



How do respondents decide whether to consent to data linkage?

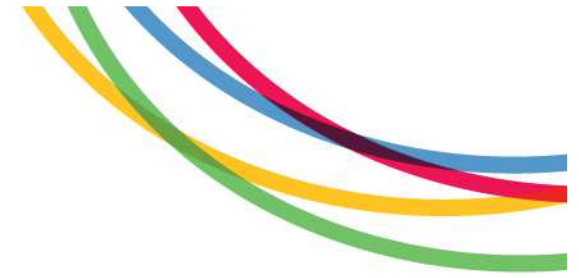
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An initiative by the Economic and Social Research Council, with scientific leadership by the Institute for Social and Economic Research, University of Essex, and survey delivery by NatGen Social Research and Kantar Public



Acknowledgements



Part of larger project: “Understanding & improving data linkage consent in surveys”

Funded by:

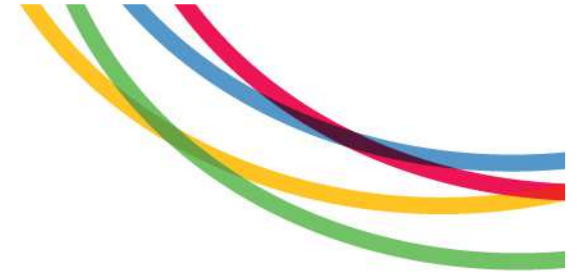


Project website:

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



What's the problem?

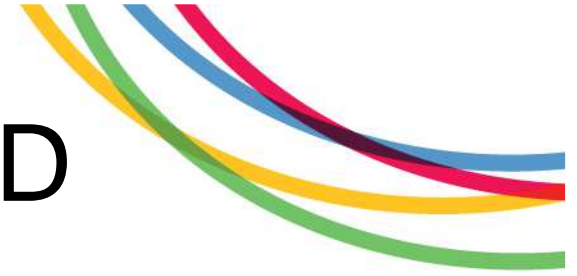


- Changes to *Understanding Society*
 - Mode of interview: Web-first
 - Data linkage increasingly important
 - Methodological challenges
 - Consent rates lower in web than FTF
 - *Understanding Society*: -30%pts
 - Not selection of different types of respondents into web
 - Effect of mode consent

(Jäckle et al. in press)
 - Respondents don't understand linkage request well

(e.g. Das & Couper 2014)
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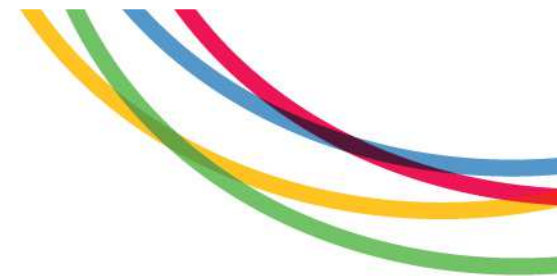
Understanding Society R&D



- Main aim:
 - What can we do to increase Informed Consent?
 - Especially in Web?
- Next steps:
 - Understand what is going on
 - So we can figure out what to do

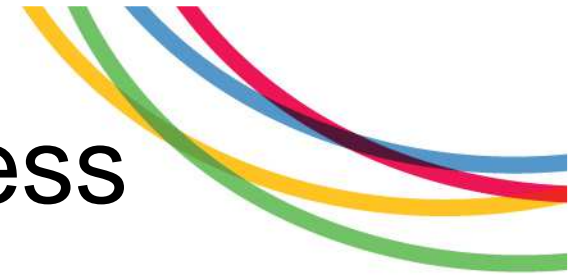


What do we know about consent to data linkage?



- Correlates of consent – inconsistent
(e.g. Peycheva et al. in press; Sala et al. 2012)
 - Joint models of consent: correlation of unobservables within interview but not between – no latent propensity to consent, situational factors important (Mostafa & Wiggins 2018)
 - Half of non-consenters say ‘yes’ if asked again – why?
(e.g. Weir et al. 2014)
 - Asking early in the interview increases consent – why?
(e.g. Sakshaug et al. 2013)
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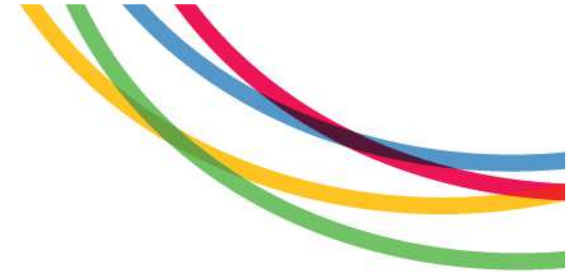
How do respondents process the consent request?



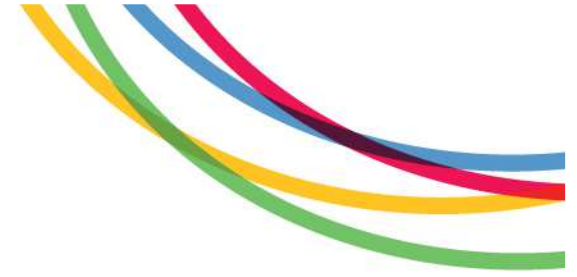
Research design based on:

- **Qualitative interviews with IP respondents:**
Factors that influence consent decision (Beninger et al 2017)
 - **Rational vs heuristic decision making:**
System 1 vs system 2 processing (Petty & Cacioppo 1986, Kahneman 2011)
 - **Survey methods literature:**
Consent to data linkage
 - **Cognitive model of survey response process**
(Cannell et al. 1981, Tourangeau et al 2000)
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Cognitive model of survey response

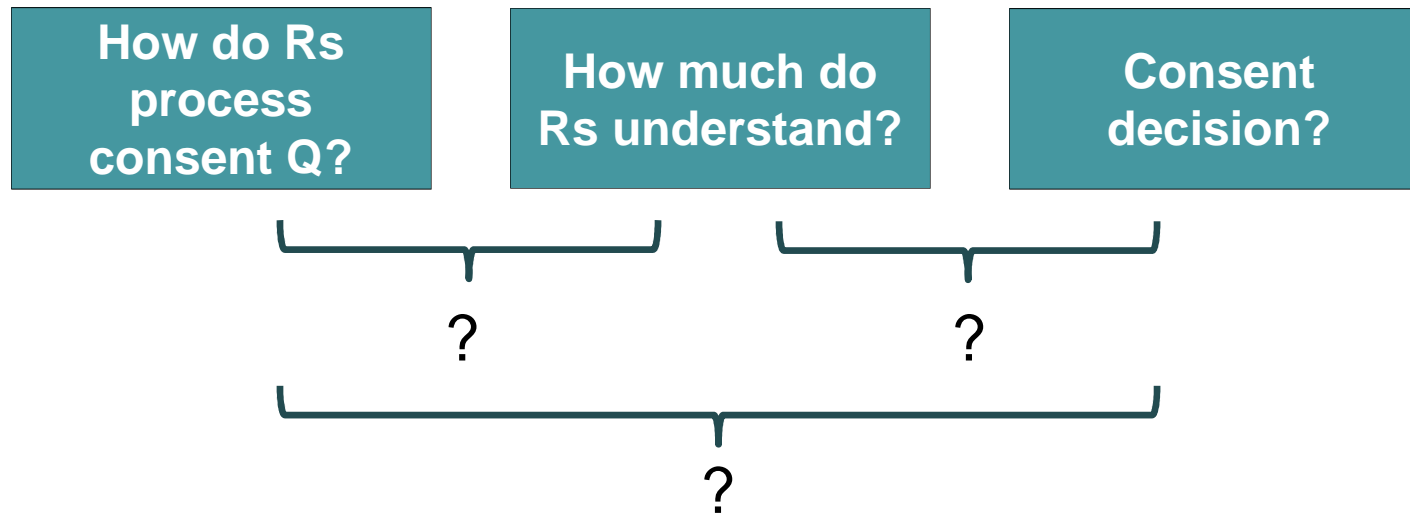
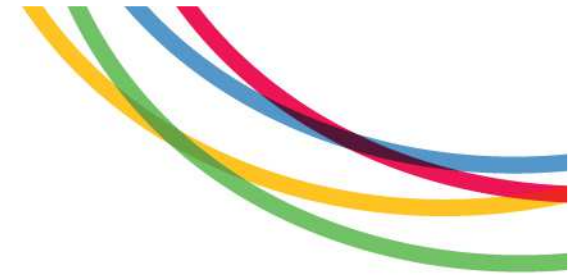


Cognitive model of survey response



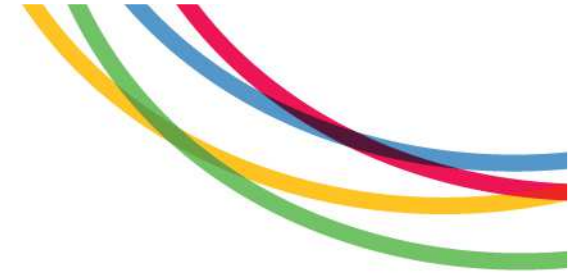
- Use cognitive model to think about consent Q
 - What can go wrong?
 - What might be different in web than with interviewer?
 - What can we do?
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Research questions



- Does making consent Q easier increase
 - Understanding?
 - Consent?
 - In what ways is Web different from FTF?
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Data: Consent request



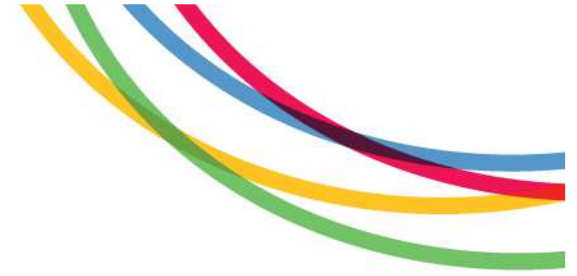
- *Understanding Society* Innovation Panel wave 11
 - Consent to link to tax records (HMRC)
 - ✓ Standard question text used in *Understanding Society*
 - ✓ Question explains what, why, how
 - ✓ “....Do you give permission for us to pass your name, address, sex and date of birth to HMRC for this purpose? (Yes/No)”
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Data: Experimental treatments



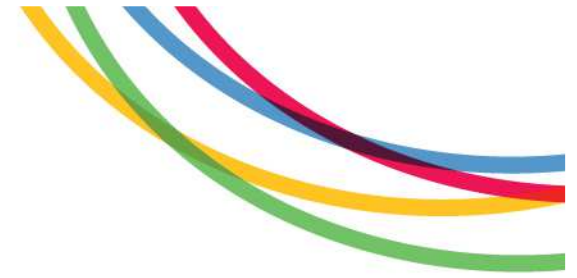
- Question wording:
 - **Standard** – *Understanding Society*
 - **Easy** – lower reading difficulty (length of sentences, no passive voice)
 - Question placement:
 - **Late** – at end of questionnaire (standard)
 - **Early** – at beginning (less cognitive fatigue)
 - Mode of interview:
 - **FTF-first**: 93% completed interview with interviewer, 7% Web
 - **Web-first**: 75% completed Web, 25% with interviewer
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Data: Sample sizes



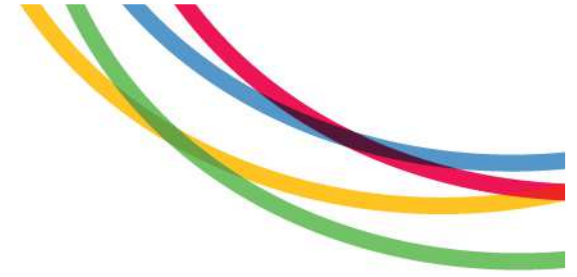
Consent question	Interview mode	
	FTF	WEB
Late placement – easy wording	320	642
– standard wording	333	657
Early placement – easy wording	338	–
– standard wording	372	–
	1,363	1,299

Data: Follow-up questions



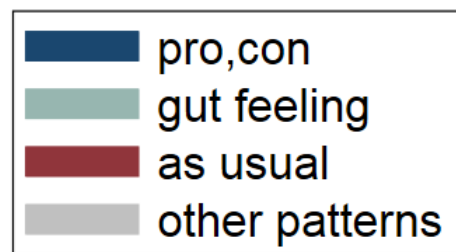
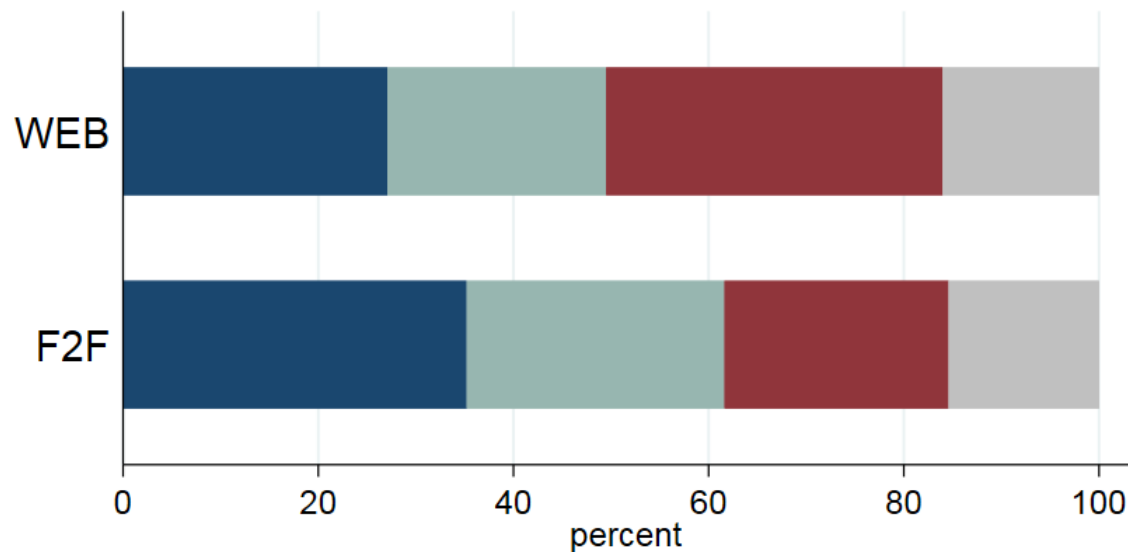
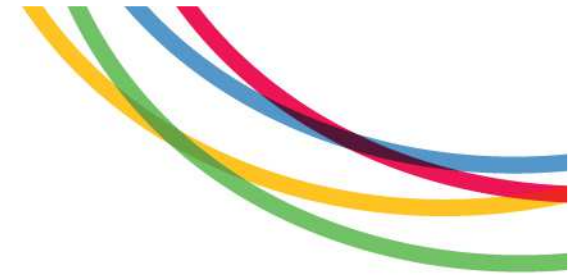
- **Processing:** How decided whether to say 'yes' or 'no'?
 - Thought about what would happen (pro/con)
 - Gut feeling
 - Usual response to request for personal data
 - **Subjective understanding:** How well felt understood?
 - 1 not at all,
 - 4 completely
 - **Objective understanding:** 8 questions on linkage procedures
 - True
 - False
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Results



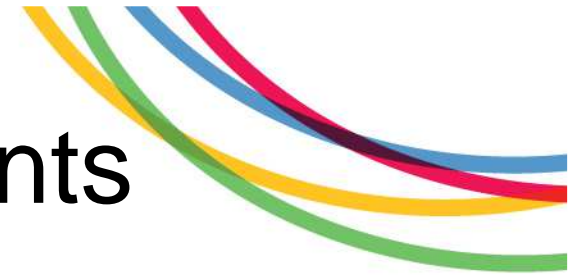
- Here: by mode of interview
- Same conclusions if account for selection into mode
 - Inverse propensity weights
 - Instrumental variable regression

1. How do respondents process consent request?



- Most Rs do not process consent request systematically
- Web Rs less likely to process systematically than FTF Rs ($p < 0.01$)

2. How much do respondents understand?



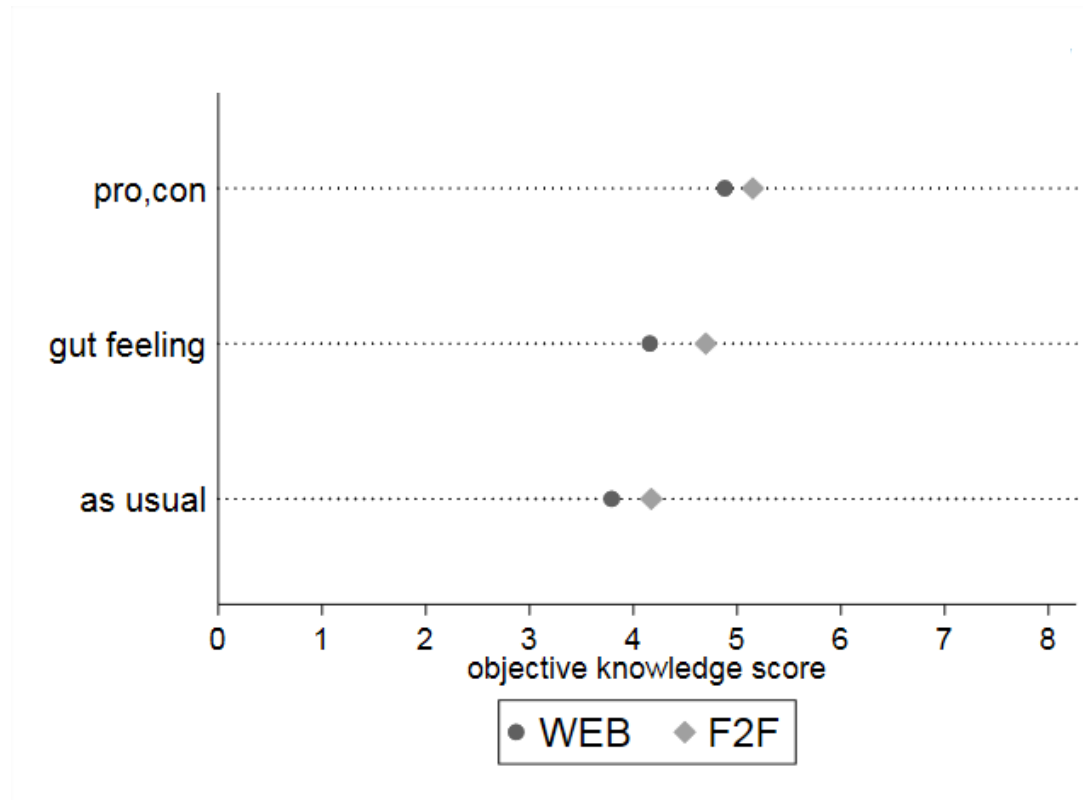
	Objective understanding (range: 0-8) (mean)	Subjective understanding (range: 1-4) (mean)
FTF	4.8	2.9
WEB	4.1	2.4

- **Understanding poor**
- Web Rs have lower understanding than FTF Rs ($p < 0.001$)

3. Does how Rs process request relate to understanding?



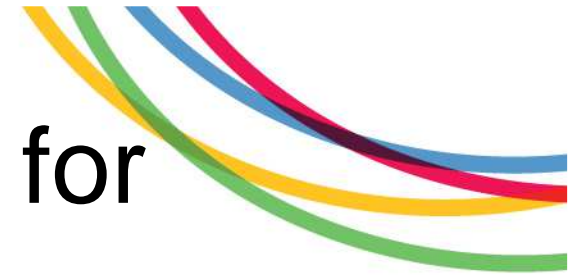
- Objective understanding by how Rs process request



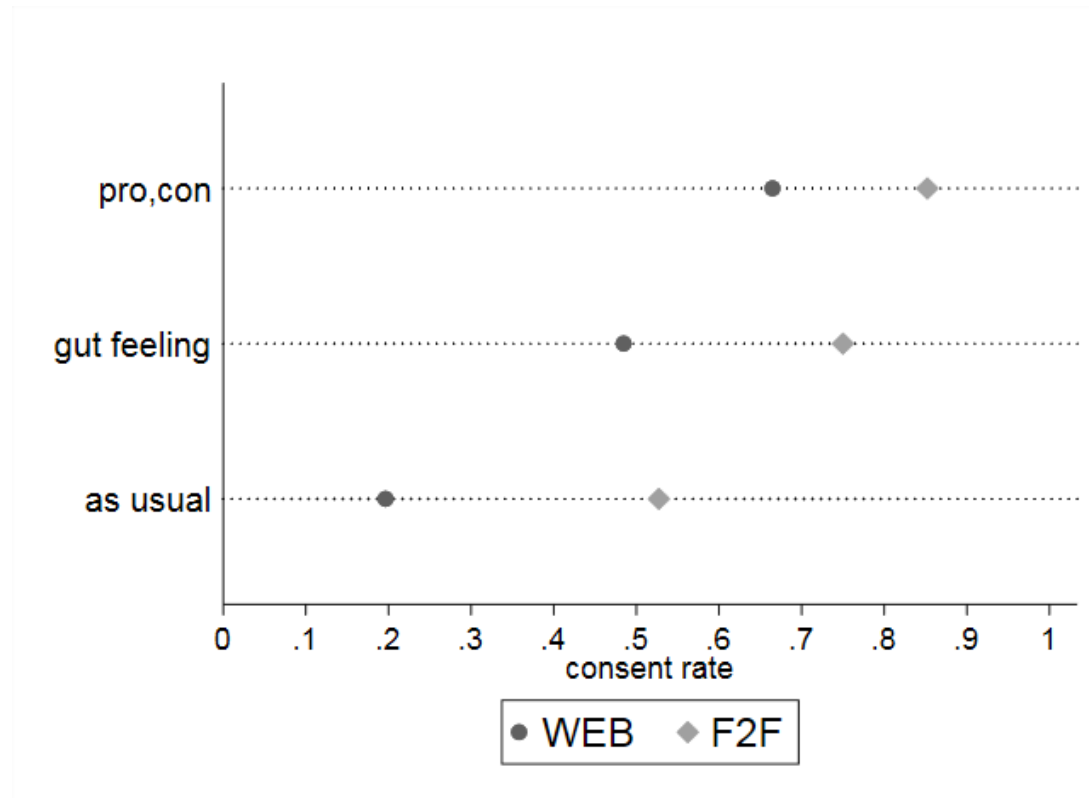
Systematic processing

- associated with better understanding ($p < 0.01$)
- In both modes
- Still lower understanding in Web than FTF ($p < 0.05$)

4. Does processing matter for consent?



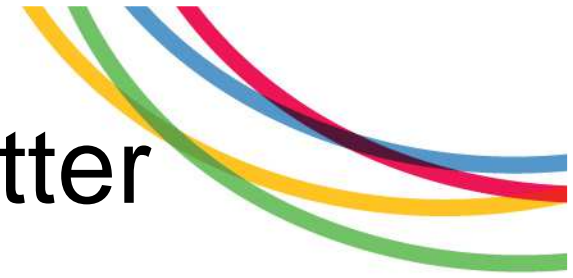
- Consent rate by how Rs process request



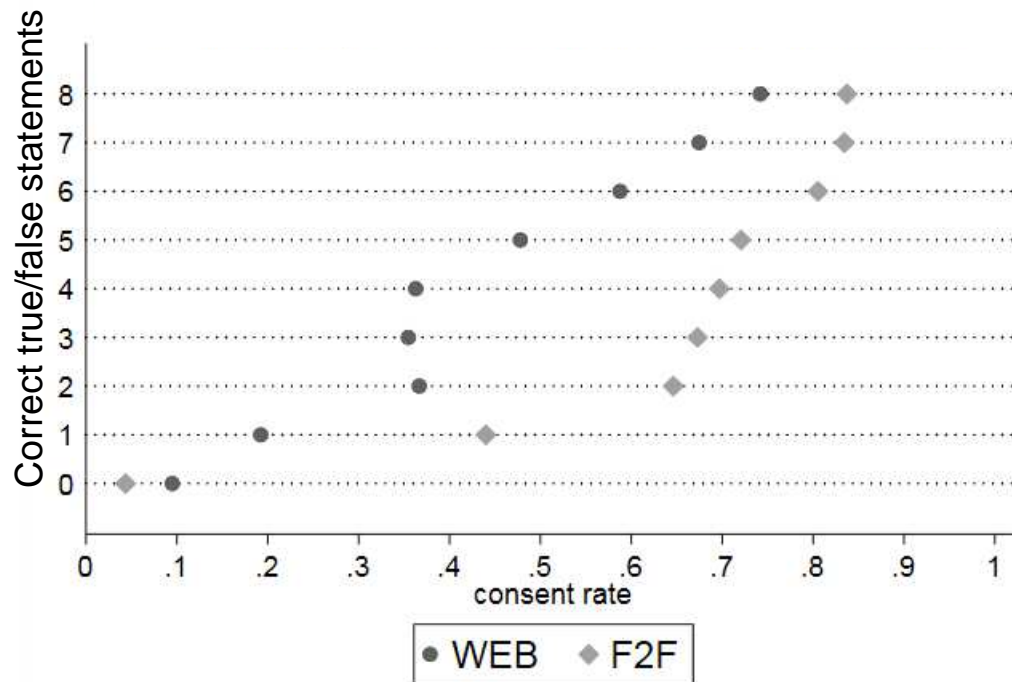
Systematic processing

- associated with higher probability of consent ($p < 0.01$)
- In both modes
- Still lower consent in Web than FTF ($p < 0.01$)

5. Does understanding matter for consent?



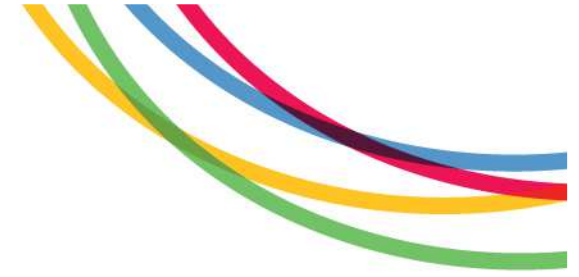
- Consent rate by number of true/false statements correct



Better understanding

- associated with higher probability of consent (OLS, $p=0.01$)
- In both modes
- Web lower consent for most levels of understanding ($p<0.05$)

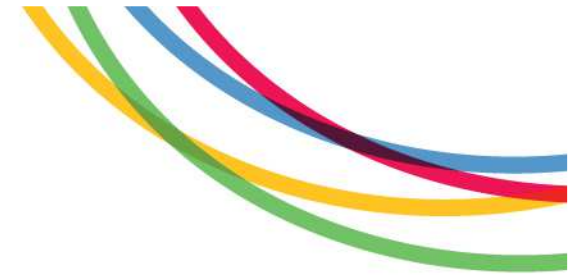
6. Can we improve understanding?



	Objective understanding (range: 0-8) (mean)
FTF easy – late	5.1
– early	5.0
FTF standard – late	4.5
– early	4.5

- **Placement of consent request:**
no effect

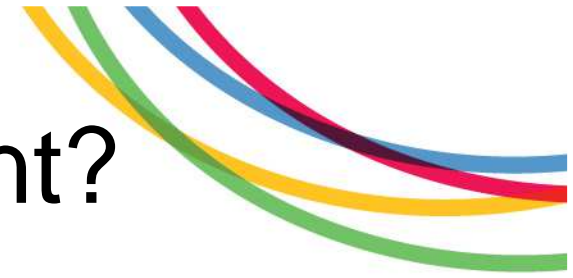
6. Can we improve understanding?



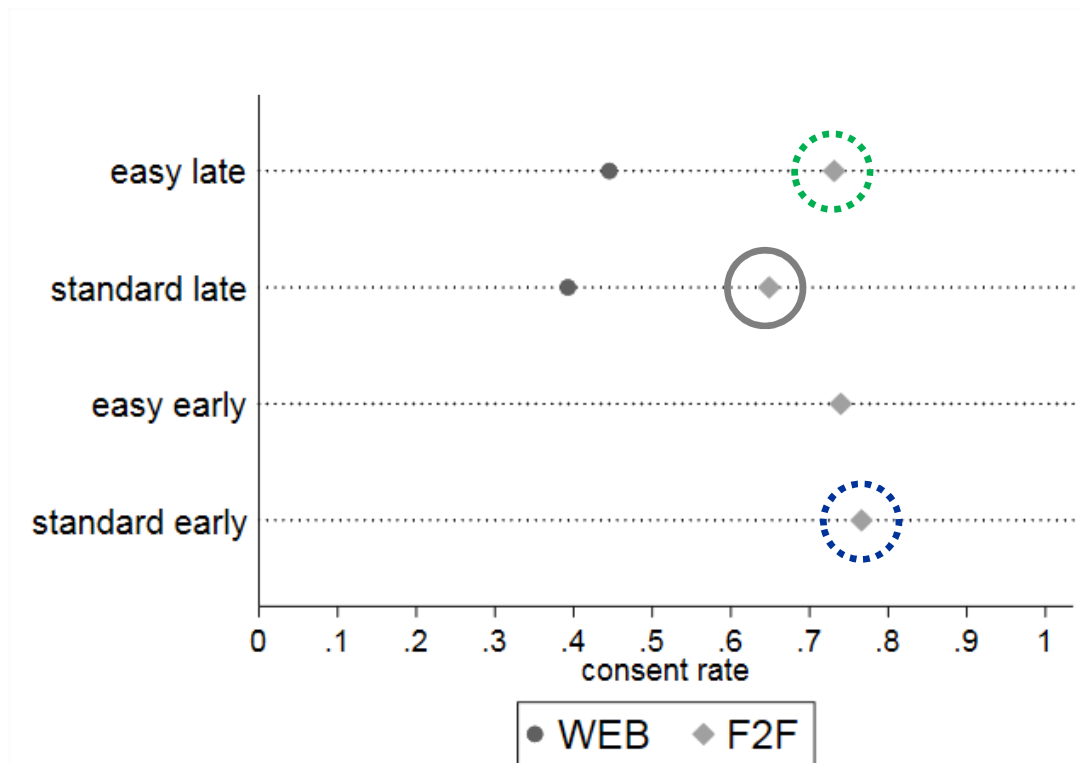
	Objective understanding (range: 0-8) (mean)
FTF early – standard	4.5
– easy	5.0
FTF late – standard	4.5
– easy	5.1
Web late – standard	3.8
– easy	4.4

- **Placement of consent request:**
no effect
- **Easy wording:**
improves understanding
- In both modes
($p < 0.01$)

7. Can we increase consent?



- Consent rate by experimental treatment group



- **Early placement:**
Increases consent (FTF only, $p < 0.01$)
- **Easy wording:**
increases consent in FTF ($p = 0.01$)
- No effect in Web

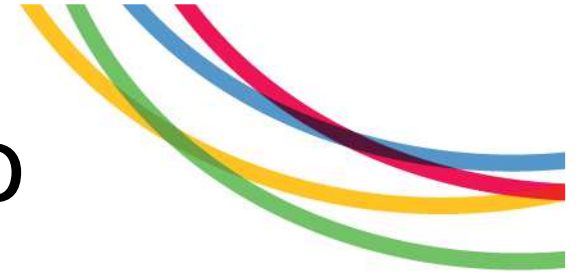
Summary:

Understanding what is going on



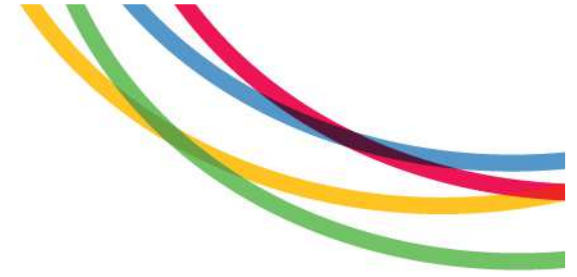
- Most Rs do not process consent Q systematically
 - Systematic processing associated with
 - Better understanding of request
 - Higher probability of consent
 - Web: same associations as in FTF, but lower levels of
 - Systematic processing
 - Understanding
 - Probability of consent
-

Summary: What can we do



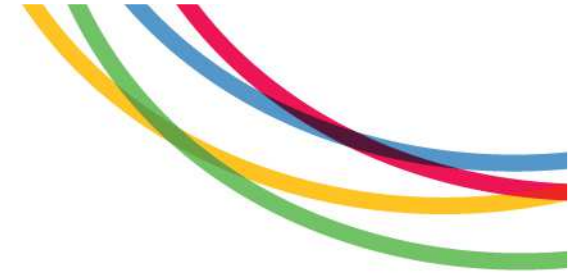
- Limited effects of experimental treatments designed to make consent request easier:
 - Early placement of consent request
 - Does not improve understanding
 - Increases consent (only tested in FTF)
 - Easier wording of consent request
 - Improves understanding (a bit)
 - Increases probability of consent in FTF but not in Web
-

The quest continues...



- This study: different ways in which Rs process consent Qs
 - Systematic processing: more Informed Consent
 - Is processing style stable over time? (Coming soon)
 - Can we push Rs to systematic processing?
 - How can we help Rs who do not process systematically
 - Understand the request?
 - Feel comfortable with giving consent?
 - What do Rs base decision on?
 - Web vs FTF?
 - Stability over time?
 - Tricky to measure if sub-conscious decision heuristics
-

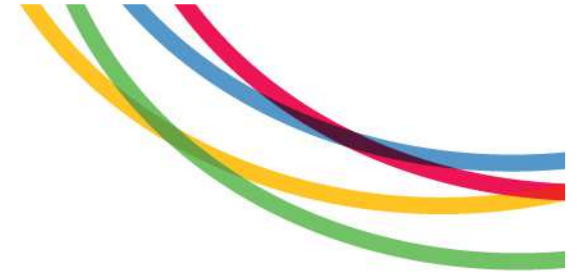
More information



Project website:

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

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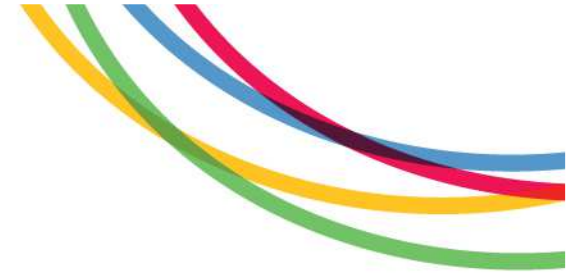
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