



Understanding Society

THE UK HOUSEHOLD LONGITUDINAL STUDY

How do survey respondents decide whether to consent to data linkage?

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ESRA conference (23/07/2021)



University of Essex



Economic
and Social
Research Council

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- Co-authors

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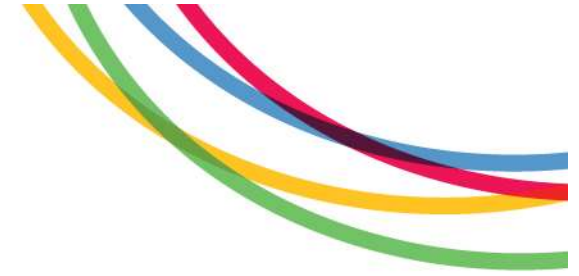
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- Funders



What we knew about consent

Selected findings

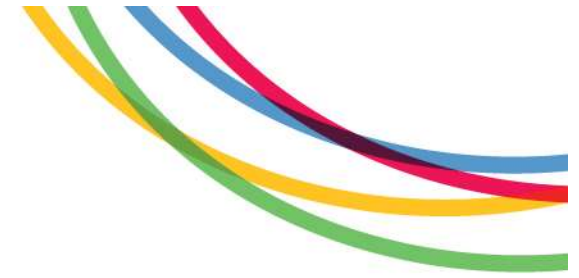


- Many respondents do not understand request [1] [2]
- Half of non-consenters say 'yes' if asked again [3] [4]
 - **Decision is not fixed, can be influenced**
- Multiple consents asked in one interview: latent willingness to consent [5] [6]
- But not when consents asked in different interviews [7]
 -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

How do respondents decide whether to consent?

Conceptual framework

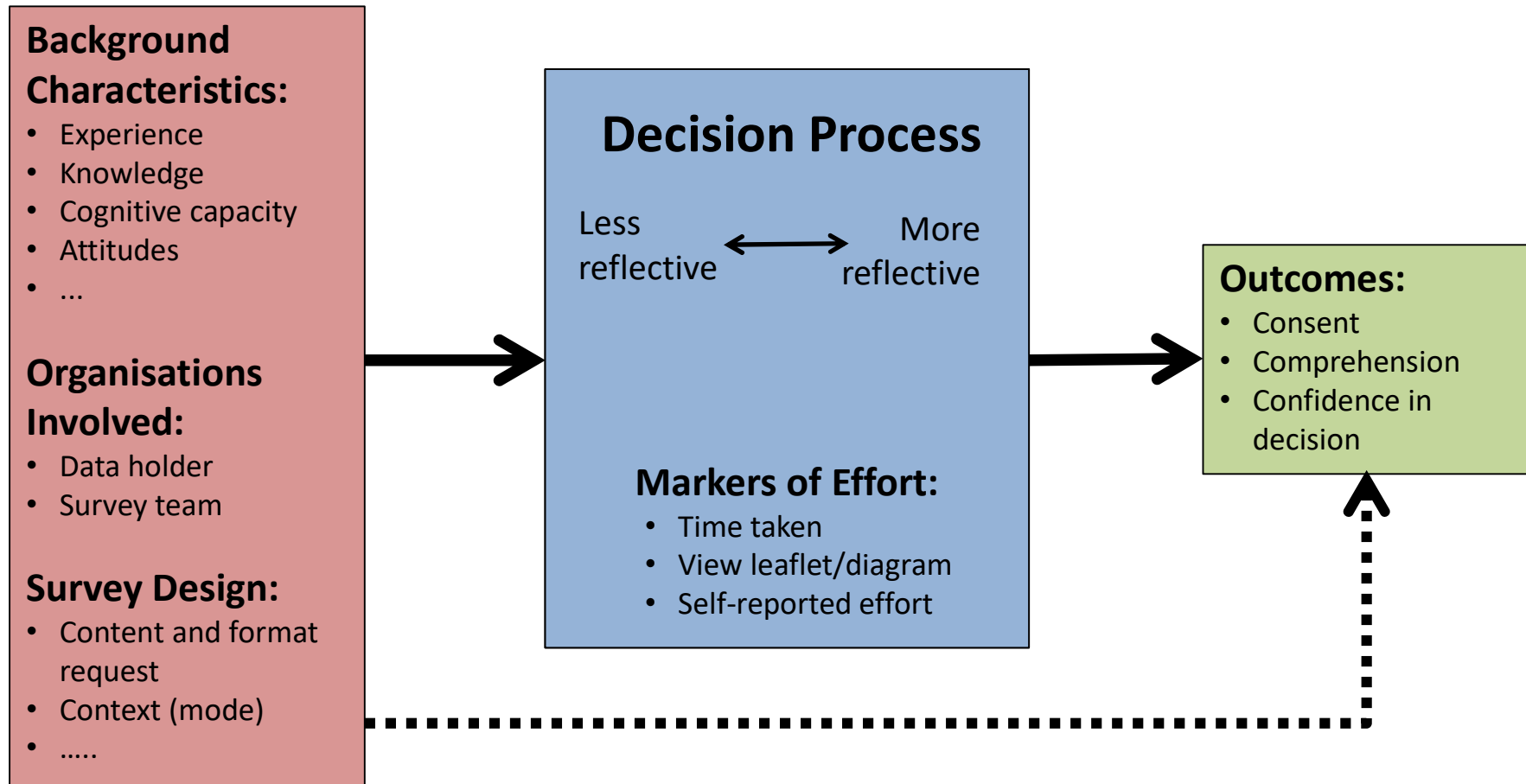
Based on



- Qualitative interviews: *Understanding Society* 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]
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Conceptual framework

How respondents decide whether to consent



Hypotheses

How respondents decide whether to consent



- Decision made within a limited time frame (survey interview)
- And with incomplete information

H1: Rs predominantly use heuristic decision processes

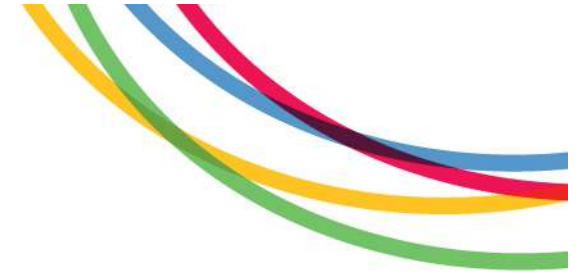
H2: Decision processes differ in the amount and nature of information used in making decision

H3: Processes differ across individuals and contexts

H4: Different processes are associated with differences in consent propensities and understanding of request



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)**

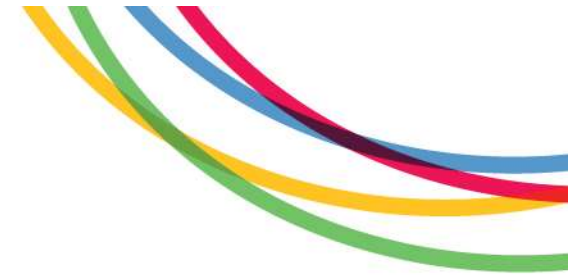
Understanding Society Innovation Panel (IP)

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

H1: Rs predominantly use heuristic decision processes

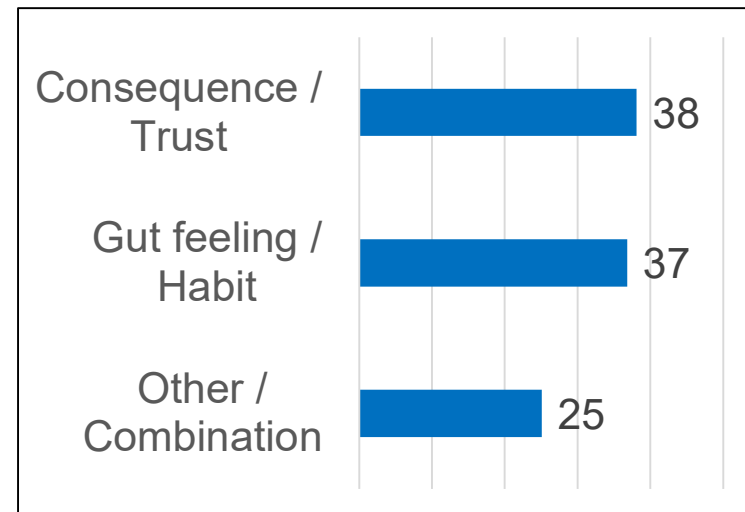


How did you decide whether to say “yes” or “no” in response to the question about data linkage?

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.

H1: supported
Only ~ 1/3 respondents
reflective decision

Aside

Are self-reported decision processes valid?

- Less reflective decision (habit / gut feeling)

vs. more reflective (consequence / trust)

Consent question answered more quickly

paradata, 4 web surveys

seconds:

23-30 vs. 33-81

Less likely to click on links to leaflet or diagram explaining linkage (paradata)

Lower self-reported effort to answer consent question (scale 0-10)

Self-reported decision process measures genuine differences between respondents

H2: Processes differ in the amount and nature of information used in making decision



When you were deciding whether or not to allow your data to be linked, how much of a role did each of the following aspects play in your decision?

(1 Played no role,, 5 Played very big role)

- *List of 14 aspects*

Consequence vs. gut / habit

More likely to consider:

“What information the government has about me”

“How much I trust the organisations involved”

“The benefits to society”

- Consider larger number of aspects

H2: supported

H3: Processes differ across individuals and contexts



- **Consequence decision**
7-15 percentage points more likely if has degree (vs lowest education)
- **Trust decision**
17-22 percentage points more likely if age 60+ (vs 16-40)
- **Consent question design – n.s.**
Early vs late in questionnaire
Easy vs standard reading difficult
Trust priming

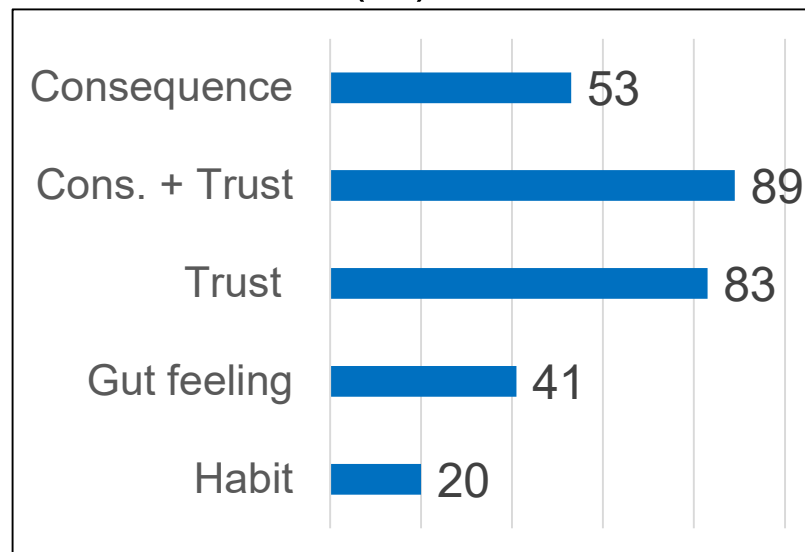
Over time (12 months between surveys)

- Respondents used same decision process in wave 2 as wave 1:
56% of consequence / trust decision makers
54% of habit/gut feeling decision makers

H3: some evidence

H4: Different processes are associated with differences in consent propensities and understanding of request

Consent rate (%):



Source: Access Panel 1.2

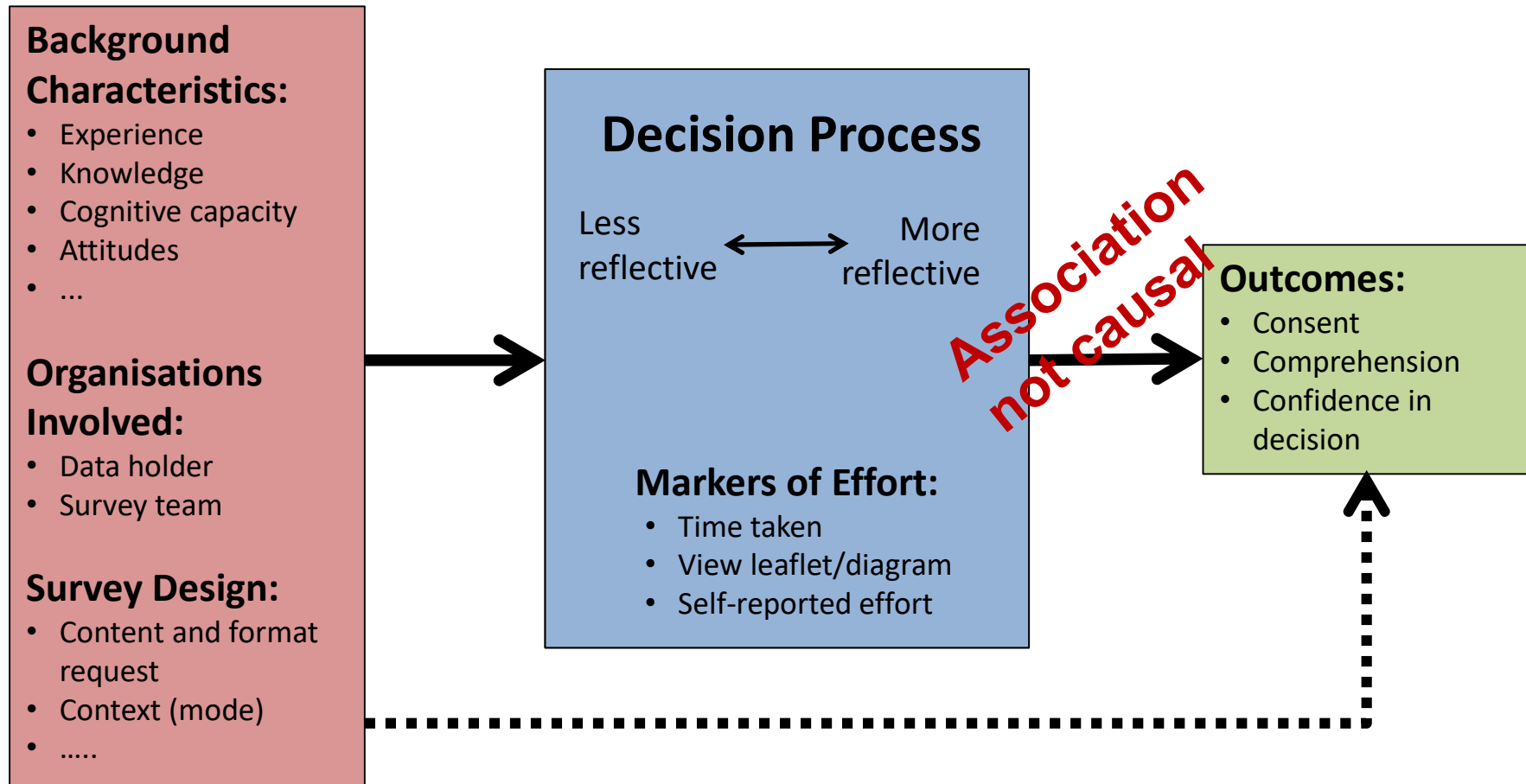
H4: supported
Not causal effect!

Consequence / trust decision makers have better understanding

- Objective understanding
8 true/false test questions about the data linkage
- Subjective understanding
How well do you think you understand what would happen with your data...
(4-point response scale)

Decision process

Mediates effect of background characteristics



Conclusion



- **Respondents vary in how they make consent decision**
More reflective processes vs.
Less reflective, more rapid, instinctive processes
 - **Decision processes vary in**
Type and amount of information the decision is based on
 - **Which process respondents use**
Depends to some extent on respondent characteristics (education, age)
But varies within respondents over time
Contextual influences?
-

Implications



- **Majority do not use reflective process**

Unlikely to read additional information materials

Base decision on fewer aspects

Make decision very quickly

→ Providing more information about the linkage unlikely to increase informed consent

- **Reflective decision makers (consequence / trust)**

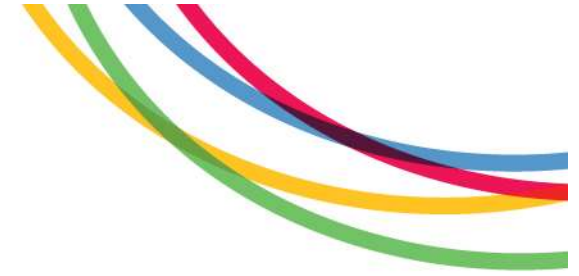
More likely to consent and have better understanding of linkage request

But not necessarily causal effect!

→ Is it possible to shift respondents to consequence or trust-based decision making?

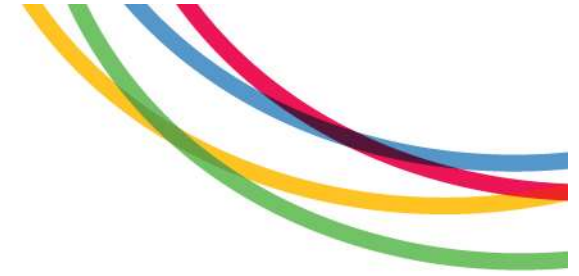
→ Would that increase informed consent?

References I



- [1] Das and Couper (2014) “Optimizing Opt-Out Consent for Record Linkage”, *Journal of Official Statistics*, 30(3): 479-497.
 - [2] 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.
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 - [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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References II



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 - [12] Kahneman (2011) “Thinking, Fast and Slow”. New York: Farrar, Straus and Giroux.
 - [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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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>

