Effect of Contact Strategy on Response Mode Selection
Outline

• Background
  • Multimode / mixed-mode collection
  • Example: Census wave methodology

• Assessing impact of contact strategy
  • 2014 Canadian Census Test
  • Analysis & results

• Conclusion
Multimode / mixed-mode collection

• Several channels used for contact & available for response
  • Concurrent, sequential, or both
  • Concept of mode is complex; focus on mode as channel

• Motivation
  • Reduced costs, coverage error, measurement error, nonresponse bias
  • Improved response rates, timeliness in collecting data
    (Dillman, Smyth & Christian 2009)
  • Respondents’ perspective:
    more likely to participate if have option to respond via preferred mode
  • Agency’s perspective:
    maximize online self-response without losing respondents
Example: Census wave methodology

• Introduced for 2011 Canadian Census of Population
  (Mathieu et al. 2012)
  
  Letter → Reminder → Questionnaire → Follow-up, msg
  Letter → Reminder → Voice msg → Follow-up, msg

• Letter indicated how to request paper form
• Questionnaire contained online instructions
• Easier to go paper → online than vice versa

• Success in 2011 and again in 2016:
  • Internet response 68.3%, self-response 88.8%
2014 Canadian Census Test

- Mandatory test
- Evaluated potential questions for the 2016 Census (Boulet & Mathieu 2015)
- While not designed for it, was an experiment about the impact of contact strategy on the choice of response mode

- Used wave methodology for contact
  - Letter (with paper mention) or questionnaire (with online instructions)
  - Everyone eventually received questionnaire

- Same response modes as Census: online (EQ), paper (PQ)
  - Also non-response follow-up (NRFU) and Census Help Line (CHL)
Analysis plan

- Randomized assignment of households to the mode of contact (letter / questionnaire) permits us to quantify the impact of contact strategy on the choice of response mode.

- Compare 2014 response rates in each response mode by 2014 contact mode and 2011 preference group.

- Consider *response mode choice* during Census 2011 as *expressed mode preference* conditional on 2011 contact mode.
Preference groups

• Six 2011 preference groups:
  1. Letter contact / EQ response → weak EQ preference
  2. Letter contact / PQ response → strong PQ preference
  3. Letter contact / non-self-response (Non-SR)
  4. Questionnaire contact / PQ response → weak PQ preference
  5. Questionnaire contact / EQ response → strong EQ preference
  6. Questionnaire contact / Non-SR

• Link households from 2014 Census Test to 2011 Census to evaluate 2014 response rates in view of 2011 preferences
  • Noise due to moves or changes in household composition
Levels of analysis

- All households
  - All sampled dwellings, including those that moved 2011 to 2014

- Households that did not move 2011 to 2014
  - At least one household member matched 2014 to 2011

- Households with same respondent* in 2011 & 2014
  - *Person 1 matched 2014 to 2011 – best indicator of same respondent

- Focus here:
  - Overall 2014 results – across all six 2011 preference groups
  - Key results looking at 2011 preferences and 2014 choices
Overall Census Test results: all households

- Response rate (%) by modes of contact and response
  - Weighted row percent

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<thead>
<tr>
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<tbody>
<tr>
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<td>56.0</td>
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<tr>
<td>Questionnaire</td>
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- Null hypothesis of no association between contact mode and response mode is rejected
- **Most households respond in the mode suggested by contact**
## 2014 Census Test results: all households

- Sending a paper questionnaire increased PQ response
  - By ~36 pp for households with weak EQ preference (1)

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- Sending an invitation letter increased EQ response
  - By ~30 pp for households with weak PQ preference (4)

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2014 Census Test results: all households

- Sending a paper questionnaire increased PQ response more for households with weak (vs. strong) EQ preference
  - By ~36 pp for households with weak EQ preference (1)
  
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- By ~26 pp for households with strong EQ preference (5)
  
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<td>62.9</td>
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<td>36.0</td>
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- Sending an invitation letter increased EQ response more for households with weak (vs. strong) PQ preference
2014 Census Test results: all households

- More households with PQ preference stuck to it following a letter contact compared to households with EQ preference who stuck to it following a questionnaire contact.
- Close to half for households with strong PQ preference (2).
- Closer to third for households with strong EQ preference (5).

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2014 Census Test results: same respondent*

- Same results as for all households but stronger
  - No noise from households that moved & those with different respondent
  - Unweighted (no reweighting done to account for non-linkages)

- Two interesting additional insights:
  - Strong PQ preferences are really sticky
  - Non-self-response rate twice as high when letter mailed as contact

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<tr>
<th>Small group of households with strong PQ preference (2)</th>
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(they either requested PQ or received it during latter waves)
Conclusions

• Contact mode is a key factor in the choice of a response mode, regardless of previously expressed preferences
• Contact mode impacts households with weaker preferences more than those with stronger preferences
• Preferences for EQ tend to be more fluid than for PQ
• In context of our multimode collection strategy, method of initial contact does not seem to reduce self-response in general
  • A small portion of population with strong preferences may self-respond less if their preferred mode is not offered at contact

• Support for multimode collection directing respondents online
  • Very pleased with 2016 results and will push even harder in 2021!
References


Questions? Comments? Ideas?
Questions ? Commentaires ? Idées ?

Thank you!
Merci !

For more information, please contact
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