Understanding Non-response in Understanding Society:
Exploring role of interviewers in collecting survey respondents’ consent to link survey data to administrative records.

Jonathan Burton, Gundi Knies
ISER, University of Essex

Plus initial research by Tarek Al Baghal and Peter Lynn

An initiative by the Economic and Social Research Council, with scientific leadership by the Institute for Social and Economic Research, University of Essex, and survey delivery by the National Centre for Social Research.
Some explanation…

- “Understanding Society” – the UK Household Longitudinal Study (UKHLS)
  - Large, national, annual, household panel survey
  - Includes an ethnic minority boost
  - Includes an Innovation Panel
  - Incorporates the British Household Panel Survey (BHPS) sample
- Consent to data linkage
  - Linking administrative data held by government agencies to survey responses
  - Requires consent from the individual
Part of a larger project

NCRM-funded project: “Understanding Nonresponse on Understanding Society”

1. Linkage of 2011 Census microdata to UKHLS responding and non-responding sample units
   • Enable data users to better handle non-response in estimation
   • Help survey practitioners identify ways of reducing non-response bias
   • Further the field of non-response research
Part of a larger project

**NCRM-funded** project: “Understanding Nonresponse on Understanding Society”

1. Linkage of 2011 Census microdata to UKHLS responding and non-responding sample units

2. Nature of bias in respondent consent to data linkage and the role of interviewers in obtaining consent
   - Enable data users to better handle consent bias in estimation
   - Help survey practitioners identify ways of reducing consent bias
   - Advance knowledge about causes and nature of consent bias
Linkage of 2011 Census microdata to UKHLS

Peter Lynn

- Matching carried out by ONS Data Linkage team
- Linked only fieldwork outcome data – not questionnaire data
- 4 months of sample that was in the field around Census Day (February-May samples)
- Over 98% of UKHLS households linked to at least one Census household or non-household address
- Linkage completed just before Team disbanded (31st March)
Linkage of 2011 Census microdata to UKHLS

Peter Lynn

• April 2014 initial analyses carried out by Peter Lynn at ONS Virtual Microdata Lab (Titchfield)
  • Descriptive comparisons of responding and non-responding households in terms of a range of Census variables;
  • Similar comparisons of types of nonresponse (refusals vs non-contacts vs others);
  • Description of addresses coded 'ineligible' on the survey;
  • Simple logistic regression models of household response.

➢ .... No results can be presented yet (need to complete an ONS clearance process)

• Further analysis will extend the models to multinomial outcomes and to individual-level Census data
Nature of bias in consent to data linkage and the role of interviewers

Two components
1. Correlates of propensity to consent to data linkage
   - Using Wave 1 data
   - Modelling consent as a function of socio-demographic, economic, health and other characteristics
   - Analysis of consent to link to health and education data, for adults and children
2. Role of interviewers in determining consent propensity
   - Interviewer survey
   - Audio-coding of interviews
Correlates of propensity to consent to data linkage

Tarek Al Baghal

- Higher consent rates to education than health
- Only significant demographic characteristic: ethnic minorities have lower consent
- Two-thirds of eligible adults (born after 1981) consent to both health + education
  - 11% to education only
  - 5% to health only
  - 17% to neither
Correlates of propensity to consent to data linkage

Tarek Al Baghal

- Analyses included random effects for both the household and interviewer components
- Consent is affected by several factors, including the respondent, but also their environment and survey factors
- Respondents within a household are very similar in their decision to consent
- Interviewers have an important role in the consent decision
- Inconsistency of significant factors across domains of administrative data
Role of interviewers in determining consent propensity

- Interviewer survey for all Wave 1 NatCen interviewers
  - Carried out May/June 2014
  - Data delivered end-June
  - Paper questionnaire data entry July 2014
  - Analyses July-October 2014
- Analysis of audio recordings
  - Recordings from IP4 (2011)
  - Coded late-2013
  - Subject of the rest of this presentation....
UKHLS Innovation Panel

Innovation Panel (IP)

- 1,500 households
- Similar design to main-stage UKHLS
- “Testing lab” – new questions and new ways of asking old questions
- IP4 (2011)
  - Original sample (4th wave) + refreshment sample (1st wave)
  - Refreshment sample, aiming for 500 interviewed households
  - 14 experiments: 5 survey procedures + 9 within-interview experiments

https://www.understandingsociety.ac.uk/research/publications/working-paper/understanding-society/2012-06.pdf
Audio coding

• The consent section of IP4 was audio-recorded, with consent from the respondent
  • 68% gave consent to audio recording
  • Consent to recording was higher among data linkage consenters (78%) than non-consenters (52%)
• We have coded particular behaviours exhibited by the interviewer and the respondent
Consent to data linkage question process

- Whilst the consent to data linkage question starts off as standardised
  - It often has to be cleared by ethics committees and data-holders
- It can quickly develop into a non-standardised interaction between interviewer and respondent
- The respondent can interrupt, ask questions
- The interviewer must respond as best they can
  - Scripting responses to all possible questions is not feasible
  - We rely on the training and experience of the interviewer
Coding frame

- Initial focus on departure from ‘standardised interviewing’
  - Did the interviewer read the question exactly?
- Further detail on departures
  - What did the respondent ask?
  - What other information did the interviewer give/withhold?
  - Did interviewer use printed materials?
- Code the presence of certain behaviours
  - Rather than coding every utterance, or exchange
- “Positive” or “Negative” behaviours
  - Subjective evaluation of behaviour according to professional and ethical standards
What happens when the interviewer is asking for consent?

- Explained purpose of linkage: 27.2%
- Gave feedback before response: 17.4%
- Made major changes: 15.4%
- Emphasized confidentiality: 7.7%
- Made minor changes: 7.0%
- Explanation of leaflet: 6.4%
- Seemingly failed to ask: 5.3%
- Influence towards yes: 2.7%
- Emphasized the voluntary nature: 2.1%
- Influence towards no: 1.9%
What does the respondent do?

- Asked for clarification: 17.8%
- Asks about purpose of form: 8.5%
- Explains rationale as responding: 7.5%
- Concern about privacy/security: 5.8%
- Concern about signing form: 5.1%
- Asked for repeat of question: 4.9%
- Gave inadequate response: 2.4%
- Interrupted reading of question: 2.0%
- Initial response is DK: 1.3%
Interviewers can affect the consent rate: positively and negatively

<table>
<thead>
<tr>
<th>Influence &quot;Yes&quot;</th>
<th>Influence &quot;No&quot;</th>
<th>Int'r emphasise confidentiality</th>
<th>Int'r emphasise voluntary</th>
<th>Major change</th>
</tr>
</thead>
<tbody>
<tr>
<td>94.1</td>
<td>0.0</td>
<td>76.0</td>
<td>73.8</td>
<td>76.8</td>
</tr>
<tr>
<td>74.0</td>
<td>1</td>
<td>76.0</td>
<td>0.0</td>
<td>67.4</td>
</tr>
<tr>
<td>95.7</td>
<td>1</td>
<td>0.0</td>
<td>46.2</td>
<td></td>
</tr>
</tbody>
</table>

* *Influence "Yes" **Influence "No" **Int'r emphasise confidentiality **Int'r emphasise voluntary * Major change
Whilst anything the respondent does, reduces consent!

<table>
<thead>
<tr>
<th>Consent rate %</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>***R seek clarification</td>
<td>57.5</td>
<td>79.1</td>
</tr>
<tr>
<td>**R asked Int'r to repeat question</td>
<td>55.2</td>
<td>76.4</td>
</tr>
<tr>
<td>*R express concern privacy/security</td>
<td>61.8</td>
<td>76.1</td>
</tr>
<tr>
<td>*R explain rationale during response</td>
<td>62.2</td>
<td>76.5</td>
</tr>
<tr>
<td>***R decision influenced by someone else</td>
<td>36.8</td>
<td>76.5</td>
</tr>
</tbody>
</table>
Controlling for respondent socio-demographics, behaviours are significantly associated with consent

Coefficients of Logistic Regression

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Odds ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewer age</td>
<td>0.75</td>
</tr>
<tr>
<td>Interviewer age squared</td>
<td>1.00</td>
</tr>
<tr>
<td>Interviewer experience at NatCen</td>
<td>0.91</td>
</tr>
<tr>
<td>Interviewer experience squared</td>
<td>1.00</td>
</tr>
<tr>
<td>Interviewer gender</td>
<td>1.04</td>
</tr>
<tr>
<td>Interviewer try to influence towards yes</td>
<td>10.12</td>
</tr>
<tr>
<td>Interviewer major change to question</td>
<td>0.68</td>
</tr>
<tr>
<td>Interviewer emphasise confidentiality of consent</td>
<td>11.62</td>
</tr>
<tr>
<td>Interviewer emphasise voluntary nature of consent</td>
<td>0.59</td>
</tr>
<tr>
<td>Respondent ask for clarification of question</td>
<td>0.37</td>
</tr>
<tr>
<td>Respondent asked interviewer to repeat question</td>
<td>0.29</td>
</tr>
<tr>
<td>Respondent express concern about privacy/security</td>
<td>0.37</td>
</tr>
<tr>
<td>Respondent explains rationale for their response whilst responding</td>
<td>0.58</td>
</tr>
<tr>
<td>Respondent decision influenced by someone else</td>
<td>0.21</td>
</tr>
<tr>
<td>Log (Pseudo) Likelihood</td>
<td>-263.31</td>
</tr>
<tr>
<td>N</td>
<td>610</td>
</tr>
</tbody>
</table>
Initial thoughts

• Early analysis of audio recordings
  • Further analysis with characteristics of more interviewers
  • Create an interviewer-level ‘quality’ score?
  • Link to interviewer survey
• Behaviours do seem to be significantly related to consent outcome
  • When behaviours are included, the significance of standard interviewer and (most) respondent characteristics disappears
  ? The way interviewers behave affects consent rates more than who they are?
  ? Can interviewer training focusing on this non-standard interaction improve consent rates?
  ? Interviewer training to foster positive behaviours and curb negative behaviours overcome respondent characteristics