



SURVEY FUTURES

SURVEY DATA COLLECTION
METHODS COLLABORATION

Consent to data linkage in web and face-to-face surveys:

Patterns, biases, and interventions

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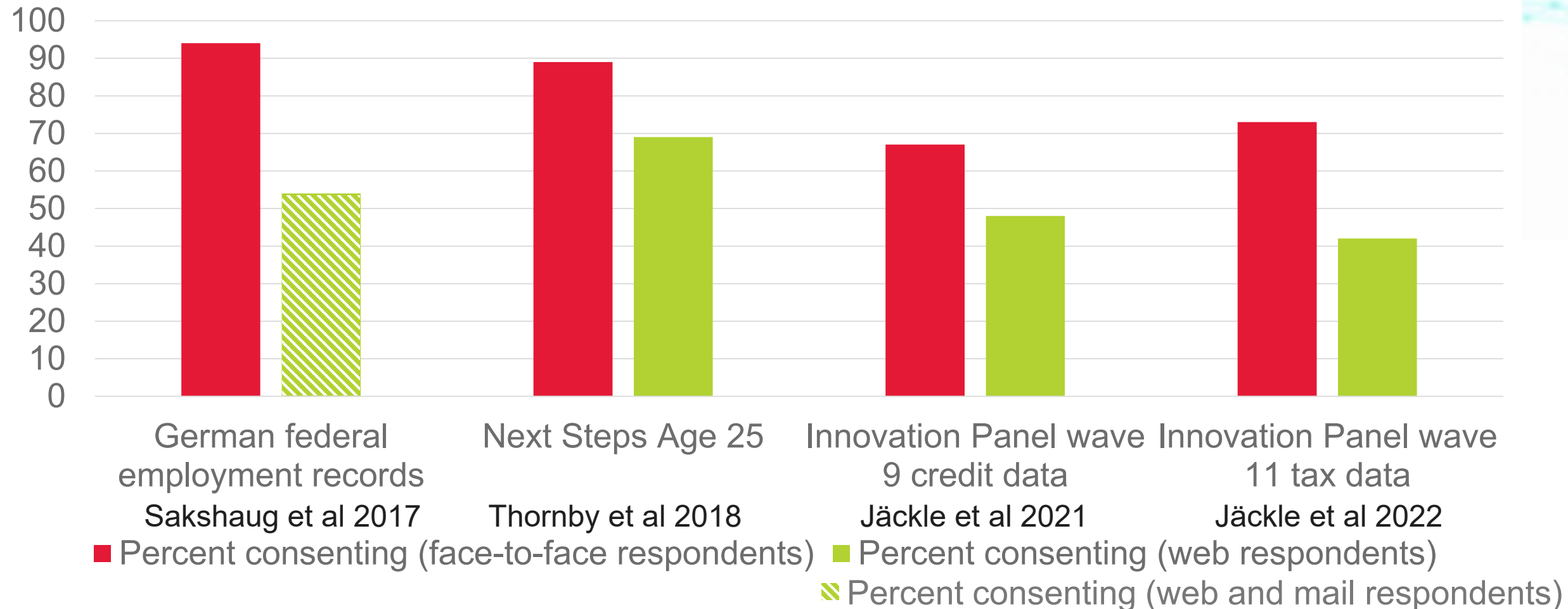
Motivation

Background

- Many surveys link to administrative records.
- Respondent consent typically sought for linkage.
- And many surveys use web as a primary mode of data collection.

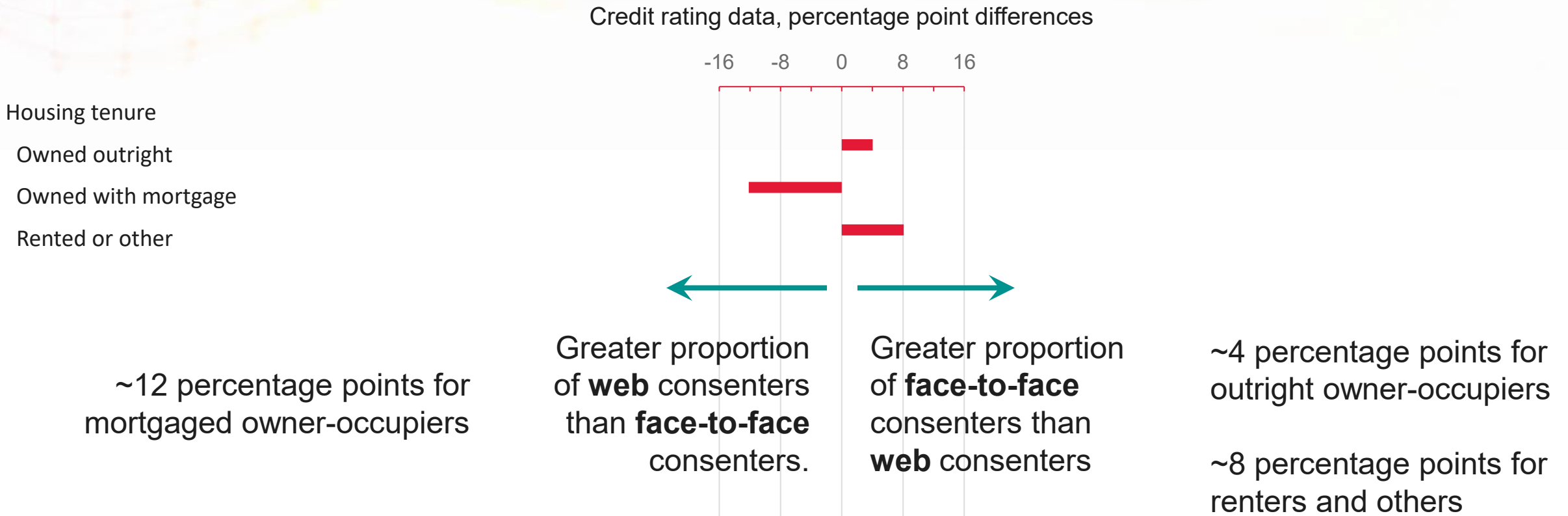
Motivation

- Respondents substantially less likely to consent online than in-person.



Motivation

- Respondents substantially less likely to consent online than in-person.
- Web consenters are a different set of people to face-to-face consenters, not just a smaller group.



Interventions 1

Repeated requests

Repeated request: existing literature

- Face-to-face, nearly 50% of non-consenters consent if re-asked later (Jäckle et al 2021).

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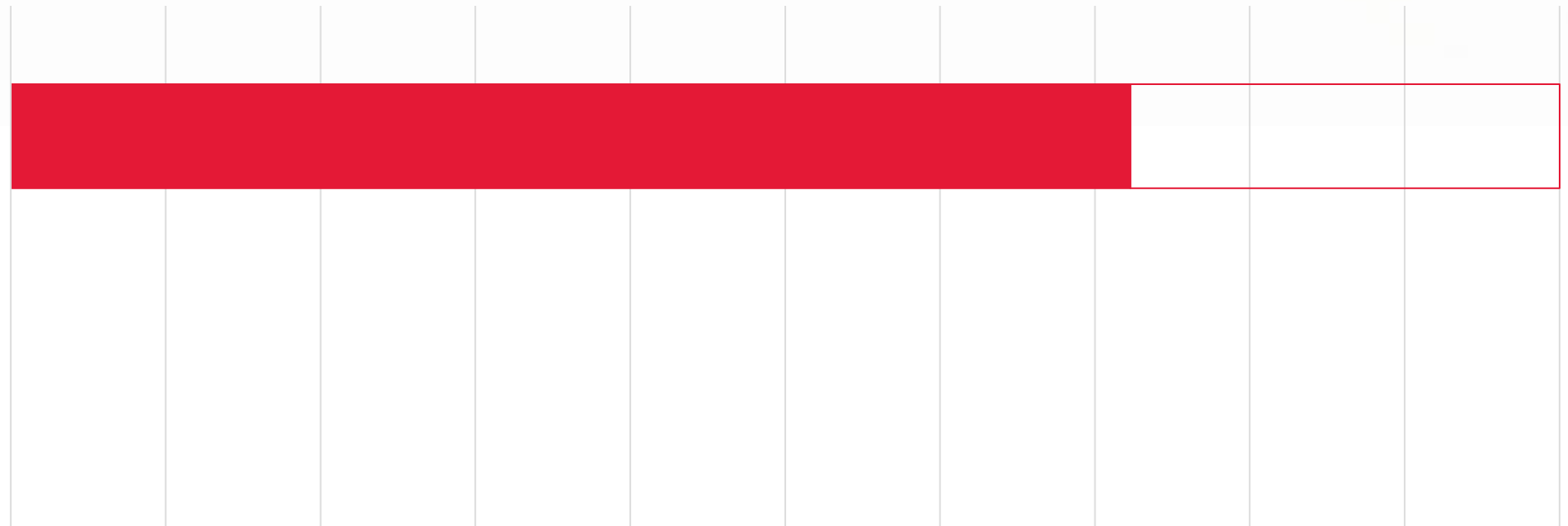
First request, tax data linkage consent, by mode allocation

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Face-to-face first

Web first

■ First ask consent □ First ask non-consent

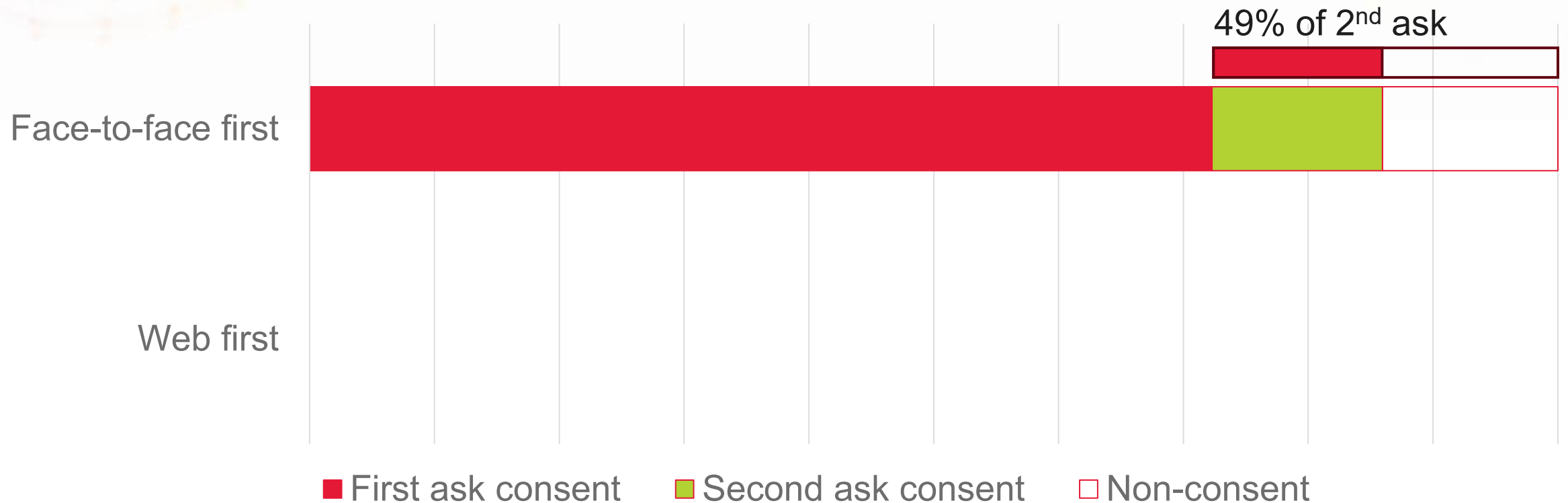


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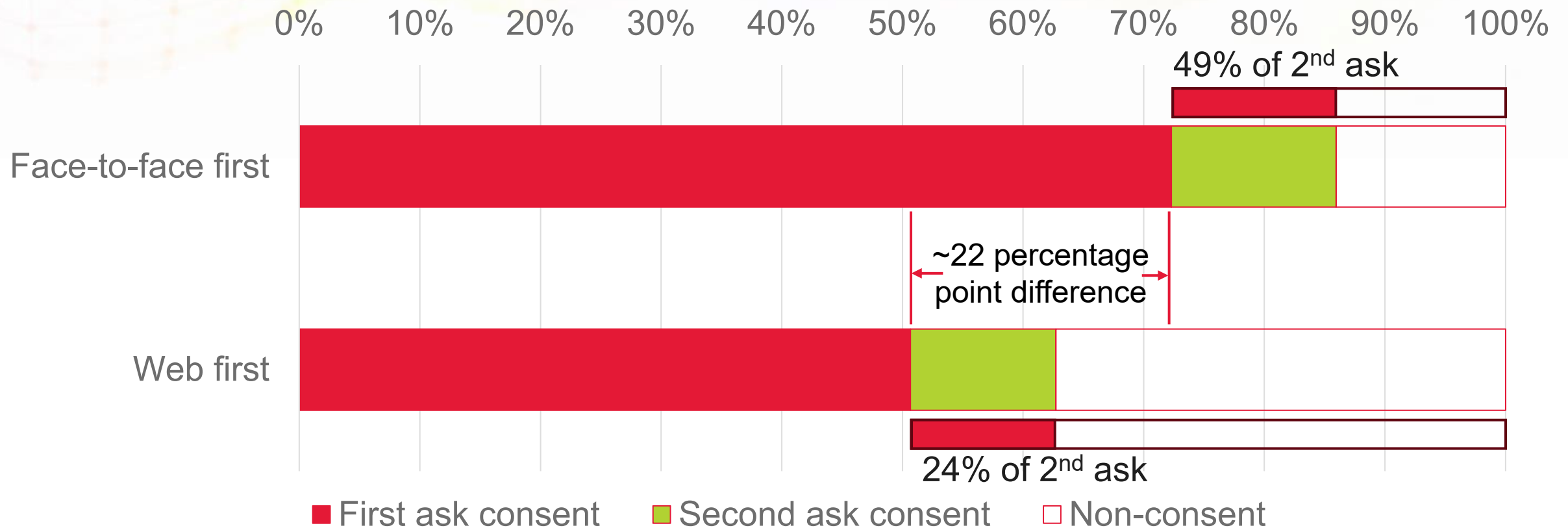
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Repeated request

- Face-to-face, nearly 50% of non-consenters consent if re-asked later.
- Re-asking web non-consenters generates some more consents, but smaller proportion than face-to-face.

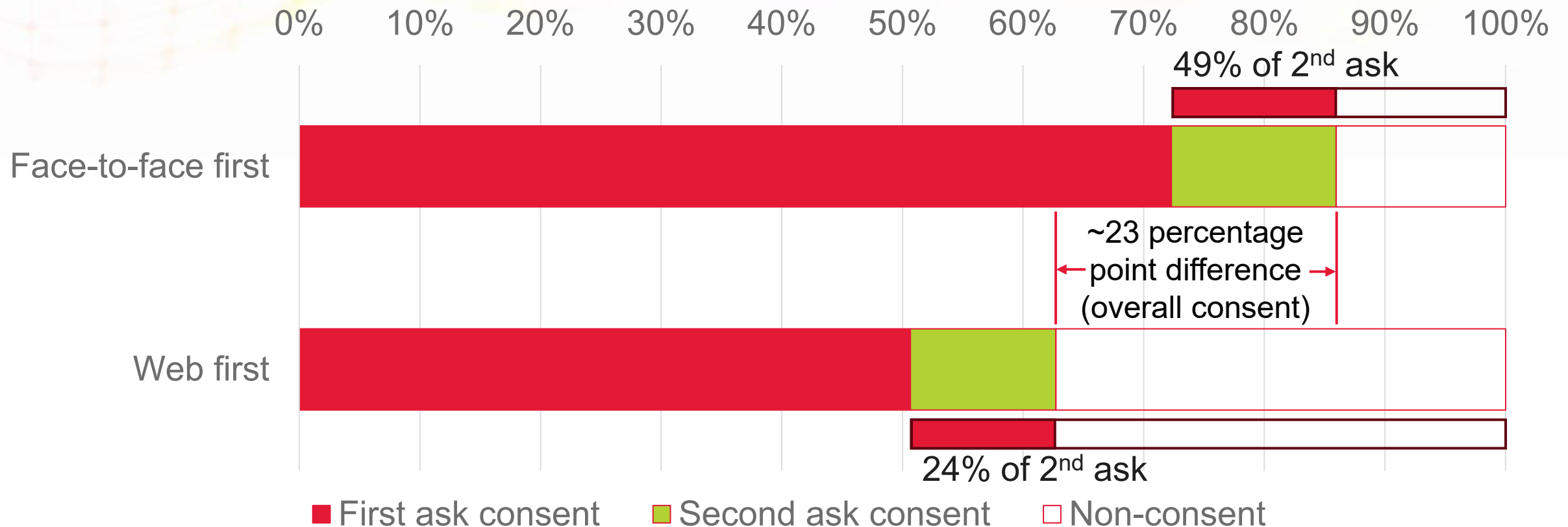
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Both requests, tax data linkage consent, by mode allocation



Interventions 2

Targeting decision processes

Consent decision processes: what we already knew

- Trust differences
 - Web respondents report more concerns about privacy and data security (Jäckle et al 2022)
 - Previous evidence of trust being correlated with consent (e.g., Jäckle et al 2024).
- Effort gaps
 - Lower effort answering consent questions (web vs. face-to-face respondents) (Jäckle et al 2024)
 - Evidence (Burton et al 2025) of...
 - Correlation between effort and consent
 - Effort and consent higher in face-to-face than web

Intervention: Attempting to engender trust and encourage effort

- If presence of an interviewer engenders trust and promotes making effort on the consent decision...
- Does it help to emulate the face-to-face interviewer in the web survey?
- Treatment: embed a video of interviewer reading the consent question vs. on-screen text question

Consent decision reasons: contribution and purpose

- Some consenters give ‘wanting to support to research’ as a reason to consent.
- Some non-consenters give ‘unclear why I was being asked’ as a reason to not consent.
- In other survey contexts, indicative signs providing reasons can increase compliance (e.g. Vine et al 2023)

Intervention: emphasising reason for data linkage

- Could detailing the value for research
 - ↑ salience of value for research of consenting?
 - ↓ likelihood of not knowing why consent requested?
- And if so, would it increase consent?
- And would any effect vary between face-to-face, web text, and web video?
- Treatment: value-for-research explained in the consent question vs. standard consent wording

Study design

- Consent question
- Follow-up questions
 - Consent decision approach
 - Effort
 - Reasons for consent
 - Reasons for non-consent
- Consent to link credit reference data from the Financial Conduct Authority (FCA, UK regulator)
 - Wave 18 (IP18) fielded 2025
- Analysis sample: people who responded in their allocated mode:
 - Allocated web first, responded web (N=2211)
 - Allocated face-to-face first, responded face-to-face respondents (N=583)

Study design

- Consent question
 - Linkage to credit rating data
 - Random allocations
 - Wording treatment
 - (Web) video vs. text treatment
- Follow-up questions

Random allocation, face-to-face

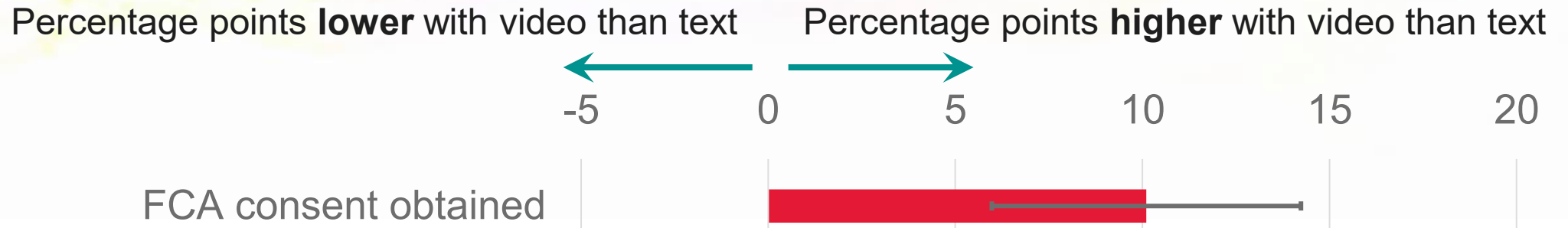
Standard wording	50%
Value-for research	50%

Random allocation, web

	Screen text	Video
Standard wording	25%	25%
Value-for research	25%	25%

Video consent question

- Video increases consent.
- Findings compatible with **Video** → **Trust** → **Consent** mechanism
- Less evidence for **Video** → **Effort** → **Consent** mechanism



Video consent question

- Video increases consent.
- Findings compatible with **Video** → **Trust** → **Consent** mechanism
- Less evidence for **Video** → **Effort** → **Consent** mechanism

Percentage points **lower** with video than text ← 0 → Percentage points **higher** with video than text

-5 0 5 10 15 20

FCA consent obtained

How decided whether to consent: Trust in organisations involved

If consented Why: trust study and/or trust FCA



Video consent question

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Percentage points **lower** with video than text Percentage points **higher** with video than text



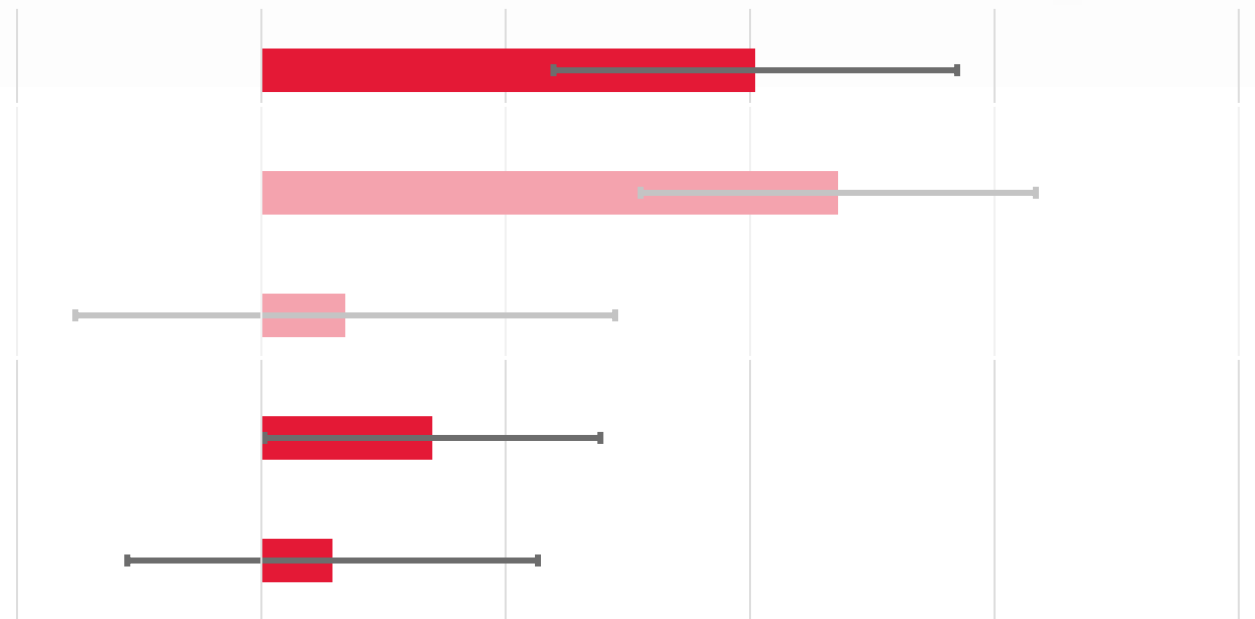
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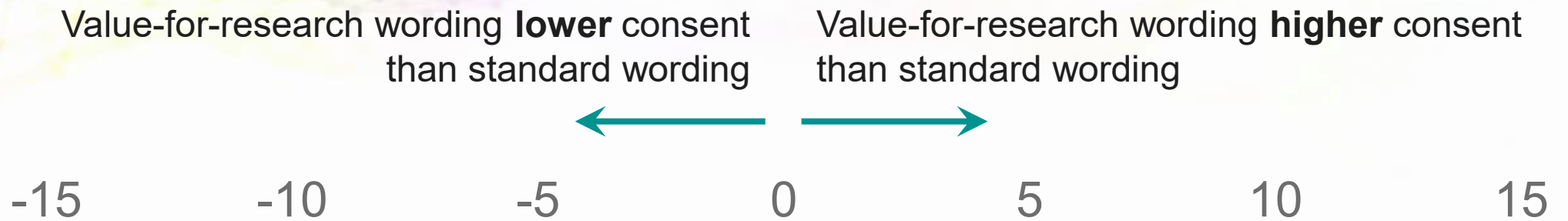
How decided whether to consent: reflective process

Effort put into consent decision: above median (5-10 out of 10)



Value-for-research wording

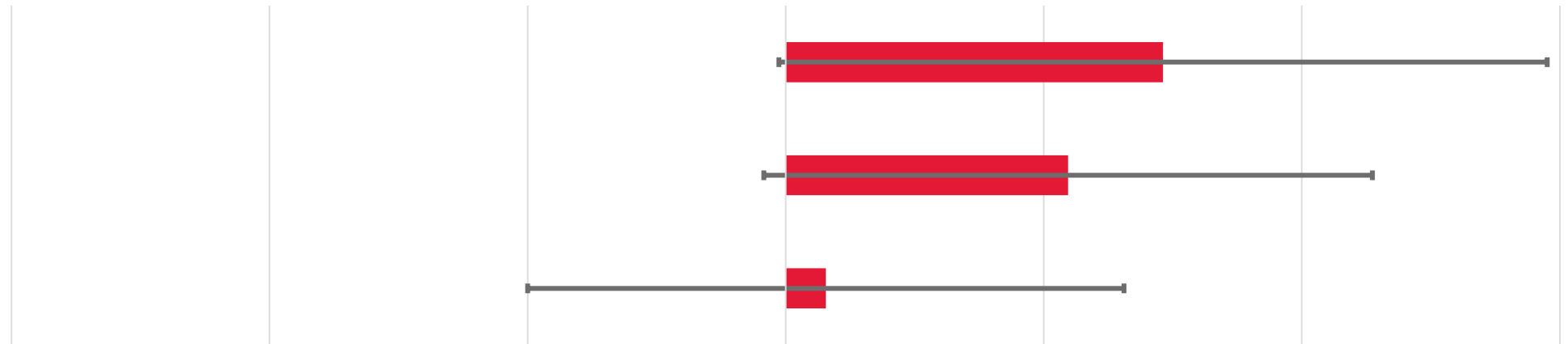
- Value-for-research wording associated with higher (n.s.) consent all modes/formats.



Face-to-face

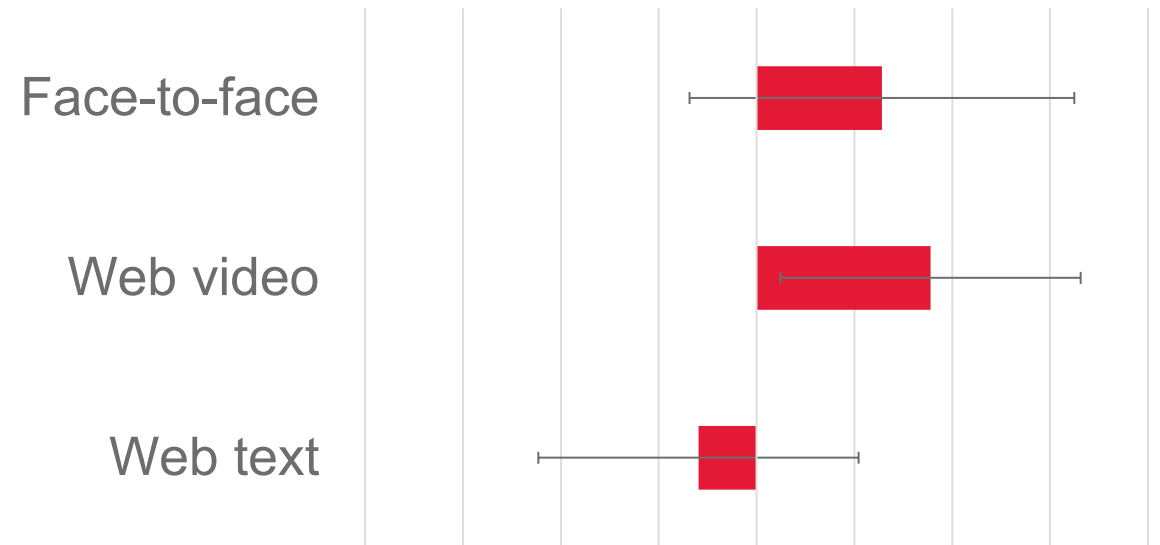
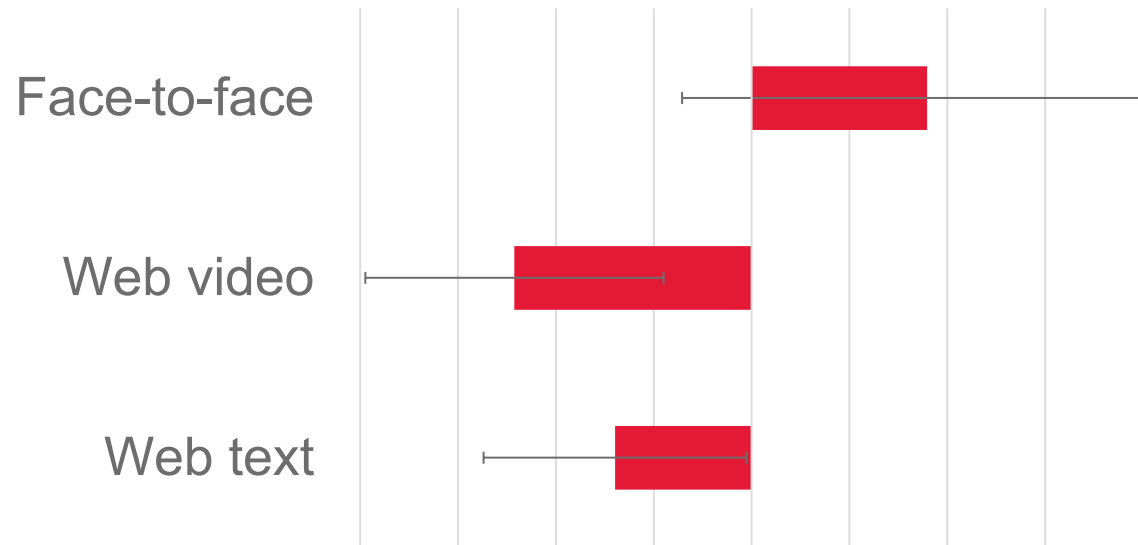
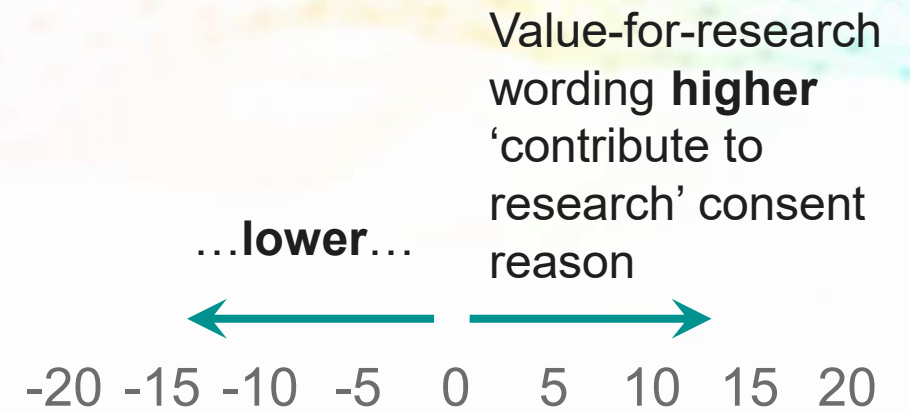
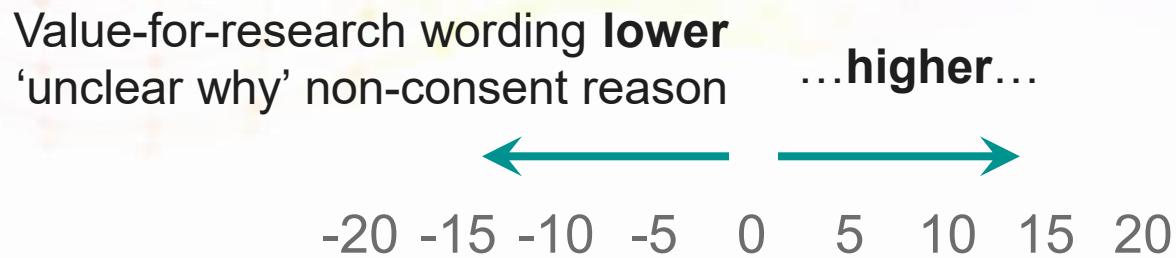
Web video

Web text



Value-for-research wording

- Value-for-research wording associated with higher (n.s.) consent all modes/formats.
- Mixed evidence on mechanism.



In conclusion...

Conclusions

- Fewer — **and different!** — respondents consent to data linkage in web than face-to-face.
- Re-asking web non-consenters secures some additional consents...
- ... but magnitude of mode difference in proportion for whom consent obtained remains similar.

Conclusions

- Video consent question increases proportion of web respondents consenting.
 - ‘Trust’ mechanism more supported than ‘effort’ mechanism.
- Value-for-research wording seems most effective face-to-face, somewhat web video.
 - Indicative of web respondents not closely reading consent questions.

Thank you for listening



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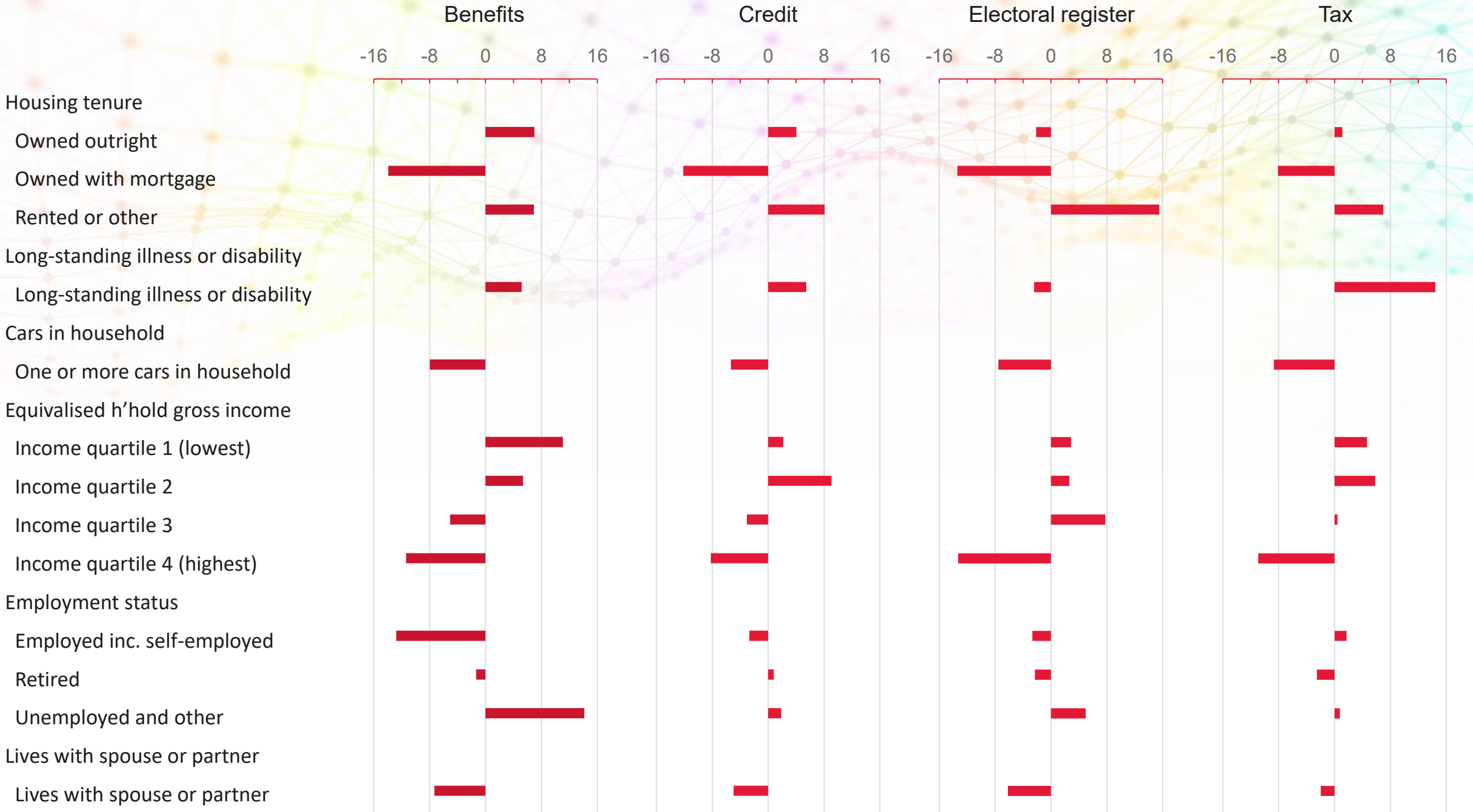
The analysis is based on data from the UK Household Longitudinal Study, *Understanding Society*. *Understanding Society* is an initiative funded by the Economic and Social Research Council and various Government Departments, with scientific leadership by the Institute for Social and Economic Research, University of Essex, and survey delivery by the National Centre for Social Research (NatCen) and Verian (formerly Kantar Public). The research data are distributed by the UK Data Service.

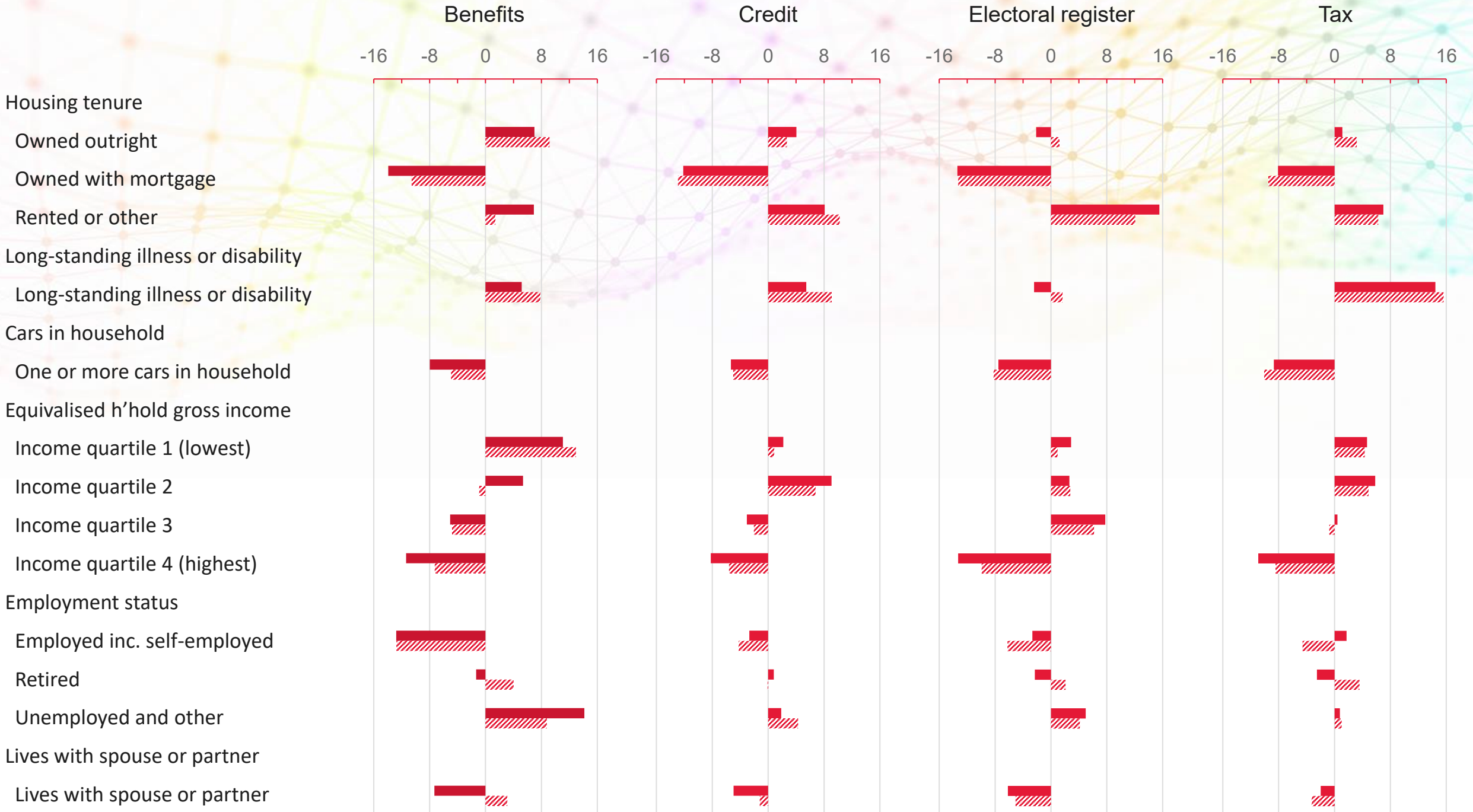
References

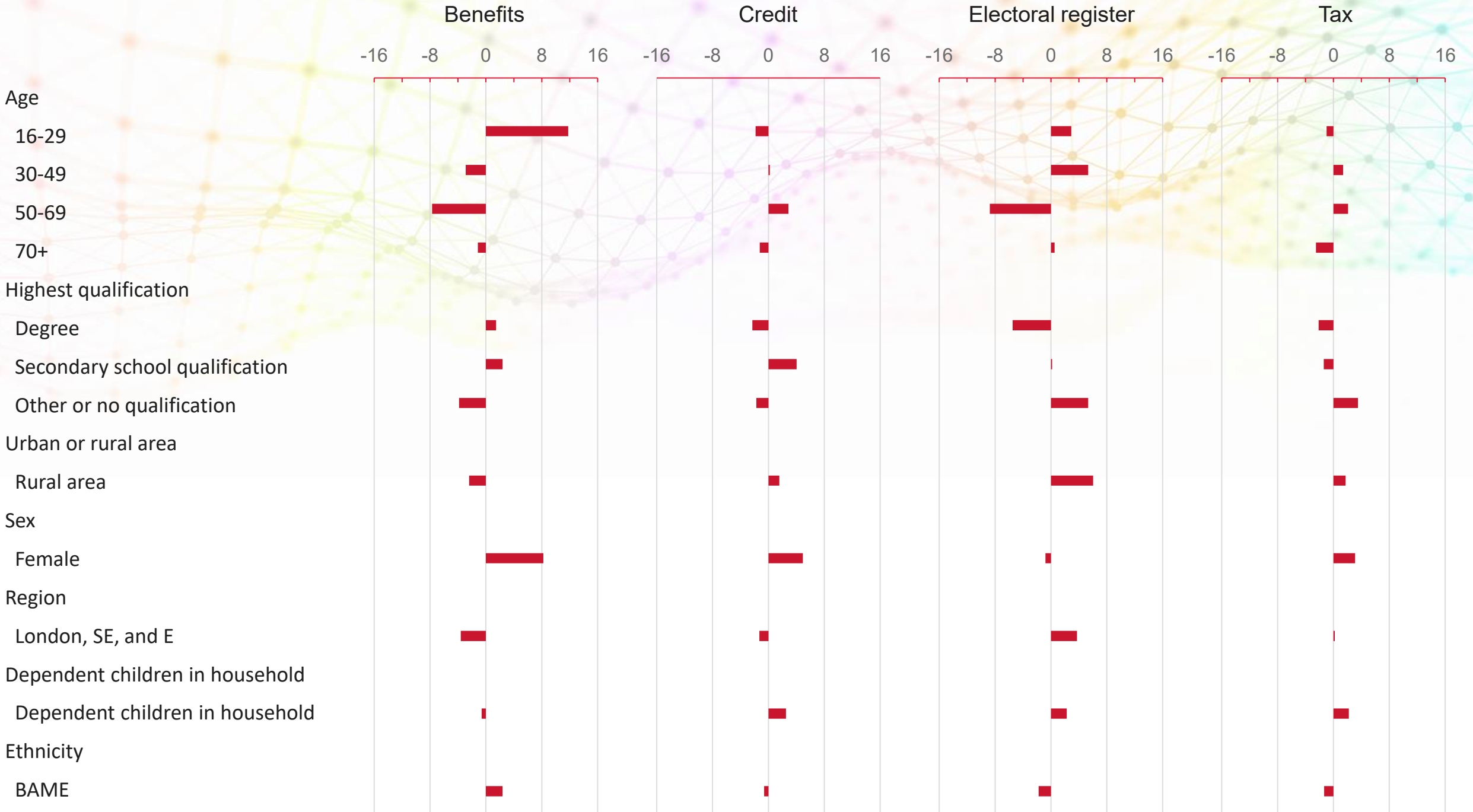
- Burton, J., Couper, M.P., and Jäckle, A. (2024) 'The Effects of Placement and Order on Consent to Data Linkage in a Web Survey', *Journal of Survey Statistics and Methodology*, 12(5):1212–1223. <https://doi.org/10.1093/jssam/smae004>
- Burton, J., Couper, M.P., Crossley, T.F., Jäckle, A., and Walzenbach, S. (2025) 'How do Survey Respondents Decide Whether to Consent to Data Linkage?', *Sociological Methods & Research*. <https://doi.org/10.1177/00491241251344289>
- Jäckle, Annette, Kelsey Beninger, Jonathan Burton, and Mick P. Couper. 2021. 'Understanding Data Linkage Consent in Longitudinal Surveys'. In *Advances in Longitudinal Survey Methodology*, 1st edn, edited by Peter Lynn. Wiley Series in Probability and Statistics. Wiley. <https://doi.org/10.1002/9781119376965.ch6>.
- Jäckle, Annette, Jonathan Burton, Mick P. Couper, Thomas F. Crossley, and Sandra Walzenbach. 2022. 'How and Why Does the Mode of Data Collection Affect Consent to Data Linkage?' *Survey Research Methods* 16 (3): 3. <https://doi.org/10.18148/srm/2022.v16i3.7933>.
- Jäckle, A., Burton, J., Couper, M. P., and Walzenbach, S. (2023), "4.5 Social pressure or nudging towards deeper cognitive processing? Experiments on the role of the interviewer in increasing consent to data linkage," in *Understanding Society Innovation Panel wave 15: Results from methodological experiments*, Understanding Society Working Paper Series, ed. J. Vine, Colchester, Essex: University of Essex, pp. 35–38.
- Jäckle, A., Burton, J., Couper, M.P., Crossley, T.F., and Walzenbach, S. (2024) 'Survey Consent to Administrative Data Linkage: Five Experiments on Wording and Format', *Journal of Survey Statistics and Methodology*, 12(5):1174–1199. <https://doi.org/10.1093/jssam/smad019>.
- Sakshaug, Joseph W., Sebastian Hülle, Alexandra Schmucker, and Stefan Liebig. 2017. 'Exploring the Effects of Interviewer- and Self-Administered Survey Modes on Record Linkage Consent Rates and Bias'. *Survey Research Methods* 11 (2): 2. <https://doi.org/10.18148/srm/2017.v11i2.7158>.
- Sakshaug, J. W., Schmucker, A., Kreuter, F., Couper, M. P., and Singer, E. (2019), "The effect of framing and placement on linkage consent," *Public Opinion Quarterly*, 83, 289–308. <https://doi.org/10.1093/poq/nfz018>.
- Thornby, Marie, Lisa Calderwood, Mehul Kotecha, Kelsey Beninger, and Alessandra Gaia. 2018. 'Collecting Multiple Data Linkage Consents in a Mixed-Mode Survey: Evidence from a Large-Scale Longitudinal Study in the UK'. *Survey Methods: Insights from the Field (SMIF)*, ahead of print, May 18. <https://doi.org/10.13094/SMIF-2018-00004>.
- University of Essex, Institute for Social and Economic Research. (forthcoming). *Understanding Society: Innovation Panel, Waves 1-18, 2008-2025*. [data collection]. 15th Edition. UK Data Service. SN: 6849
- Vine, J., Horn, D., Burton, J., and Jäckle, A. (2023), "4.6 Improving the reporting of mobile contact details and consent to send survey questions by SMS," in *Understanding Society Innovation Panel wave 15: Results from methodological experiments*, Understanding Society Working Paper Series, ed. J. Vine, Colchester, Essex: University of Essex, pp. 39–48.

Additional info...

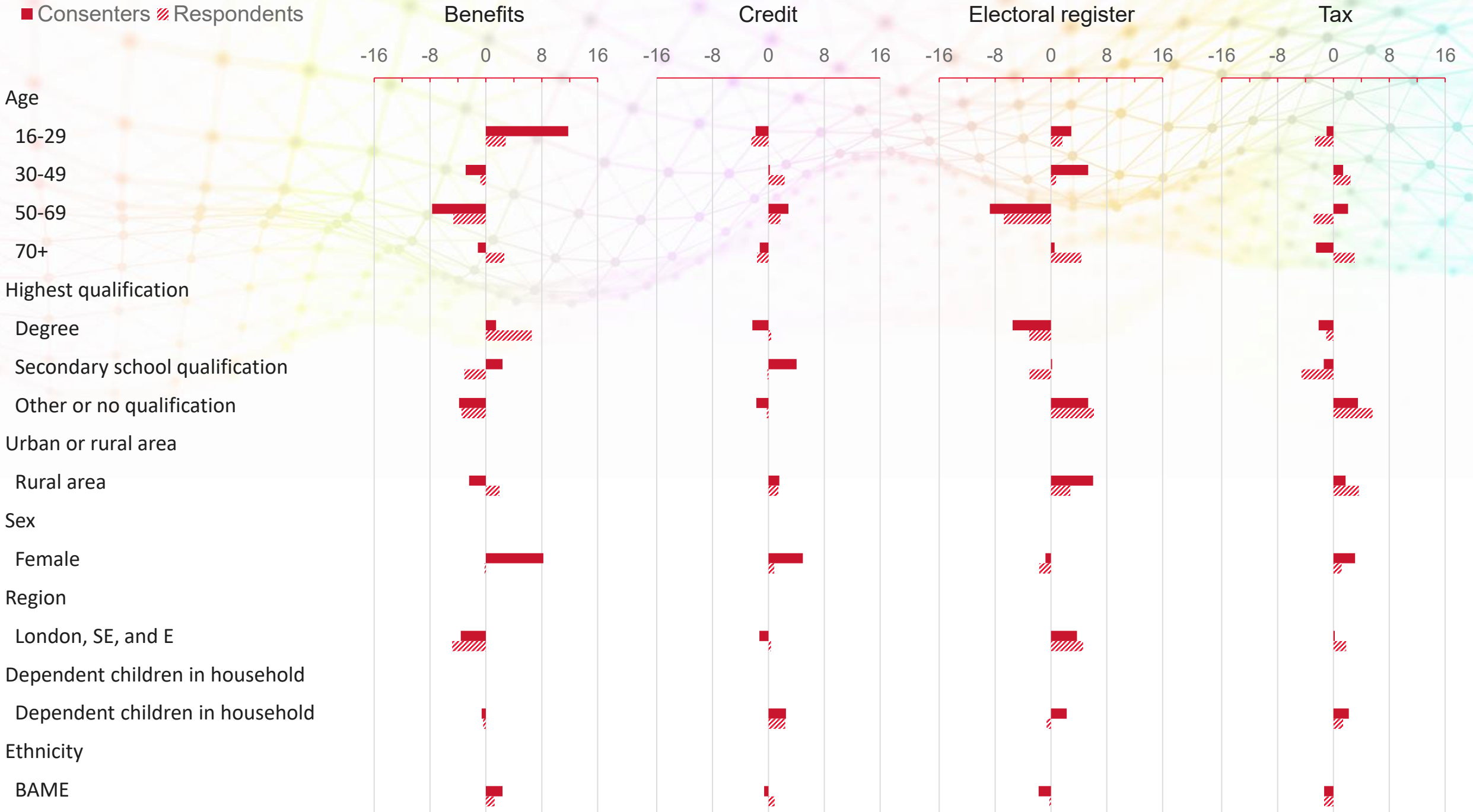
More on the mode differences in consenters







■ Consenters ▨ Respondents



Additional info...

More on the effect of asking twice by mode

Repeated request

- Face-to-face, nearly 50% of non-consenters consent if re-asked later.
- And web?

First request, tax data linkage consent, by mode allocation

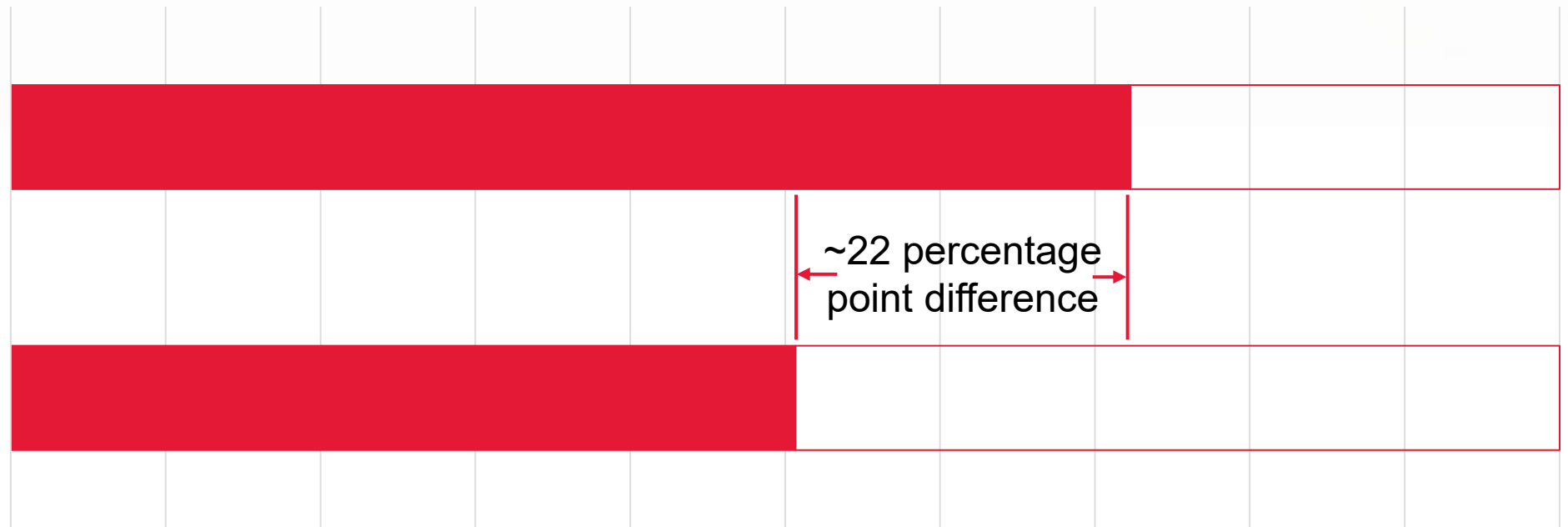
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Face-to-face first

Web first

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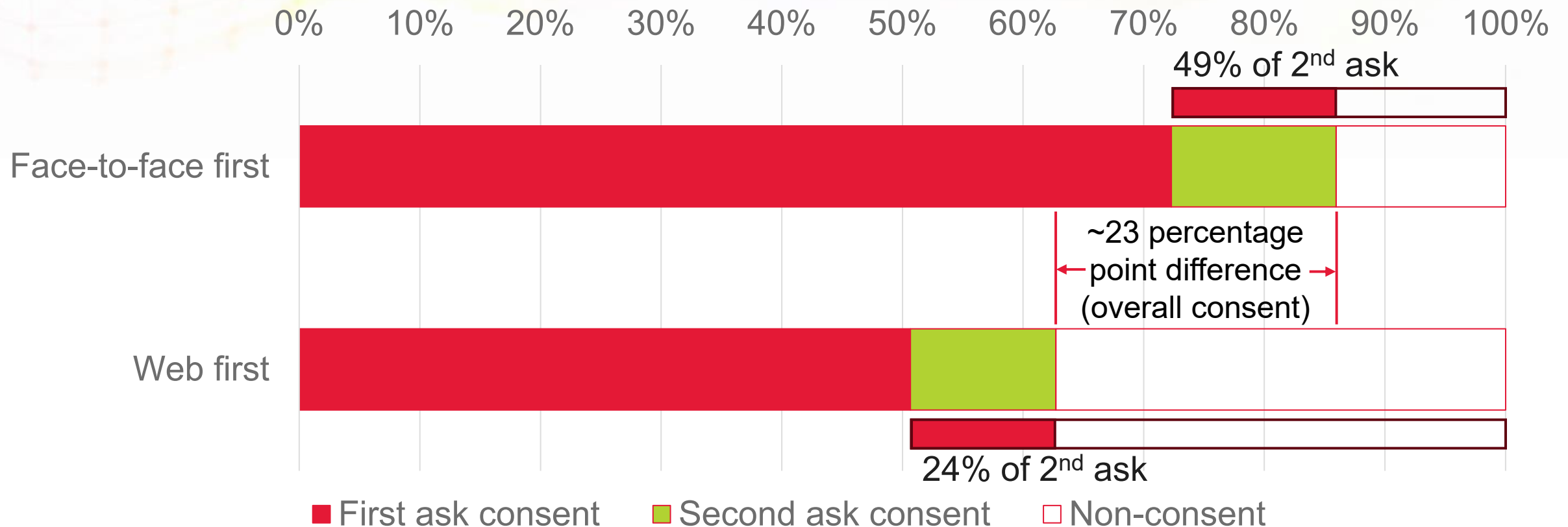
~22 percentage point difference



Repeated request

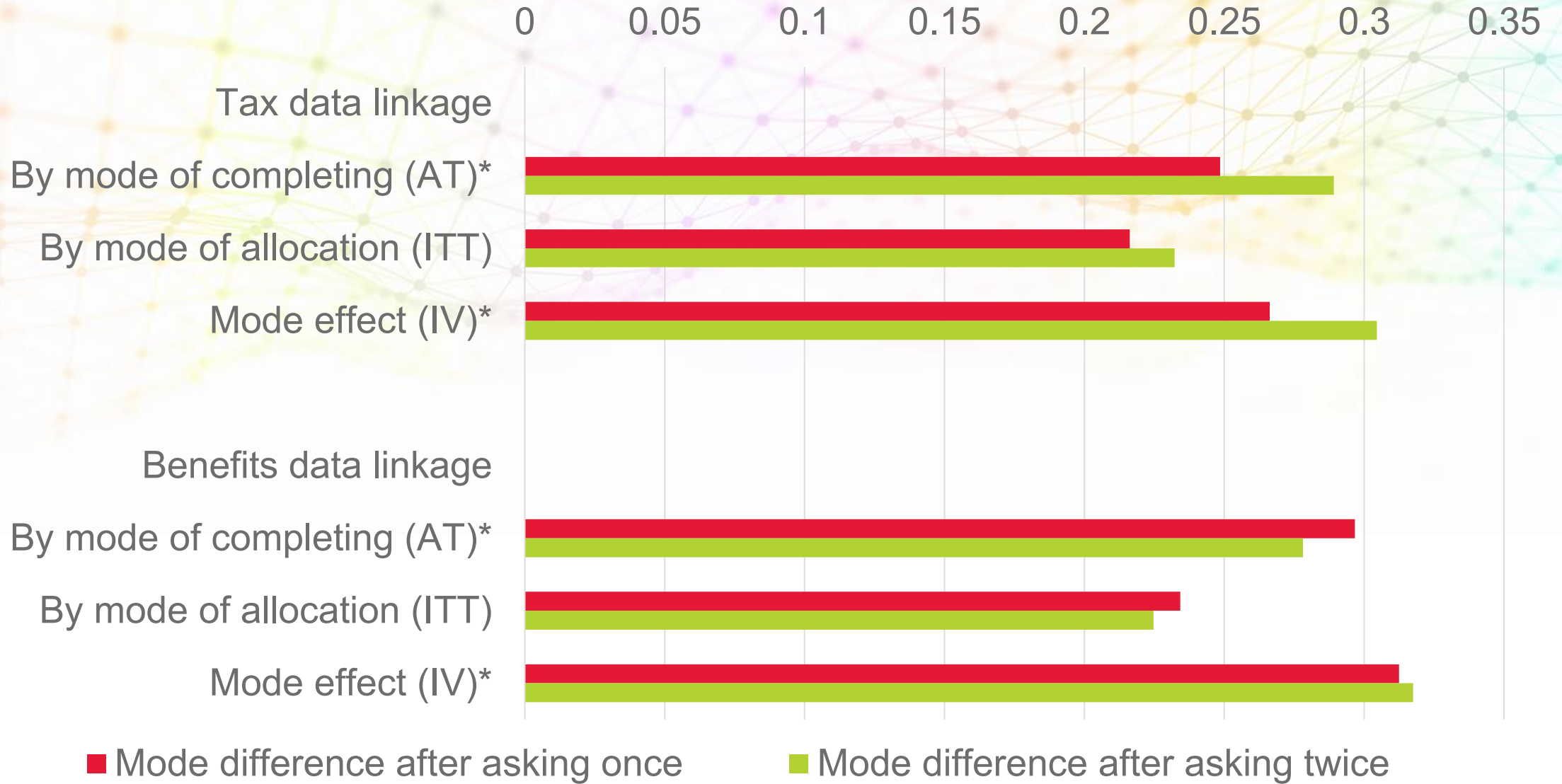
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Both requests, tax data linkage consent, by mode allocation





* Consistent mode cases (FTF/FTF and web/web) for AAT and IV analyses



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Additional info...

More on background to consent decisions

Consent decision processes: what we already knew

- Mode effect on willingness to consent, not just selection effects (Jäckle et al 2022)
- Web respondents report more concerns about privacy and data security (Jäckle et al 2022)
- Previous evidence of trust being correlated with consent (e.g., Jäckle et al 2024).

Consent decision processes: what we already knew — Effort gap

- Lower effort answering consent questions (web vs. face-to-face respondents) (Jäckle et al 2024)
 - spend less time answering
 - less likely to read additional materials
 - understand the request less well
 - more likely to make consent decisions based on gut feeling or habit
 - less likely to make consent decisions based on thinking about the consequences of consent
- Evidence (Burton et al 2025) of...
 - Correlation between effort and consent
 - Effort and consent higher in face-to-face than web

Consent decision processes: what we already knew — increasing consent

- Earlier position in the survey: ~+7ppt (Burton et al 2024)
- Trust prime: +5ppt (Jäckle et al 2024)
- Photo and message from study director: +5ppt (Jäckle et al 2023)
- Easier wording of the consent request: +5ppt but $p > 0.05$ (Jäckle et al 2024)
- Loss framing: inconsistent findings (Sakshaug et al 2019)
- Consent as default wording: n.s. (Jäckle et al 2024)

- In other survey contexts, indicative signs providing reasons can increase compliance (e.g. Vine et al 2023)

Additional info...

More on study design for looking at consent decisions

Study design

- Consent question
 - Linkage to credit rating data
 - Random allocations

- Follow-up questions

Responses, face-to-face

Standard wording	276
Value-for research	307

Responses, web

	Screen text	Video
Standard wording	579	530
Value-for research	572	530

Study design

- Consent question
 - Linkage to credit rating data
 - Random allocations
 - Wording treatment
- Follow-up questions

Standard consent question

The Financial Conduct Authority (FCA) would like to anonymously link your answers from the survey to data it holds from regulated firms as part of its ongoing remit to help protect consumers. Some of these data will be included in the anonymised survey data set that is provided to researchers for research purposes only.

◀ ◀ ◀ ◀ ◀ Value-for-research wording here for relevant respondents.

Consent to sharing your data will **not** affect your involvement with any financial services providers or your ongoing participation in this study.

The information will be treated in strict confidence and used for research and to help the regulator of financial services to protect consumers.

Do you give your consent to sharing your data?

Study design

- Consent question
 - Linkage to credit rating data
 - Random allocations
 - Wording treatment
- Follow-up questions

Value-for-research addition:

By agreeing, you will play an important role in helping researchers bring evidence to real world problems that affect us all. For example:

- How do loans impact people's mental health?
- How have rising mortgages affected homeowners and first-time buyers?
- Are pensions providing enough money for retirement?

Additional info...

More on consent decision results

Video → Trust → Consent?

- Video increases consent
- Some evidence that it increased trust
- And that it affected how respondents made the consent decision
- Compatible with trust process mechanism

	Text question % yes	Video question % yes	χ^2 test p-value
Consent	50	60	<0.001
How decided whether to consent: Trust in organisations involved	33	45	<0.001
<i>If consented</i> Why: trust study and/or trust FCA	60	62	0.542

Video → Effort → Consent?

- Video increases consent
- Little effect on reporting use of a reflective consent decision process
- Little effect on how much effort reported putting into answering
- Little support for effortful processing mechanism

	Text question % yes	Video question % yes	χ^2 test p-value
Consent	50	60	<0.001
How decided whether to consent: reflective process	20	23	0.046
Effort put into consent decision: above median (5-10 out of 10)	50	51	0.497

Purpose → Consent? (by mode)

- Higher consent with value-for-science wording
 - Face-to-face
- Reason why
 - Directionally consistent face-to-face
- Reason why not
 - Directionally inconsistent face-to-face

Face-to-face	Standard wording % yes	Value-for-research wording % yes	χ^2 test p-value
Consent	66	74	0.054
<i>If consented</i> Why: Contribute to research	45	51	0.203
<i>If not consented</i> Why not: Purpose unclear	12	21	0.155

Purpose → Consent? (by mode)

- Higher consent with value-for-science wording
 - Face-to-face
 - Web text (barely!)
- Reason why
 - Directionally inconsistent web text
- Reason why not
 - Directionally consistent web text

Web: text question	Standard wording % yes	Value-for-research wording % yes	χ^2 test p-value
Consent	49	50	0.792
<i>If consented</i> Why: Contribute to research	48	46	0.478
<i>If not consented</i> Why not: Purpose unclear	26	19	0.043

Purpose → Consent? (by mode)

- Higher consent with value-for-science wording
 - Face-to-face
 - Web text (barely!)
 - Web video (in between)
- Reason why
 - Directionally consistent web text
- Reason why not
 - Directionally consistent web text

Web: video question	Standard wording % yes	Value-for-research wording % yes	χ^2 test p-value
Consent	57	63	0.069
<i>If consented</i> Why: Contribute to research	54	63	0.023
<i>If not consented</i> Why not: Purpose unclear	27	15	0.002

Decision processes: summary

- Higher online consent to data linkage with a video reading of the question vs. standard written version.
 - Around 10pp — large for attempts to increase online consent
 - Data more compatible with trust mechanism than effort mechanism
- Higher consent with additional wording emphasising value for research
 - Largest point estimate for face-to-face, middling for web video, small for web text, none above conventional threshold for statistical significance
 - Directions and magnitudes of effects of wording on reasons for consent / non-consent differ across mode / video-vs-text format