



Understanding Society
THE UK HOUSEHOLD LONGITUDINAL STUDY

Understanding consent to data linkage

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Workshop on Improving Consent and Response
in Longitudinal Studies of Aging
(28/09/2021)



University of Essex

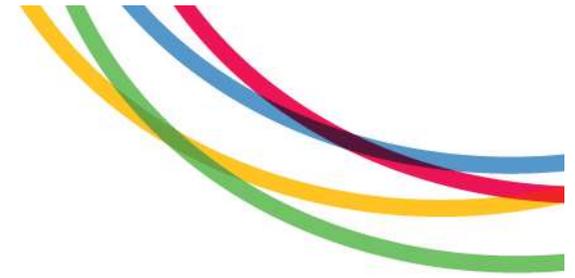


Economic
and Social
Research Council

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Acknowledgements



- Co-authors

Jonathan Burton (University of Essex)

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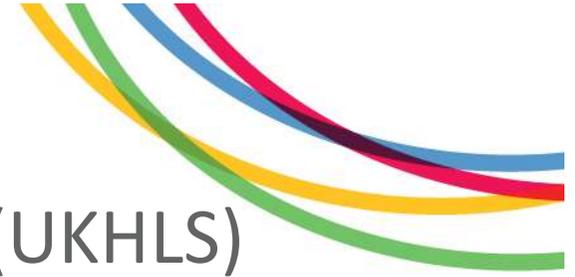
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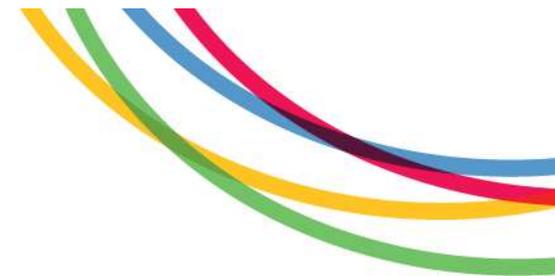
Understanding Society: The UK Household Longitudinal Study (UKHLS)



- **Data collection**
Web, face-to-face, telephone interviews
- **Consents to data linkage**
Government administrative data
Financial Conduct Authority
- **Consent rates web < FTF**
-30 percentage points ^[1]

What can we do?

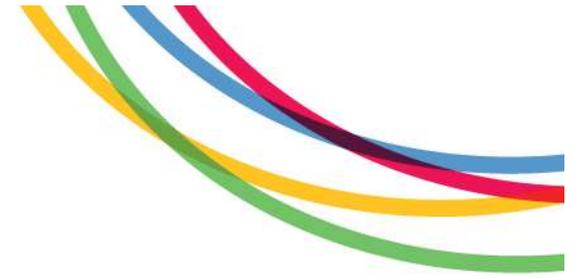
What we knew about consent: Decision is difficult to predict



- **Large variation in consent rates between**
 - Data to be linked/topics [2]
 - Interviewers [3] [6]
 - Modes of interview [1]
 - **Correlates of consent inconsistent**
 - Between studies / within studies over time [4]
 - Respondent / interviewer characteristics [5] [6]
 - **Little effect of question wording experiments**
 - In which wave of a panel consent is asked [7] [8]
 - Emphasising benefits to respondent / survey [3] [9]
 - Loss framing – inconsistent results [10]
-

What we knew about consent:

Decision can be influenced

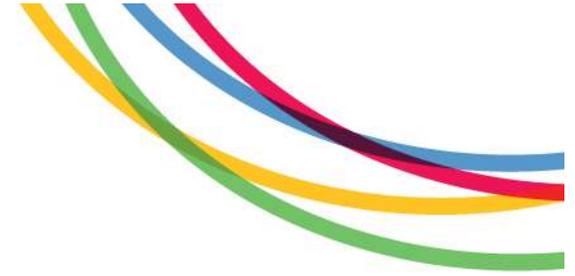


- Many respondents do not understand request ^[11] ^[12]
- Half of non-consenters say 'yes' if asked again ^[1] ^[13]
 - **Decision is not fixed, can be influenced**
- Multiple consents asked in one interview: latent willingness to consent ^[14] ^[15]
- But not when consents asked in different interviews ^[16]
 - **Situational factors important**

How do respondents decide whether to consent?

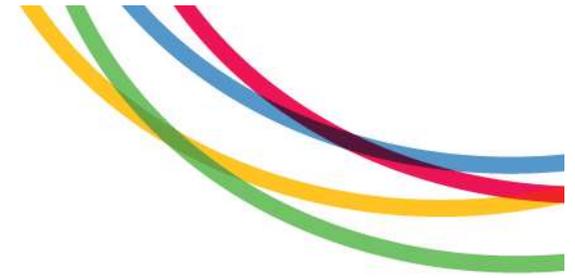
Today

Overview



1. How do respondents decide whether to consent to data linkage?
 2. Why are respondents less likely to consent in web than FTF surveys?
 3. Some consent question experiments
-

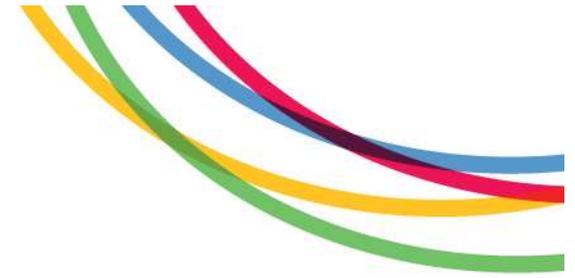
Methods



- Qualitative in-depth interviews with *Understanding Society* Innovation Panel sample members ^[17]
 - What determines whether respondents consent?
 - Conceptual framework
 - How respondents make the consent decision
 - Hypotheses
 - Experimental testing
 - Innovation Panel wave 11
 - PopulusLive online access panel (UKHLS COVID-19 survey)
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Conceptual framework

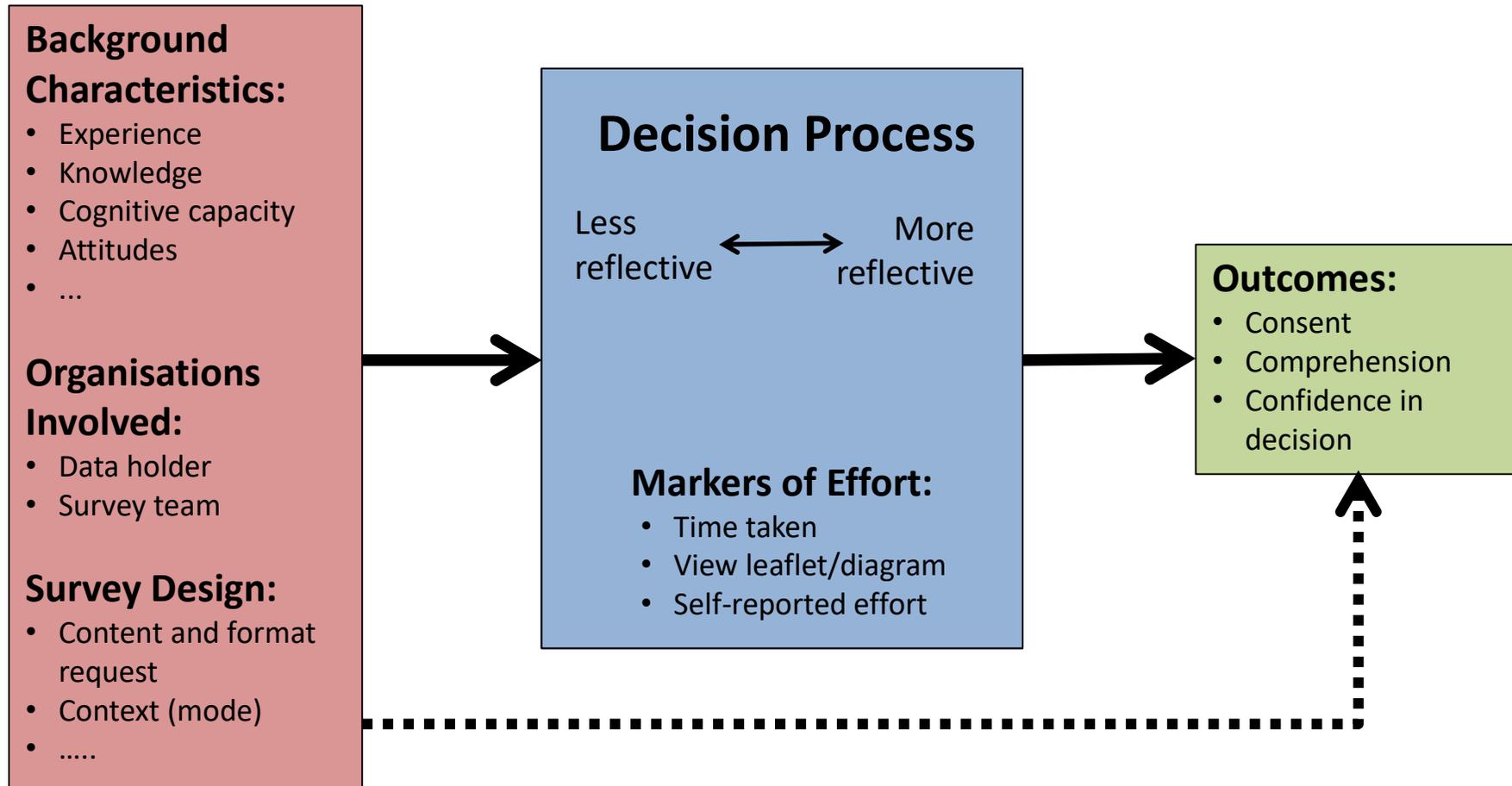
Based on



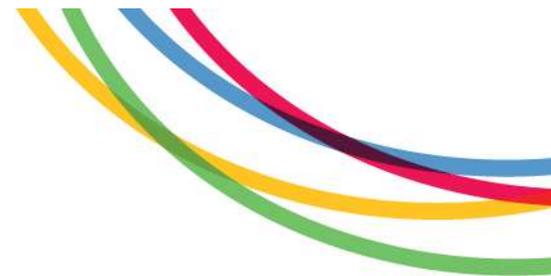
- **Qualitative interviews: *Understanding Society* respondents**
Factors that influence consent decision ^[17]
 - **Cognitive model of survey response process**
How Rs answer survey questions ^{[18] [19]}
 - **Survey methods literature**
Consent to data linkage, experiments
 - **Rational vs heuristic decision making**
System 1 vs system 2 processing ^{[20] [21]}
 - **Real-life decision making**
People reduce amount of information considered ^[22]
-

Conceptual framework

How respondents decide whether to consent



Data



- **Consent to link to tax records**

Standard question text used in *Understanding Society*

Question explains what, why, how

....Do you give permission for us to pass your name, address, sex and date of birth to HMRC for this purpose? (Yes/No)

- **Questionnaires**

Background questions

Follow-up questions about consent decision

- **Surveys (2018 / 2019)**

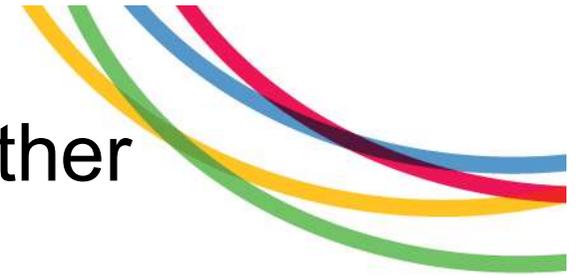
Understanding Society Innovation Panel (IP)

PopulusLive online access panel (AP)

Sample sizes:

IP	web	1,299
	face-to-face	1,363
AP	sample 1 wave 1	1,034
	sample 1 wave 2	816
	sample 2	965

1. How do respondents decide whether to consent to data linkage?

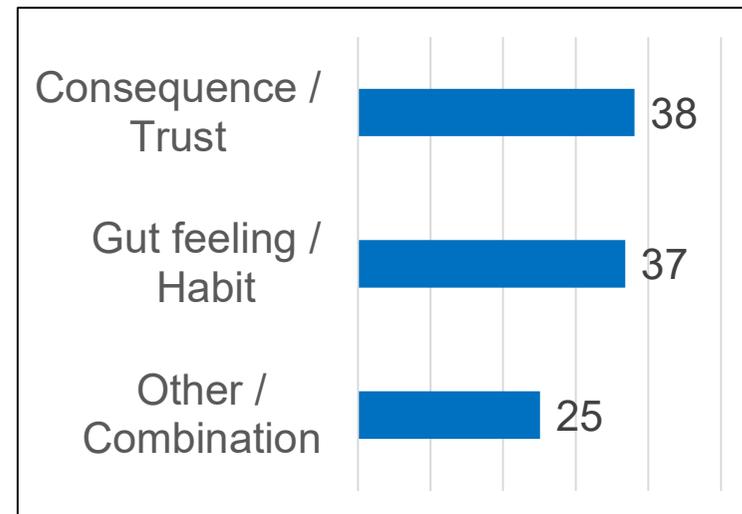


How did you decide whether to say “yes” or “no” in response to the question about data linkage?

Please select all that apply

1. I thought about what would happen if I said “yes” or “no” (**consequence**)
2. Instinct or gut feeling (**gut**)
3. I said what I usually say when I’m asked for information that is very personal (**habit**)
4. I thought about how much I trust the organisations involved (**trust**)
5. Something else

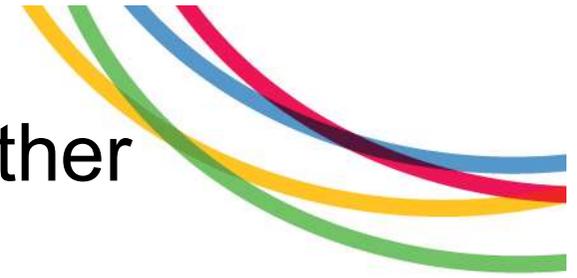
Percent of respondents:



Source: Access Panel 1.2.

Only ~ 1/3 respondents make reflective decision

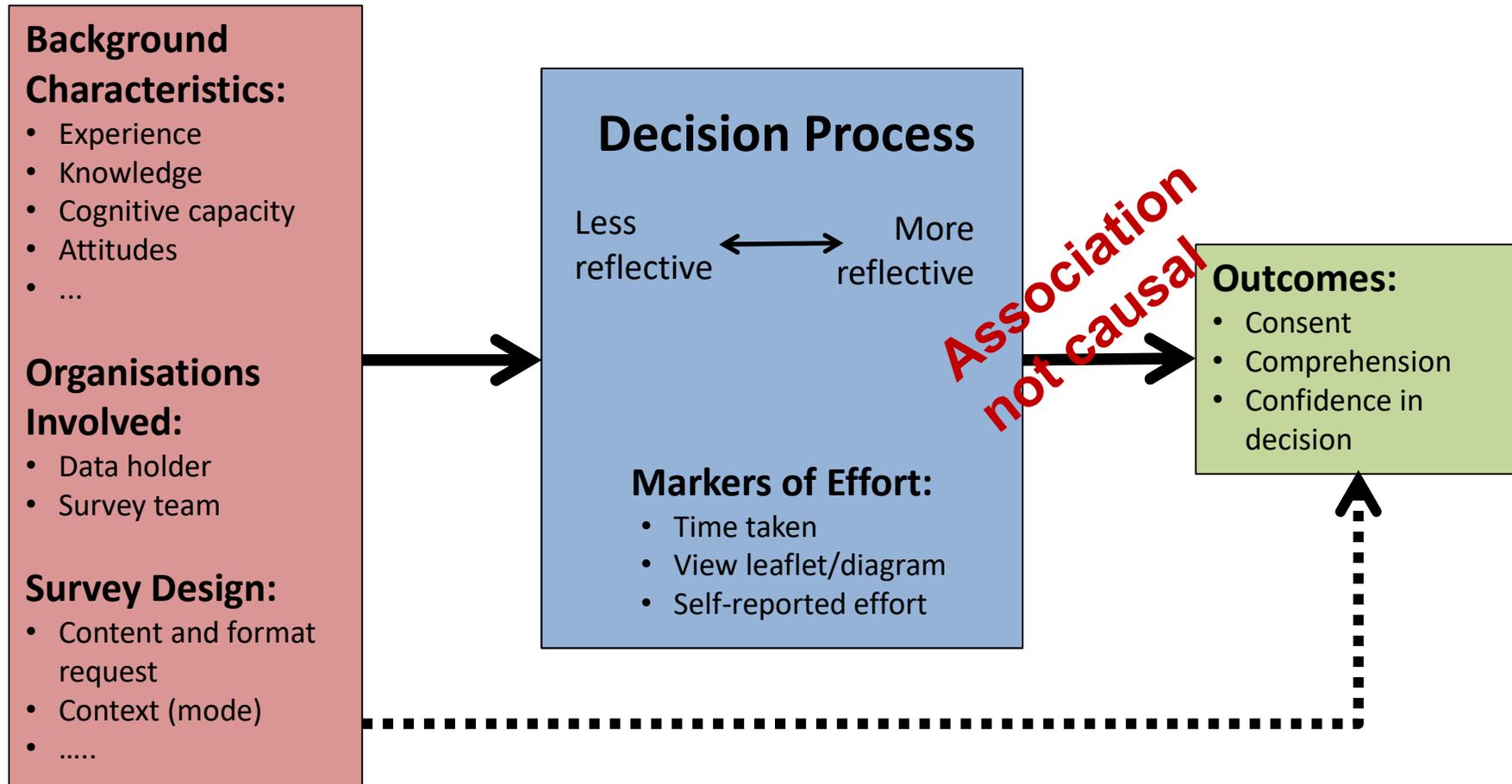
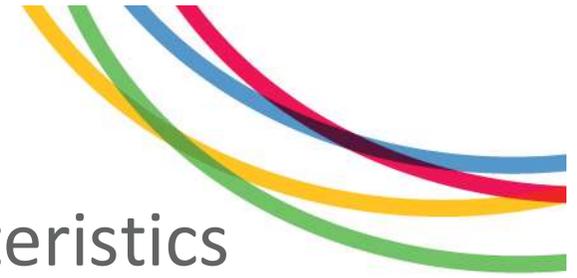
1. How do respondents decide whether to consent to data linkage?



- **Rs predominantly use heuristic decision processes**
 - More / less reflective processes
 - **Decision processes differ in**
 - Speed of decision making (paradata 4 web surveys: 33-81 vs. 23-30 seconds)
 - Whether links to leaflet or diagram explaining linkage clicked (paradata)
 - Self-reported effort in making decision
 - Self-reported amount and nature of information used in making decision
 - **Which process used differs across individuals and contexts**
 - **Differences in consent outcomes between processes**
 - More reflective: higher consent rates, better understanding
 - Not necessarily causal effect
-

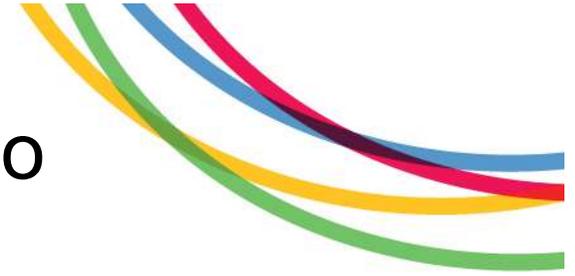
Decision process

Mediates effect of background characteristics



2. Why are respondents less likely to consent in web than FTF surveys?

Consent outcomes



- Consent rates by mode of interview (IP11):

FTF: 73%

Web: 42%

- Effect of mode on consent, not selection

LATE: -30pp

- Rs understand request less well when answering online

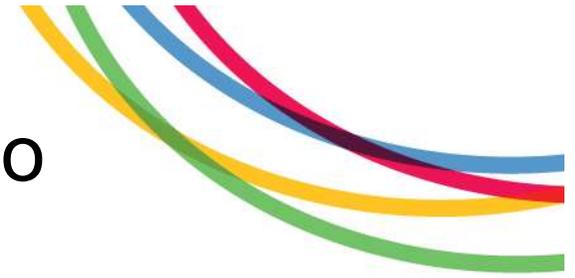
Subjective understanding: *“How well do you think you understand what would happen with your data, if you allowed us to link it to records held by HM Revenue and Customs?”*

Objective understanding: knowledge test questions

2. Why are respondents less likely to consent in web than FTF surveys?

Potential mechanisms

- Rs more concerned about privacy / data security in web
 - Rs answer consent Qs less thoroughly online than FTF
 - Reflective decision: -9 pp
 - Habit-based decision: +12 pp
 - Response time: 2.2 x faster
 - Read/clicked leaflet: -32 pp
 - Information presented was “too much”: +6 pp
 - Devices used to complete web survey not explanation
 - Verbal interviewer behaviours not driving mode differences
 - Explanations, reassurance, additional information rare in FTF interviews
-



3. Some consent question experiments

- Easy / standard wording (web & FTF)

Reading difficulty: Flesch-Kincaid Grade level 14.5 vs 8.2

Increased understanding of request

No main effect on consent rate

- Trust priming (web)

+5pp consent rate

Mechanisms?

- Position in survey (web & FTF)

Early: 75% consent

Late: 69% consent

- Multiple consents (web)

Format (separate vs single page): no effect

Order: some carry-over effects

The next question is about linking the information you provide in this survey, to data that HM Revenue and Customs, or HMRC, hold about you.

HMRC is a trusted data holder

Trust



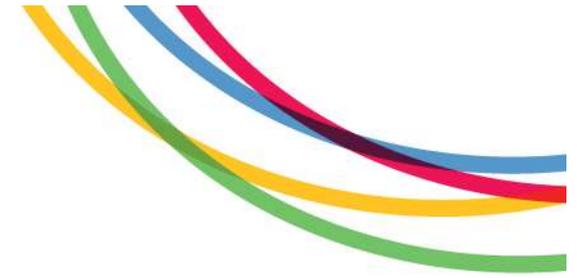
1 Continue



Conclusion I

- **Respondents vary in how they make consent decision**
 - More reflective processes vs.
Less reflective, more rapid, instinctive processes
 - **Majority do not use reflective process**
 - Unlikely to read additional information materials
 - Base decision on fewer aspects
 - Make decision very quickly
 - Providing more information unlikely to increase informed consent
 - **Reflective decision makers (consequence / trust)**
 - More likely to consent and have better understanding of linkage request
 - But not necessarily causal effect!
 - Is it possible to shift Rs to consequence/trust-based decision making?
 - Would that increase informed consent?
-

Conclusion II



- **When Rs complete survey online rather than FTF**

- Much less willing to consent

- Understand the linkage request less well

- **Why is this?**

- Rs more concerned about privacy / data security when answering online

- Rs process consent requests less carefully when answering online

- Not due to devices used to complete web survey

- Not due to interviewer verbal behaviours

- **What can we do?**

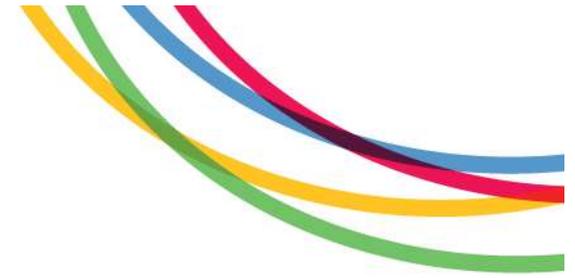
- Providing additional information for web respondents does not help

- Improving understanding of request does not help

- Web experiment: Trust seems to be a key driver of consent

- Not tested: Social pressure with interviewer? Undecided more likely to agree?

Practical implications



- **Easier readability of consent questions**

Flesch-Kincaid Grade level scores: rate reading difficulty on a U.S. school grade level, implemented in MS Word

Increases understanding

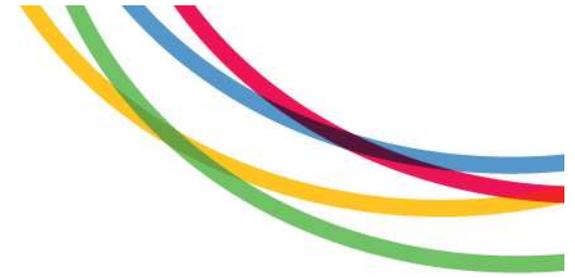
Reduces unstandardised interviewer behaviours (unsolicited additional information)

- Asking earlier in the questionnaire
- Emphasising trust / data security
- Multiple consents: start with Q that gets highest consent rates



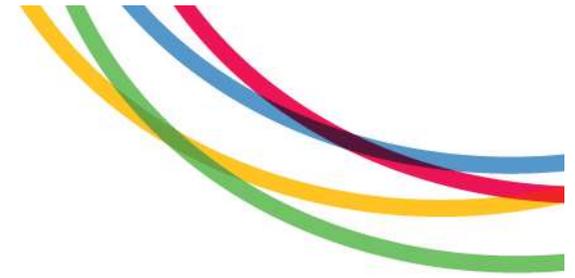
Increase
consent
rates

References I



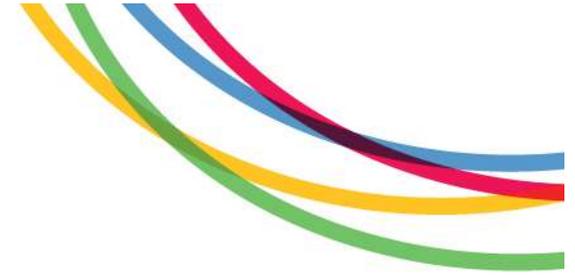
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Thank you for listening

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Project papers:

- Multiple consents
- Consent and modes
- Consent decision (in progress)
- Consent wording (in progress)

More information:

<https://www.iser.essex.ac.uk/research/projects/understanding-and-improving-data-linkage-consent-in-surveys>

