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Effect of Contact Strategy on Response Mode Selection

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Outline

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 - 2014 Canadian Census Test
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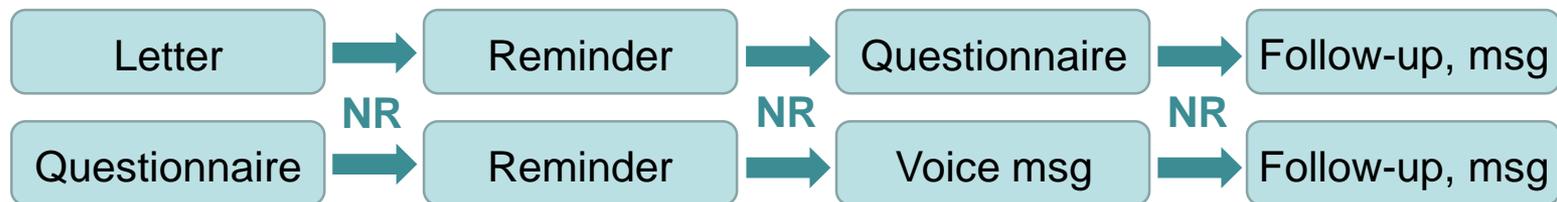


Multimode / mixed-mode collection

- 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 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

Sent in 2014	Received in 2014		
	EQ	PQ	Non-SR
Letter	56.0	22.5	21.5
Questionnaire	25.4	53.6	21.0

- 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)

Sent in 2014	Received in 2014		
	EQ	PQ	Non-SR
Letter	70.2	15.3	14.5
Questionnaire	33.1	51.8	15.2

- Sending an invitation letter increased EQ response

- By ~30 pp for households with weak PQ preference (4)

Sent in 2014	Received in 2014		
	EQ	PQ	Non-SR
Letter	42.2	36.3	21.5
Questionnaire	12.2	66.6	21.2



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)**

Sent in 2014	Received in 2014		
	EQ	PQ	Non-SR
Letter	70.2	15.3	14.5
Questionnaire	33.1	51.8	15.2

- By **~26 pp** for households with **strong EQ preference (5)**

Sent in 2014	Received in 2014		
	EQ	PQ	Non-SR
Letter	62.9	11.7	25.5
Questionnaire	36.0	37.9	26.1

- 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)**

Sent in 2014	Received in 2014		
	EQ	PQ	Non-SR
Letter	31.4	46.8	21.7
Questionnaire	8.0	74.8	17.2

- **Closer to third** for households with **strong EQ preference (5)**

Sent in 2014	Received in 2014		
	EQ	PQ	Non-SR
Letter	62.9	11.7	25.5
Questionnaire	36.0	37.9	26.1



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

Small group of households with **strong PQ preference (2)**

Sent in 2014	Received in 2014		
	EQ	PQ	Non-SR
Letter	24.9	64.4	10.7
Questionnaire	4.1	90.9	5.1

(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

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

Thank you!
Merci !

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