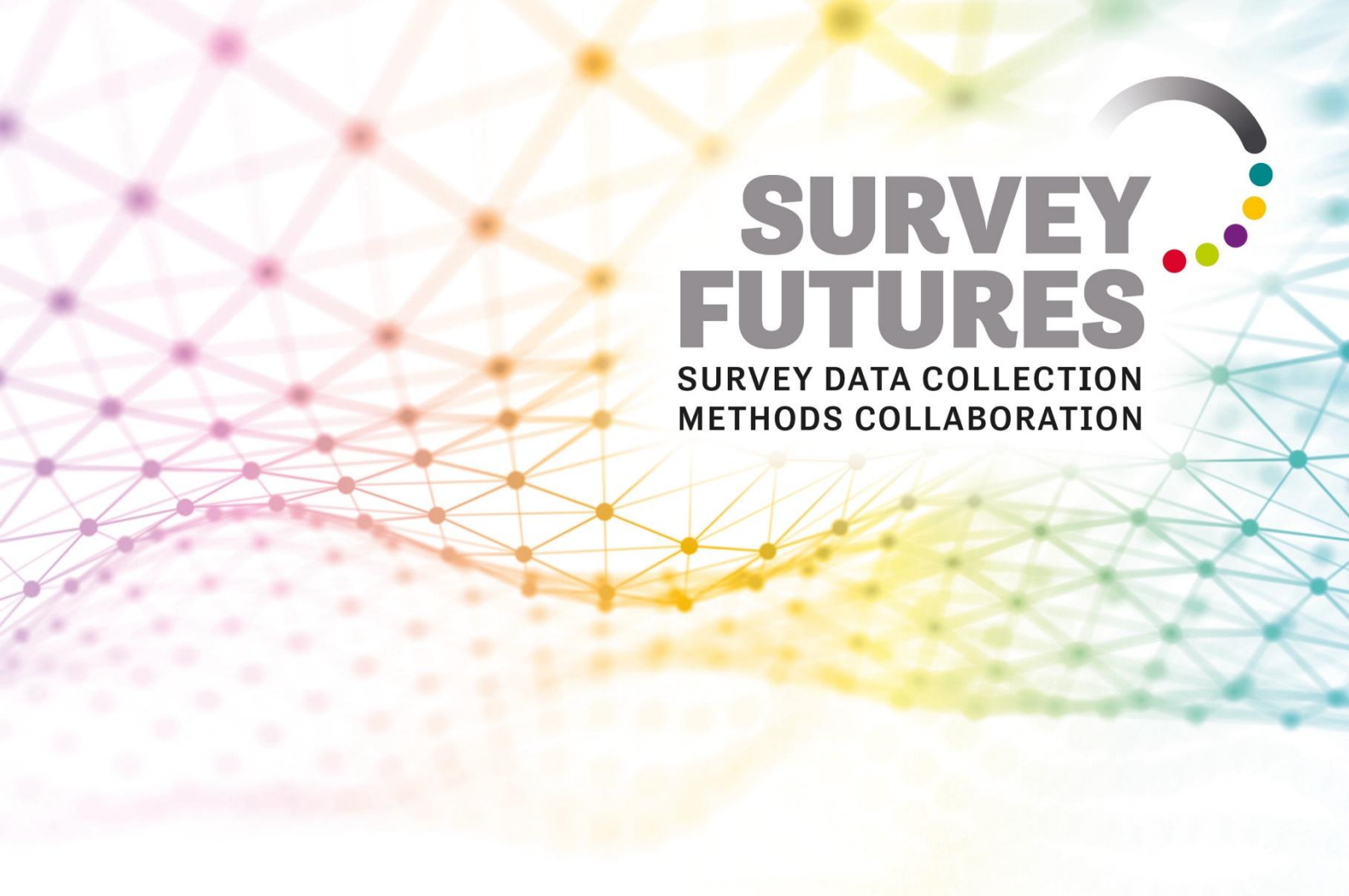




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Working Paper 29:

Increasing consent to data linkage in web and face-to-face surveys: Testing interventions designed to increase respondents' trust, cognitive effort, or understanding of the request

Annette Jäckle¹, Jim Vine¹, Jonathan Burton¹,
and Mick P. Couper²

¹ University of Essex, ² University of Michigan

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Increasing consent to data linkage in web and face-to-face surveys: Testing interventions designed to increase respondents' trust, cognitive effort, or understanding of the request

Annette Jäckle (University of Essex), Jim Vine (University of Essex), Jonathan Burton (University of Essex), and Mick P. Couper (University of Michigan)

Abstract: Linking administrative data to surveys provides information that is more detailed and accurate than can be collected directly from respondents. However, increasing use of online data collection may limit the potential of linked data, as respondents interviewed online are consistently less likely to consent to linkage than those interviewed face-to-face. In this research we test the effects of two interventions, designed to affect the respondent's decision process when answering consent questions. The first intervention provided additional information about the value for science of the linked data; the second used a video of an interviewer reading the consent question, instead of showing the question text on screen. The experiments were implemented in the Understanding Society Innovation Panel, a probability sample of households in Great Britain. The value for science question wording increased consent somewhat for face-to-face respondents and web respondents who saw the consent question as a video. The video question format increased consent by 10 percentage points among web respondents and seemed to have nudged respondents towards making a more trust-based decision. These findings highlight practical approaches for improving consent to data linkage in an increasingly online survey environment.

Keywords: experiment, decision process, question wording, question format, video

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Corresponding author: Annette Jäckle, Institute for Social and Economic Research, University of Essex, Wivenhoe Park, Colchester, Essex CO4 3SQ, United Kingdom, aejack@essex.ac.uk.

1 Introduction

Linking responses given in surveys to data held about respondents by administrative institutions, such as government departments, provides the opportunity for more and better data. Information held in administrative records is of more detail and often greater accuracy than we could hope to collect during a survey. As an increasing amount of daily business is conducted online, the potential sources of data that can be linked to surveys has grown, opening up opportunities for new areas of research. Administrative data, however, are not collected primarily for research purposes and so the scope and coverage may be narrow. Linking the depth of administrative data with the breadth of survey data offers researchers rich datasets to answer new research questions. For a review of the use of linked administrative and survey data in research, see Benzeval et al. (2020). For many surveys this data linkage is only permitted if the individual respondent has given their consent. If respondents do not consent to data linkage, the resulting linked dataset will have fewer cases. If those who do not consent are different to those who do, there is also the potential for bias in the linked data.

A potential limitation to the widespread use of linked data is the increasing move to online interviewing. Rising interviewing costs and falling response rates have motivated survey designers to offer multiple ways in which people can take part in their surveys and at times more convenient to them. This has meant that surveys are increasingly moving online, including as part of mixed-mode designs. Prior research has shown that consent rates are between 20 and 40 percentage points lower for respondents interviewed online, compared to those interviewed face-to-face (Jäckle et al. 2021, Thornby et al. 2018, Peycheva et al. 2023, Sakshaug et al. 2017). Experimental research by Jäckle et al. (2022) found that this was a causal effect, with the web mode decreasing willingness to consent by 30 percentage points compared to face-to-face interviews.

In this paper we examine the effects of two interventions, designed to affect the mechanisms by which respondents decide whether to consent to data linkage: explaining the value for science of the linkage and mimicking an interviewer in the web survey. We examine the effects of the treatments on consent, on the processes by which respondents make their decision, and how these effects differ in web and face-to-face.

2 Background

Previous research on predictors of consent to data linkage has found that there are no systematic patterns in terms of socio-demographic characteristics of respondents (e.g. Peycheva et al. 2021, Sakshaug et al. 2012, Sala et al. 2012). There is, however, evidence that concerns about privacy and data confidentiality are negatively associated with consent to data linkage (Mostafa 2016, Sakshaug et al. 2012), while trust is positively associated with consent (Fullard and Sen 2026, Sala et al. 2012, Sakshaug et al 2017).

Burton et al. (2026) examined the cognitive process of how respondents decide whether to consent to data linkage. They distinguished between decision processes that are reflective (thinking through the consequences of saying ‘yes’ or ‘no’), trust-based, gut feeling-based, or habit-based. When respondents were asked which was the most important aspect of their decision-making, the majority mentioned trust (37%), followed by consequences (25%), habit (19%), and gut-feeling (17%). Replicating analyses in two samples they also found that the nature of the decision process was associated with the probability of consent. Consent rates were highest among respondents who made trust-based decisions (83/89%), followed by consequentialist decisions (53/55%), gut-feeling based decisions (41/43%), and lowest for those who made habit-based decisions (20/20%).

Previous research on face-to-face surveys has found large variation between interviewers in the consent rates they obtain (e.g. Korbmacher and Schröder 2013, Patterson et al. 2020, Sakshaug et al. 2012). Some studies have surveyed their interviewers about their own attitudes towards data linkage. They have found that the interviewer’s own hypothetical willingness to consent is highly predictive of whether a respondent consents. For example, Patterson et al. (2020) reported that respondents were 17% more likely to consent if their interviewer was also willing to consent. Sakshaug et al. (2013) found similar results in a CATI survey. This suggests that the interviewer’s own attitudes might affect their behaviour, whether verbal or non-verbal, when administering linkage consent questions, and that these behaviours can affect respondents’ willingness to consent.

There are therefore several mechanisms that could explain why web respondents are less likely to consent to data linkage – or to put in another way, why face-to-face respondents are more likely to consent: interviewer behaviours might influence respondents’ decisions; the presence of an interviewer might legitimise the linkage request or activate social norms and pressure to consent; the survey mode might prime respondents to think differently about privacy and data security; or it might influence the cognitive processes by which respondents make their decision.

Jäckle et al. (2022) made a first attempt to disentangle these potential mechanisms. Analysing audio-recordings, they concluded that the higher consent rates in face-to-face interviews did not appear related to verbal behaviours of interviewers, such as additional explanations or reassurances. Respondents only rarely asked for clarifications or showed signs of uncertainty

and interviewers only rarely offered additional information. They did, however, find evidence that respondents were more concerned about privacy and data security when answering consent questions online than face-to-face. They also found evidence that the survey mode influenced the cognitive processes of answering consent questions. Respondents put in less effort when answering the consent question online: they were more likely to make gut feeling or habit-based decisions, answered more quickly, were less likely to read additional information materials, reported lower levels of effort, and scored lower on knowledge test questions about the request than face-to-face respondents.

Few interventions in the experimental literature on consent to data linkage have so far been successful. While there is some evidence that 'loss framing', that is, telling the respondent that the data they have already provided will be of less value without the linkage, can increase consent (e.g. Kreuter et al. 2016), these results have not always replicated (Sakshaug et al. 2015). Other interventions varying the wording of consent questions to highlight benefits to respondents, such as shorter interview duration, have sometimes been effective (Sakshaug and Kreuter 2014), but not always (Pascale 2011, Sakshaug et al. 2013). Similarly, highlighting benefits for the survey agency, such as greater accuracy or lower cost, has not been effective (Pascale 2011).

One vein of interventions that have had some success in web surveys is related to trust. Jäckle et al. (2024) tested an experimental treatment designed to prime respondents to think about trust in the organisations involved in the linkage. Walzenbach et al. (2023) tested a treatment that showed web respondents a photo of the Study Director with a message to read the consent request carefully. Each of these experimental treatments increased consent rates by 5 percentage points. However, Fullard and Sen (2026) reported a similar treatment, showing a photo of the research team with a message. While this increased trust in the study, it did not improve data linkage consent.

3 Research questions and hypotheses

Building on the previous literature on predictors of consent, differences in how web and face-to-face respondents process consent questions, and the effectiveness of different interventions, we examine the following research questions.

RQ1: Does providing a better explanation of the value of linked data for science increase consent? Is the effect similar in web and face-to-face?

Our hypothesis behind RQ1 is that when respondents have a clearer understanding of why data linkage consent is sought, this understanding may outweigh other concerns that would otherwise prevent them from consenting. By giving respondents actual real-world examples of the research questions that may be answered using linked data, we hope to increase the intrinsic benefit of consenting, and increase the salience of the value to research when the respondent makes the decision. Our first testable hypothesis is therefore:

H1a: Respondents who receive a treatment explaining the value for science of data linkage will be more likely to consent, than respondents in the control group.

To test the underlying mechanism through which this treatment is likely to have an effect, we test two further hypotheses:

H1b: We expect consenters in the value for science treatment group to be more likely to say they did so to contribute to research, than consenters in the control group.

H1c: We expect non-consenters in the value for science group to be less likely to say they were unclear about the purpose of the linkage, than non-consenters in the control group.

We further expect that the effects of the treatment might differ, depending on characteristics of respondents. Since respondent concerns about privacy and data security seem to be a primary barrier to consent to data linkage, we test whether the value for science treatment counter-balances such concerns:

H1d: The effect of the value-for-science treatment on consent will differ between respondents, depending on whether they have high or low levels of concern about privacy and data security.

We also examine whether these effects differ in web and face-to-face interviews, though we have no expectations about the direction of differences between modes.

RQ2: Does implementing the consent question by video affect how web respondents process the consent request?

There are two underlying hypotheses behind RQ2. The first is that when respondents trust the organisations responsible for the survey, they are more likely to consent to data linkage (trust mechanism). The second is that when respondents make more effort in processing the request they are more likely to consent (cognitive effort mechanism). By showing web respondents a

video of an interviewer reading the question, instead of respondents reading the question text on screen, we hope to mimic interviewer presence and activate trust and cognitive effort. The first testable hypothesis for both mechanisms is therefore:

H2a: Web respondents who are shown a video of an interviewer reading the consent question will be more likely to consent, than web respondents who read the consent question on screen.

To test whether trust mechanisms are activated by the video treatment, we test two further hypotheses:

H2b: When asked how they decided whether to consent, we expect web respondents in the video group to be more likely to refer to trust in the organisations involved, than respondents in the text group.

H2c: We expect consenters in the video group to be more likely to say they did so because of trust in the organisations involved, than consenters in the text group.

We again expect that the effect of the video treatment will vary between respondents with different levels of concern:

H2d: The effect of the video treatment on consent will differ between respondents, depending on whether they have high or low levels of concern about privacy and data security.

To test whether mimicking the interviewer in a web survey nudges respondents towards a more reflective decision-making process, we test two further hypotheses:

H2e: When asked how they decided whether to consent, we expect web respondents in the video group to be more likely to say they thought about the consequences, than respondents in the text group.

H2f: Web respondents in the video group will report higher levels of effort in making the decision, than respondents in the text group.

Since watching the video is likely easier than reading the text on screen, we also expect that the effect of the video treatment on effort will vary between respondents with different levels of cognitive ability.

H2g: The effect of the video treatment will differ between respondents with higher versus lower levels of education.

RQ3: Is there an interaction effect between presenting the consent question as a video and providing a better explanation of the value of linked data for science?

Since web respondents spend very little time answering consent questions, it is possible that they will be more likely to notice the explanation of the value of linked data for science when the consent question is presented in a video. We examine this as an exploratory question.

4 Data

4.1 Survey

The Innovation Panel (IP) is part of *Understanding Society: The UK Household Longitudinal Study*. The IP started in 2008, one year before the main *Understanding Society* study. It is used for methodological testing and implements experiments and novel questionnaire content. The sample is a clustered, stratified sample of addresses in Great Britain. The survey is conducted annually, and the aim is to interview all adults (aged 16 or over) in households in which there is at least one original sample member who was enumerated at the first wave. Individuals are followed within the UK if they move out of the original address. Initially the IP comprised around 1,500 households. There have been regular refreshment samples to maintain this sample size, or to increase it when the scientific aims require this. Refreshment samples were added in Waves 4, 7, 10, 11, 14, and 18. The data used in this paper were collected from July to December 2025 (IP wave 18) and will be available from the UK Data Service (Study Number 6849). For more information on the design of the IP, see the User Guide online at <https://www.understandingsociety.ac.uk/documentation/innovation-panel/user-guide/>.

IP18 included a consent question asking respondents for permission to link data held by the Financial Conduct Authority (FCA) about them to their survey responses. The FCA is the regulator of financial services in the UK. It is an independent public body, accountable to the UK Treasury and Parliament, which was set up to protect consumers. The linked data contain information the FCA obtains from credit rating agencies, such as balances on current accounts, mortgages, personal loans, motor finance, and credit cards.

4.2 Experimental design

For the present study we make use of an ongoing mixed-mode experiment in the IP, as well as bespoke experimental treatments designed to influence consent to data linkage.

Since the fifth wave of the Innovation Panel (2012) there has been a mixed-mode experimental design, in which around two-thirds of households are issued web-first, and one-third to Computer Assisted Personal Interviews (CAPI)-first. Adults are issued in their primary mode, with non-respondents later followed up in the secondary mode. It is also possible for sample members to take part by Computer Assisted Telephone Interview (CATI) towards the end of fieldwork, or if this is their strong preference. In 2012 the web-first and CAPI-first groups were randomly allocated, and households have kept the same issued mode for most waves since, except in 2019, 2020, and 2021. Refreshment samples are also allocated to the mixed mode experiment in the same proportions, often after their initial wave.

There were two experiments embedded in the IP18 FCA consent question:

- (a) Consent question format: web respondents were either shown the consent question as on-screen text, or they were shown a video of an interviewer reading the consent question (50:50 split).

- (b) Consent question wording: web and CAPI respondents were either given the standard consent question wording or a version that included a paragraph explaining the value for science of this data linkage (50:50 split).

For web respondents the allocations to these two experiments were stratified, resulting in a 2x2 factorial design with equal proportions allocated to each group.

The video treatment in the web survey was implemented as follows. On moving to the question screen, the respondent was greeted with a paused video. The video did not automatically play. Text on-screen informed the respondent to *“Please play the 45-second [60-second] video below then continue to the next screen. The video has subtitles, so if you cannot listen you can mute your device and still read those.”* The “60-second” alternative text was used for the group who received the additional information about the value for science. The respondent could then click on the video to start playing it. The “Continue” button did not appear on-screen until five seconds had elapsed. The consent question read out by the person in the video was identical to the on-screen wording; the reader gave no additional information nor did they introduce themselves.

After the survey screen with the consent question video, respondents were asked if they were able to watch it: 8.9% said they were not able. These respondents were then shown the on-screen text version of their consent question. In our analyses, we treat these respondents as part of the video group. The script also collected paradata about the respondent’s behaviour on this screen, including whether they watched the video and for how long. According to these data, the median time respondents spent watching the videos was 53 seconds (standard wording) and 71 seconds (value for science wording).

For the value for science experiment the control group received a standard consent question about linking FCA data; the treatment group wording had an additional paragraph about the value of linked data. We included several example research questions, that addressed potential interests of different types of respondents. See Appendix 2 for the full wording of the consent question.

All respondents were then asked follow-up questions about the consent decision process (see Appendix 2 for question wording). In the face-to-face interviews these questions were asked in a self-completion module so that the presence of the interviewer would not affect the answers given.

Respondents were first asked how they decided whether to give or withhold consent, to differentiate between reflective decisions, and those based on trust, habit, or gut-feeling. In prior research this self-reported decision process was validated by examining associations with other indicators of cognitive processes, such as the extent and nature of information they considered in making their decision, time spent answering the question, whether respondents read additional information, and how well they understood the request (Burton et al. 2026).

Respondents were then asked to report how much effort they had put into deciding whether to consent, using an 11-point rating scale. Finally, respondents were asked what reasons they had for either consenting or not consenting (depending on their response) to the data linkage, with a set of pre-coded responses and an open text “other” option. All respondents were also asked about privacy concerns and data security concerns earlier in the questionnaire. These questions were separated by several modules from the consent question.

4.3 Outcomes

The main outcome we examine for both experiments is **consent** to FCA data linkage (coded as 1 if yes, and 0 otherwise).

For the value for science experiment, we also examine whether the treatment affected respondents’ evaluation of the request. We use the following indicators: **consented because wanted to contribute to research** (coded as 1 if consenters gave “to support research for the greater good of society” as a reason for consenting, and 0 otherwise); **did not consent because unclear why asked** (coded as 1 if non-consenters said “unclear why I am being asked for this / what the data would be used for” as a reason for not consenting, and 0 otherwise).

For the video experiment we also examine whether the treatment affected the decision process, either nudging respondents towards trust-based or more reflective decision making. We use the following indicators: **trust-based consent decision process** (coded as 1 if the respondent said they made their decision based on “trust in the organisations involved”, and 0 otherwise); **consented because of trust** (coded as 1 if consenters gave “I trust the study not to mishandle information” or “I trust the Financial Conduct Authority” as reasons for consenting, and 0 otherwise); **reflective consent decision process** (coded as 1 if the respondent said “I thought about what would happen if I said ‘yes’ or ‘no’”, and 0 otherwise); and **high effort making consent decision** (median split, coded as 1 if respondents selected scale points 5-10 in response to the question how much effort they put into answering the consent question, and 0 if they selected scale points 0-4).

4.4 Respondent characteristics

The respondent characteristics used to test the effects of experimental treatments are **privacy concerns** (coded as 1 if very or somewhat worried about personal privacy, and 0 if not very or not at all worried), **data security concerns** (coded as very or somewhat concerned about data security, and 0 if not very or not at all concerned), and **education** (coded as 1 if has a degree, and 0 otherwise).

4.5 Analysis sample

Table 1 documents the cases that were excluded from our analyses, and why. The IP18 refreshment sample was randomly allocated to three groups. In two of these groups, a short

version of the IP18 questionnaire was used. This short version did not include the consent question and so these respondents are excluded from our analyses. CATI respondents were also not asked the consent question and are excluded.

After fieldwork completed, it was discovered that there was an error in the experimental allocation file. The treatment to video or text question was only populated for those who were issued web-first, rather than all issued cases. This meant that those who were issued CAPI-first, but then completed their interview online, did not have an experimental allocation and so were not asked the consent module at all. We therefore restrict the analysis to those respondents who completed their interview in the mode to which they were first issued. This yields an analysis sample of 2,299 web respondents and 596 CAPI respondents.

Table 1: Analysis sample selection

Sample	N
IP18 individual respondents	6,148
- Refreshment sample and Short Survey experimental arm	- 2,383
- CATI respondents	- 81
- Interview not completed in allocated mode	- 778
- Consent not asked or missing	- 11
Analysis sample	
Web respondents	2,299
CAPI respondents	596

Appendix Table 2 documents the number of missing observations for each variable used in the analyses and whether missing categories were recoded or dropped. The main reason for missing observations is that in the CAPI interviews, 49 respondents declined to complete the self-completion section in which the follow-up questions were asked (these variables are coded as ‘inapplicable’ in the data). For each analysis, we use all cases that have non-missing information for the variables used for that analysis.

For both experiments the treatment allocations are balanced for the following respondent characteristics: sex, employment status, housing tenure, number of cars in household, whether married or living as a couple. For the video experiment there is a slight imbalance in age: in the video treatment group the share of respondents in age groups 30-49 and 50-69 is nearly equal, while in the control group there is a larger share in the 50-69 age group. The age distribution is, however, balanced for the value for science treatment groups (Appendix 3).

5 Methods

We test all main effects of experimental treatments using χ^2 tests. For each experiment and outcome, we report the percentage point difference in the prevalence of the outcome between groups, the 95% confidence interval of that difference, and the p -value from the χ^2 test.

We test whether experimental treatments have heterogeneous effects on consent, using logistic regression. We regress the probability of consent on the treatment indicator, an indicator of respondent characteristics, and their interaction. We then calculate the interaction as the difference-in-difference between the predicted probabilities of consent between those in the treatment and control group for one set of respondents, and the difference between treatment and control for the omitted set of respondents. We report the difference-in-difference estimate in percentage points, the 95% confidence interval of the difference-in-difference, and the p -value. We document the underlying logit models in Appendix 4.

6 Results

RQ1: Does providing a better explanation of the value of linked data for science increase consent? Is the effect similar in web and face-to-face?

Table 2 documents the effects of the consent question wording experiment, by interview mode and consent question format. Among face-to-face respondents, the additional explanation increased consent by 6.8 percentage points (CI = [-0.5, 14.2]). Among web respondents in the video treatment group it had a similar effect, increasing consent by 5.4 percentage points (CI = [-0.4, 11.2]). The treatment, however, had little effect on web respondents who were shown the consent question as on-screen text (0.3 percentage points, CI = [-5.4, 6.0]). These results lend some support to H1a, that the value for science wording increases consent.

Evidence that the value for science wording improves understanding of the purpose of the request is, however, mixed. The web video respondents are the only group where explaining the value for science increased the percentage of consenters who said they did so, in order to contribute to research (10.3 percentage points, CI = [2.7, 17.8]). The evidence for H1b is, therefore, mixed. The additional explanation did, however, decreases the percentage of non-consenters who said they were unclear why they were asked this request in both web groups (web video: -12.2 percentage points, CI = [-19.5, -4.9]; web on-screen text: -8.3 percentage points, CI = [-14.8, -1.8]). The effect in the face-to-face group is however unclear. The evidence for H1c is, therefore, also mixed.

The effect of the value for science treatment does not vary between respondents with low versus high concerns about privacy or between respondents with low versus high concerns about data security. That is, the results provide no support for H1d. Table 3 documents the interaction effects, separately for privacy and data security, for face-to-face respondents. The top panel in the table includes the predicted probability of consent for each of the four groups defined by the 2x2 interaction of question format and privacy concern; the differences in the predicted probabilities between the treatment groups, separately by level of concern; and the overall difference-in-difference of these two treatment effects. These predicted probabilities are derived from the corresponding logit model (Appendix Table 4.1). For the interaction of question wording and privacy concerns among face-to-face respondents, the difference-in-difference estimate is 3.1 percentage points (CI = [-11.8, 18.0]). The lower panel in Table 3 documents the estimates for the interaction with data security concerns. These tables are replicated for web respondents shown the question as on-screen text (Table 4) and for web respondents shown the question in video format (Table 5). The corresponding logit models are in Appendix 4.

Table 2: Effects of consent question wording (web and face-to-face)

	Standard Q		Value for science Q		Difference			χ^2 <i>p</i> -value
	N asked	% Yes	N asked	% Yes	PP	95% CI		
Face-to-Face								
Consent	284	66.5	312	73.4	6.8	-0.5	14.2	0.068
Consented to contribute to research	184	45.7	224	51.3	5.7	-4.0	15.4	0.253
Did not consent because unclear why asked	76	11.8	64	20.3	8.5	-3.8	20.7	0.170
Web: on-screen text Q								
Consent	597	48.7	593	49.1	0.3	-5.4	6.0	0.910
Consented to contribute to research	291	48.1	291	45.4	-2.7	-10.9	5.4	0.506
Did not consent because unclear why asked	306	25.8	302	17.5	-8.3	-14.8	-1.8	0.013
Web: video Q								
Consent	563	56.3	546	61.7	5.4	-0.4	11.2	0.067
Consented to contribute to research	317	52.1	337	62.3	10.3	2.7	17.8	0.008
Did not consent because unclear why asked	245	26.5	209	14.4	-12.2	-19.5	-4.9	0.001

Notes: Q = question, PP = percentage points.

Table 3: Difference-in-difference of value for science wording x privacy concerns / data security concerns (CAPI)

CAPI: Wording x privacy	Phat	CI LB	CI UB	S.E.	p-value
Standard wording x not concerned	70.5	62.9	78.1	3.9	<0.001
Value for science wording x not concerned	75.3	69.1	81.5	3.2	<0.001
<i>Difference</i>	4.8	-5.0	14.6	5.0	0.340
Standard wording x concerned	62.8	54.9	70.6	4.0	<0.001
Value for science wording x concerned	70.6	62.7	78.6	4.1	<0.001
<i>Difference</i>	7.9	-3.3	19.1	5.7	0.168
Difference-in-Difference	3.1	-11.8	18.0	7.6	0.682
CAPI: Wording x data security					
Standard wording x not concerned	72.8	64.6	81.0	4.2	<0.001
Value for science wording x not concerned	73.7	65.8	81.7	4.1	<0.001
<i>Difference</i>	0.9	-10.5	12.3	5.8	0.874
Standard wording x concerned	62.5	55.2	69.8	3.7	<0.001
Value for science wording x concerned	73.3	67.0	79.6	3.2	<0.001
<i>Difference</i>	10.8	1.2	20.4	4.9	0.028
Difference-in-Difference	9.9	-5.0	24.8	7.6	0.195

Notes: Phat = predicted probability, CI LB = 95% Confidence Interval lower bound, CI UB = 95% Confidence Interval upper bound.

Table 4: Difference-in-difference of value for science wording x privacy concerns / data security concerns (Web on-screen text)

Web on-screen: Wording x privacy	Phat	CI LB	CI UB	S.E.	p-value
Standard wording x not concerned	56.3	50.4	62.1	3.0	<0.001
Value for science wording x not concerned	54.6	48.6	60.6	3.1	<0.001
<i>Difference</i>	-1.7	-10.1	6.8	4.3	0.698
Standard wording x concerned	42.9	37.5	48.3	2.8	<0.001
Value for science wording x concerned	44.8	39.5	50.2	2.7	<0.001
<i>Difference</i>	2.0	-5.6	9.6	3.9	0.608
Difference-in-Difference	3.7	-7.7	15.0	5.8	0.528
Web on-screen: Wording x data security					
Standard wording x not concerned	55.7	48.3	63.0	3.7	<0.001
Value for science wording x not concerned	57.1	49.5	64.8	3.9	<0.001
<i>Difference</i>	1.5	-9.1	12.1	5.4	0.787
Standard wording x concerned	46.1	41.3	50.8	2.4	<0.001
Value for science wording x concerned	46.3	41.6	51.0	2.4	<0.001
<i>Difference</i>	0.2	-6.5	6.9	3.4	0.949
Difference-in-Difference	-1.2	-13.8	11.3	6.4	0.846

Notes: Phat = predicted probability, CI LB = 95% Confidence Interval lower bound, CI UB = 95% Confidence Interval upper bound.

Table 5: Difference-in-difference of value for science wording x privacy concerns / data security concerns (Web video question)

Web video: Wording x privacy	Phat	CI LB	CI UB	S.E.	p-value
Standard wording x not concerned	58.6	52.4	64.8	3.2	<0.001
Value for science wording x not concerned	67.2	61.3	73.2	3.0	<0.001
<i>Difference</i>	8.6	0.0	17.2	4.4	0.049
Standard wording x concerned	54.9	49.4	60.4	2.8	<0.001
Value for science wording x concerned	57.5	51.9	63.0	2.8	<0.001
<i>Difference</i>	2.6	-5.2	10.4	4.0	0.516
Difference-in-Difference	-6.0	-17.6	5.5	5.9	0.307
Web video: Wording x data security					
Standard wording x not concerned	60.4	52.4	68.4	4.1	<0.001
Value for science wording x not concerned	68.9	61.5	76.3	3.8	<0.001
<i>Difference</i>	8.5	-2.4	19.3	5.6	0.128
Standard wording x concerned	55.3	50.5	60.1	2.4	<0.001
Value for science wording x concerned	59.0	54.1	63.8	2.5	<0.001
<i>Difference</i>	3.7	-3.1	10.5	3.5	0.287
Difference-in-Difference	-4.8	-17.6	8.1	6.5	0.467

Notes: Phat = predicted probability, CI LB = 95% Confidence Interval lower bound, CI UB = 95% Confidence Interval upper bound.

RQ2: Does implementing the consent question by video affect how web respondents process the consent request?

Table 6 documents the effects of the consent question format experiment among web respondents. Showing the consent question as a video, rather than on-screen text, increased consent by 10.1 percentage points (CI = [6.0, 14.1]). This supports H2a, that the video treatment increases consent.

There is some evidence for the trust mechanism. Respondents in the video treatment group were 11.6 percentage points (CI = [7.6, 15.5]) more likely than those in the on-screen text group to report a trust-based process for making their consent decision. This supports H2b. However, consenters in the video group were not more likely to report trust in the organisations involved as a reason for consenting. There is, therefore, no evidence for H2c.

There is no evidence that the effect of the video treatment varied between respondents with low versus high levels of concern about privacy, or that it varied between those with low versus high levels of concern about data security (Table 7). There is, therefore, also no evidence for H2d.

Table 6: Effects of consent question format (web)

	On-screen text Q		Video Q		Difference			χ^2 p-value
	N asked	% Yes	N asked	% Yes	PP	95% CI		
Consent	1,190	48.9	1,109	59.0	10.1	6.0	14.1	<0.001
Trust-based decision process	1,190	32.6	1,109	44.2	11.6	7.6	15.5	<0.001
Consented because of trust	582	59.8	654	61.5	1.7	-3.8	7.1	0.548
Reflective consent decision process	1,190	20.0	1,109	22.9	2.9	-0.5	6.3	0.090
High effort making consent decision	1,169	50.0	1,091	51.5	1.5	-2.7	5.6	0.485

Notes: Q = question, PP = percentage points.

Table 7: Difference-in-difference of video treatment x privacy concerns / data security concerns (Web)

Web: Video x privacy	Phat	CI LB	CI UB	S.E.	p-value
On-screen text x not concerned	55.4	51.2	59.6	2.2	<0.001
Video consent x not concerned	62.9	58.5	67.2	2.2	<0.001
<i>Difference</i>	<i>7.4</i>	<i>1.4</i>	<i>13.5</i>	<i>3.1</i>	<i>0.016</i>
On-screen text x concerned	43.9	40.1	47.7	1.9	<0.001
Video question x concerned	56.2	52.3	60.1	2.0	<0.001
<i>Difference</i>	<i>12.3</i>	<i>6.9</i>	<i>17.7</i>	<i>2.8</i>	<i><0.001</i>
Difference-in-Difference	4.9	-3.3	13.0	4.1	0.241
Web: Video x data security					
On-screen text x not concerned	56.4	51.1	61.7	2.7	<0.001
Video consent x not concerned	64.7	59.3	70.2	2.8	<0.001
<i>Difference</i>	<i>8.4</i>	<i>0.8</i>	<i>16.0</i>	<i>3.9</i>	<i>0.031</i>
On-screen text x concerned	46.2	42.8	49.5	1.7	<0.001
Video question x concerned	57.1	53.7	60.5	1.7	<0.001
<i>Difference</i>	<i>10.9</i>	<i>6.1</i>	<i>15.7</i>	<i>2.4</i>	<i><0.001</i>
Difference-in-Difference	2.6	-6.4	11.5	4.6	0.577

There is less evidence for the cognitive effort mechanism. The video treatment increased the percentage of respondents who reported a reflective process for making their consent decision by 2.9 percentage points (CI = [-0.5, 6.3]), providing only weak support for H2e. Similarly, the video treatment increased the percentage of respondents who said they put a lot of effort into answering the consent question by 1.5 percentage points (CI = [-2.7, 5.6]), providing no evidence for H2f.

The effect of the consent question format did, however, vary between respondents with low versus high education (Table 8). Among respondents without a degree, the video treatment had some effect, increasing the consent rate by 4.8 percentage points (CI = [-1.2, 10.8]). Among those with a degree, the treatment, however, increased the consent rate by 15.6 percentage points (CI = [9.9, 21.3]), a difference-in-difference of 10.8 percentage points (CI = [2.5, 19.1]). This provides support for H2g.

Table 8: Difference-in-difference of video treatment x education (web)

Web: Video x education	Phat	CI LB	CI UB	S.E.	p-value
On-screen text x no degree	47.5	43.4	51.6	2.1	<0.001
Video consent x no degree	52.3	47.9	56.6	2.2	<0.001
<i>Difference</i>	<i>4.8</i>	<i>-1.2</i>	<i>10.8</i>	<i>3.0</i>	<i>0.115</i>
On-screen text x degree	50.5	46.4	54.6	2.1	<0.001
Video consent x degree	66.1	62.1	70.1	2.0	<0.001
<i>Difference</i>	<i>15.6</i>	<i>9.9</i>	<i>21.3</i>	<i>2.9</i>	<i><0.001</i>
Difference-in-Difference	10.8	2.5	19.1	4.2	0.011

RQ3: Is there an interaction effect between presenting the consent question as a video and providing a better explanation of the value of linked data for science?

The results in Table 2 already suggested that the effect of the question wording treatment varied depending on the format in which the consent question was implemented. Table 9 documents the results of testing this interaction. The difference-in-difference estimate, however, shows no clear effect of one treatment on the other (5.1 percentage points, CI = [-3.0, 13.2]).

Table 9: Difference-in-difference of video treatment x question wording treatment (web)

Web: video x wording	Phat	CI LB	CI UB	S.E.	p-value
Standard wording x on-screen text	48.7	44.7	52.8	2.0	0.000
Value for science wording x on-screen text	49.1	45.0	53.1	2.1	0.000
<i>Difference</i>	<i>0.3</i>	<i>-5.4</i>	<i>6.0</i>	<i>2.9</i>	<i>0.910</i>
Standard wording x video consent	56.3	52.2	60.4	2.1	0.000
Value for science wording x video consent	61.7	57.6	65.8	2.1	0.000
<i>Difference</i>	<i>5.4</i>	<i>-0.4</i>	<i>11.2</i>	<i>2.9</i>	<i>0.066</i>
Difference-in-Difference	5.1	-3.0	13.2	4.1	0.219

7 Discussion

The aims of this research were to develop and test interventions that can help reduce the gap in rates of consent to data linkage that are common between web and face-to-face respondents. We tested two interventions. The first was a wording experiment, designed to improve the respondents' understanding of the purpose of the linkage and what kind of research might be done with the data. We hypothesised that a better understanding of the purpose of the request might motivate respondents sufficiently to overcome other concerns they might have about consenting. The second was an intervention designed to mimic a face-to-face interviewer in the web survey. Instead of reading the question on screen, the respondent had to watch a video of an interviewer reading the question. We hypothesised two potential mechanisms by which this intervention could affect how respondents process the consent request: mimicking the interviewer might foster trust, or it might prompt respondents to make more cognitive effort in answering the request. There is evidence from prior research that both trust (Fullard and Sen 2026, Sala et al. 2012, Sakshaug et al 2017) and cognitive effort (Burton et al. 2026) are positively correlated with consent.

The additional wording about the value to research had a positive effect on consent for face-to-face respondents and web respondents who saw the consent question in a video. It had no effect for web respondents who read the consent question on screen. This finding is consistent with prior research, that has shown that web respondents spend very little time reading and answering consent questions (Jäckle et al. 2022). Many web respondents likely only skimmed the question text and did not notice the additional explanation. In contrast, the face-to-face respondents and the web respondents shown the video simply had to listen to the question being read to them. There was some evidence that the additional explanation made it more likely that respondents consented, because they wanted to contribute to research, and made it less likely that they did not consent because they were unclear why they were asked.

Mimicking an interviewer by showing the consent question as a video increased the consent rate by 10 percentage points. In the experimental literature on consent to data linkage this is a large effect. In contrast, prior successful experiments designed to increase trust only increased consent rates by 5 percentage points (Jäckle et al. 2024; Walzenbach et al. 2023). The video format seems to have nudged people towards making a more trust-based decision. There was little evidence that the video format affected the cognitive effort respondents made. The video treatment, however, had a larger effect for respondents with a degree than for those without a degree. This is somewhat surprising; we had expected that the video format would make it easier for respondents, maybe especially for those with lower ability. This finding is, however, consistent with Frederick's (2005) research using the Cognitive Reflection Test. He showed that cognitive ability does not correlate fully with how much cognitive effort people put into making decisions. In our experiment, this would be consistent with respondents with higher education not making more effort to read the question on-screen than those with lower education. However, if they are exposed to the question being

read to them, those with higher education might be more likely to have the cognitive capacity to remember and process the additional information provided, than those with lower education.

A limitation of this research is that the experiments were implemented in an ongoing panel survey where, for web respondents, the overwhelming majority of questions are asked as standard written questions, with very little video (or even graphical) content. It is unclear whether the effects reported here are due to novelty and whether they would be sustained if video questions were used repeatedly across waves. A further limitation is that we examined only a single consent question, however, many surveys ask for multiple consents within a single interview. Future research would be needed to examine how best to implement multiple consents as video questions. Future research could also examine alternative ways of describing the value for science of data linkage. We used several example research questions, that were selected to map onto potential interests of different types of respondents. Alternatively, the value for science wording could include actual results from research using linked data.

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Appendix 1: Question wording

Questions about privacy and data security concerns were asked early in the adult interview. They were in the second substantive module after a module collecting demographic information.

PRIVACY [Concerns about privacy]

In general, how worried are you about your personal privacy?

- 1 Very worried
- 2 Somewhat worried
- 3 Not very worried
- 4 Not at all worried

DTASCRTY [Concerns about data security]

Different private and public organisations have personal information about us. How concerned are you about whether or not they keep this information confidential?

- 1 Very concerned
- 2 Somewhat concerned
- 3 Not very concerned
- 4 Not at all concerned

The FCA consent question was asked around two-thirds of the way into the survey. Web respondents allocated to the video implementation were first shown a video of an interviewer reading the consent question, using either the standard (45 seconds) or the value for science wording (60 seconds).

FCAVID [FCA consent, video implementation]

SCRIPTING NOTES: Display consent question video (standard / value for science wording version). The video should NOT auto-play. Display 'Continue' option after a 5 second delay.

Please play the [45-second / 60-second] video below then continue to the next screen. The video has subtitles, so if you cannot listen you can mute your device and still read those.

[Embed standard wording / value for science wording video here]

- 1 Continue

Respondents were then asked a check question whether they had been able to watch the video.

FCavidck [FCA data linkage consent video check]

Did you manage to watch the video?

- 1 Yes
- 2 No

Respondents who said they were able to watch the video were then asked to enter their answer to the consent request.

FCacons1 [FCA data linkage consent, video implementation]

Do you give your consent to sharing your data?

- 1 Yes
- 2 No

HELP:

Who are the FCA?

- The Financial Conduct Authority (FCA) is the regulator of financial services. It was set up to protect consumers.
- It is an **independent public body**, accountable to the Treasury, which is responsible for the UK's financial system, and to Parliament.
- For more information, see <https://www.fca.org.uk/about/the-fca>

How will the linkage be done?

- We'd like to link your survey and credit history data. Importantly, this process will protect your personal data.
- First, we would pass your name, address, and date of birth, but not your answers from the survey, to a credit reference agency (CRA), along with a unique anonymised identifying number.
- Second, we would pass the survey results to the FCA with the same unique anonymised identifying number, but **without** your name, address, and date of birth.
- Third, the CRA will then provide an anonymous extract from your credit file to the FCA who will match this data with your survey data using the unique anonymised identifying number.
- The FCA will also match other data it holds on consumer use of financial products. This other data includes information the FCA regularly collects, for example data on mortgages and payday loan applications.
- This other data will **never** contain your name, address or contact details. The matching of survey responses to this other data will be carried out using anonymised numerical identifiers.

How will my data be used?

- Selected data from your credit files, grouped by type of credit product, matched to survey responses will be included in the anonymised dataset that are provided to researchers who use the survey data, for **research purposes only**.
- Researchers will be able to use this information to examine important questions such as the effect of taking out different types of loans on the financial and personal well-being of different groups in society.
- The FCA will use the credit files and other data matched to survey responses to research consumer interactions with financial service products.
- The FCA will not have access to your personal information.
- This research will inform the FCA in delivering its objectives of promoting effective competition in the interests of consumers, ensuring consumers are appropriately protected when using financial products and the UK financial services market has integrity and is protected.

Web respondents who were not able to watch the video were shown the consent question as on-screen text. For those in the value for science treatment group the question included an additional paragraph, in bold below. The consent question wording was the same for face-to-face respondents.

FCACONS2 [FCA data linkage consent, text implementation]

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.

[IF value for science treatment group:

By agreeing, you will play an important role in helping researchers bring evidence to realworld 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?]**

Consent to sharing your data will **not** affect your involvement with any financial services providers or your ongoing participation in the 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?

- 1 Yes
- 2 No

HELPL: same as FCACONS1

The consent follow-up questions, about their decision-making process and reasons for giving or withholding consent, were in the self-completion section of the questionnaire. Those who were already self-completing online went directly into these modules. Respondents were first asked how they decided whether to give or withhold consent.

CDCSNFCA [Decision heuristics question]

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”
- 2 Instinct or gut feeling Instinct or gut feeling
- 3 I said what I usually say when I’m asked for information that is very personal
- 4 Trust in the organisations involved
- 5 Something else

They were then asked about the amount of effort they put into deciding whether to give consent.

EFFORTFCA [Cognitive effort]

On a scale of 0-10, where 0 is ‘no effort at all’ and 10 is ‘a great deal of effort’, how much effort did you put into deciding whether to allow data linkage with your data held by the Financial Conduct Authority?

- 0 No effort at all
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 A great deal of effort

Respondents who did not consent were then asked why they did not consent.

FCAWHYNOT [Why not consented to FCA linkage]

Can you tell us why you did not give us permission to add records collected by the Financial Conduct Authority to the answers you have given in this study?

Please select all that apply.

- 1 Too personal, I've shared enough information with this survey
- 2 I am unclear about the risks involved I am unclear about the risks involved
- 3 I don't understand what would be done
- 4 I'm worried that my credit rating data might be used against me
- 5 I'm worried that my credit rating data might be lost / hacked / stolen
- 6 I was too tired / didn't want to make a decision
- 7 Unclear why I am being asked for this / what the data would be used for
- 8 The Financial Conduct Authority doesn't have any data about me
- 97 Other

Respondents who gave consent were asked to provide their reasons for consenting.

FCAWHY [Why consented to FCA linkage]

Can you tell us why you gave us permission to add records collected by the Financial Conduct Authority to the answers you have given in this study?

Please select all that apply.

- 1 I trust the study not to mishandle information
- 2 I trust the Financial Conduct Authority
- 3 To support the Financial Conduct Authority
- 4 To support research for the greater good of society
- 5 I didn't see any reason not to / I have nothing to hide
- 97 Other

Appendix 2: Missing observations

Appendix Table 2: Item non-response and whether missing observations were recoded or dropped

Variable	Missing category	CAPI		Web	
		N	%	N	%
Consent	Refused / Don't know: coded as Consent = 0	26	4.3	15	0.7
Consent decision process	Refused / Don't know: coded as Not Mentioned	13	2.2	27	1.2
	Inapplicable / Missing: Dropped from analysis	48	8.0	0	0
Why consented (Asked if Consent = Yes)	Refused / Don't know: coded as Not Mentioned	6	1.0	2	0.1
	Inapplicable / Missing: Dropped from analysis	188	31.5	1,063	46.2
Why not consented (Asked if Consent = No)	Refused / Don't know: coded as Not Mentioned	10	1.7	34	1.5
	Inapplicable / Missing: Dropped from analysis	456	76.5	1,237	53.8
Effort making consent decision	Refused / Don't know: Dropped from analysis	18	3.0	38	1.7
	Inapplicable / Missing: Dropped from analysis	49	8.0	1	<0.1
Privacy concerns	Refused / Don't know: Dropped from analysis	0	0	6	0.3
	Inapplicable / Missing: Dropped from analysis	0	0	0	0
Personal information confidentiality concerns	Refused / Don't know: Dropped from analysis	5	0.8	7	0.3
	Inapplicable / Missing: Dropped from analysis	0	0	0	0
Education	Missing: Dropped from analysis	23	3.9	110	4.8
Total N		N	596	2,299	

Appendix 3: Balance checks for experimental treatment allocations

Appendix Table 3.1: Video treatment allocations (web respondents)

	On-screen text Q		Video Q		χ^2 <i>p</i> -value
	n	%	n	%	
Sex					
Male	517	44.9	498	47.0	0.331
Female	634	55.1	562	53.0	
Age					
16-29	193	16.8	161	15.2	0.030
30-49	337	29.3	365	34.4	
50-69	433	37.6	351	33.1	
70+	188	16.3	183	17.3	
Employment status					
Employed inc. self-employed	679	59.0	612	57.7	0.801
Retired	298	25.9	287	27.1	
Unemployed and other	174	15.1	161	15.2	
Housing tenure					
Owned outright	433	37.6	401	37.8	0.254
Owned with mortgage	451	39.2	442	41.7	
Rented or other	267	23.2	217	20.5	
Cars in household					
No cars in household	130	11.3	128	12.1	0.568
One or more cars in household	1,021	88.7	932	87.9	
Married / live as couple					
no	404	35.1	384	36.2	0.581
yes	747	64.9	676	63.8	
Total N	1,151		1,060		

Appendix Table 3.2: Value for science treatment allocations (web and FTF respondents)

	Standard consent question wording		Value for science consent wording		χ^2 <i>p</i> -value
	n	%	n	%	
Sex					
Male	649	46.9	620	44.0	0.129
Female	736	53.1	789	56.0	
Age					
16-29	220	15.9	194	13.8	0.300
30-49	421	30.4	427	30.3	
50-69	461	33.3	507	36.0	
70+	283	20.4	281	19.9	
Employment status					
Employed inc. self-employed	750	54.2	778	55.2	0.842
Retired	421	30.4	421	29.9	
Unemployed and other	214	15.5	210	14.9	
Housing tenure					
Owned outright	546	39.4	568	40.3	0.149
Owned with mortgage	496	35.8	535	38.0	
Rented or other	343	24.8	306	21.7	
Cars in household					
No cars in household	181	13.1	183	13.0	0.950
One or more cars in household	1,204	86.9	1,226	87.0	
Married / live as couple					
No	500	36.1	514	36.5	0.835
Yes	885	63.9	895	63.5	
Total N	1,385		1,409		

Appendix 4: Logit models of consent with interactions

Notes for all Appendix 4 tables: CI LB = 95% confidence interval lower bound, CI UP = 95% confidence interval upper bound.

Appendix Table 4.1: Logit model of consent with interaction of value for science wording and privacy concerns (CAPI)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Value for science wording	0.242	0.252	0.959	0.338	-0.252	0.735
Concerned about privacy	-0.350	0.253	-1.381	0.167	-0.846	0.147
Wording $\times$ concerned about privacy	0.114	0.362	0.315	0.753	-0.596	0.824
Intercept	0.871	0.186	4.685	<0.001	0.507	1.236
Pseudo R-squared	0.0083					
N	596					

Appendix Table 4.2: Logit model of consent with interaction of value for science wording and data security concerns (CAPI)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Value for science wording	0.047	0.297	0.159	0.874	-0.535	0.629
Concerned about data security	-0.474	0.264	-1.795	0.073	-0.991	0.043
Wording $\times$ concerned about data security	0.452	0.374	1.207	0.227	-0.282	1.186
Intercept	0.985	0.210	4.679	<0.001	0.572	1.397
Pseudo R-squared	0.0091					
N	591					

Appendix Table 4.3: Logit model of consent with interaction of value for science wording and privacy concerns (web on-screen text)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Value for science wording	-0.068	0.174	-0.388	0.698	-0.409	0.274
Concerned about privacy	-0.539	0.166	-3.243	0.001	-0.865	-0.213
Wording $\times$ concerned about privacy	0.148	0.235	0.632	0.528	-0.312	0.609
Intercept	0.251	0.122	2.056	0.040	0.012	0.491
Pseudo R-squared	0.0098					
N	1,186					

Appendix Table 4.4: Logit model of consent with interaction of value for science wording and data security concerns (web on-screen text)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Value for science wording	0.059	0.220	0.270	0.787	-0.372	0.491
Concerned about data security	-0.386	0.181	-2.137	0.033	-0.740	-0.032
Wording $\times$ concerned about data security	-0.051	0.260	-0.195	0.845	-0.559	0.458
Intercept	0.228	0.152	1.504	0.133	-0.069	0.526
Pseudo R-squared	0.0062					
N	1,186					

Appendix Table 4.5: Logit model of consent with interaction of value for science wording and privacy concerns (web video)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Value for science wording	0.371	0.190	1.955	0.051	-0.001	0.742
Concerned about privacy	-0.152	0.172	-0.880	0.379	-0.489	0.186
Wording $\times$ concerned about privacy	-0.266	0.249	-1.068	0.285	-0.754	0.222
Intercept	0.348	0.130	2.675	0.007	0.093	0.602
Pseudo R-squared	0.0062					
N	1,107					

Appendix Table 4.6: Logit model of consent with interaction of value for science wording and data security concerns (web video)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Value for science wording	0.371	0.245	1.517	0.129	-0.108	0.851
Concerned about data security	-0.211	0.197	-1.069	0.285	-0.596	0.175
Wording $\times$ concerned about data security	-0.220	0.283	-0.778	0.436	-0.775	0.334
Intercept	0.423	0.170	2.481	0.013	0.089	0.757
Pseudo R-squared	0.0058					
N	1,106					

Appendix Table 4.7: Logit model of consent with interaction of video format and privacy concerns (web)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Video consent question	0.308	0.128	2.402	0.016	0.057	0.560
Concerned about privacy	-0.465	0.118	-3.955	<0.001	-0.695	-0.234
Video $\times$ concerned about privacy	0.186	0.171	1.089	0.276	-0.149	0.521
Intercept	0.218	0.087	2.505	0.012	0.047	0.389
Pseudo R-squared	0.0139					
N	2,293					

Appendix Table 4.8: Logit model of consent with interaction of video format and data security concerns (web)

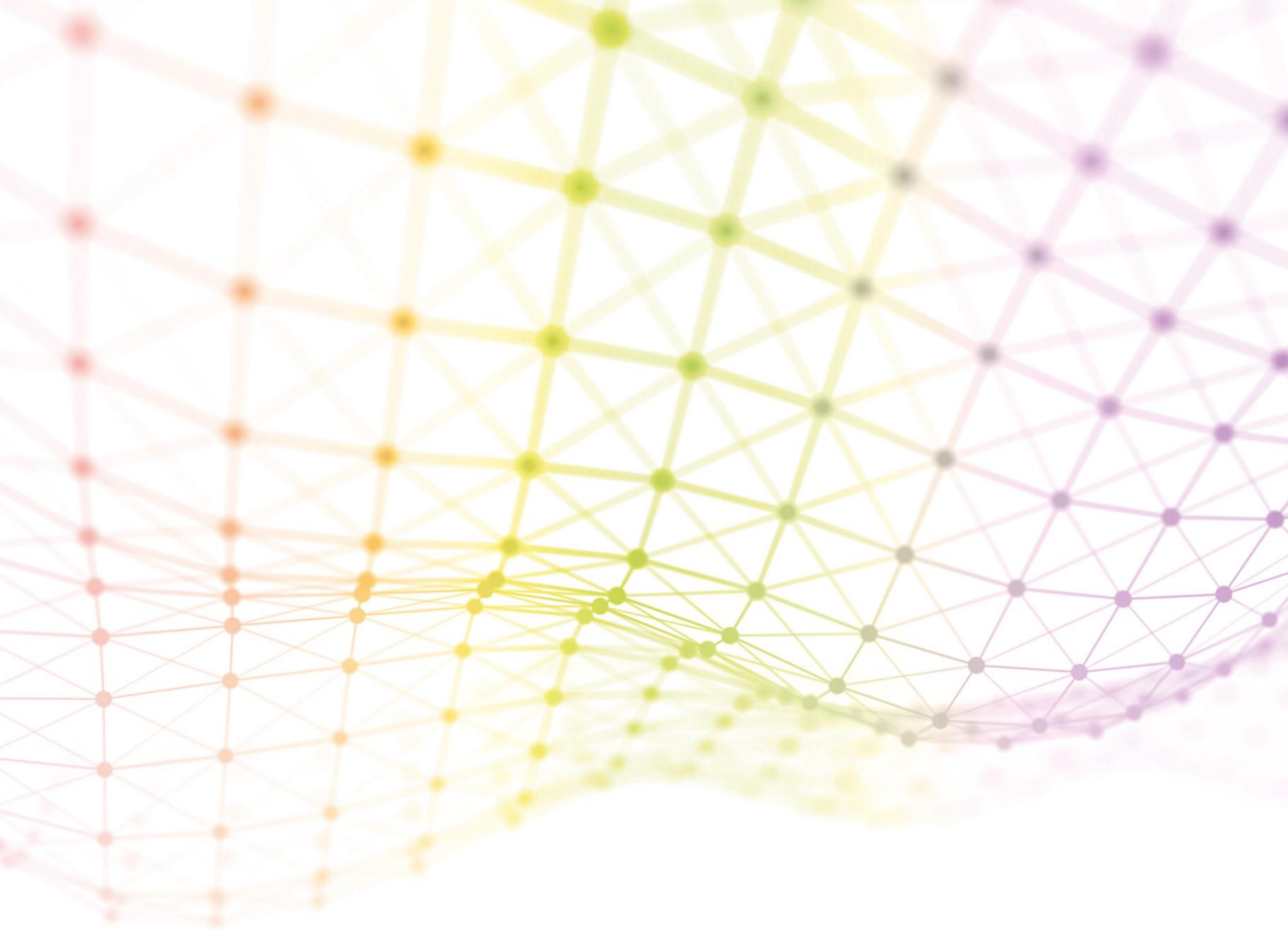
Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Video consent question	0.351	0.164	2.141	0.032	0.030	0.673
Concerned about data security	-0.410	0.130	-3.163	0.002	-0.664	-0.156
Video $\times$ concerned about data security	0.088	0.192	0.458	0.647	-0.288	0.463
Intercept	0.257	0.110	2.336	0.019	0.041	0.472
Pseudo R-squared	0.0122					
N	2,292					

Appendix Table 4.9: Logit model of consent with interaction of video format and education (web)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Video consent question	0.192	0.122	1.575	0.115	-0.047	0.432
Degree	0.123	0.119	1.035	0.301	-0.110	0.355
Video $\times$ degree	0.455	0.174	2.617	0.009	0.114	0.795
Intercept	-0.102	0.084	-1.213	0.225	-0.266	0.063
Pseudo R-squared	0.0152					
N	2,189					

Appendix Table 4.10: Logit model of consent with interaction of value for science wording and video treatment (web)

Probability of consent	β	S.E.	z	p-value	CI LB	CI UB
Value for science wording	0.013	0.116	0.113	0.910	-0.214	0.240
Video consent question	0.304	0.118	2.575	0.010	0.073	0.535
Wording $\times$ Video	0.211	0.169	1.252	0.211	-0.119	0.541
Intercept	-0.050	0.082	-0.614	0.539	-0.211	0.110
Pseudo R-squared	0.0084					
N	2,299					



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