



Understanding Society

THE UK HOUSEHOLD LONGITUDINAL STUDY

How and why does the mode of data collection affect consent to data linkage?

Annette Jäckle (University of Essex)

GenPopWeb2 workshop, 5 March 2021:
Collecting data linkage consents in online surveys

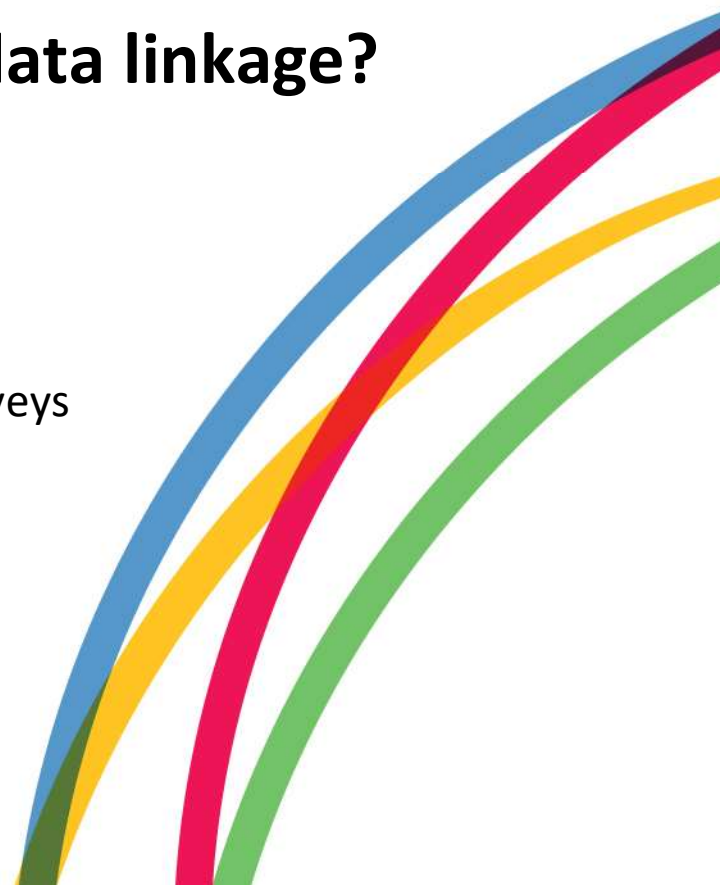


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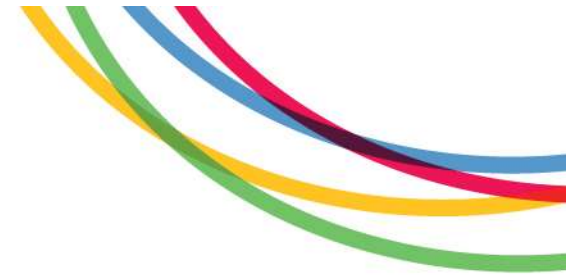


Economic
and Social
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- Co-authors

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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
Social media
- **Consent rates web < FTF**
-30 percentage points ^[1]

What can we do?

What we knew about consent

Key findings



- Many respondents do not understand request [2] [3]
- Half of non-consenters say 'yes' if asked again [1] [4]
→ **Decision is not fixed, can be influenced**
- Multiple consents asked in one interview: latent willingness to consent [5] [6]
- But not when consents asked in different interviews [7]
→ **Situational factors important**

How do respondents decide whether to consent?

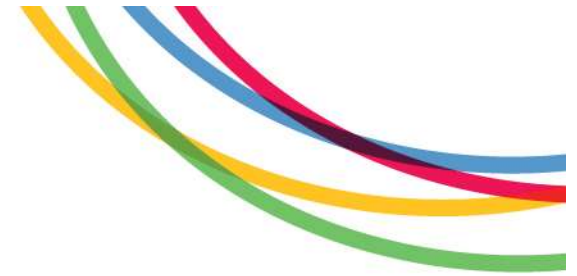
Conceptual framework

Based on

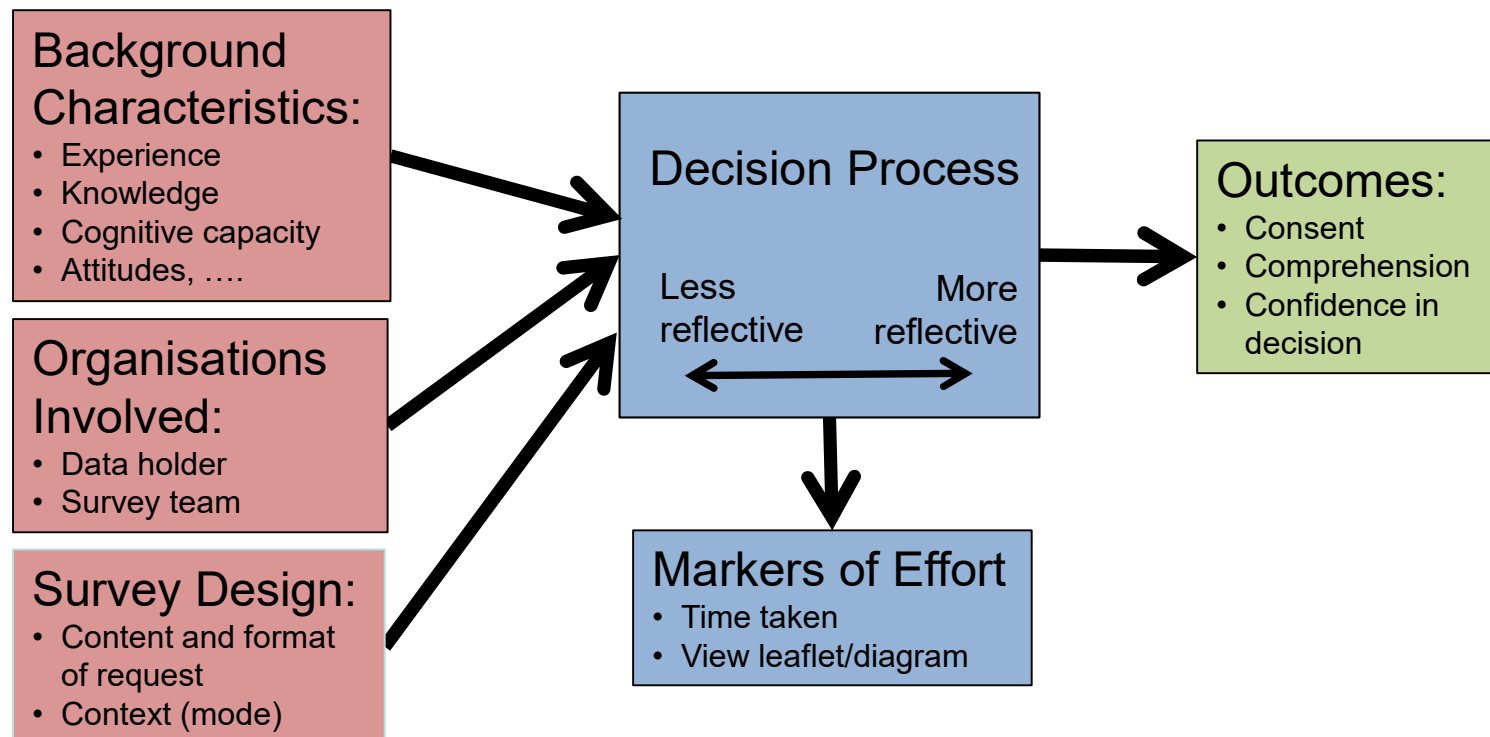


- **Qualitative interviews with UKHLS respondents**
Factors that influence consent decision [8]
 - **Cognitive model of survey response process**
How Rs answer survey questions [9] [10]
 - **Survey methods literature**
Consent to data linkage, experiments
 - **Rational vs heuristic decision making**
System 1 vs system 2 processing [11] [12]
 - **Real-life decision making**
People reduce amount of information considered [13]
-

Conceptual framework



How respondents decide whether to consent



Source: Burton et al "Understanding consent to data linkage", manuscript in preparation.

Today



Difference between modes in

1. Consent rate
2. Understanding of linkage request

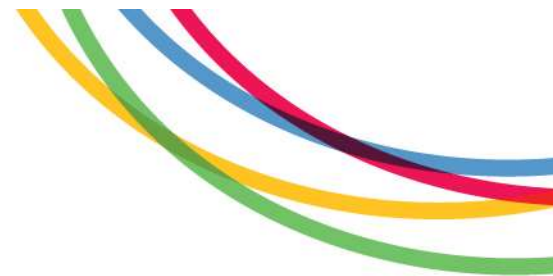
Potential mechanisms

3. Respondent attitudes
4. Consent decision process
5. Device used to complete web survey
6. Interviewer behaviours

Questionnaire design to increase web consent

7. Easier wording
 8. (Trust priming)
-

Data

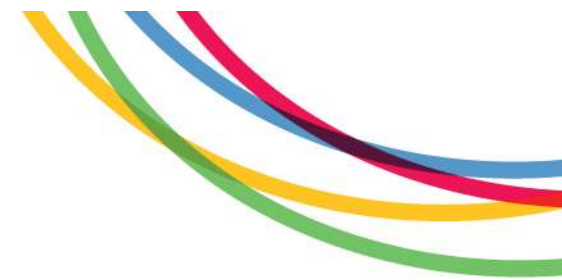


- Understanding Society Innovation Panel
- Probability sample in Great Britain
- All household members aged 16+ interviewed annually
- Wave 11 (2018)
- N=2,608
- Consent to link tax record data

Standard vs. easy question wording

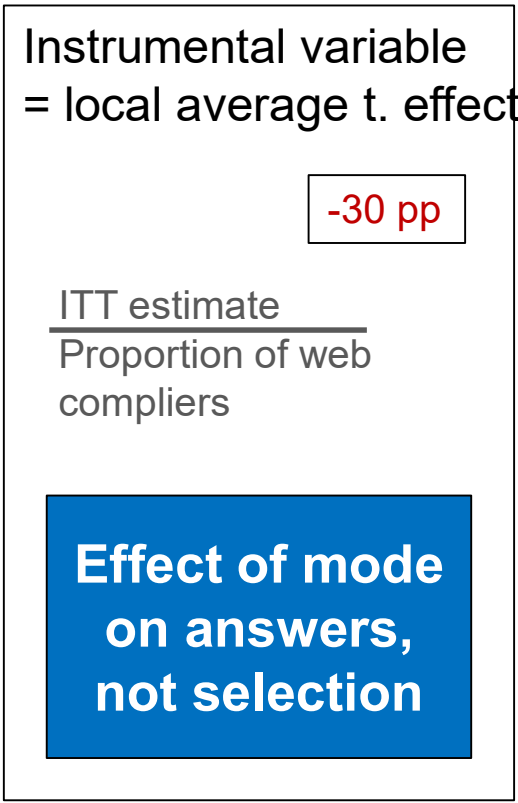
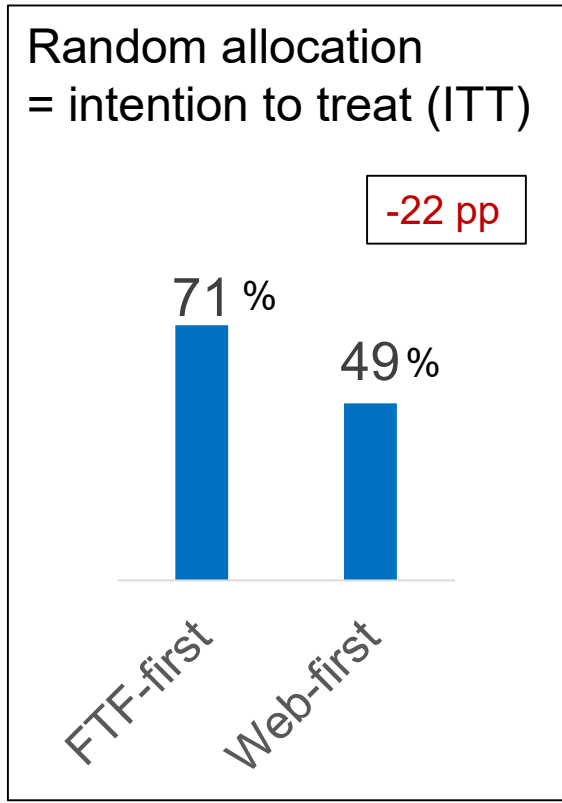
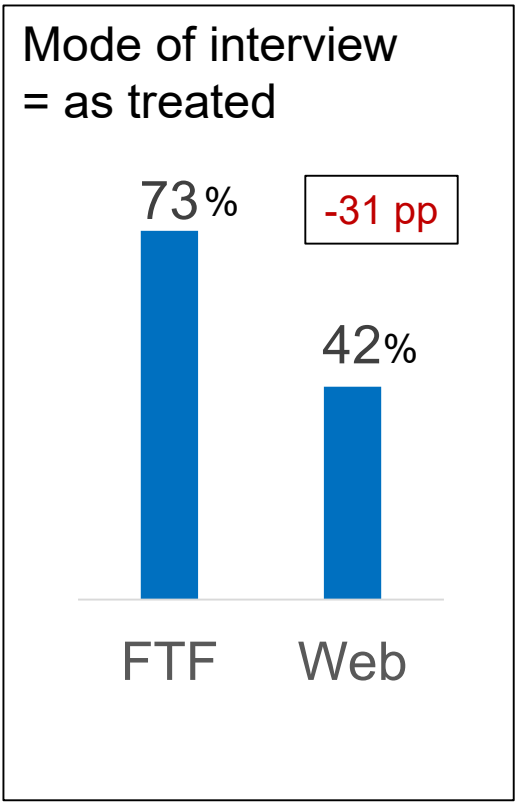
- Mixed mode data collection

	Mode of interview		Total
	FTF (%)	Web (%)	
Random allocation			
FTF-first	93.5	6.5	1,032
Web-first	22.3	77.7	1,576

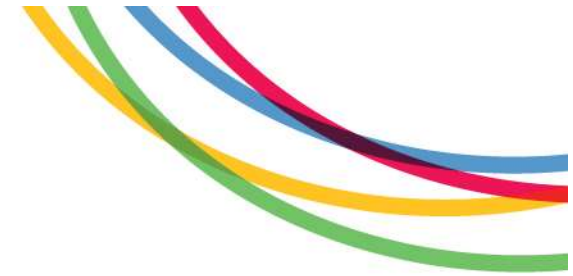


1. Difference between modes: Consent rate

Linkage to tax records (HMRC)

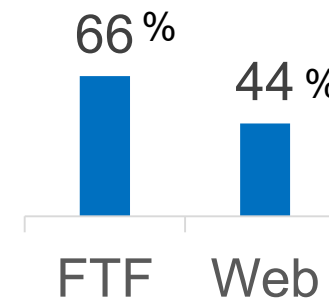


2. Difference between modes: Understanding of linkage request



- **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:**
8 true/false statements
- **Confidence in consent decision:**
“... How confident are you about the decision you made?”

Completely/mostly understood:

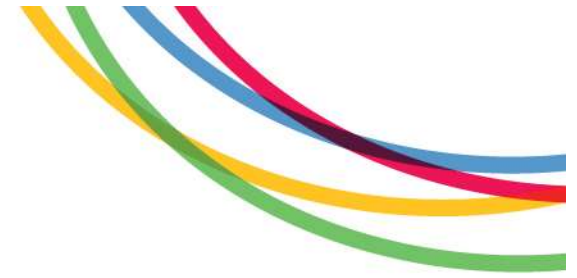


Web: lower test scores

No difference

Respondents understand less when answering online

3. Potential mechanisms: Respondent attitudes



- **Privacy:** very/somewhat concerned
+8 pp in web
- **Data security:** very/somewhat concerned
+5 pp in web



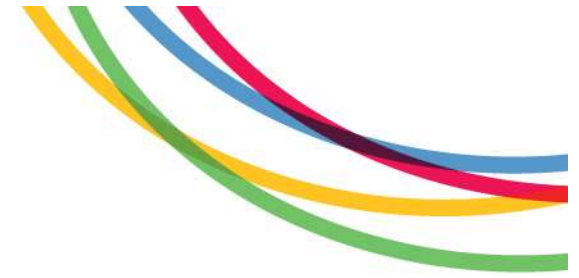
Web treatment effect

- HMRC tax data are (highly) sensitive
- Trust in survey organisation, university
- Trust in HMRC



No difference
between modes

Respondents more concerned about privacy / data security when answering online



4. Potential mechanisms: Consent decision process

- Decision process

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

1. I thought about what would happen if I said “yes” or “no” (**systematic**)
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. Something else

- Web treatment effect

Systematic 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

**Respondents answer consent Qs less thoroughly
when answering online**

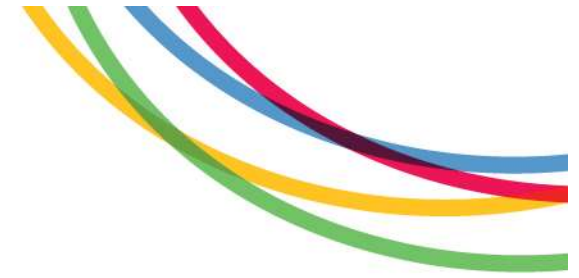
5. Potential mechanisms: Device used to complete web survey



- Devices used by web respondents:
 - 57% PC, laptop, notebook
 - 29% tablet
 - 14% smartphone
- Logit models to control for respondent characteristics

- No differences in
 - Probability of consent
 - Objective understanding
 - Privacy / data security concerns
 - Consent decision process
 - Whether clicked leaflet/diagrams
- Smartphone users
 - Information presented: “Too much”
 - Took longer to answer consent Q

Devices not driving mode effects



6. Potential mechanisms: Interviewer behaviours

- Audio-recordings

FTF interviews

- Coded what interviewers
& respondents did

Consent question

- Interviewers – rarely

Emphasized confidentiality (4.1% cases)

Offered additional information (14%)

- Respondents – rarely

Expressed concern/uncertainty (5%)

Asked questions (16%)

Interviewer behaviours not driving mode differences



7. Questionnaire design: Easier wording of consent request

- **Standard wording**

UKHLS consent question (tax records)

Reading difficulty:

Flesch-Kincaid Grade level = 14.5

- **Easy wording**

Lower reading difficulty: 8.2

Shorter sentences, shorter words, no passive sentences

Results from qualitative interviews

Text broken up into bullet points

- **Easy wording**

Increased understanding

No effect on consent

No interaction with allocated mode

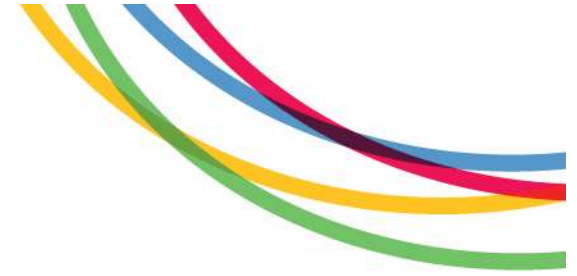
**Increasing understanding did not increase consent
Easier wording did not reduce mode effect on consent**

Conclusions



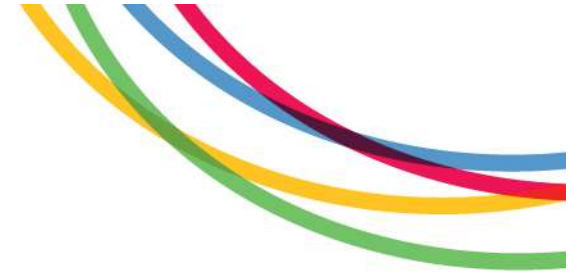
- **When Rs complete survey online rather than FTF**
 - Much less willing to consent
 - Understand the linkage request less well
 - **Why is this?**
 - Rs more concerned about privacy / data security when answering online
 - Rs process consent requests less carefully when answering online
 - Not due 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?
-

References I



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 - [2] Das and Couper (2014) “Optimizing Opt-Out Consent for Record Linkage”, *Journal of Official Statistics*, 30(3): 479-497.
 - [3] Edwards and Biddle (2021) “Consent to Data Linkage: Experimental Evidence from an Online Panel”, Ch. 8 in P. Lynn (ed.), *Advances in Longitudinal Survey Methodology*. New York: Wiley.
 - [4] Weir, Faul, and Ofstedal (2014) “The Power of Persistence: Repeated Consent Requests for Administrative Record Linkage and DNA in the Health and Retirement Study”, Paper presented at the Panel Survey Methods Workshop. Ann Arbor, MI.
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 - [6] Mostafa (2016) “Variation within households in consent to link survey data to administrative records: evidence from the UK Millennium Cohort Study”, *International Journal of Social Research Methodology*, 19(3): 355-375.
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References II



- [7] Mostafa and Wiggins (2018) “What influences respondents to behave consistently when asked to consent to health record linkage on repeat occasions?” *International Journal of Social Research Methodology*, 21 (1): 119-134.
 - [8] Beninger, Digby, Dillon, and MacGregor (2017) “How People Decide Whether to Give Consent to Link Their Administrative and Survey Data”, *Understanding Society working paper 2017-13*, Colchester: University of Essex.
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 - [13] Galotti (2007) “Decision Structuring in Important Real-Life Choices”, *Psychological Science*, 18(4):320-325.
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Thank you for listening

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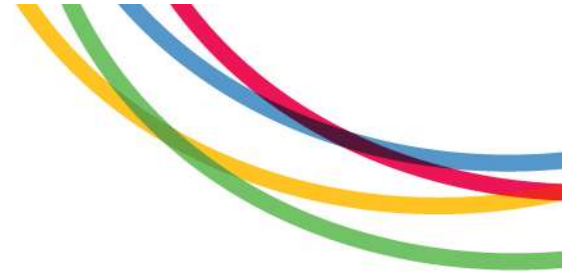
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Project papers:

- Multiple consents
- Consent decision
- Consent wording experiments
- Consent and modes

More information:

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



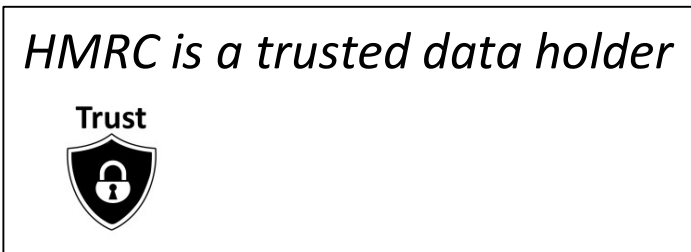
8. Questionnaire design: Trust priming



Study 2:

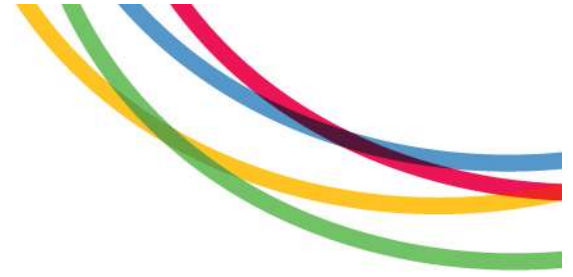
- PopulusLive online access panel
- Great Britain
- Quota to match Innovation Panel
- Same questions
- ‘Easy’ consent question
- N=1,921

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.



Experiment

1 Continue



8. Questionnaire design: Trust priming

- Consent rate:
+5 pp

Relatively large effect
Equivalent to 1/6th of mode gap

- No effects on

Understanding

Response time

Objective understanding

Whether clicks on leaflet/diagram

Confidence in decision

Trust in HMRC

Decision process

Factors respondents considered

Trust is important
Survey design / setting can affect trust
Sub-conscious?

Source: Jäckle et al “Consent to data linkage: Wording and format experiments”, manuscript in preparation.