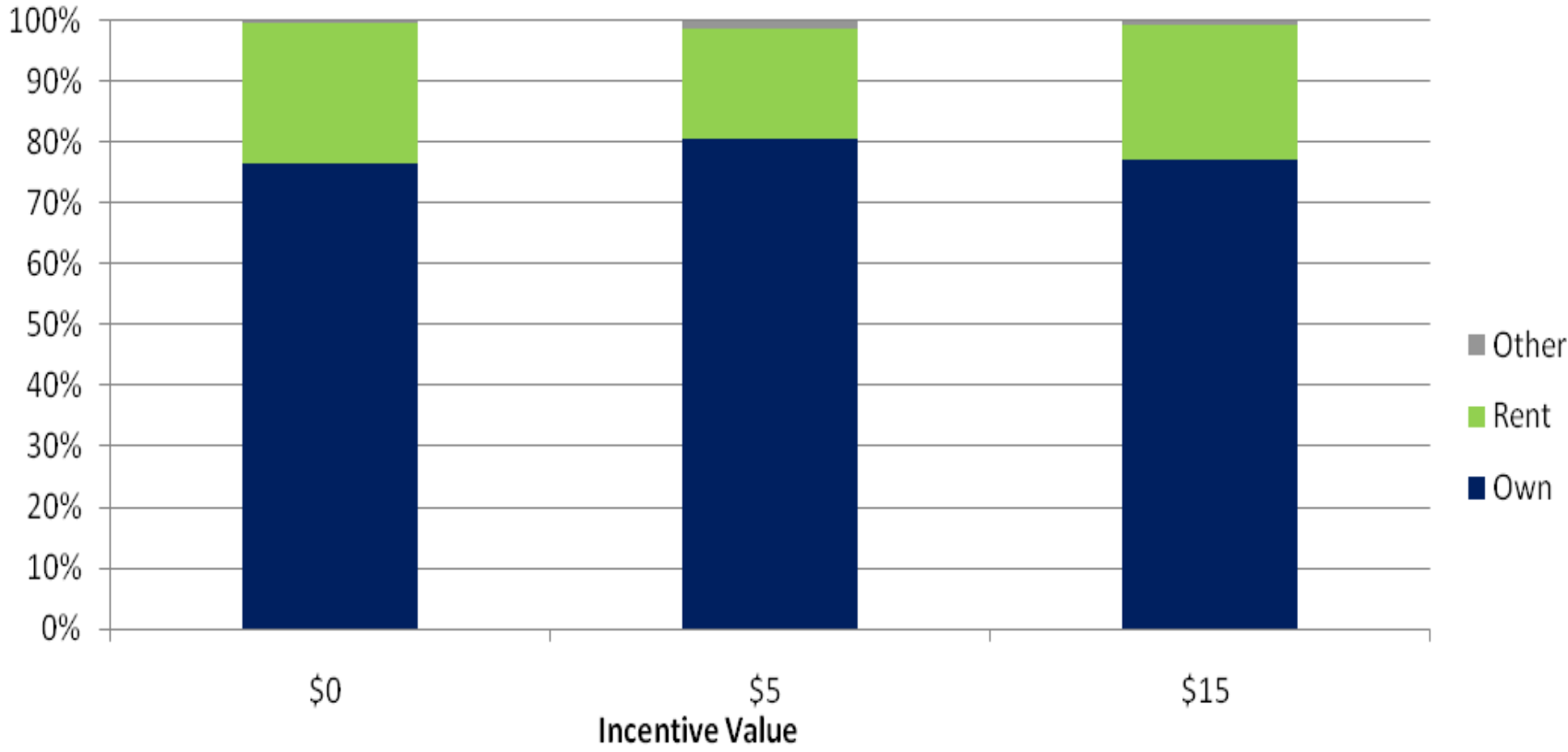
Table 2. Conditional Topical Response Rates by initial and non-response follow-up mailings

| | \$0 | \$5 | \$15 |
|---------------------------|------|------|-------|
| Initial Mailing | 36.1 | 40.3 | 48.4* |
| 1 st Follow-up | 47.9 | 46.4 | 51.2 |
| 2 nd Follow-up | 31.3 | 30.8 | 36.5 |

*Significant ly different from the \$0 group at the .05 level

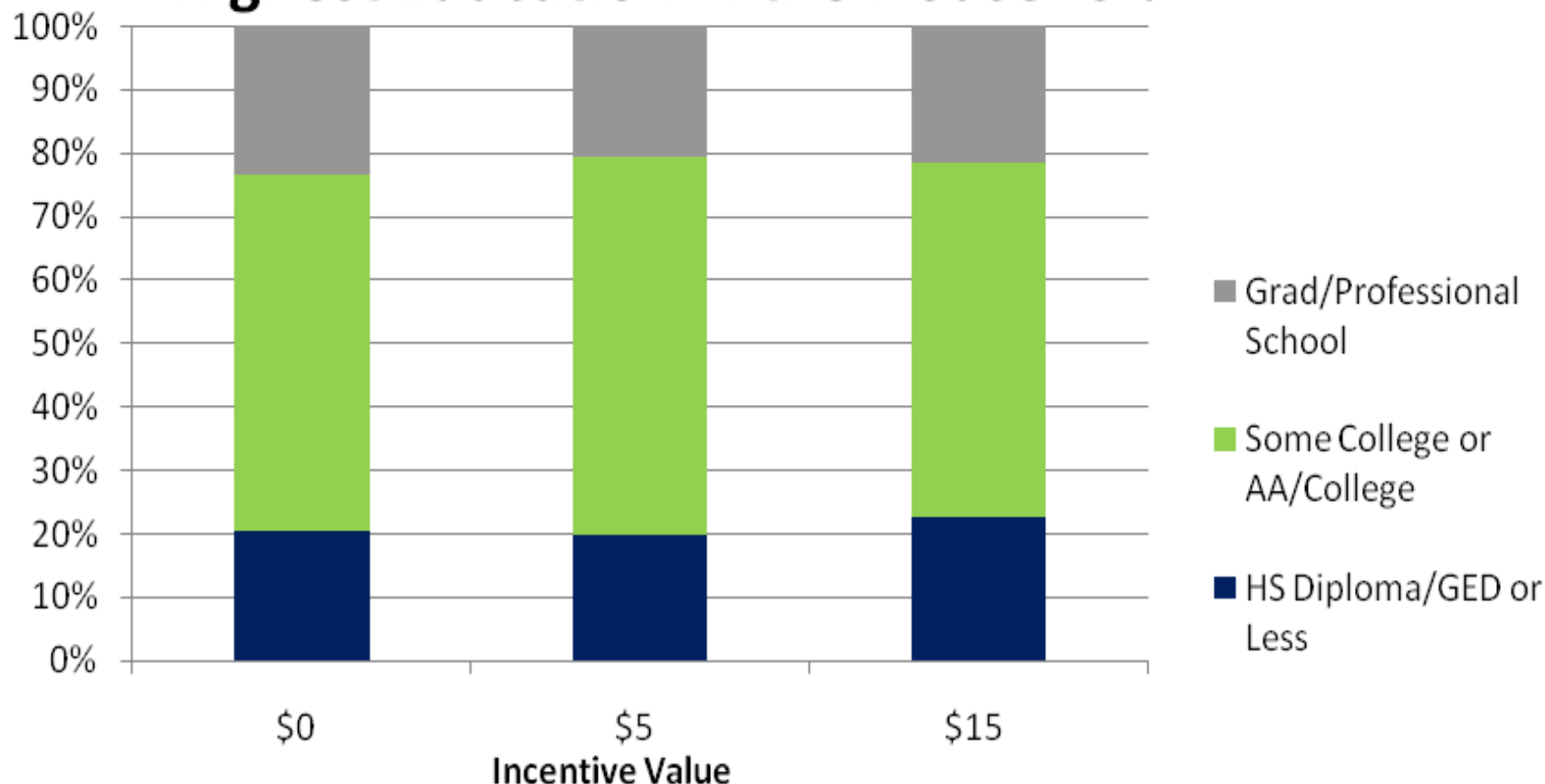
Do the characteristics of respondents vary by incentive amount?

Distribution by Incentive Amount: Homeownership



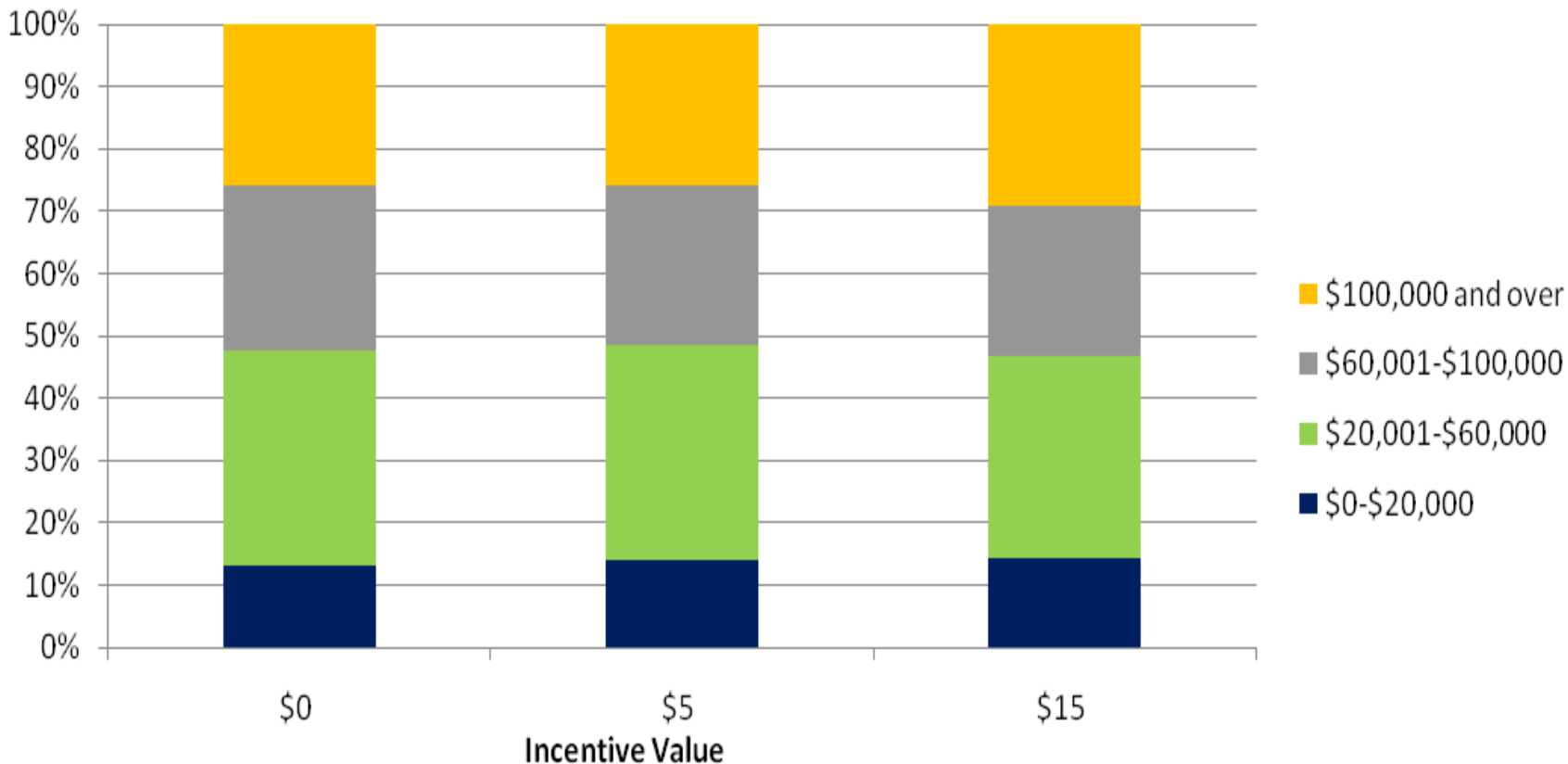
Do the characteristics of respondents vary by incentive amount?

Distribution by Incentive Amount: Highest Education in the Household



Do the characteristics of respondents vary by incentive amount?

Distribution by Incentive Amount: Household Income





Telephone Incentive Experiment

- Subsample of non-response follow-up cases were sent to the telephone
- Respondents that completed a screener by phone and had eligible children were randomly assigned into no cash or \$5 promised incentive groups

Table 3. Phone Response Rates and Sample Sizes for Topical Surveys, by Incentive Amount

| | \$0 | \$5 |
|----------------------------|------|------|
| Total Sampled for ECPP/PFI | 54 | 75 |
| Topical Response Rate | 40.7 | 46.7 |



Overall Findings

- Incentives are effective in gaining cooperation at the Topical phase
- The \$15 incentive elicited higher initial cooperation rates
- No evidence that offering an incentive results in respondents with different characteristics
- Sample sizes were too small to detect some potential differences



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