Linking Survey and Social Security Records in the Health and Retirement Study

Implications for Consent

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Outline

• Introduction
• Health and Retirement Study
• Research questions
• Results
• Conclusions
Introduction

• Obtaining informed consent from respondents can be a difficult challenge

• Consent rates vary from study-to-study and target-to-target

• Concern that consent rates will decline like response rates, raising the risk of bias

• Little is known about mechanisms of consent
Health and Retirement Study

- Longitudinal survey of adults over the age of 50 conducted by the Institute for Social Research (ISR) in Ann Arbor, Michigan
- Collects information about income, work assets, pension plans, physical health and disability, health care expenses
- Study began in 1992; new birth cohorts added every 6 years
- HRS conducts about 20,000 interviewers every 2 years
- Starting in 2006, “enhanced” face-to-face interviews are conducted with a random half of sample
Consent Procedures

• HRS respondents are periodically asked to grant ISR permission to obtain respondents’ earnings and benefit histories as reported to the Social Security Administration

• Until 2004, the SS linkage consent was retrospective

• Starting in 2006, HRS began asking for consent for prospective linkage of SS records
Consent Statement

We would like to obtain a history of your earnings and any benefits from programs administered by the Social Security Administration applied for or received through 2023. Since most people cannot recall this information very well, we are asking for your permission to obtain from government records the following:

1) Your earnings reported to Social Security.

2) Any information about benefits from programs administered by the Social Security Administration applied for or received through 2023.
Consent Procedures (cont.)

• SSA requires separate signatures for earnings and benefit records

• Consenting respondents were asked to provide their social security number
  – Not required to perform linkage

• Consent request was administered at the end of the interview
Research Questions
Accuracy/Uncertainty

• Are respondents who answer “don’t know” to questions about items contained in their administrative record more or less likely to consent?

• Do you currently receive...?
  – Social Security income
  – Supplemental Security Income
  – Welfare
  – Veteran/pension benefits
  – Food stamps

• Additive index: Number of DK responses (range: 0-5)
Privacy/Confidentiality Concerns

• Are respondents who express concerns about privacy and data confidentiality less likely to consent?

• Prior-wave (2006) interviewer observations
  • How often did the R ask you why you needed to know the answer to some questions? (never, seldom, or often)
  • How often did the R express concern about whether his/her answers would be kept confidential? (never, seldom, or often)
  • How truthful do you believe the R was regarding his/her answers to financial questions? (completely truthful, mainly truthful, about half and half, mainly untruthful)

• Additive index: Number of confidentiality concerns (range: 0-3)
General Resistance Towards Survey Interview

• Are respondents who express some form of resistance towards the survey interview less likely to consent?

• Prior-wave interviewer observations
  • How often did R ask how much longer the interview would last? (never, seldom, often)
  • How was R’s cooperation during the interview? (excellent, good, fair, poor)
  • How would you describe the level of resistance from the respondent? (low/passive, moderate, high)
  • How much did the R seem to enjoy the interview? (a great deal, quite a bit, some, a little, not at all)

• Additive index: Number of resistance indications (range: 0-4)
Preexisting Relationship With Social Security Administration

• Are respondents who receive income from the SSA or other government benefits more or less likely to comply with the linkage request?

• Social Security income
• Supplemental Security income
• Welfare, veteran/pension benefits
• Food stamps
Attentiveness

• Are respondents who are less attentive during the survey interview more likely to consent to linkage?

• Prior-wave interviewer observation

• How attentive was the R to questions during the interview? (not at all attentive, somewhat attentive, very attentive)
Interviewer Effects

• Are interviewer characteristics related to respondents’ likelihood of consent?
  
• Education
• Matching Rs & interviewers on demographics
• Interviewer experience
• Past performance
Statistical Analysis

• N=6,384 respondents
• Outcome/DV: Consent (0/1)
  – Irrespective of Social Security number
• Multilevel random-effects logistic regression
  – SAS NLMIXED
• Point estimates and standard errors adjusted for complex survey design features
Results
Consent Rate

• 2008 wave

• Overall consent rate = 67.8%

• Bivariate results
  – Highest consent rates for males (69.1) and married persons (69.5)
  – Lowest consent rates for African-Americans (60.4)
  – No difference by age, Hispanic ethnicity, and qualifications
Accuracy/Uncertainty

<table>
<thead>
<tr>
<th>Financial “don’t know”</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 wave</td>
<td>0.83</td>
<td>0.45 - 1.52</td>
</tr>
<tr>
<td>2006 wave</td>
<td>1.21</td>
<td>0.52 - 2.83</td>
</tr>
</tbody>
</table>

No effect of financial “don’t know” on consent
Preexisting Relationship with SSA or other Government Agency

<table>
<thead>
<tr>
<th>Income source</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS/SSI income</td>
<td>1.05</td>
<td>0.87 – 1.28</td>
</tr>
<tr>
<td>Other government income</td>
<td>1.34**</td>
<td>1.10 – 1.65</td>
</tr>
</tbody>
</table>

No effect of SS/SSI income receipt on consent

Other government income positively related to consent
## Attentiveness

<table>
<thead>
<tr>
<th></th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not very attentive</td>
<td>1.22†</td>
<td>0.96 – 1.56</td>
</tr>
</tbody>
</table>

No strong effect of attentiveness on consent
Privacy/Confidentiality Concerns

<table>
<thead>
<tr>
<th>Confidentiality concern index</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 wave</td>
<td>0.68*</td>
<td>0.47 – 0.99</td>
</tr>
<tr>
<td>2006 wave</td>
<td>0.88*</td>
<td>0.79 – 0.97</td>
</tr>
</tbody>
</table>

The number of confidentiality concerns negatively related to consent
## Interview Resistance

<table>
<thead>
<tr>
<th>Resistance indicators</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncooperation index</td>
<td>0.76***</td>
<td>0.70 – 0.82</td>
</tr>
<tr>
<td>Initial refusal</td>
<td>0.57**</td>
<td>0.38 – 0.85</td>
</tr>
<tr>
<td>Total call attempts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008 wave</td>
<td>0.86</td>
<td>0.70 – 1.06</td>
</tr>
<tr>
<td>2006 wave</td>
<td>0.89</td>
<td>0.78 – 1.02</td>
</tr>
<tr>
<td>Ever wave nonrespondent</td>
<td>0.64***</td>
<td>0.50 – 0.82</td>
</tr>
</tbody>
</table>

IW resistance negatively related to consent
## Interviewer Characteristics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.01</td>
<td>0.98 – 1.03</td>
</tr>
<tr>
<td>Male</td>
<td>0.86</td>
<td>0.39 – 1.89</td>
</tr>
<tr>
<td>Black</td>
<td>0.84</td>
<td>0.25 – 2.83</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-15 years</td>
<td>0.89</td>
<td>0.04 – 18.11</td>
</tr>
<tr>
<td>16+ years</td>
<td>0.91</td>
<td>0.05 – 18.16</td>
</tr>
</tbody>
</table>

No effect of interviewer demographics on consent

Matching on demographic characteristics unrelated to consent
Interviewer Characteristics (cont.)

<table>
<thead>
<tr>
<th>Interviewer Performance</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of prior completed interviews</td>
<td>0.86</td>
<td>0.70 – 1.06</td>
</tr>
<tr>
<td>Number of prior consents</td>
<td>1.03†</td>
<td>1.00 – 1.06</td>
</tr>
</tbody>
</table>

No effect of past interviewer performance on consent
Conclusions

• No support for notion that respondents compensate for their financial uncertainty by consenting to linkage
  – This connection was not explicitly brought to the attention of Rs.
  – Experimental research on framing the consent request is needed.
Conclusions (cont.)

• Strong support for the privacy and interview resistance hypotheses
  – Not surprising
  – Could have practical implications as indications of these mechanisms, observed prior to the linkage, may be used to preidentify and intervene on likely non-consenters
Conclusions (cont.)

• No evidence of a link between Social Security income/benefit receipt and consent
  – Receipt of other government income sources positively related to consent
• R’s level of attentiveness does not seem to have a large impact on the consent decision
  – Open question whether respondents fully understand the consent request
Conclusions (cont.)

• Interviewer characteristics unrelated to consent
  – However, consent rates varied significantly across interviewers
  – What interviewer attributes explain this variation?
    • Attitudes toward data sharing/privacy?
  – If significant interviewer attributes are found, can they be used to improve consent rates? How?
Thank you

• Questions?
• Comments?
• More details can be found in
• Contact: joesaks@umich.edu