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## **How Informed is Consent? A Field Experiment**

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# How Informed is Consent? A Field Experiment

## Abstract

In an increasingly data-driven world, data protection and the requirement of obtaining informed consent rapidly gain relevance. The intention is to protect data holders. Yet, is consent provided by data holders truly informed? In the context of empirical research, the requirement for informed consent can affect external validity and data quality of the evidence generated. Conducting a survey with 7,752 potential participants in rural Pakistan, we find that respondents are insufficiently informed about important aspects related to their consent. Experimentally changing the consent process, we find that showing an animated video has a negative impact on respondent's understanding, but additionally engaging them in an interactive dialogue about the informational text significantly improves understanding. Even though we find effects on levels of understanding, we do not find meaningful changes in consent rates and non-response behavior indicating no adverse effects on the quality of the survey.

JEL Classification: A1, C83, C93

Keywords: Ethics, Survey Methods, Data collection, randomized control trial

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# How Informed is Consent?

## A Field Experiment

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### Abstract

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# I INTRODUCTION

Current data protection regulations put the burden of responsibility for individual data protection on the data holders. Given the length and complexity of consent forms, data holders are limited in their capacities to understand what they consent to and also in their ability to negotiate or amend the terms of data usage. Emphasizing these challenges to truly providing informed consent, the policy and legal debate increasingly questions the whole idea of basing secure and regulated data sharing on informed consent only. At the same time, progress and access to services may suffer if individual consent to data usage is placed above the greater public good which could be generated from timely evidence.<sup>1</sup>

Acquiring genuinely informed consent to the collection, use, and disclosure of personal data can have essential methodological implications: For the quality of evidence as well as for the external validity of empirical results and policies.<sup>2</sup> First, the legal and ethical regulations require researcher to obtain informed consent from their study participants, not only consent.<sup>3</sup> A better understanding of personal rights by the data holders may alter the type and quality of data they share. If it results in low consent rates, it could present a real risk to research studies, putting an additional burden on research budgets and timelines by requiring bigger sample sizes. Low consent rates may further indicate significant selection into the sample and thus limited external validity of evidence. At the same time, increased understanding, in particularly of rights and confidentiality, could also lead to a higher willingness to share information and increased consent rates. If alternative approaches to inform people about their data protection rights and the purpose of the data collection affect their response behavior, researcher would need to consider potential implications for the representativeness of their research samples.

Limitations on data holder's ability to protect their data are exacerbated in Low- and middle-income countries (LMICs), reflecting among others gaps in legal frameworks, high poverty, and low literacy rates. Illegitimate data collections, storage, and processing may expose the poor to a range of new vulnerabilities (Hilbert 2016; Medine and Murthy 2020). In a survey setting, a lack of understanding of the data collection purpose may effectively coerce vulnerable people in need into participation or raise expectations for future aid.<sup>4</sup> Presented with complex and abstract concepts, terms such as "data protection" and "confidentiality", vulnerable population groups are asked to give consent without potentially fully understanding the implications. Whether and to what extent the informed consent fails in such settings is largely an open, empirical question.

<sup>1</sup> See, for instance, Cate and Mayer-Schönberger (2013); Elliott et al. (2020); Medine and Murthy (2020) who discuss the limitations and the implications of the current state of acquiring informed consent. For the far-reaching legal implications of the de facto inability to provide informed consent, please refer to Solove (2012). Debates on the potential institutionalization of inequalities and evidence from medical research are hereby informative (e.g., Cassell and Young (2002) and Tu et al. (2004)).

<sup>2</sup> Despite its increasing policy relevance, the analysis of limitations and approaches to share private information has - with few exceptions (Acquisti et al. 2007, 2016; Benndorf and Normann 2018; Goldfarb and Tucker 2019) - gained little attention in economic research.

<sup>3</sup> Even though the respondent is undoubtedly aware that she provides information during an interview, it is not always clear whether she is aware of the consequences of doing so. And even if consent might be assumed to be implicit in a survey setting, this implicit consent applies to the data collection itself, but not necessarily to data storage and analysis.

<sup>4</sup> Instead of considering what happens to their data, respondents reportedly often expect that their lives will improve directly or indirectly as an outcome of the interaction with the research teams (Alderman 2013).

In this study, we ask the following research questions: First, how informed are data holders (survey respondents) about their data protection rights, the purpose of the study, their voluntary participation in it, and the confidentiality of the information they share? Second, can augmented, alternative procedures to obtain consent improve their understanding and affect response behavior? The answers to these questions are hard to anticipate and there is little to no empirical evidence to build on. To shed light on this topic, we conducted an experiment varying the procedures to obtain informed consent and measured respondents understanding during two large scale data collections, between winter 2020/2021 and summer 2021, eventually including 7,752 potential research participants in rural Sindh and Punjab, Pakistan. We randomly varied two alternative approaches of presenting the consent form. First, in addition to only reading out the consent form, the enumerator presented a short, animated video to the potential respondent which visualized processes related to confidentiality and data protection as well as the interview itself. Overall, about 44% of potential respondents were randomly assigned to this treatment. Additionally, a second approach, which combined the video with an interactive scripted process, was assigned to about 6% of potential respondents.<sup>5</sup> During this process, the enumerator read the consent form and, between paragraphs, asked questions about the information in the paragraphs to check whether the respondent retained the information and then directly corrected misunderstandings. This experimental design allows us to study whether alternative approaches change response behavior and the understanding of respondents, as compared to the standard approach of obtaining consent.

In the first set of results, we find that respondents in the business-as-usual approach were not sufficiently informed about relevant aspects related to their consent. In particular, respondents were not sufficiently informed about the purpose of the data collection and the fact that their participation was voluntary. In addition to our objective measures, subjective measures (which measured the self-assessed levels of understanding) confirmed a large potential for improvement.

Second, we find that our video decreases understanding whereas the combination of watching a video and being presented with the consent form in an interactive process improves the understanding of respondents according to our objective measure. Compared to the control group, potential respondents who were assigned to the video alone were 11 percentage points less likely to assess a statement about their right to complain correctly (control group mean: 51%). This negative effect was mitigated when the video was combined with the interactive reading of the consent form. Further, the video alone decreased understanding that the provided private information will not be shared with third parties by 6.3 percentage points (control group mean: 69%), an effect driven by male respondents. Further, we find improvements of the approach combining video and the interactive component on understanding related to the voluntary nature of participation. Fully treated respondents were 4.8 percentage points more likely to assess that they were free to participate in the survey and 10.6 percentage points more likely to understand that they were not obliged to provide responses to specific questions (con-

<sup>5</sup> As the implementation of the various approaches are costly in terms of time and there was the above mentioned risk of affecting response behavior, we chose to allocate the second approach only to a small sub-sample of the potential respondents.

trol group means: 29% and 34%, respectively). At the same time, self-reported understanding decreased in the group assigned to the combined approach across several aspects. Given that self-reported understanding was not reflecting understanding according to our objective measurement (i.e., potentially capturing overconfidence in understanding), this detected decrease might be preferred if it indicates a more accurate self-assessment.

Third, we explore potential implications from the alternative approaches on response behavior. While researchers want respondents to be informed about their participation in a study, about their rights, and what will happen with the data, it is well-known that humans - once informed of being studied - might behave differently (the so-called Hawthorn effects). Survey respondents might provide more accurate information or overall more information during the interview, depending on whether the intervention increased or decreased their willingness to provide information. We find first that the augmented process of inquiring consent does not affect consent rates, which are overall very high in our sample. We further investigate item non-response rates, i.e., the share of questions to which the respondent did not respond. We find no meaningful effects on response behavior on this intensive margin. Thus, concerns about a potential trade-off between informing respondents and a change in their response behavior is negligible in our setting.

“How informed is consent?” is a question investigated in medicine and consumer behavior research, yet to our knowledge is unprecedented in the field of development economics and survey research. In a meta-study, [Falagas et al. \(2009\)](#) find inadequate understanding in more than half of the studies considered, both in the context of surgeries and medical research. Yet, medicine differs from social science in important ways which directly relate to the provision of consent. For medical procedures, a lack of consent might mean that a condition remains untreated. In a situation with no real choice of alternatives, patients might willfully ignore the information provided by a doctor as it might only induce stress and worry without much scope to change their choice. From the literature on consumer behavior, we also know that market interactions involving personal data occur in the absence of individuals’ fully informed consent. [Acquisti et al. \(2016\)](#) find that consumers would rarely (if ever) be completely aware of privacy threats as well as the consequences of sharing and protecting their personal information. Overall, despite being concerned with the same question of “how much information is enough”, research in this field is mostly conducted in high-income countries. This is the first study to investigate the understanding of informed consent in a large survey data collection in a LMIC targeting vulnerable rural households.

Further, our findings question the study participant’s motivation for participating in the survey based on incomplete understanding about its purpose. Financial scarcity is a likely motivation for study participation in rural Pakistan, where surveys are frequently used to target future program beneficiaries. In our survey, respondents were informed that the survey is conducted for research purposes only without foreseeable consequences. Still, to a large extent respondents were not aware that their participation in the data collection was voluntary

(about two in three participants) and the purpose of the survey (about four in five participants). If more respondents better understood the purpose of the survey, this might lead to a lower rate of consent and a different sample composition. In Canada, for instance, obtaining written informed consent for participation in a stroke registry led to important selection biases such that registry patients were not representative of the typical stroke patient (Tu et al. 2004). Despite great mobilization efforts to register individuals for a disease register, no general, valid scientific conclusions could eventually be made. Therewith, our study relates to the work on selection into surveys and the credibility of such evidence. It is generally known that financial incentives affect response rates in survey research and such implications on sample composition are frequently studied in particular in high income countries (e.g., Singer and Ye (2013) and Mercer et al. (2015)). Closer to our work, Marreiros et al. (2017) show that providing information on data privacy may alter response behavior. Their study participants disclosed less private information after being exposed to information regarding privacy (highlighting positive or negative aspects of online privacy).

Given the low levels of understanding, does it make a difference how the consent is presented to the respondents? Consumer research has experimented with different ways to display the content on digital platforms. For instance, it was found that opt-in consent could benefit established firms whom consumers seem to trust more (Campbell et al. 2015). In medicine, several small-scale studies investigate this question. Stanley et al. (1998), for example, measure understanding and compare a routine consent procedure with the provision of additional verbal or written information. Their evidence indicates that one in four patients have a poor understanding of the risks and complications of their medical procedures but no improvements from the provision of additional information.<sup>6</sup> We are the first to test whether and how consent procedures can be improved with several thousand participants in a real-world data collection setting. More specifically, we test illustrative and interactive means of communication to improve understanding and show, that the understanding can be affected and increased through direct feedback to incorrect comprehension. However, in addition to positive effects from an interactive reading of the consent form, we do find a negative impact from showing an animated video alone, suggesting scope for future research to identify better means of communicating the complex topics involved.

The rest of the paper is organized as follows: In Section II, we provide general background related to informed consent and describe our findings with respect to survey respondent’s understanding of crucial aspects of informed consent. Section III presents our experimental design and describes the alternative approaches to convey the information (the experimental design), our empirical strategy, data, and sample. Section IV presents the experimental results for how the alternative consent processes affect response behavior and respondent’s understanding. Section V concludes.

<sup>6</sup> Related studies are Fitzgerald et al. (2002); Hutton et al. (2008); Miller and Boulton (2007); Stunkel et al. (2010).



## II IS CONSENT INFORMED?

In what follows, we discuss the process of acquiring informed consent in primary data collections in LMICs (Section II.A) and present first evidence on potential challenges (Section II.B).

### II.A Informed Consent in Practice

Data protection and research ethic guidelines command that the purpose of data collections and information about data processing need to be in clear and simple language, understandable, and easily accessible. In primary data collections, research teams present this information when they first encounter potential survey respondents. To acquire informed consent, the teams usually follow specific procedures. After a short introduction, a standardized text lays out the rights of the respondents and the risks of harm associated with participating in a research study. The interview or intervention only proceeds if consent is given.

To design our survey instruments and experiment, we first conducted a desk review of relevant guidelines on and examples of consent forms and accompanying informational texts. Our starting point was an overview of the current practice of how informed consent is obtained in surveys. Systematically reviewing guidelines and legal codes, we first tried to distill principles of what informed consent should encompass. Considering the vast amount of different codes across disciplines and countries as well as the great overlap of content, we eventually focused on the following three: An international code of conduct in social science research published by United Nations Educational, Scientific and Cultural Organization (UNESCO) (de Guchteneire 2014), the United States code of federal regulations on the protection of human subjects (45 Code of Federal Regulations (CFR) 46), and the European Union General Data Protection Regulation (GDPR).<sup>7</sup> In addition to these more theoretical guidelines, we have conducted a reality check by searching the Datahub for Field Experiments in Economics and Public Policy of Harvard Dataverse for consent forms used by researchers in economics.<sup>8</sup> On September 30th 2019, there was a total of 147 entries. We identified 59 entries that provided access to questionnaires, 39 of which included a consent form and thereof 34 were available in English.<sup>9</sup> While our selection is certainly not representative of all field research conducted by economists, it does provide a selection of rather popular studies. Additionally, we collected consent forms from major surveys - the Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) - which are conducted in several countries.

<sup>7</sup> While many guidelines are tailored to medical and experimental research, some deal exclusively with data protection. For all, the Belmont Report is the underlying ethical foundation for human subjects research. It states that respect for people would require that subjects, “to the degree that they are capable”, were given the opportunity to choose what shall or shall not happen to them and that the process of acquiring consent should be guided by information, comprehension, and voluntariness (Department of Health and Welfare 1979). Relevant past legislations regulating such guidelines include “The European Union Directive on the Protection of Personal Data” (1995), “OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data”, in the US: Fair Information Practices (FIP) from 1970, and the “Children’s Online Privacy Protection Rule”.

<sup>8</sup> Harvard Dataverse is an open-source research data repository. The Datahub for Field Experiments in Economics and Public Policy is accessible via the following link: <https://dataverse.harvard.edu/dataverse/DFEEP>. Accessed on November 20th, 2019. We have not been aware of any alternative or better-suited database that consistently collects consent forms.

<sup>9</sup> Some of the remainders indicated the existence of such a consent form without giving direct access to it. Note, however, that there are duplicates, as several entries can relate to the same data collection.

With this set of background information, we have narrowed down the principles of what a respondent should be informed about prior to the full onset of the interview to the following: (1) Identity and contact information of the research teams; (2) purpose of data collection and research; (3) expected duration of participation, (4) (potential) risks, benefits, or consequences of participation; (5) voluntary nature of participation and right to withdraw consent; (6) (limitations to the) confidentiality of records. We additionally divided the latter into the requirement to provide information on (a) the recipients of data (including the risk of transfer into other legal systems), (b) the duration of storage, (c) the right to complain, and on (d) the procedures to ensure confidentiality.<sup>10</sup> We used this information to design a “business-as-usual” consent form (Appendix F.I) as well as to identify and operationalize our core outcomes related to the respondents’ understanding.<sup>11</sup> The business-as-usual consent form represents our reference group against which we experimentally test alternatives which will be described in Section III.

## II.B Understanding of Informed Consent

Our main outcomes aim to capture changes in the levels of objective and subjective understanding related to four aspects conveyed in the informed consent: (1) Rights w.r.t. data protection, (2) the purpose of the data collection, (3) voluntary participation, and (4) data confidentiality.<sup>12</sup> The context of our study is marked by very high illiteracy rates. For instance, the share of men who had completed 10 grades or more was 21.5% in rural Sindh and 26.9% in rural Punjab in 2017-18 (NIPS Pakistan and ICF 2019). Amongst individuals with educational levels below, only 12.9% of men can read a whole sentence in rural Sindh and 32.7% in rural Punjab.<sup>13</sup>

We first assess whether or not survey respondents are sufficiently informed about important aspects related to their consent to the data collection. We hypothesize that the business-as-usual process of obtaining consent is not sufficiently informative. To assess this hypothesis, we constructed a short questionnaire module consisting of six statements.<sup>14</sup> Each statement is related to one or more principles of informed consent. The respondents were asked to assess whether the statements are “true” or “false”; “don’t know” is also offered as an answer option. An example question is: “I have to participate in the study” for which the correct assessment would be *false*.<sup>15</sup> One limitation of this approach is that we only ask one or two questions to assess the respondents’ objective understanding of a specific aspect, which is clearly not enough

<sup>10</sup> This narrows in on data protection issues and omits experimental protocols, which we deemed more appropriate in our context of data collection.

<sup>11</sup> To measure the potential respondents’ understanding of consent we developed two survey tools (Appendix B for more details). We piloted the survey tools with enumerators during the design of the intervention (Appendix C).

<sup>12</sup> This reduced scope seemed appropriate in our context. Since the survey was an endline for another project, participation in the survey had no implications beyond the sharing of information such that (potential) risks and benefits was omitted as aspect. Note however, that the lack of benefits is covered under our objective measure related to the purpose of the study.

<sup>13</sup> The net attendance ratio for secondary school children (age 10-14) was 37.7%. In Sindh, 20.9% of children age 10-12 attended secondary school or higher in 2018-19 (Bureau of Statistics 2020). In Punjab, 36.7% of children age 12-14 attend secondary school or higher in 2017-18 (Bureau of Statistics, Bureau and Board, Planning & Development and of the Punjab, Government 2018).

<sup>14</sup> We piloted the tool during an enumerator training for another study. For more details refer to Section C in the Appendix.

<sup>15</sup> For more details about the survey tool, please refer to Section B in the Appendix.

to give a complete picture. Another common problem with these kind of assessments is the tendency of respondents to assess a statement as true, regardless of whether it is true or false. This is likely to result in high shares of correct assessments for supposedly “true” statements with little room for improvement. To circumvent this problem, we introduced an alternative version for each statement in the second wave of the data collection which took place in Punjab. Compared to the first wave of data collection in Sindh, during which the answers for each of the statement were either “true” or “false”, in Punjab we randomized the phrasing and therewith the correct assessment of the statement. In other words, for each statement either a true or false version of the question was randomly selected and read out. The random assignment confirms that true statements were about 30-55% percentage points more likely to be assessed correctly. We thus focus our discussion on the version of the statements which is false assuming that false statements that are correctly assessed as false indicate understanding, whereas true statements that are correctly assessed as true are often the result of respondents’ tendency to select true as a default assessment.<sup>16</sup>

Additionally, we capture a respondent’s self-assessed understanding of the four aspects of informed consent. It would be concerning if respondents felt they had understood these aspects, but actually they did not. Or simply if they do not think they understand what they consented to. For each aspect we asked the respondents to indicate how well they (subjectively) understood it. We explicitly mention that there are no right or wrong answers. An example is “The purpose of this study”, for which the respondents could chose “I didn’t understand this at all”, “I didn’t understand much of it”, “I understood this to some extent”, “I understood this well”, and “I understood this fully”. For our main outcomes, we code subjective understanding as 1 if they assess their understanding as “well” or “fully” and 0 otherwise.<sup>17</sup>

Figure 1 displays the averages of outcomes related to understanding in the control group. In the following we focus on the share of respondents correctly assessing false statements as false, i.e., Figure 1a. We expand this descriptive evidence with further information collected during the implementation of our dialogue intervention, in which potential respondents were asked questions such that the enumerator could directly correct any misconceptions.<sup>18</sup>

We find that 58.7% of respondents correctly assess “Once I provided any information, I cannot tell the researchers or data collection team to delete the information” as false. About every second person knows of their right to complain (51.3% for “I cannot complain about the way the data collection team and researchers handled my data”).

Turning to the purpose of the data collection only every fifth person knew that the data collection was not for a needs assessment (19.4% for “I am interviewed to assess my needs and determine whether I am eligible for a beneficial program”). From the implementation data of the dialogue intervention, we further learn that while the informational text conveys the message that the survey is conducted for research purposes, one in five respondents reports that

<sup>16</sup> More elaboration on this point and our choice of focusing on the *false* statements can be found in Section G in the Online Appendix.

<sup>17</sup> For all questions please refer to the information in Appendix B.

<sup>18</sup> For more details see Section F in the Online Appendix.

it determines the eligibility for a program as well (Table A.2).

Further, the voluntary nature of their participation in the data collection was not clear to the participants. Respondents were presented with the statements “I have to participate in the study” and “When I give consent, I have to respond to all questions”; and only about every third assessed each as false (29.4% and 33.7% respectively, Figure 1a). Relatedly, during the implementation, respondents indicated that refusal of consent would imply that they would be refused services in the future (10%), would lose existing benefits (5%), or would be punished (2.3%) (Table A.2).

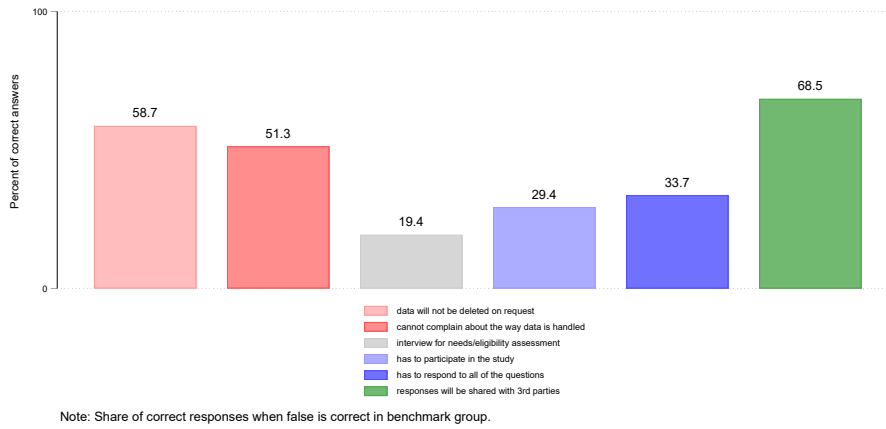
Finally, only 68.5% of respondents correctly assessed the statement related to the confidentiality of the information shared, i.e., “My responses, together with my name and other identifying information, will be shared with third parties”, as false (Figure 1a). Additional evidence suggests that 14.4% indicated that their data would be used by an Non-Governmental Organisations (NGOs) (Table A.2).

Overall, we find limited understanding among study participants according to the false version whereas true statements are almost always assessed as true (Figure 1b). While the false version of a statement is not always the logical negation of the true version, the comparison of randomly assigned versions allows for the conclusion that the high shares of correctly assessed true statements are misleading. Nevertheless, even for the true version, less than four in five respondents assessed the purpose of the data collection correctly (77.5% for “The answers I provide in this interview do NOT affect whether I am eligible for a beneficial program”).

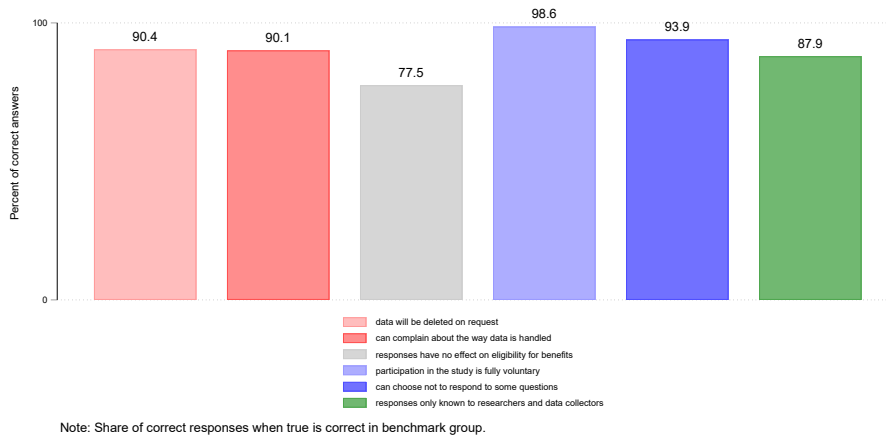
For the subjective measures, we observe in Figure 1c that across all four aspects of informed consent, more than every second person feels that she is adequately informed. However, for none of the aspects more than two of three respondents self-assessed their understanding as well, indicating scope for improvement and demand for more information.

Altogether, the novel descriptive evidence presented for the context of a LMIC suggests that overall study participants have low objective levels of understanding the regulations and implications they consent to prior sharing personal data. We therewith confirm findings from consumer research indicating that consumers lack enough information to make privacy-sensitive decisions (Acquisti and Grossklags 2005; Acquisti et al. 2016). In general, choices can be influenced by access to information, behavioral biases, personal, and physical resources. Our indicators of understanding intentionally focus on basic concepts and misunderstanding in our context may indicate a fundamental problem.

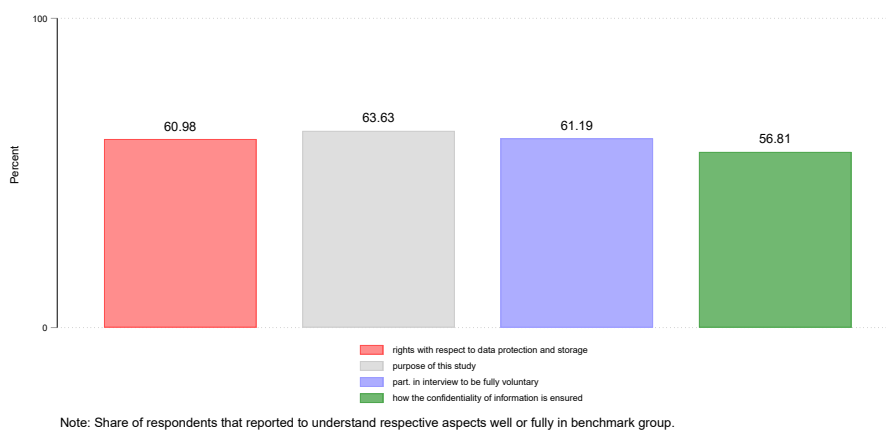
Figure 1: UNDERSTANDING OF THE INFORMED CONSENT



(a) OBJECTIVE MEASURE: *False* RESPONSE IS CORRECT



(b) OBJECTIVE MEASURE: *True* RESPONSE IS CORRECT



(c) SUBJECTIVE MEASURE

*Notes.* The figures display various measures of understanding among the control group. Figures 1a and 1b refer to objective measures based on the correct assessment of statements indicated in the figure's legend. Figure 1a shows the share of correct assessments when the statement is false, whereas Figure 1b shows the share of correct assessments when the statement is true. Figure 1c displays the share of respondents which self-reported their understanding as well or fully. Sample sizes differ for each item and are between 400 and 650 for Figures 1a, and 1b and approximately 1,300 for Figure 1c.

## III THE EXPERIMENT

### III.A Alternative Approaches to Communicate Consent Forms

In the following, we describe our intervention and treatment arms. The different approaches were integrated into the Computer-Assisted Personal Interviewing (CAPI) survey tool. At the beginning of each interview, the consent form was randomized to either the business-as-usual, an animated video, or an animated video combined with a scripted, interactive reading of the consent form (a short, guided dialogue). For each of the control and treatment groups, the enumerator play an important role as they facilitate and implement the different approaches. Half of potential respondents are assigned to the control group, 44% to the video treatment, and only 6% of potential respondents were assigned to the full video and dialogue treatment.<sup>19</sup> The survey was collected using SurveyCTO and the treatment is randomized using the build-in random number generator. One could imagine that an enumerator with a preference over treatments will create new forms to avoid specific treatment arms. However, before the randomization, the enumerator would already have needed to fill in some information. The effort of creating a new form should keep her from doing so if unnecessary. We discuss treatment and implementation fidelity in more depth in Appendix D. It is important to stress that the treatment interventions are on-top of the control intervention and are not supposed to replace the business-as-usual process. Moreover, we undertook several efforts to contextualize this research design in the local context. The exact phrasing of the various approaches was decided after several rounds of piloting, discussions with local experts, and with feedback from several NGOs. All content was translated into the respective local languages.

**Control Group: Business-as-usual Consent Form** As described before, currently the common practice of obtaining informed consent for survey participation is asking the potential respondent to read about one page of information, the so-called consent form. The enumerator who conducts the interview is present and trained to answer questions the potential respondent might have. This shall ensure that all aspects of informed consent are addressed. Depending on the survey and who is conducting it, the procedure varies in length. Given that the respondents of surveys in LMICs are often not literate, it is common practice that the interviewers read the consent form to the respondents. Consent is then usually obtained either written, by a signature or a similar practice, or oral. Given that the survey was collected during the COVID-19 pandemic and in a setting with high illiteracy rates, consent to participate in the survey was obtained through recorded oral statements. Against this benchmark, we further test two alternative approaches.<sup>20</sup>

<sup>19</sup> The study was an independent add-on to a different study and, as the lower share for the longer intervention indicates, we wanted to minimize any potential influence of this study on the main survey of the other study

<sup>20</sup> The information text presented to the potential respondent and further details for all treatment arms is presented in Section F of the Online Appendix.

**Treatment Group 1: Additional Animated Video** The first experimental variation augmented the business-as-usual approach by showing an animated video illustrating the informational text. Before reading out the consent form, the enumerator first presented a short video to the potential respondent. In addition to reading the text of the consent form, the video visually illustrated processes concerning confidentiality, data protection, and the interview itself. This part of the treatment has several potential advantages over the benchmark. The process is normed such that each respondent receives the same information. Further, being visually engaged might increase attention and can make abstract concepts more available to the respondents.<sup>21</sup> The video’s length is 2:40 minutes, however the interview duration as recorded by the SurveyCTO software was only 1:40 minutes longer on average in treatment group 1 compared to the control group, potentially indicating incomplete compliance with the protocol.<sup>22</sup> The video that we test was purposely kept short such that it could be easily added to ongoing data collections without major implications for the enumerator’s and respondent’s time.

**Treatment Group 2: Additional Video plus Dialogue** The second experimental variation further augmented the business-as-usual approach and the animated video with a scripted and interactive reading of the consent form. Even though the respondents are theoretically encouraged to ask questions during the benchmark approach, they rarely take advantage of this. In other words, both the benchmark and the video-only approach tend to be passive. To actively engage the potential respondent in the process, we included questions about the content of the consent form between paragraphs to check whether the respondent retained the information. If the responses indicated misunderstanding (i.e., provided incorrect responses to basic questions between the consent’s paragraphs), the relevant information was repeated and explained.<sup>23</sup> On average, interviews assigned to this treatment arm took an additional 3:40 minutes compared to the benchmark. We expected the additional dialogue intervention to have encouraged the respondents to listen more actively, better understanding and recalling the information presented in the consent form.

In the following, we describe our estimation strategy as well as the sample and data which will build the basis for the empirical assessment of the alternative approaches to present the informed consent.

<sup>21</sup> Examples of screenshots from the video and the script can be found in Section F in the Online Appendix.

<sup>22</sup> For more details refer to Section H the Online Appendix.

<sup>23</sup> The full script can be found in Section F in the Online Appendix. Responses to the questions are summarized in Table A.2 in the Appendix.

### III.B Empirical Strategy

The following equation outlines our main specification capturing the Intention to treat effects (ITTs) of our treatments.

$$Y = \alpha + \beta_1 D_{Video} + \beta_2 D_{+Dialogue} + \xi + u \quad (1)$$

$Y$  is the outcome variable at the respondent level for all the respondents who provided us with the consent or at the level of potential respondents for consent rates. The ITT for the video only and the video plus dialogue treatment are captured by  $\beta_1$  and  $\beta_2$ , respectively. Additionally,  $\xi$  corresponds to enumerator fixed effects. The standard errors are Eicker-Huber-White standard errors. Alongside, we will report the difference between  $\beta_2$  and  $\beta_1$ . Given that  $\beta_1$  captures the effect of the video, while  $\beta_2$  the joint effect of the video and the dialogue, the difference between the two coefficients may be interpreted as the added value of the structured dialogue.

### III.C Sample and Data

We measure understanding of the informed consent in a real-world setting at scale rather than a laboratory setting. The experiment was implemented alongside an already planned data collection in rural Punjab and Sindh, Pakistan. Our setting has the advantage that we learn about the scope of potential problems and test the alternative approaches on a target population which is very typical for development economics.

The full module of questions to measure objective and subjective understanding was posed to only 12% of respondents, the 6% in the video plus dialogue group, and 6% from the control group. The remaining 88%, who were assigned to either the video only or the control group, were asked only two questions at random (one of each objective and subjective measure of understanding).<sup>24</sup> This implies different sample sizes for different outcomes and comparisons between groups. Given the overall large sample size of our study, the reduced sample size for most outcomes as a result of asking only two questions to most respondents is not problematic. Originally, the study was designed for only 12% of the sample in one of the provinces and included only the combined approach. In other words, the eventually realized sample size is bigger than originally planned. Still, for analyses of outcomes based on the full module, the sample size is reduced and we are not able to investigate the effect of the video only intervention in such analyses.

Table 1 gives an overview of the (approximate) sample size for various types of outcomes and comparisons. It also displays summary statistics of the respondent's age, sex, and relation to the household head across different treatment groups. In the control group, about 61%

<sup>24</sup> Not all respondents were asked all questions to minimize any potential influence on the main survey which was conducted for another study.



of respondents were female, and the average age was 42 years. About 37% of respondents were the household head (almost always male), about 49% were their spouse, and about 14% were in another relationship to the household head. There are few differences in these characteristics across treatment groups. For instance, the share of women is 4-5 percentage points lower in the video plus dialogue group compared to the video only and control group and the share of respondent’s who are the household head is about 3-4 percentage points higher (only the difference of women between the video only and video plus dialogue group is statistically significant).

Table 1: CHARACTERISTICS OF RESPONDENTS AND SAMPLE SIZES

	Control		Video		+Dialogue		Differences		
	(1) mean	(2) sd	(3) mean	(4) sd	(5) mean	(6) sd	(7) V-C	(8) D-C	(9) D-V
Female	0.61	0.49	0.63	0.48	0.58	0.49	0.01	-0.04	-0.05**
Age	42.1	11.6	42.1	11.3	42.5	11.9	-0.03	0.46	0.49
Household head	0.37	0.48	0.36	0.48	0.40	0.49	-0.00	0.03	0.04
Spouse	0.49	0.50	0.50	0.50	0.48	0.50	0.01	-0.02	-0.02
Other relation	0.14	0.35	0.14	0.34	0.12	0.33	-0.01	-0.02	-0.01
<i>Number of observations:</i>									
Meta indicators	3903		3404		445		7307	4348	3849
Objective item level	1003		559		444		1562	1447	1003
Subjective item level	1312		856		444		2168	1756	1300
Full module	446		0		445		0	891	0

\* :  $p < 0.05$ ; \*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

*Notes.* The table displays characteristics of study participants as well as approximate sample sizes for various outcomes. Columns (1) and (2) correspond to the control group, columns (3) and (4) to the video only group, and columns (5) and (6) to the video plus dialogue group. Column (7) displays differences between the control and video only group. Column (8) the difference between the control and the video plus dialogue group. Column (9) the difference between the treatment groups. Meta indicators refer to outcomes such as consent rates which are mostly observed for everyone. Objective and subjective item level refers to one of the items of our objective and subjective measure of understanding. Each item of the respective category was asked with the same probability such that this gives an approximation for all items. Note that there are only four subjective, compared to six objective items, explaining the discrepancy between the numbers of observations. Full module refers to those who were asked all questions related to our measures of understanding. Note that all in the video plus dialogue group, 12% of the control group, and no one in the video only group was assigned to all questions. For details on the questions, refer to Appendix B.

## IV RESULTS

In this section, we present our main results. We begin with an analysis of potential changes in the consent to participate in the survey (Section IV.A) which can theoretically change the composition of the study participants. We continue our analysis by answering the question of whether alternative ways to present the information related to informed consent affect the understanding of its content (Section IV.B). Finally, in the last part of the results section (Section IV.C), we present evidence on whether our experimental variations change data quality in terms of item non-response. Our analysis follows a Pre-analysis Plan which we developed and registered prior to the data collection.<sup>25</sup>

### IV.A Consent Rate

A common concern for researchers is the representativeness of their studies and the number of study participants. In particular, it is a common belief in development economics that

<sup>25</sup> This analysis plan is registered at AEA RCT registry under AEARCTR-0006829 (<https://doi.org/10.1257/rct.6829-1.0>).

larger field experiments could help to improve external validity or the accuracy with which the estimates of impact from a Randomized Control Trial (RCT) predict the effects of some subsequent policy decision (Duflo et al. 2007; Muralidharan and Niehaus 2017; Peters et al. 2016). Given that development research aims to alleviate poverty and improve people’s lives, we need to be careful that this research does not systematically exclude vulnerable groups of the population. Therefore, it is crucial to know whether survey respondents differ in important ways from non-respondents. If the willingness to participate in a study is affected by the consent process, requiring and obtaining informed consent might create selection into the sample. If the provision of consent and being informed is - for instance - related to vulnerability, this could bias statistics derived from the survey for the actual population of interest.

In our study, we directly test the effect of the different treatment approaches on the rate of consent compared to the business-as-usual approach. Are people more or less likely to decline an interview if the consent form is presented differently? Generally, there are two channels to consider. Firstly, the unusual approach might scare off some people or, on the contrary, increase their interest, trust, and willingness to participate. Secondly, the intervention may accomplish its goal to inform the respondents better, and eventually better-informed respondents might make different response decisions. Then, on the one hand, they might become aware of the consequences and no longer want to provide information because they thought the consequences were less severe. On the other hand, they might want to provide private information now because they otherwise would have thought the consequences of doing so were more severe. We expected that the interventions, if anything, would decrease the rates of consent, since people who already at the onset are uninterested in the interview or people who do not trust the survey team, would have probably rejected the enumerator’s request before the formal consent process had even started.

Our data collection took place in two household visits, an initial visit, during which the experiment was implemented, and a second visit, during which a more comprehensive interview took place. The respondent was asked for consent in both visits and the respondent in the second visit was not necessarily the same as in the first visit. We collect information on which respondents gave consent in both types of visits and record the number of potential respondents who refused to be interviewed in both types of visits. Almost everyone in our study provided consent to be interviewed and there is no difference across treatment arms (Table 2). We observe only a minor increase of 1.2 percentage point in the response rate of the second visit (i.e., the likelihood of giving consent during the second visit conditional on consent during the first visit). This increase is marginally statistically significant at the 10% level. Thus, a first finding from studying alternative approaches to acquiring consent is that they seem not to affect the rate of consent in any meaningful way.

Note, however, that the measured consent rate unlikely reflects the share of those who gave their consent among all approached people. There are two main explanations for this: (1) The

Table 2: CONSENT AND RESPONSE RATES

	Consent Rate		Response Rate
	(1) 1st visit	(2) 2nd visit	(3) 2nd visit
Video ( $\beta_1$ )	0.001 (0.001)	-0.000 (0.001)	0.003 (0.004)
+Dialogue ( $\beta_2$ )	0.001 (0.002)	0.000 (0.000)	0.012* (0.007)
Diff. ( $\beta_2 - \beta_1$ )	-0.00 (0.00)	0.00 (0.00)	0.01 (0.01)
<i>Model description:</i>			
Interviewer FE	Yes	Yes	Yes
Adj. $R^2$	0.03	0.01	0.04
Control group mean	1.00	1.00	0.97
Observations	7752	7309	7736

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

*Notes.* The table displays different rates of consent. Column (1) is the rate of consent asked during the first visit during which the experiment took place, only 16 potential respondents did not give consent. Column (2) refers to a rate of consent acquired during the second visit, i.e. those you gave consent after being explicitly asked. Note that this was only well-documented after the data collection already began, such that 334 observations are missing. Further, not all who gave consent in the first visit were successfully approached for a second time and thus not asked for consent. Finally column (3) refers to the response rate during the second visit, i.e. giving consent during the second visit conditional on consent during the first.

timing of measurement and (2) incomplete documentation.

First, we are neither interested in the usual response rate for this study, which also documents unavailable potential respondents, nor in the overall consent rate among all potential respondents. We are only interested in changes due to our intervention and, thus, the consent rate conditional on being part of the experiment. Being part of the experiment means that a formal process of acquiring consent has been in fact initiated and implemented which only happens after an initial buy-in from the potential respondent. Before starting the process, the enumerator already introduced herself and usually informed the potential respondent about the purpose of her visit. The potential respondent agreed (or at least did not effectively object) to start the formal process of acquiring consent. Given this initial buy-in, it is less surprising that almost everyone gave consent. However, it still allows us to measure our interventions' effect on the consent rate and potential implications for sample selection.

Second, incomplete documentation, on the other hand, would be problematic. There was little incentive for the enumerators to document the cases in which they did not receive consent. While there was also little cost to documenting it, some enumerators might not have submitted forms without consent as they might have feared that this would reflect poorly on them. During the data collection we payed much attention to this through close surveillance and repeated reminders to submit all forms. If the treatment affects the consent rate and forms without consent are not submitted, this could be reflected in the shares of the treatment groups among submitted forms. We analyze these shares in Appendix D. We had also discussed differences in respondents' characteristics across treatment arms in Section III.C above. Altogether, we do not find a strong indication of problems with incomplete documentation of consent.

Given that the two treatment interventions seem not to affect the rate of consent or response rate in the second visit in a meaningful way, we will not further consider whether the different approaches change our sample composition. And since there are no sizable selection effects to consider in the analysis of the remainder of outcomes, it will facilitate the interpretation of results.

## IV.B Understanding of the Informed Consent

In this section, we analyze whether alternative approaches to deliver the information contained in the informed consent change the levels of understanding of the informed consent. The outcome measures presented here have been described in Section II.B.

**Objective Measures** Table 3 presents the results for the objective measures of understanding. We consider individual statements on rights w.r.t. data protection (columns (3)-(4)), the study purpose (column (5)), voluntariness of participation (columns (6)-(7)), and data confidentiality (column (8)). For our main analysis, we record correct answers as 1, incorrect answers and “don’t know” responses as 0.<sup>26</sup> Note that the table is based on the version for which false is correct.<sup>27</sup> The table starts with the results for a summary score capturing the average number of correctly answered items across all statements (column (1)) and an indicator for being sufficiently informed (column (2)).<sup>28</sup>

We find that showing the video alone has a negative impact on the likelihood that respondents correctly assess the statement “I can complain about the way the data collection team and researchers handled my data” (column (4)). For the other statement directly relating to their data protection rights we do not find effects. The likelihood of correctly assessing that they can complain decreases by 11.1 percentage points in the group which was shown only the video which is a relative decrease by about 22% of the control mean of 51%. Note that we assess the correctness based on the fact that respondents were provided with contact information and explicitly told that they can complain. However, respondents might not possess a phone or sufficient credit to make a call or other factors might prevent them from effectually complaining. Therefore the extent to which this item represents understanding is limited. By illustrating the pseudonymisation of their data and the way it travels, respondents might feel more disconnected from the researchers and less empowered to complain. This might explain why adding a scripted dialogue to the video, which arguably builds rapport, diminishes the negative impacts of showing the video alone.

<sup>26</sup> Alternative specifications in which incorrect answers are coded -1 and “Don’t know” is coded 0 are considered as robustness checks in the Online Appendix. Note that for each of the six statements, less than 5% of responses are “Don’t know” or refusals to answer and all results discussed below are robust to this specification.

<sup>27</sup> The same table with the true versions of statements and a rationale for why we focus the analysis on the false version can be found in G the Online Appendix. Table A.19 in the Online Appendix includes both versions with a control for the truth value of the statement as a robustness check.

<sup>28</sup> The indicator refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “don’t know”. Note, that indicators based on more than one question can only be assessed based on 12% of the total sample (mentioned above in Section III.C).

Relatedly, we find a negative effect of 6.3 percentage points on the likelihood to correctly assess the statement that “My responses, together with my name and other identifying information, will be shared with third parties” as false (column (6)). However, exploring heterogeneous effects with respect to the respondent’s sex shows that the negative effect on understanding of confidentiality is driven by men, whereas females remain largely unaffected by the combined approach. (Table A.3).

Only 42% of people in the control group correctly understood that the purpose of the study is not a needs assessment and we do not find that our interventions increased this share.<sup>29</sup> Further research might be needed to better convey what “research” is and how it differs from a needs assessment. While participants who indicated that they believe that the survey was used for a needs assessment during the dialogue intervention were immediately corrected with a statement that their survey is for research purposes only, none of the approaches explicitly explain the distinction between “research” and a “needs assessment”. Better emphases of the distinction of the different types of purposes seems to be of particular importance given that surveys conducted for both purposes are often similar, yet their implications are completely different. A needs assessment is more likely to result in an immediate aid response and may even induce strategic response behavior in order to increase this likelihood.

While we do not find effects for the video only, the additional dialogue improved the respondents’ understanding with respect to voluntariness of participation in the study and obligation to respond to specific questions. The estimated increase in correct assessments is 4.8 percentage points for the statement “I have to participate in the study” and a 10.6 percentage points for “When I give consent, I have to respond to all the questions”. These effect sizes correspond to a significant increase of about 17% and 31% relative to the control group means (29% and 34%, respectively). Note that it is not the case that those who incorrectly assessed that they have to reply to all questions do indeed reply to all questions, about 3% refuse to answer at least one question during the first visit.<sup>30</sup>

To sum up, we observe mixed results from our interventions on objective measures of understanding. We do find some negative impacts from the video alone, whereas the added scripted dialogue tends to result in increased objective understanding levels. However, overall the findings are limited and we do not find effects on important aspects such as the purpose of the study.

**Subjective Measures** Using our subjective measure of understanding, we assess whether the different approaches to convey the information affect the share of respondents who think they are informed. Again, ex-ante, the direction of the effect is unclear, as additional information might confuse respondents; or increased understanding might reduce self-assessed

<sup>29</sup> The original question reads “I am interviewed to assess my needs and determine whether I am eligible for a beneficial program”.

<sup>30</sup> This is expected, as respondents can learn this during the interview when they are asked a question they are reluctant to answer. To refuse to answer, they do not need to be aware of this option at all times actively.

Table 3: OBJECTIVE MEASURES OF UNDERSTANDING (FALSE CORRECT)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Video ( $\beta_1$ )			-0.014 (0.030)	-0.111*** (0.031)	-0.028 (0.020)	-0.025 (0.024)	-0.003 (0.025)	-0.063** (0.029)
+Dialogue ( $\beta_2$ )	0.011 (0.012)	0.033 (0.026)	0.004 (0.037)	-0.031 (0.034)	0.001 (0.027)	0.048* (0.027)	0.106*** (0.031)	-0.021 (0.034)
Diff. ( $\beta_2 - \beta_1$ )			0.02 (0.04)	0.08** (0.04)	0.03 (0.03)	0.07** (0.03)	0.11*** (0.03)	0.04 (0.04)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.48	0.53	0.45	0.50	0.46	0.51
Control group mean	0.67	0.38	0.59	0.51	0.19	0.29	0.34	0.69
Observations	889	889	807	820	1216	1225	1207	810

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

understanding (the so-called Dunning-Kruger effect). We present the results for the impact of the alternative presentations of the informed consent on subjective assessments of understanding in Table 4.

In Section II.B, we described that self-assessed understanding of four aspects related to informed consent was on average limited, leaving room for improvement. With the animated video alone we were not able to affect the self-assessment. We do not find changes from showing the short animated video on the respondents’ self-assessed understanding about their rights, the study purpose, the voluntariness of their participation, or confidentiality of the private information shared. None of the estimated coefficients is either statistically significant different from zero or sizable.

Adding the additional scripted dialogue to the video decreased the subjective measure of understanding overall. On average, the video plus dialogue treatment arm reduces the share of well-understood aspects by 4.2 percentage points (control group mean is 59%, column (1)). We find a decrease in the self-assessment of understanding of the purpose of the study, despite finding no effects on our objective measure for this aspect. Respondents are 6 percentage points less likely to indicate that they understood the “The purpose of this study” (control mean is 61%, column (5)). We further detect a statistically significant decrease of 5.4 percentage points in their self-assessed understanding that their participation in the interview is fully voluntary relative to a mean of 64% in the control group (column (6)). While not statistically significant, the point estimates are negative for the remaining aspects as well.<sup>31</sup>

**Objective vs. Subjective Measures** In what follows, we investigate in how far the objective and subjective levels of understanding are more or less aligned following the exposure

<sup>31</sup> Note that while women generally self-assess their understanding lower than men, we do not find sex-specific effects of the interventions (Table A.11 in the Online Appendix).

Table 4: SUBJECTIVE MEASURES OF UNDERSTANDING

	Overall			Rights	Purpose	Voluntariness	Confidentiality
	(1) Share	(2) All	(3) Score	(4)	(5)	(6)	(7)
Video ( $\beta_1$ )				0.002 (0.017)	-0.007 (0.016)	-0.022 (0.016)	0.004 (0.016)
+Dialogue ( $\beta_2$ )	-0.042** (0.020)	-0.048* (0.025)	-0.080** (0.035)	-0.023 (0.021)	-0.060*** (0.021)	-0.054*** (0.021)	-0.032 (0.022)
Diff. ( $\beta_2-\beta_1$ )				-0.03 (0.02)	-0.05** (0.02)	-0.03 (0.02)	-0.04 (0.02)
<i>Model description:</i>							
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.66	0.59	0.64	0.47	0.47	0.49	0.48
Control group mean	0.59	0.41	3.56	0.57	0.61	0.64	0.61
Observations	882	882	882	2561	2612	2606	2616

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays outcomes based on our subjective measure of understanding of consent (Appendix B). Column (1) is the share of the four categories (columns (4)-(7)). Column (2) refers to an indicator that all categories are reportedly understood. Column (3) refers to a score based on the average understanding across all categories from 1=“not at all” to 5=“fully”. Columns (4)-(7) refer to a response of “I understood this well” or “I understood this fully” for the respective aspect. In more detail, the statement in column (4) is “My rights with respect to data protection and storage”. The statement in column (5) is “The purpose of this study”. The statement in column (6) is “My participation in the interview being fully voluntary”. The statement in column (7) is “How the confidentiality of my information is ensured”.

to the experimental variation. In other words, using our objective and subjective measure of understanding, we assess whether the video plus dialogue approach changed the alignment of these measures across respondents. To do so, we divide the respondents into four types for each of the four aspects: Respondents who have both a high objective and subjective understanding, respondents who have a low understanding in both, and respondents for which the measures are not aligned.<sup>32</sup> Note that since only 12% of respondents were asked the full module, the sample size for this analysis is considerably smaller and can neither incorporate the video only group nor focus only on the statements for which false is correct. Thus the discussion below and the findings are not directly comparable to the previous discussions.

For the aspects of *rights* with respect to data protection and *confidentiality*, respondents with both high objective and subjective understanding are the majority, and those with a high objective and low subjective understanding are the second largest group, reflecting the fact that most respondents answered both related items correctly. For the aspects of *purpose* of the study and the *voluntarism*, respondents have a low understanding according to our objective measure and a high understanding according to our subjective measure. We further reject the null hypothesis of no difference in the distribution of respondent types between the video plus dialogue and control group. The null cannot be rejected for the aspects *rights* with respect to data protection, the *purpose* of the study, and *confidentiality* of the data shared. The change for *voluntarism* is expected and reflects what we already presented before: The video plus dialogue intervention increased the share of respondents providing responses with a high understanding

<sup>32</sup> The results are presented in Figure A.2 in the Appendix. For each aspect, we conduct a Pearson’s chi-square test of independence between assignment to the video plus dialogue treatment and the distribution across respondent types. We only analyze this for the video plus dialogue treatment relative to part of the control group that was asked the full module, as for the video only treatment and most of the control group, only two questions were asked at random, reducing the sample size for outcomes based on three questions to zero and for outcomes based on two questions to less than 5%.

according to the objective measure while, at the same time, the subjective measure related to the voluntary nature of participation decreased.

## IV.C Item Non-response Rates

In addition to declining to participate in the interview, respondents can refuse to answer any specific question during the interview. Therefore, we assess the effect of the different approaches to inform study participants on the item non-response rate and especially the non-response rate to questions that might be sensitive. Again, the effects could arguably go both ways. The approaches could increase or decrease trust, making respondents aware of the voluntary nature of their participation or how their data is handled.

Since the full treatment increased the share of respondents that are aware that they can refuse to answer specific questions, we might expect more of them to make use of this right. In Table 5 we observe that this does not seem to be the case. In the first visit, there were hardly any questions any respondent refused to answer; in fact, only 3% of respondents declined to reply to any of the questions (column (2)). For the roster and full interview during the second visit, the share of individuals refusing to answer any of the questions was higher at 6% (column (4)) and 10% (column (6), respectively). Overall, we find neither that the video alone nor the video plus dialogue has affected the share of respondents who refused to answer any question, nor the frequency with which they gave refusals. We find weak evidence of a reduction in the likelihood of non-response in the full interview during the second visit (column (5)). While the average non-response rate is 0.19% in the control group, the video plus dialogue decreased this rate by 0.07 percentage points. The effect is not only small but also only significant at the 10% significance level. However, when also accounting for responses being coded as “don’t know”, i.e., treating such responses as non-response, we do find an increase of 4 percentage points on any non-response during the household roster, significant at the 5% significant level, from being assigned to the video plus dialogue compared to the video alone. This effect is a 19.2% change relative to a control group mean of 26% (Table A.4). Finally, note that there is only a limited correlation between our measure of understanding and response behavior.<sup>33</sup> This limited correlation and the direction of the effects on response behavior indicate that the observed increase in understanding is unlikely the channel through which the intervention affected response behavior. Thus, overall, we find weak but mixed evidence for effects on item non-response behavior and no consistent picture emerges.

<sup>33</sup> Regressing correct understanding that they do not have to respond to all questions on the various measures for item non-response controlling for enumerator fixed effects only gives a statistically significant coefficient for the item non-response rate in the first visit but not for those for which we detect significant effect estimates.



Table 5: ITEM NON-RESPONSE RATES

	1st Visit		2nd Visit (HH Roster)		2nd Visit (Full Int.)	
	(1) Non-resp. rate	(2) Any non-resp.	(3) Non-resp. rate	(4) Any non-resp.	(5) Non-resp. rate	(6) Any non-resp.
Video ( $\beta_1$ )	-0.038 (0.045)	-0.003 (0.003)	0.004 (0.010)	0.001 (0.005)	0.009 (0.024)	0.010 (0.011)
+Dialogue ( $\beta_2$ )	0.034 (0.091)	0.002 (0.006)	-0.022 (0.017)	-0.008 (0.010)	-0.056* (0.033)	0.005 (0.022)
Diff. ( $\beta_2 - \beta_1$ )	0.07 (0.09)	0.00 (0.01)	-0.03 (0.02)	-0.01 (0.01)	-0.07* (0.03)	-0.01 (0.02)
<i>Model description:</i>						
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.39	0.39	0.16	0.16	0.20	0.20
Control group mean	0.48	0.03	0.11	0.06	0.19	0.10
Observations	7736	7736	7519	7519	2767	2767

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

*Notes.* The table displays results for non-response behavior. Columns (1) and (2) captures outcomes during the first visit, columns (3) and (4) captures outcomes in the household roster during the second, and columns (5) and (6) captures outcomes from the full interview during the second visit. Columns (1), (3), and (5) corresponds to the non-response rate in percent among sensitive questions (i.e. 0.1 means the respondent refused to answer 0.1 percent of sensitive questions) and columns (2), (4), and (6) to an indicator of any non-response to a sensitive question. A sensitive question is defined, as per pre-analysis plan, to be any question at least one respondent refused to answer. Note that, to ensure robustness towards outliers, the non-response rates are winsorized to 3 standard deviations from the mean. Table A.4 is similar but includes “*Don’t know*” in the definition of non-response.

## V CONCLUSION

Data collections for research purposes, needs assessments, and digital services are quickly expanding. At the same time, people’s data and privacy are increasingly at risk due to under-developed data protection legislation. This puts a heavy burden on data holders, with the requirement to protect themselves while having to understand complex terms and to engage with data collectors. This is especially problematic in LMICs, where the population is often ill-equipped to do so. The development of adequate data protection practices is thus critical for scientific integrity and validity of empirical work in economics and other social sciences.

Our study focuses on a specific aspect of data protection: The so-called informed consent to participate in primary data collections. We find that study participants in our study display little understanding about their core data protection rights, the purpose, and implications of the data collection. Given that individuals living in poverty are more likely to be exposed to needs assessments by governments and NGOs, it may be little surprising that they are not clear about the different purposes of data collections. One implication of our findings is that given the low awareness of their rights, research participants might also be less likely to exercise these rights. Thus, in addition to awareness of rights, informed consent would require knowledge of and access to adequate mechanisms to allow participants to request, correct, or delete information. Moreover, evidence from piloting our survey tool indicates that well-educated and experienced enumerators lack an adequate level of understanding related to the voluntariness of survey participation. Thus, the problem of inadequate understanding could be tackled from multiple angles, including a more in-depth training of enumerators on data protection, along with more information on the purpose, use, and processing of data.

Given the low understanding, how can study participants be better informed about the purpose, consequences, and the voluntary nature of their data provision? We experimentally

test whether the content of the consent form could be supported by a short video and whether an additional structured dialog would improve understanding. We show that augmenting the process of acquiring consent can improve respondent’s understanding without affecting the consent rate or response behavior. The improvements we detect are largely limited to the aspect of *voluntarism*. On the other hand, after being shown only the animated video (without further dialogue) left our research participants even less clear about their rights to complain and about the confidentiality of their data. Throughout, the limited impacts we identify from our alternative approaches indicate the need for further research on this topic. At the same time, it needs to be kept in mind that changes to the consent process can have implications in terms of selection and thus for the quality of data collections and the external validity of the results obtained. In our research we find no evidence for these valid concerns.

Altogether, our study informs an emerging debate on the ethical and practical challenges related to conducting field experiments. As [Asiedu et al. \(2021\)](#) argue, it would be important for researchers to integrate mechanisms to deal with ethical concerns throughout the project. Our study points to a starting point for this - the first encounter with the study participants and the legal and ethical obligation to ensure that they are aware of and are able to enforce their data protection rights. We believe that further investigations on improving the understanding of and decisions about the costs and benefits associated with data sharing are far-sighted, especially in the specific context of our study. Adhering to ethical norms is essential to ensure scientific integrity as well as to form stronger norms and trust in science ([Asiedu et al. 2021](#); [Gueron 2017](#)). Criticism of informed consent as a tool is closely linked to the debates on ethics of applying RCTs in field experiments, because groups of research participants frequently and systematically remain uninformed about the research they contribute to.<sup>34</sup> More specifically, testing how to better adapt survey research protocols to local contexts and how to make research more transparent, addresses a practical gap in field research. Eventually, meeting high ethical and legal standards continues to be among field’s core challenges. We hope to contribute to an ongoing debate which increasingly questions the standard approaches to conducting empirical research in economics ([Christensen and Miguel 2018](#); [Kaplan et al. 2020](#); [Ravallion 2020](#)). This debate has spurred a number of important recent adjustments in research practices, such as the usage of pre-analysis plans ([Ludwig et al. 2019](#); [Olken 2015](#)) and of platforms to predict research results, request for more piloting of field instruments and policies as well as increased reporting of critical background information via structured ethics appendices in research papers ([Asiedu et al. 2021](#)). These innovations and changes in alternative practices fall onto fertile soil given their fast and high uptake by researchers and journals. Our study aimed to help exploring the problems we face and to investigate practical solutions on how to ensure that data protection rights are adhered to in empirical research. A real solution is largely missing so far. In the meantime, data users will need to be aware of the limitations of consent, share responsibility,

<sup>34</sup> For instance, if they are in the control group, are part of a treatment cluster, or if the program is implemented by the government. With relevant contributions to this debate by [Evans \(2021\)](#); [Hoffmann \(2020\)](#); [MacKay and Chakrabarti \(2019\)](#); [Ravallion \(2020\)](#). Moreover, [Glennester \(2017\)](#), discusses the practical aspects of obtaining informed consent for randomized evaluations, yet focus on legal and ethical requirements. [Alderman \(2013\)](#) addresses practical concerns of how to collect consent in difficult situations, yet only by referring to anecdotal evidence.

and keep the data holder's interest in mind beyond obtaining the often uninformed consent.

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# APPENDIX

## A ADDITIONAL TABLES

Table A.2: RESPONSES DURING THE DIALOGUE INTERVENTION

	Mean (1)	Obs. (2)
<b>Knows data users are only researchers</b>	0.764	445
Usage: researchers	0.901	445
Usage: non-governmental organization	0.144	445
Usage: private company	0.052	445
Usage: government	0.045	445
<b>Knows purpose is only research</b>	0.762	445
Purpose: needs assessment (determining the eligibility to a program)	0.182	445
Purpose: research	0.935	445
Purpose: marketing	0.027	445
Purpose: criminal prosecution	0.002	445
<b>Knows participation is voluntary</b>	0.760	445
If consent: I will be interviewed	0.847	445
If consent: my responses will be send to the researchers	0.227	445
If consent: my information will be saved for a pot. new int.	0.169	445
If consent: I will receive money or an in-kind compensation for the int.	0.002	445
If consent: a non-governmental organization will help me, my family, or my comm.	0.009	445
If no consent: the interview stops immediately	0.843	445
If no consent: I will be declined services in the future	0.103	445
If no consent: I will lose existing benefits	0.049	445
If no consent: someone will punish me	0.022	445
<b>Knows data will not be shared with third parties</b>	0.919	445
Has access: enumerators	0.578	445
Has access: researchers	0.789	445
Has access: data collection company	0.292	445
Has access: other private companies	0.007	445
Has access: non-governmental organizations	0.022	445
Has access: governmental or public institutions	0.022	445

*Notes.* The table displays responses received during the implementation of the dialogue intervention, where questions were asked between the paragraphs of the informed consent. Considered are here only people assigned to this treatment arm. The survey instrument is displayed in Section F.III of the Online Appendix.

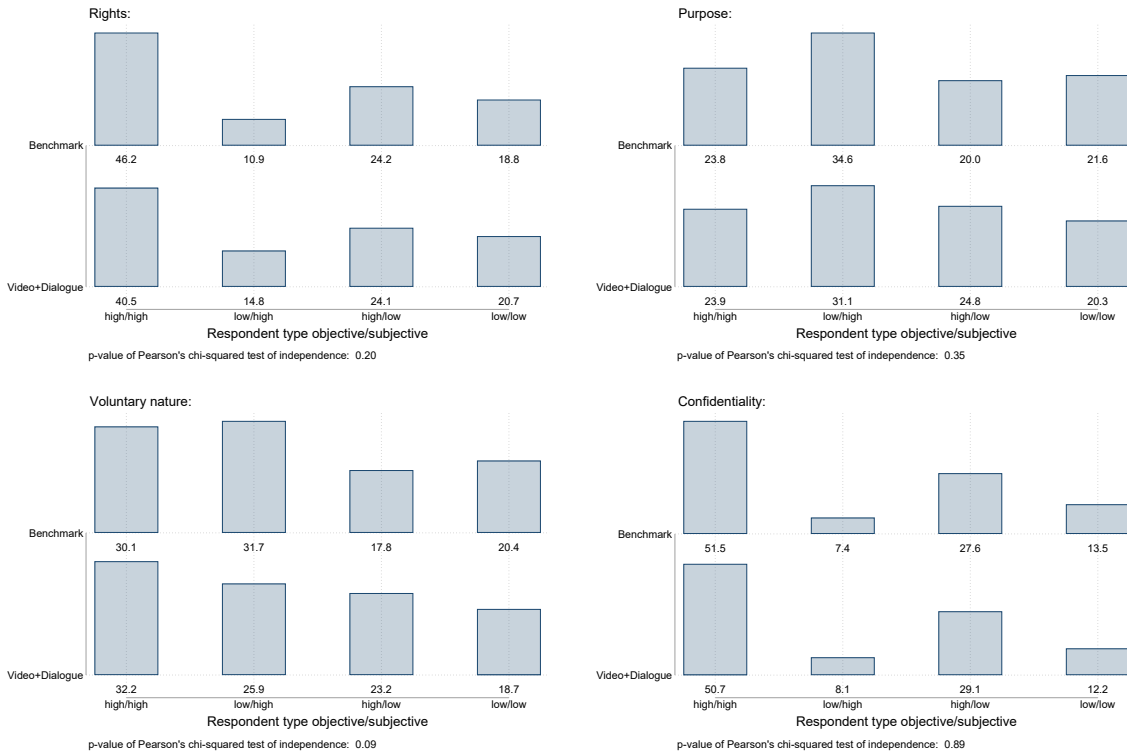
Table A.3: OBJECTIVE MEASURES OF UNDERSTANDING (FALSE CORRECT)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Female	0.001 (0.019)	-0.044 (0.041)	0.046 (0.044)	-0.026 (0.040)	0.039 (0.032)	0.048 (0.036)	0.036 (0.038)	-0.000 (0.039)
Video ( $\beta_1$ )			0.026 (0.054)	-0.109** (0.052)	0.013 (0.033)	-0.040 (0.036)	0.026 (0.036)	-0.152*** (0.056)
+Dialogue ( $\beta_2$ )	0.016 (0.018)	0.010 (0.039)	0.055 (0.069)	-0.067 (0.058)	0.032 (0.040)	0.038 (0.037)	0.110*** (0.039)	-0.044 (0.062)
Video x Female ( $\gamma_1$ )			-0.061 (0.064)	-0.003 (0.066)	-0.067 (0.042)	0.025 (0.047)	-0.046 (0.049)	0.134** (0.066)
+Dialogue x Female ( $\gamma_2$ )	-0.011 (0.023)	0.034 (0.051)	-0.078 (0.080)	0.053 (0.071)	-0.053 (0.054)	0.026 (0.054)	-0.011 (0.061)	0.035 (0.074)
Diff. ( $\beta_2-\beta_1$ )			0.03 (0.07)	0.04 (0.07)	0.02 (0.04)	0.08* (0.04)	0.08** (0.04)	0.11 (0.07)
Diff. Female ( $\gamma_2-\gamma_1$ )			-0.02 (0.09)	0.06 (0.08)	0.01 (0.06)	0.00 (0.06)	0.03 (0.07)	-0.10 (0.08)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.53	0.48	0.53	0.45	0.51	0.46	0.51
Control group mean	0.67	0.38	0.59	0.51	0.19	0.29	0.34	0.69
Observations	888	888	807	819	1216	1225	1206	809

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

Notes. The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

Figure A.2: OBJECTIVE VS. SUBJECTIVE UNDERSTANDING



Notes: Figure A.2 compares the alignment of objective and subjective levels of understanding between the video and dialogue and control group. Respondents are categorized into four types: (i) high objective and subjective understanding, (ii) low objective but high subjective understanding, (iii) high objective but low subjective understanding, or (iv) low objective and subjective understanding. High for subjective understanding refers to a self-report of understanding this aspect well or fully. High for objective understanding refers to assessing all statements related to this aspect correctly. The p-value of a Pearson’s chi-squared test is displayed for each category of understanding. The test refers to the hypothesis that the distribution of types is the same between the benchmark and the video plus dialogue group.



Table A.4: ITEM NON-RESPONSE RATES INCLUDING “Don’t know”

	1st Visit		2nd Visit (HH Roster)		2nd Visit (Full Int.)	
	(1) Non-resp. rate	(2) Any non-resp.	(3) Non-resp. rate	(4) Any non-resp.	(5) Non-resp. rate	(6) Any non-resp.
Video ( $\beta_1$ )	-0.016 (0.038)	-0.002 (0.004)	-0.036 (0.025)	-0.018* (0.009)	-0.069 (0.066)	-0.010 (0.018)
+Dialogue ( $\beta_2$ )	-0.000 (0.074)	0.000 (0.007)	0.069 (0.057)	0.022 (0.020)	0.062 (0.145)	0.018 (0.036)
Diff. ( $\beta_2-\beta_1$ )	0.02 (0.07)	0.00 (0.01)	0.10* (0.06)	0.04** (0.02)	0.13 (0.15)	0.03 (0.04)
<i>Model description:</i>						
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.32	0.31	0.21	0.22	0.20	0.21
Control group mean	0.42	0.04	0.59	0.26	1.03	0.38
Observations	7736	7736	7519	7519	2767	2767

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

*Notes.* The table displays results for non-response behavior. Columns (1) and (2) correspond to the first visit, columns (3) and (4) to the roster during the second, and columns (5) and (6) to the full interview during the second visit. Columns (1), (3), and (5) corresponds to the non-response rate among sensitive questions and columns (2), (4), and (6) to an indicator of any non-response to a sensitive question. A sensitive question is defined, as per pre-analysis plan, to be any question at least one respondent refused to answer or replied with “Don’t know”. Note that, to ensure robustness towards outliers, the non-response rates are winsorized to 3 standard deviations from the mean. Table 5 is similar but excludes “Don’t know” in the definition of non-response.

## B QUESTIONNAIRE MODULES

### B.I Objective Measure of Understanding of Consent

In the following you can find the questions used to assess the understanding of the respondent. Correct answers are emphasized in bold font.

*In the following, you will be presented X of statements about this interview.*

*Please indicate whether the statements are true or false.*

A 1: I can call/tell the data collection team/researchers to have my information deleted.

- **True**
- False
- Don't know

A 2: I am interviewed to assess my needs and determine whether I am eligible for a beneficial program.

- True
- **False**
- Don't know

A 3: I have to participate in the study

- True
- **False**
- Don't know

A 4: When I give consent, I have to respond to all of the questions.

- True
- **False**
- Don't know

A 5: Only the researchers and data collection team will know the responses I gave.

- **True**
- False
- Don't know

A 6: I can complain about the way the data collection team and researchers handled my data.

- **True**
- False
- Don't know

Questions A1 and A6 relate to the rights of the respondent, question A2 relates to purpose of the study and benefits from participating, questions A3 and A4 relate to the voluntary nature of the respondent, and questions A5 relates to confidentiality.

## Alternative version

Since we detected a tendency of respondents to assess statements as *true*, regardless of whether they were, we introduced an alternative version of each statement for which the opposite assessment is correct in the second data collection. This allows us to take this default response behavior into account to improve our analysis. For more elaboration on this issue see Section G in the Online Appendix.

B 1: Once I provided any information, I cannot tell the researchers or data collection team to delete the information.

- True
- **False**
- Don't know

B 2: The answers I provide in this interview do NOT affect whether I am eligible for a beneficial program.

- **True**
- False
- Don't know

B 3: The participation in the study is fully voluntarily.

- **True**
- False
- Don't know

B 4: Even after I gave consent, I can choose not to respond to specific questions.

- **True**
- False
- Don't know

B 5: My responses, together with my name and other identifying information, will be shared with third parties.

- True
- **False**
- Don't know

B 6: I CANNOT complain about the way the data collection team and researchers handled my data.

- True
- **False**
- Don't know

## B.II Subjective Measure of Understanding of Consent

We only focus on three aspects which seem to be the most relevant in this context.  
*In the following, you will be presented three aspects related to this survey.*

*Please indicate how well you understood each of these aspects. There are no right or wrong answers.*

B 1: The purpose of this study.

- I didn't understand this at all
- I didn't understand much of it
- I understood this to some extent
- I understood this well
- I understood this fully

B 2: My participation in the interview being fully voluntary.

- I didn't understand this at all
- I didn't understand much of it
- I understood this to some extent
- I understood this well
- I understood this fully

B 3: How the confidentiality of my information is ensured.

- I didn't understand this at all
- I didn't understand much of it
- I understood this to some extent
- I understood this well
- I understood this fully

B 4: My rights with respect to data protection and storage.

- I didn't understand this at all
- I didn't understand much of it
- I understood this to some extent
- I understood this well
- I understood this fully

## C PILOTING THE SURVEY TOOLS

Prior to the data collection, we tested our survey instrument during an enumerator training for a different data collection in the same geographical area. The enumerators were more educated compared to our later pool of respondents and experienced with surveys. At the end of the training, enumerators participated in a test on the content of the training and the hiring decision depended, among other things, on their performance in the test. The test included our survey tool<sup>35</sup> and the enumerators were arguably motivated to get the questions for the objective measure right. For the subjective measure of understanding, on the other hand, the potential enumerators could have been concerned about admitting that they did not understand certain aspects well.<sup>36</sup> The results from the pilot study are displayed in Table A.5. From the pilot study we learned that the enumerators had problems with the questions related to voluntarism. Only 6% of enumerators correctly assessed both that the respondents (1) are free not to participate in the survey and (2) can decline to answer specific questions (20% and 13% correctly assessed the respective statement). This is especially concerning since enumerators need to ensure or facilitate these aspects during a survey. Only every third enumerator correctly understands the purpose of the data collection, despite having participated in extensive training before. This pilot was the first indicator that even among enumerators, who are on average more educated and experienced with surveys than respondents, a general problem with understanding the purpose, rights, and obligations during a data collection exists. When directly asked about their understanding, the enumerators reported that they understood the different aspects well. This self-assessment stands in little to no relation to the whether the questions were actually correctly answered.

Table A.5: UNDERSTANDING OF THE INFORMED CONSENT IN AN ENUMERATOR PILOT STUDY

	Overall (1)	Rights (2)	Purpose (3)	Voluntariness (4)	Confidentiality (5)
<i>Objective understanding</i>					
Share informed	2%	36% and 72%	29.6%	13% and 20%	99%
<i>Subjective understanding</i>					
Share understanding	73%	87%	94%	85%	93%
<i>Objective and subjective</i>					
High and high	1%	30%	29%	7%	92%
Low and high	72%	59%	65%	78%	1%
High and low	0%	4%	1%	0%	7%
Low and low	27%	7%	5%	15%	0%

*Notes.* The table displays a summary of responses to our survey instrument of 115 potential enumerators participating in a training for a different survey but in the same region. Columns (2)-(5) each refers to one of four aspects of informed consent we inquired about, and column (1) to a summary measure across aspects. The objective understanding of the aspects *rights with respect to data protection* and *voluntary nature of participation* (columns (2) and (4)) are measured based on two items the shares of which are given in the respective columns. For details on the questions refer to Appendix B.

<sup>35</sup> Note that during the enumerator training only the original version was piloted.

<sup>36</sup> After the test, we asked the potential enumerators for consent to use their test data in a research study. A total of 115 potential enumerators gave their consent.

## D RANDOMIZATION AND IMPLEMENTATION FIDELITY

The survey was conducted in 2019/2020, mostly in the COVID-19 pandemic year 2020. The data collection was thus subject to social distancing rules which could have made it inconvenient to properly show the video to respondents. While the various approaches of obtaining consent were trained, and their importance was stressed during the enumerator training, their accurate implementation could not be systematically and completely monitored. In particular, enumerators were, theoretically and practically, able to manipulate the randomization of treatment assignment. For example, if they wanted to avoid the longer dialogue, they could check the treatment assignment and delete the corresponding survey form and instead start a new one in the hope of a different treatment assignment. There are different reasons why this would not have happened at a large scale. First, the quality of the data collection was monitored in real time, with enumerator dismissal in case of bad quality output. Second, while this type of manipulation was possible, it was rather cumbersome as all the information about the location of the interview needed to be re-entered, and it is doubtful whether this would have eventually saved the enumerators any time. Finally, we analyze the potential manipulation of the randomization empirically. To check whether enumerators complied with the random assignment we test whether the observed share of treatment assignment is significantly different from its assigned probability. We do this overall and for each enumerator separately (Tables A.4 and A.5 in the Online Appendix). Significant deviations might hint that the randomization was not adhered to. Note, however, that the number of observations per enumerator is low in some cases such that only large deviations can be expected to be detected. Overall we find that only 5.7% instead of 6% forms included the video plus dialogue treatment which is neither an absolute nor statistically significant difference. A Kolmogorov-Smirnov test of the equality of the observed random number draw, underlying the treatment assignment, with its theoretical uniform distribution rejects this hypothesis at any meaningful significance level. We do not find any strong indication of manipulation of the random assignment.

We further looked at the total interview duration as measured by the SurveyCTO application. This duration includes both interview and the formal consent process. When compared to the control group, for which the average duration was about 12:20min, the video only treatment took an additional 1:40min and the video plus dialogue treatment an additional 3:40min.<sup>37</sup> Note that the video duration is 2:40min such that we would conclude that either the video was not always fully shown or other parts of the consent or interview process were cut short. This is not necessarily problematic, e.g., the video might resolve some questions otherwise posed or make the respondent more collaborative, however we take it as an indication of not full compliance with the implementation protocol.

<sup>37</sup> For more details see Figure A.3 and Tables A.6 and A.7 in the Online Appendix.

## E STRUCTURED ETHICS APPENDIX

**Policy Equipoise** There is, in our opinion, no reasonable expectation that one arm of the study produces more benefits to participants than any other arm. Benefits in this case would solely pertain to having more information and a better understanding of the consent they are asked about. The existence of these benefits were ex-ante unclear. Even if beneficial, they would need to be put in perspective with the additional costs of applying the different approaches. Further, the implementation of our experiment required additional resources (in terms of time and budget) and thus only 6% received the full-treatment. Finally, none of the treatment arms was superior to the other w.r.t. participants' material benefits.

**Role of researchers with respect to implementation** The research team (the authors of this study) had direct decision making power over whether and how to implement the activities tested in this study. IRB approval was obtained on May 25th, 2020, from the University of Mannheim Ethics Committee, Mannheim, Germany, and on November 5th, 2020, from Research and Development Solutions, Islamabad, Pakistan. Moreover, ethical approval for the pilot was obtained on July 28th, 2020, from Research and Development Solutions, Islamabad, Pakistan. The research team did not directly intervene with the participants, it did however give instructions to endorse the interventions. No formal explanation of the experiment was provided and no consent was collected prior to the experiment. It would otherwise not have been possible to conduct the study after obtaining consent because the experiment varies the process prior to obtaining consent (i.e., how to best provide information is an explicit research interest in this study). Informed consent was acquired for the collection and use of survey data used in this study.

**Potential harms to participants or nonparticipants from the interventions or policies** We foresee no potential harm to participants or non-participants from intervention under study. The average additional time cost of the various approaches was ex-ante estimated to be less than 10 minutes and ex-post estimated as less than 5 minutes. Participants' access to future services or policies did not change because of participation in the study.

**Potential harms to research participants or research staff from data collection (e.g., surveying, privacy, data management) or research protocols (e.g., random assignment)** Our goal was to ensure that the data collection and/or research procedures adherent to privacy, confidentiality, risk-management, and informed consent protocols with regard to human subjects. We want to stress that our experimentally varied approaches which were in addition to (and not instead of) the business-as-usual approach. Potential harms to research staff from conducting the data collection that are beyond "normal" risks were related to the COVID-19 pandemic and the fact that the data collection was face-to-face. However, necessary security protocols were implemented and the adherence of the implementation by the enumerators controlled. Moreover, the data collection did not take place specifically for this study. Instead, only few additional questions were added to the survey questionnaire of another study.

**Financial and reputational conflicts of interest** The researchers had no financial conflicts of interest with regard to the results of the research. The researchers have also no potential reputational conflicts of interest.

**Intellectual freedom** There were no contractual limitations on the ability of the researchers to report the results of the study.

**Feedback to participants or communities** We believe that the findings of this study are of no direct interest to the research participants or their communities and there are no plans to share the findings with the study participants. It however became clear from our study that the study participants are insufficiently informed and that there are still misconceptions. We will continue to pay attention on the process of adequately informing study participants and stress the importance during enumerator trainings in future data collections. This can include data collections with these study participants or their communities. However, our study also showed that we do not have a good solution for properly informing participants yet.

**Foreseeable misuse of research results** We anticipate no foreseeable and plausible risk that the results of the research will be misused and/or deliberately misinterpreted by interested parties to the detriment of other interested parties.

**Other Ethics Issues to Discuss** No other issues to discuss. The authors are available for further clarifications.



# ONLINE APPENDIX

## F INTERVENTIONS IN DETAIL

### F.I Consent Form

[*This is an example, wording depends on whether the potential respondent reached the age of maturity.*]

*TO ENUMERATOR: Please let the parent (and child together) read the text on the next screen. If they are not able to read, please read the text to the parent (and child together). If they have questions, answer them to your best knowledge or direct them to your supervisor.*

Hello,

I am [name] conducting a survey for [information of who the principal investigators are]. We conduct a research study about [topic of survey or research]. We are interested in your opinions and general information about you, your family and your household. Your household was randomly selected for an interview. First we would like to ask you about your household and then interview your child about his/her life. The interview with you will take about 40 minutes to complete, the interview with your child will take about 60 minutes to complete.

[*Goal of the study*]

We would be glad if you would support our study with your participation in the interview. We do not expect any negative consequences for you or your family from this study.

[*Data protection*]

The study is for research purposes only. During the interviews personal data about you, your child and your family is collected and stored for several years until the completion of this study. All responses will be treated strictly confidential by the researchers. The data will only be used for this study. For the analysis of the survey all identifying information (such as names and identification numbers) will be replaced with numbers. We keep this information only in case we are interested in following-up with an interview in the future. Any results from this survey will only be reported in aggregate terms and no personal data will be revealed in any of our reports. Third parties and public institutions will not receive access to any personal information. Your name and your family member's names will not be passed on to anyone and will not be made public. All of your data will be deleted upon request.

[*Rights of the respondent*]

Your and your child's participation in this research study is fully voluntary. If you choose to continue with the interview, you and your child can choose not to respond to any or all of the questions we ask. You can withdraw your consent for participation in the study at any time, without the need to mention any reasons and without any negative consequences for you or your family. In case you withdraw your consent, all personal data which was collected will be erased. Let me assure you again that all the information provided by you will be kept strictly confidential.

If you want to withdraw your consent, get further information about the survey, or are interested in the results of the study, please contact the person listed on the business card.

Do you have any questions?

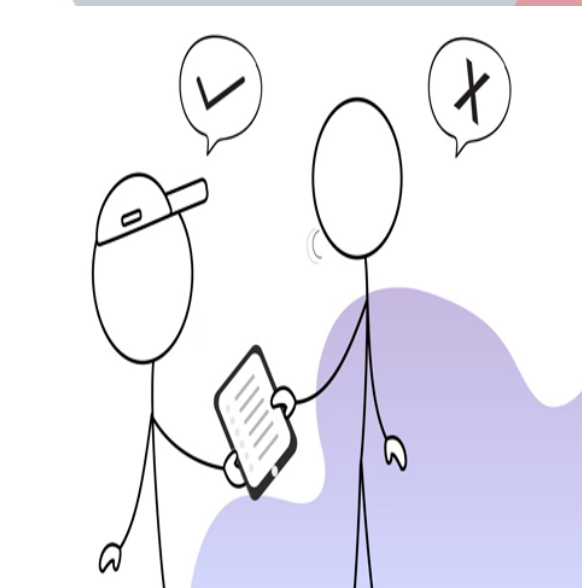
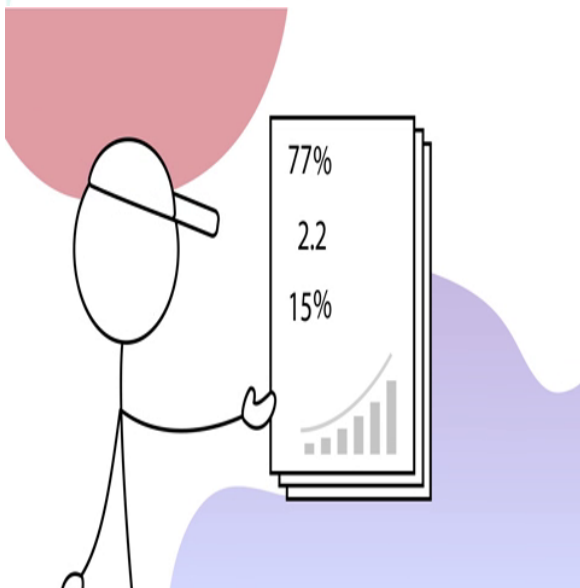
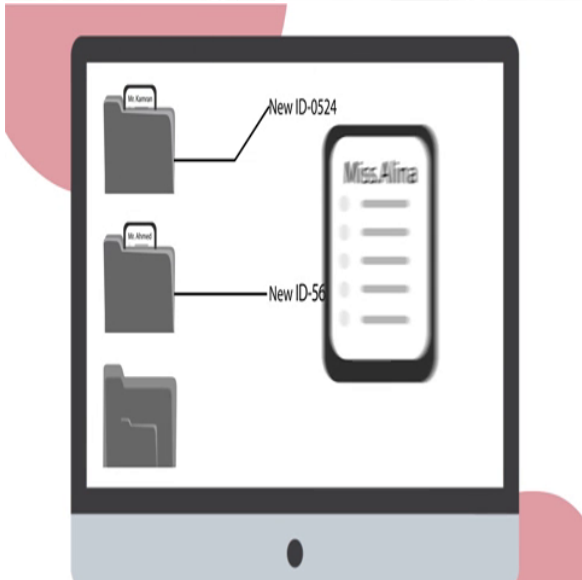
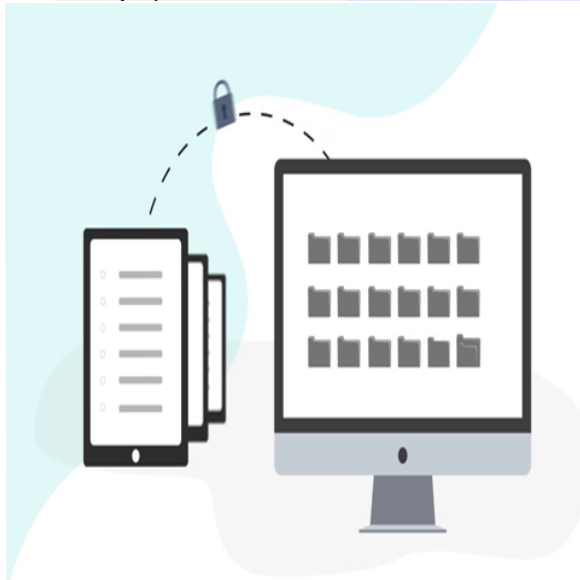
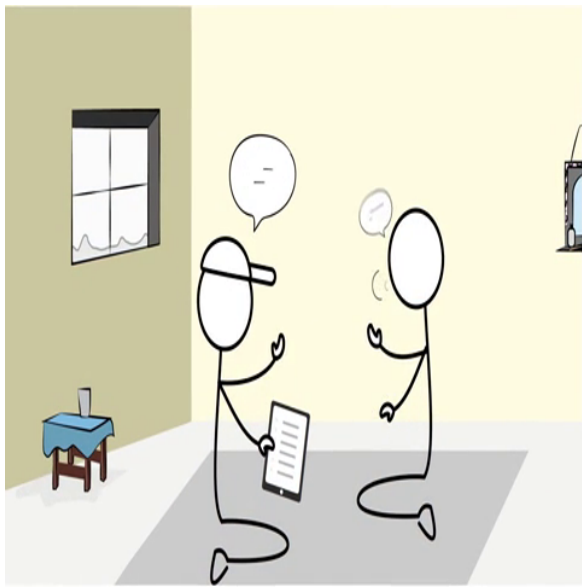
## F.II Animated Video

*TO ENUMERATOR: Please show the respondent the video on the next screen.  
Tell them they can pause or re-watch the video at any time.*

### Script

Hello! We are conducting a survey for *[information of who the principal investigators are]*. We conduct a research study about *[topic of survey or research]*. We are interested in your opinions and general information about you, your family and your household. We would like to ask you about your household and your life. The interview will take about 60 minutes to complete. We would be glad if you could support our study with your participation in the interview. We do not expect any negative consequences for you or your family from this study. During the interview personal data about you and your family is collected and stored for several years until the completion of the study All responses will be treated strictly confidential by the researchers. This means after the interview is done, the information is send to the data collection company. At the data collection company all information from all the interviews is collected. Then all identifying information (such as names and identification numbers) will be replaced with new numbers. We keep the personal information only in case we are interested in following up with an interview in future. It is stored for several years until the completion of the study. The rest of the information is used for research . The information from all the interviews is then analyzed and reported in aggregated terms, such that no personal data will be revealed in any of the reports. The aggregated information is then shared but third parties and public institutions will not receive access to any personal information. Your name will not be passed onto anyone and will not be made public. Your participation in this research study is fully voluntarily. If you choose to continue with the interview, you can choose not to respond to any or all the questions we ask. You can withdraw your consent for participation at this study anytime, without the need to mention any reasons and without any negative consequences for you and your family. If you want to withdraw your consent, get further information about the survey, or are interested in the result of the studies please tell the enumerator or contact the person listed on the business card. In case you withdraw your consent, all personal data which was collected will be erased.

# Examples of Screenshots



### F.III Scripted Interactive Consent Form (Dialogue)

[This is an example, wording depends on whether the potential respondent reached the age of maturity.]

*TO ENUMERATOR: On the following screens, there will be either text or questions displayed. If there is text displayed, please read it to the respondent.*

*If a question is displayed, please ask the respondent for an answer.*

*DO NOT READ OUT THE CHOICES, but select all choices which reflect the respondent's answer. There are no right or wrong answers.*

Hello,

I am [name] conducting a survey for [information of who the principal investigators are]. We conduct a research study about [topic of survey or research]. We are interested in your opinions and general information about you, your family and your household. Your household was randomly selected for an interview. We would like to ask you about your household and your life. The interview will take about 100 minutes to complete.

Who will be using the information you provide?

[multiple responses possible]

- Government
- NGO
- **Researchers**
- Private company
- Don't know
- Other, please specify

**In case of incorrect response<sup>38</sup>:** We are conducting the survey for researchers from the University of Mannheim in Germany.

We would be glad if you would support our study with your participation in the interview. We do not expect any negative consequences for you or your family from this study.

The study is for research purposes only. During the interview personal data about you and your family is collected and stored for several years until the completion of this study.

What will the information you provide be used for?

[multiple responses possible]

- Needs assessment (determining the eligibility to a program)
- **Research**
- Marketing
- Criminal prosecution
- Don't know
- Other, please specify

**In case of incorrect response:** The study is for research purposes only.

All responses will be treated strictly confidential by the researchers. The data will only be used for this study. For the analysis of the survey all identifying information (such as names

<sup>38</sup> Correct responses are **emphasized** in this illustration

and identification numbers) will be replaced with numbers. We keep this information only in case we are interested in following-up with an interview in the future. Any results from this survey will only be reported in aggregate terms and no personal data will be revealed in any of our reports. Third parties and public institutions will not receive access to any personal information. Your name and your family member's names will not be passed on to anyone and will not be made public. All of your data will be deleted upon request.

Who will have access to your personal information?

*[multiple responses possible]*

- **Enumerators**
- Government/Public institutions
- **Researchers**
- NGOs
- **Data collection company**
- Other private companies
- Don't know
- Other, please specify

**In case of incorrect response:** Only the researchers and the data collection company have access to your personal information. Third parties and public institutions will not receive access to any personal information. Your name and your family member's names will not be passed on to anyone and will not be made public.

Your participation in this research study is fully voluntary. If you choose to continue with the interview, you can choose not to respond to any or all of the questions we ask. You can withdraw your consent for participation in the study at any time, without the need to mention any reasons and without any negative consequences for you or your family. In case you withdraw your consent, all personal data which was collected will be erased. Let me assure you again that all the information provided by you will be kept strictly confidential.

If you want to withdraw your consent, get further information about the survey, or are interested in the results of the study, please contact the person listed on the business card.

What happens if you give consent?

*[multiple responses possible]*

- **I will be interviewed**
- I will receive money and / or compensation for the interview
- **My (and my child's) responses will be send to the researchers**
- A NGO will help me, my family, or my community
- **My (and my child's) information will be saved for a potential new interview**
- Don't know
- Other, please specify

What happens if you do not give consent?

*[multiple responses possible]*

- I will be declined services in the future
- I will lose existing benefits
- **The interview stops immediately**
- Someone will punish me

- Don't know
- Other, please specify

**In case of incorrect response:** Your participation in this research study is fully voluntary. If you choose to continue with the interview, you can choose not to respond to any or all of the questions we ask.

In case you withdraw your consent, all personal data which was collected will be erased.

*TO ENUMERATOR: On the next screen, the whole text is displayed in case the respondent wants to read it for themselves. Please ask them if they have any further questions.*

## G RATIONALE FOR FOCUSING ON STATEMENTS THAT ARE *False* IN THE ANALYSIS

During the first data collection in Sindh we found a strong relationship between a statement being assessed correctly and whether it is true or false. Therefore, we constructed an alternative version for each statement for the second data collection (Appendix B.1) which should mirror the original statement but with the opposite truth value.<sup>39</sup>

In Punjab, each respondent was randomly asked either of the versions thus the observed differences between 30 and 55% in the share of correct assessments between the versions in Punjab can be attributed to the phrasing of the statement (compare Table A.2). Further, we see that 28.8% of those asked the full module assess each of the six statements as true, whereas only 1.3% assess all as false. For us, this indicates that respondents have a default of assessing statements as true in case they do not want or cannot assess a statement. This might also be strongly influenced by the enumerator posing the question and entering the response into the CAPI software. Assuming that an assessment of false reflects their understanding leaves us with four types of respondents: those who (1) know the correct answer and reply accordingly, (2) know and use the default, (3) do not know and reply accordingly, and (4) do not know and use default.

For the presented descriptive statistics in Section II.B, the above assumption implies that the false version presents a lower and the true version an upper bound for understanding. Since we believe that respondents are more likely to use the default if they do not know compared to when they do know the correct answer, we focused on the false version in our discussion. This preference depends primarily on the believe that type (4) is (significantly) more common than type (2). The choice of focusing on the false version for the treatment effect estimation is however evident based on the following elaboration:

Focusing on the version for which false is the correct assessment gives us the difference in the share of type (1) respondents as a result of the interventions. Thus an effect might not necessarily reflect an increase in understanding, but could just indicate an increased willingness to provide a correct answer. This is generally the best we can hope for when assessing understanding based on a survey tool.<sup>40</sup>

Focusing on the version for which true is correct gives us the difference in the share of all-but-type-(3) respondents. So the treatment effect estimates would primarily pick-up changes in the share of those who not only do not know, but think they know and assess the statement accordingly incorrectly. Respondents who do not know the right response and use the default in absence of the intervention yet who know the right response when treated are not reflected in the treatment effect estimates. Neither are respondents reflected who change from “knowing” (type (1) or (2)) to “not knowing and using the default” (type (4)) as result of the intervention. Therefore, if most of those who do not know tend to stick with the default, we would have a difficult time to detect changes in understanding due to the intervention even if there were changes. This explains the lack of both negative and positive findings when focusing on the true version of the statement (Table A.3).

<sup>39</sup> In some cases this is done by negating the statement by inserting a “not” but sometimes it is not a direct negation such as “I have to participate in the study” and “The participation in the study is fully voluntary”.

<sup>40</sup> It is not possible to differentiate between an increase in understanding or an increased willingness to indicate existent understanding. Financial or other incentives might arguably increase such a willingness without affecting understanding, but in a typical survey no such incentives exist.



Table A.2: OBJECTIVE UNDERSTANDING BY PHRASING OF QUESTION

	Rights		Purpose	Voluntariness		Confidentiality
	(1) Delete info.	(2) Can complain	(3)	(4) Whole interview	(5) Each question	(6)
True is correct	0.911 (0.011)	0.888 (0.011)	0.786 (0.014)	0.979 (0.013)	0.937 (0.014)	0.892 (0.011)
False is correct	0.571 (0.014)	0.491 (0.014)	0.193 (0.012)	0.313 (0.011)	0.361 (0.012)	0.663 (0.014)
<i>Model description:</i>						
Adj. $R^2$	0.81	0.78	0.63	0.76	0.73	0.82
Observations	2006	2034	2061	2050	2011	2019

	Rights		Purpose	Voluntariness		Confidentiality
	(1) Delete info.	(2) Can complain	(3)	(4) Whole interview	(5) Each question	(6)
Sindh: True is correct	0.909 (0.012)	0.901 (0.013)	0.000 (.)	0.000 (.)	0.000 (.)	0.885 (0.012)
Sindh: False is correct	0.000 (.)	0.000 (.)	0.186 (0.013)	0.280 (0.012)	0.364 (0.013)	0.000 (.)
Punjab: True is correct	0.923 (0.028)	0.826 (0.027)	0.786 (0.014)	0.979 (0.013)	0.937 (0.014)	0.929 (0.029)
Punjab: False is correct	0.571 (0.014)	0.491 (0.014)	0.230 (0.028)	0.463 (0.025)	0.346 (0.030)	0.663 (0.013)
<i>Model description:</i>						
Adj. $R^2$	0.81	0.78	0.63	0.77	0.73	0.82
Observations	2006	2034	2061	2050	2011	2019

*Notes.* The table displays the share of correct assessments for each of the six items according to the phrasing of the question, i.e. whether it is correct that the statement is true or false. This is done separately for both provinces. Note that during the data collection in Sindh only one version per item was asked, so the respective mean for cells displaying 0.000 cannot be computed.

Table A.3: OBJECTIVE MEASURES OF UNDERSTANDING (TRUE CORRECT)

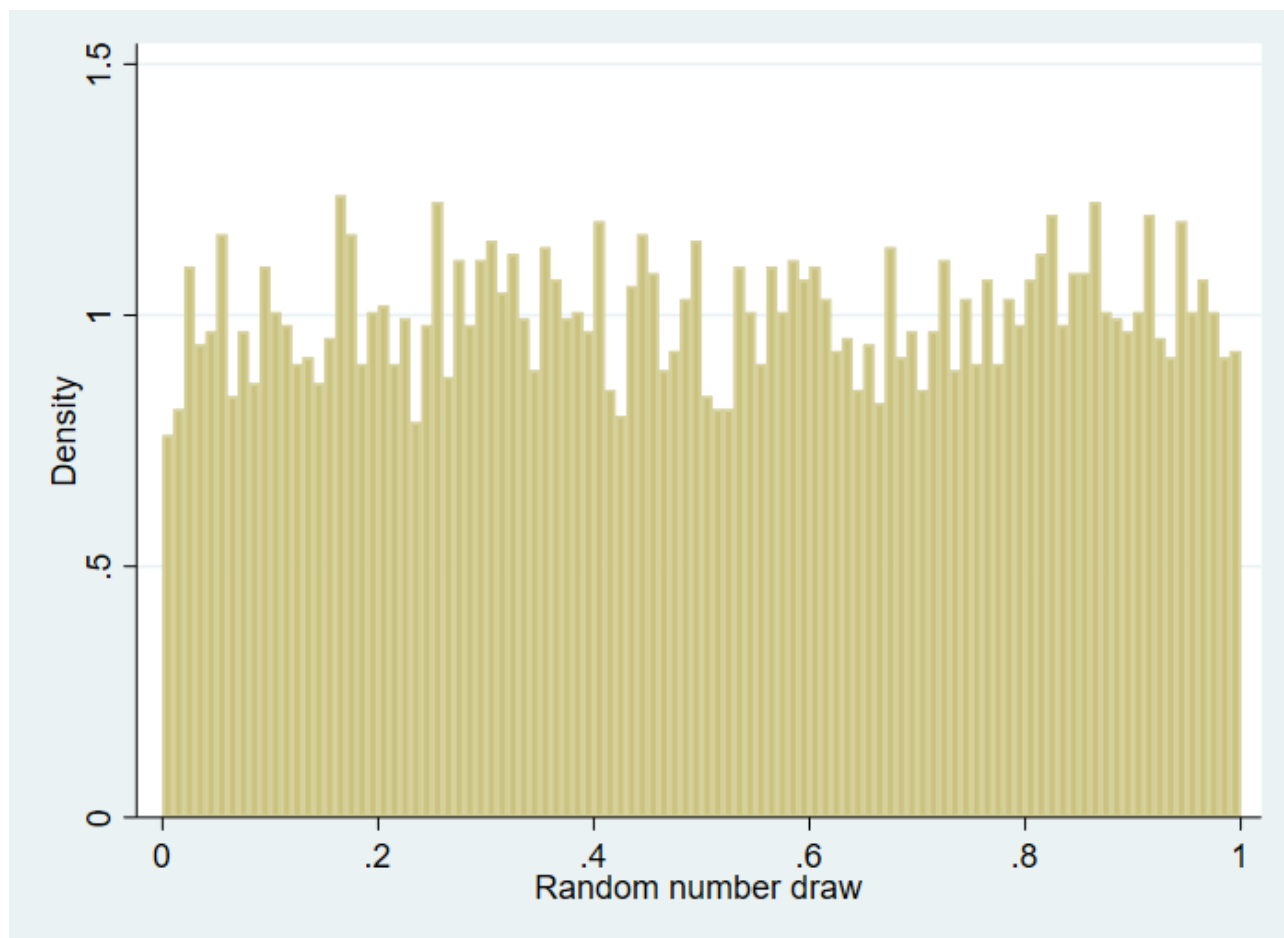
	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Video ( $\beta_1$ )			0.001 (0.017)	-0.020 (0.018)	0.011 (0.026)	-0.019 (0.013)	-0.001 (0.020)	0.015 (0.017)
+Dialogue ( $\beta_2$ )	0.011 (0.012)	0.033 (0.026)	-0.001 (0.020)	-0.031 (0.022)	0.047 (0.031)	0.001 (0.011)	-0.002 (0.022)	0.015 (0.022)
Diff. ( $\beta_2-\beta_1$ )			-0.00 (0.02)	-0.01 (0.02)	0.04 (0.03)	0.02 (0.01)	-0.00 (0.02)	-0.00 (0.02)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.35	0.36	0.42	0.17	0.25	0.36
Control group mean	0.67	0.38	0.90	0.90	0.77	0.99	0.94	0.88
Observations	889	889	1199	1214	845	825	804	1209

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)–(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

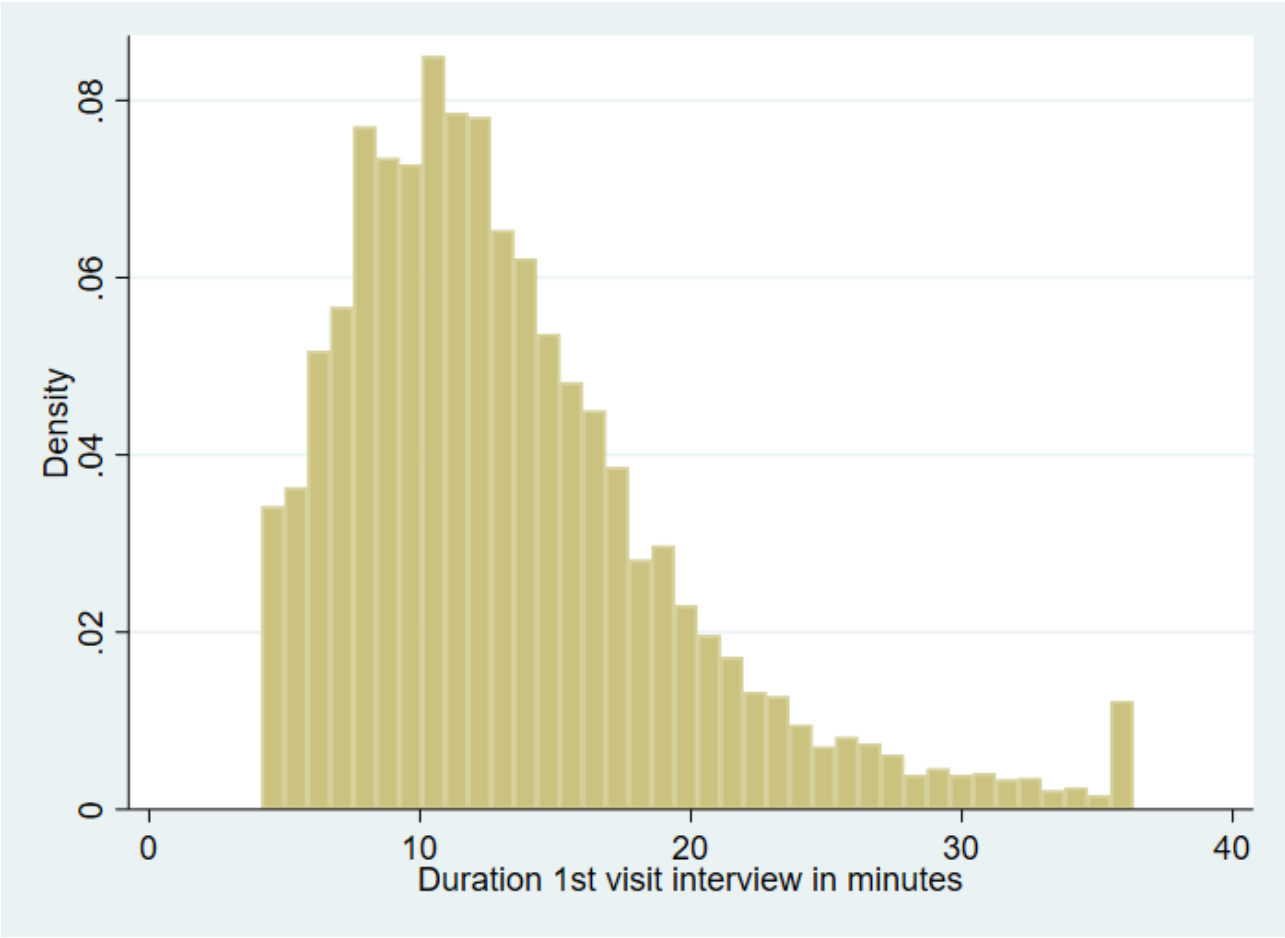
## H RANDOMIZATION AND IMPLEMENTATION FIDELITY

Figure A.2: DISTRIBUTION OF THE RANDOM NUMBER DRAW OF THE SUBMITTED FORMS



*Notes:* Figure A.2 displays the histogram of random number draws which determined the treatment assignment of submitted interview forms. Forms with a random number draw of (i) less than 0.06 were assigned to the video plus dialogue treatment and the full survey tool, (ii) between 0.06 and 0.12 to the control group but full survey tool, (iii) between 0.12 and 0.56 were assigned to the video only treatment and one question of each the subjective and objective measure, and (iv) the remainder to the control group with one question each of the subjective and objective measure.

Figure A.3: DISTRIBUTION OF THE INTERVIEW DURATION DURING THE 1ST VISIT



Notes: Figure A.3 displays the histogram of interview duration during the 1st visit during which the experiment took place. Duration in minutes winsorized at the 99th quantile.

Table A.4: TEST OF COMPLIANCE WITH RANDOM ASSIGNMENT PUNJAB

	Share of Video only	Share of Video+Dialogue	Share of Video only	Share of Video+Dialogue
Overall	0.44	0.057	0.44	0.057
p-val: actual=assigned share	0.87	0.33	0.87	0.33
Observations	7752	7752	7752	7752
Enumerator ID: 2	0.43	0.053	0.43	0.053
p-val: actual=assigned share	0.80	0.59	0.80	0.59
Observations	337	337	337	337
Enumerator ID: 3	0.47	0.038	0.47	0.038
p-val: actual=assigned share	0.33	0.05	0.33	0.05
Observations	288	288	288	288
Enumerator ID: 4	0.40	0.059	0.40	0.059
p-val: actual=assigned share	0.31	0.95	0.31	0.95
Observations	136	136	136	136
Enumerator ID: 5	0.48	0.049	0.48	0.049
p-val: actual=assigned share	0.29	0.51	0.29	0.51
Observations	164	164	164	164
Enumerator ID: 6	0.36	0.045	0.36	0.045
p-val: actual=assigned share	0.47	0.75	0.47	0.75
Observations	22	22	22	22
Enumerator ID: 10	0.53	0.020	0.53	0.020
p-val: actual=assigned share	0.21	0.04	0.21	0.04
Observations	51	51	51	51
Enumerator ID: 11	0.46	0.070	0.46	0.070
p-val: actual=assigned share	0.69	0.67	0.69	0.67
Observations	129	129	129	129
Enumerator ID: 12	0.38	0.058	0.38	0.058
p-val: actual=assigned share	0.16	0.90	0.16	0.90
Observations	156	156	156	156
Enumerator ID: 13	0.33	0.17	0.33	0.17
p-val: actual=assigned share	0.63	0.55	0.63	0.55
Observations	6	6	6	6
Enumerator ID: 14	0.46	0.065	0.46	0.065
p-val: actual=assigned share	0.58	0.81	0.58	0.81
Observations	138	138	138	138
Enumerator ID: 15	0.51	0.077	0.51	0.077
p-val: actual=assigned share	0.20	0.58	0.20	0.58
Observations	78	78	78	78
Enumerator ID: 18	0.50	0	0.50	0
p-val: actual=assigned share	0.85	.	0.85	.
Observations	4	4	4	4
Enumerator ID: 21	0.45	0.034	0.45	0.034
p-val: actual=assigned share	0.86	0.14	0.86	0.14
Observations	116	116	116	116
Enumerator ID: 22	0.67	0	0.67	0
p-val: actual=assigned share	0.33	.	0.33	.
Observations	6	6	6	6
Enumerator ID: 24	0.48	0.042	0.48	0.042
p-val: actual=assigned share	0.19	0.16	0.19	0.16
Observations	260	260	260	260
Enumerator ID: 25	0.40	0.067	0.40	0.067
p-val: actual=assigned share	0.42	0.75	0.42	0.75
Observations	119	119	119	119
Enumerator ID: 27	0.38	0.034	0.38	0.034
p-val: actual=assigned share	0.25	0.20	0.25	0.20
Observations	87	87	87	87
Enumerator ID: 28	0.60	0	0.60	0
p-val: actual=assigned share	0.55	.	0.55	.
Observations	5	5	5	5
Overall	0.44	0.057	0.44	0.057
p-val: actual=assigned share	0.87	0.33	0.87	0.33
Observations	7752	7752	7752	7752
Enumerator ID: 101	0.45	0	0.45	0
p-val: actual=assigned share	0.84	.	0.84	.
Observations	73	73	73	73
Enumerator ID: 102	0.52	0.017	0.52	0.017
p-val: actual=assigned share	0.10	0.00	0.10	0.00
Observations	116	116	116	116
Enumerator ID: 103	0.44	0.018	0.44	0.018
p-val: actual=assigned share	0.96	0.03	0.96	0.03
Observations	55	55	55	55
Enumerator ID: 104	0.36	0.049	0.36	0.049
p-val: actual=assigned share	0.13	0.66	0.13	0.66
Observations	81	81	81	81
Enumerator ID: 105	0.53	0.054	0.53	0.054
p-val: actual=assigned share	0.14	0.82	0.14	0.82
Observations	74	74	74	74
Enumerator ID: 107	0.47	0.027	0.47	0.027
p-val: actual=assigned share	0.66	0.09	0.66	0.09
Observations	73	73	73	73
Enumerator ID: 108	0.37	0.097	0.37	0.097
p-val: actual=assigned share	0.27	0.34	0.27	0.34
Observations	62	62	62	62
Enumerator ID: 110	0.097	0.097	0.097	0.097
p-val: actual=assigned share	0.34	0.34	0.34	0.34
Observations	62	62	62	62
Enumerator ID: 111	0.50	0.056	0.50	0.056
p-val: actual=assigned share	0.26	0.86	0.26	0.86
Observations	90	90	90	90
Enumerator ID: 114	0.46	0	0.46	0
p-val: actual=assigned share	0.79	.	0.79	.
Observations	68	68	68	68
Enumerator ID: 115	0.48	0.075	0.48	0.075
p-val: actual=assigned share	0.54	0.65	0.54	0.65
Observations	67	67	67	67
Enumerator ID: 116	0.40	0.086	0.40	0.086
p-val: actual=assigned share	0.25	0.23	0.25	0.23
Observations	162	162	162	162
Enumerator ID: 117	0.39	0.079	0.39	0.079
p-val: actual=assigned share	0.29	0.44	0.29	0.44
Observations	127	127	127	127
Enumerator ID: 118	0.52	0.043	0.52	0.043
p-val: actual=assigned share	0.45	0.71	0.45	0.71
Observations	23	23	23	23
Enumerator ID: 119	0.38	0.031	0.38	0.031
p-val: actual=assigned share	0.29	0.19	0.29	0.19
Observations	64	64	64	64
Enumerator ID: 120	0.59	0.061	0.59	0.061
p-val: actual=assigned share	0.04	0.97	0.04	0.97
Observations	49	49	49	49
Enumerator ID: 122	0.75	0	0.75	0
p-val: actual=assigned share	0.30	.	0.30	.
Observations	4	4	4	4
Enumerator ID: 124	0.50	0	0.50	0
p-val: actual=assigned share	0.65	.	0.65	.
Observations	16	16	16	16
Enumerator ID: 125	0.41	0.040	0.41	0.040
p-val: actual=assigned share	0.47	0.26	0.47	0.26
Observations	125	125	125	125
Enumerator ID: 126	0.36	0.076	0.36	0.076
p-val: actual=assigned share	0.09	0.51	0.09	0.51
Observations	118	118	118	118
Enumerator ID: 127	0.38	0.034	0.38	0.034
p-val: actual=assigned share	0.18	0.14	0.18	0.14
Observations	116	116	116	116
Enumerator ID: 128	0.39	0.13	0.39	0.13
p-val: actual=assigned share	0.21	0.01	0.21	0.01
Observations	173	173	173	173
Enumerator ID: 130	0.48	0.065	0.48	0.065
p-val: actual=assigned share	0.38	0.82	0.38	0.82
Observations	123	123	123	123
Enumerator ID: 666	1	0	1	0
p-val: actual=assigned share	.	.	.	.
Observations	2	2	2	2

*Notes.* The table displays share of potential respondents by treatment assignment for each enumerator ID with p-values of a test if the actual share corresponds to the theoretical share. Deviations might indicate issues with the random assignment.

Table A.5: TEST OF COMPLIANCE WITH RANDOM ASSIGNMENT SINDH

	Share of Video only	Share of Video+Dialogue
Overall	0.44	0.057
p-val: actual=assigned share	0.87	0.33
Observations	7752	7752
Enumerator ID: 1002	0.48	0.047
p-val: actual=assigned share	0.44	0.58
Observations	85	85
Enumerator ID: 1003	0.36	0.091
p-val: actual=assigned share	0.63	0.74
Observations	11	11
Enumerator ID: 1004	0.35	0.064
p-val: actual=assigned share	0.09	0.88
Observations	78	78
Enumerator ID: 1005	0.42	0.030
p-val: actual=assigned share	0.80	0.17
Observations	66	66
Enumerator ID: 1006	0.39	0.057
p-val: actual=assigned share	0.35	0.92
Observations	87	87
Enumerator ID: 1007	0.41	0.18
p-val: actual=assigned share	0.78	0.16
Observations	22	22
Enumerator ID: 1008	0.33	0.67
p-val: actual=assigned share	0.78	0.21
Observations	3	3
Enumerator ID: 1009	0.43	0.093
p-val: actual=assigned share	0.82	0.33
Observations	75	75
Enumerator ID: 1010	0.36	0.069
p-val: actual=assigned share	0.11	0.74
Observations	87	87
Enumerator ID: 1011	0.38	0.077
p-val: actual=assigned share	0.28	0.55
Observations	91	91
Enumerator ID: 1012	0.51	0.029
p-val: actual=assigned share	0.23	0.14
Observations	68	68
Enumerator ID: 1013	0.39	0.11
p-val: actual=assigned share	0.38	0.17
Observations	72	72
Enumerator ID: 1016	0.59	0
p-val: actual=assigned share	0.25	.
Observations	17	17
Enumerator ID: 1017	0.52	0.051
p-val: actual=assigned share	0.17	0.71
Observations	79	79
Enumerator ID: 1018	0.44	0.056
p-val: actual=assigned share	0.97	0.88
Observations	89	89
Enumerator ID: 1019	0.50	0.081
p-val: actual=assigned share	0.31	0.51
Observations	74	74
Enumerator ID: 1020	0.43	0.046
p-val: actual=assigned share	0.78	0.54
Observations	87	87
Enumerator ID: 1021	0.42	0.024
p-val: actual=assigned share	0.74	0.04
Observations	83	83
Enumerator ID: 1022	0.49	0.080
p-val: actual=assigned share	0.36	0.53
Observations	75	75
Enumerator ID: 1023	0.51	0.078
p-val: actual=assigned share	0.18	0.53
Observations	90	90
Enumerator ID: 1024	0.56	0.10
p-val: actual=assigned share	0.10	0.36
Observations	50	50
Enumerator ID: 1026	0.40	0.077
p-val: actual=assigned share	0.60	0.65
Observations	52	52
Enumerator ID: 1027	0.37	0.081
p-val: actual=assigned share	0.20	0.47
Observations	86	86
Enumerator ID: 1028	0.46	0
p-val: actual=assigned share	0.73	.
Observations	85	85

	Share of Video only	Share of Video+Dialogue
Overall	0.44	0.057
p-val: actual=assigned share	0.87	0.33
Observations	7752	7752
Enumerator ID: 2001	0.53	0.067
p-val: actual=assigned share	0.22	0.86
Observations	45	45
Enumerator ID: 2002	0.36	0.018
p-val: actual=assigned share	0.21	0.02
Observations	56	56
Enumerator ID: 2003	0.44	0.093
p-val: actual=assigned share	0.95	0.42
Observations	54	54
Enumerator ID: 2004	0.54	0.033
p-val: actual=assigned share	0.12	0.24
Observations	61	61
Enumerator ID: 2005	0.43	0.086
p-val: actual=assigned share	0.89	0.48
Observations	58	58
Enumerator ID: 2006	0.42	0.14
p-val: actual=assigned share	0.80	0.10
Observations	59	59
Enumerator ID: 2008	0.37	0.088
p-val: actual=assigned share	0.27	0.47
Observations	57	57
Enumerator ID: 2009	0.36	0.055
p-val: actual=assigned share	0.25	0.86
Observations	55	55
Enumerator ID: 2010	0.43	0.053
p-val: actual=assigned share	0.92	0.78
Observations	76	76
Enumerator ID: 2011	0.53	0.023
p-val: actual=assigned share	0.22	0.12
Observations	43	43
Enumerator ID: 2012	0.42	0.028
p-val: actual=assigned share	0.77	0.11
Observations	71	71
Enumerator ID: 2013	0.47	0.082
p-val: actual=assigned share	0.69	0.59
Observations	49	49
Enumerator ID: 2014	0.48	0.065
p-val: actual=assigned share	0.50	0.89
Observations	62	62
Enumerator ID: 2015	0.45	0.017
p-val: actual=assigned share	0.90	0.02
Observations	58	58
Enumerator ID: 2016	0.50	0.036
p-val: actual=assigned share	0.38	0.34
Observations	56	56
Enumerator ID: 2017	0.50	0.061
p-val: actual=assigned share	0.34	0.98
Observations	66	66
Enumerator ID: 2018	0.42	0.076
p-val: actual=assigned share	0.80	0.63
Observations	66	66
Enumerator ID: 2019	0.48	0.080
p-val: actual=assigned share	0.58	0.61
Observations	50	50
Enumerator ID: 2020	0.54	0
p-val: actual=assigned share	0.12	.
Observations	61	61
Enumerator ID: 2021	0.52	0.031
p-val: actual=assigned share	0.23	0.19
Observations	64	64
Enumerator ID: 2022	0.28	0.15
p-val: actual=assigned share	0.01	0.06
Observations	61	61
Enumerator ID: 2023	0.49	0.053
p-val: actual=assigned share	0.45	0.81
Observations	57	57
Enumerator ID: 2024	0.39	0.035
p-val: actual=assigned share	0.33	0.22
Observations	85	85
Enumerator ID: 2025	0.40	0.018
p-val: actual=assigned share	0.55	0.03
Observations	55	55
Enumerator ID: 2026	0.44	0.056
p-val: actual=assigned share	0.95	0.89
Observations	54	54
Enumerator ID: 2027	0.47	0.052
p-val: actual=assigned share	0.70	0.78
Observations	58	58
Enumerator ID: 2029	0.37	0.083
p-val: actual=assigned share	0.25	0.52

Table A.6: TEST OF DURATION, PUNJAB

	Extra duration of Video only	Extra duration of Video+Dialogue	Extra duration of Video only	Extra duration of Video+Dialogue
Overall	1.60	3.62	1.60	3.62
p-val: enum=overall	0.99	0.99	0.99	0.99
Observations	6278	3730	6278	3730
Enumerator ID: 2	0.43	2.33	1.36	0
p-val: enum=overall	0.00	0.14	0.88	.
Observations	182	106	73	40
Enumerator ID: 3	1.16	1.31	2.51	2.93
p-val: enum=overall	0.34	0.02	0.21	0.78
Observations	157	88	114	56
Enumerator ID: 4	0.65	4.60	1.29	-12.8
p-val: enum=overall	0.40	0.76	0.87	0.03
Observations	33	19	54	31
Enumerator ID: 5	0.84	3.26	1.42	2.98
p-val: enum=overall	0.33	0.80	0.89	0.84
Observations	67	43	77	52
Enumerator ID: 6	0.84	3.26	1.25	4.98
p-val: enum=overall	0.33	0.80	0.79	0.73
Observations	67	43	70	35
Enumerator ID: 10	2.53	5.92	2.26	6.46
p-val: enum=overall	0.19	0.30	0.45	0.28
Observations	50	24	71	39
Enumerator ID: 11	2.17	0.053	Enumerator ID: 108	-0.85
p-val: enum=overall	0.46	0.08	p-val: enum=overall	0.02
Observations	60	31	Observations	56
Enumerator ID: 12	1.44	-0.58	Enumerator ID: 110	5.04
p-val: enum=overall	0.74	0.00	p-val: enum=overall	0.47
Observations	87	55	Observations	39
Enumerator ID: 13	5.49	6.21	Enumerator ID: 111	2.63
p-val: enum=overall	0.11	0.21	p-val: enum=overall	0.36
Observations	5	4	Observations	85
Enumerator ID: 14	1.26	3.81	Enumerator ID: 114	1.70
p-val: enum=overall	0.55	0.89	p-val: enum=overall	0.92
Observations	72	38	Observations	68
Enumerator ID: 15	1.26	3.81	Enumerator ID: 115	1.66
p-val: enum=overall	0.55	0.89	p-val: enum=overall	0.96
Observations	72	38	Observations	62
Enumerator ID: 18	1.26	3.81	Enumerator ID: 116	2.02
p-val: enum=overall	0.55	0.89	p-val: enum=overall	0.57
Observations	72	38	Observations	148
Enumerator ID: 21	2.94	2.46	Enumerator ID: 117	1.44
p-val: enum=overall	0.40	0.57	p-val: enum=overall	0.89
Observations	41	18	Observations	117
Enumerator ID: 22	2.94	2.46	Enumerator ID: 118	1.40
p-val: enum=overall	0.40	0.57	p-val: enum=overall	0.93
Observations	41	18	Observations	22
Enumerator ID: 24	1.66	3.15	Enumerator ID: 119	1.22
p-val: enum=overall	0.89	0.63	p-val: enum=overall	0.81
Observations	162	89	Observations	62
Enumerator ID: 25	0.037	0	Enumerator ID: 120	2.22
p-val: enum=overall	0.57	.	p-val: enum=overall	0.72
Observations	10	5	Observations	46
Enumerator ID: 27	0.61	0	Enumerator ID: 122	6.36
p-val: enum=overall	0.30	.	p-val: enum=overall	0.25
Observations	35	21	Observations	4
Enumerator ID: 28	2.02	0	Enumerator ID: 124	7.00
p-val: enum=overall	0.89	.	p-val: enum=overall	0.07
Observations	5	2	Observations	16
			Enumerator ID: 125	0.99
			p-val: enum=overall	0.64
			Observations	120
			Enumerator ID: 126	2.61
			p-val: enum=overall	0.12
			Observations	109
			Enumerator ID: 127	1.28
			p-val: enum=overall	0.75
			Observations	112
			Enumerator ID: 128	2.73
			p-val: enum=overall	0.06
			Observations	150
			Enumerator ID: 130	1.40
			p-val: enum=overall	0.85
			Observations	115
			Enumerator ID: 666	0
			p-val: enum=overall	.
			Observations	2

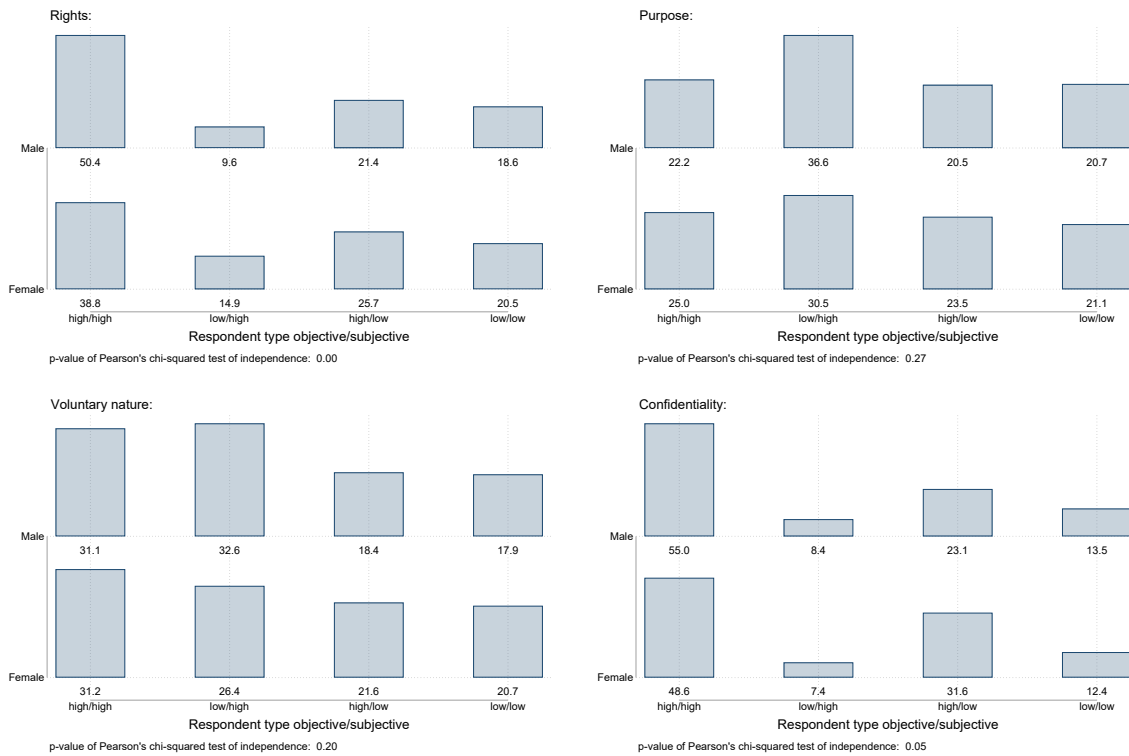
Notes. The table displays extra interview duration in minutes by treatment assignment for each enumerator ID with p-values of a test if the extra duration for that specific enumerator corresponds to the overall extra duration.

Table A.7: TEST OF DURATION, SINDH

	Extra duration of Video only	Extra duration of Video+Dialogue	Extra duration of Video only	Extra duration of Video+Dialogue
Overall	1.60	3.62	1.60	3.62
p-val: overall=overall	0.99	0.99	0.99	0.99
Observations	6278	3730	6278	3730
Enumerator ID: 1002	1.74	1.35	2.24	4.20
p-val: enum=overall	0.90	0.43	0.78	0.90
Observations	81	44	42	21
Enumerator ID: 1003	-2.00	-1.47	2.44	-0.49
p-val: enum=overall	0.55	0.68	0.52	0.36
Observations	10	7	55	36
Enumerator ID: 1004	4.34	6.62	1.04	5.18
p-val: enum=overall	0.00	0.05	0.67	0.61
Observations	73	51	49	30
Enumerator ID: 1005	2.74	5.66	-0.50	11.3
p-val: enum=overall	0.17	0.40	0.09	0.06
Observations	64	38	59	28
Enumerator ID: 1006	-0.61	-1.52	-0.74	5.45
p-val: enum=overall	0.12	0.11	0.10	0.47
Observations	82	53	53	33
Enumerator ID: 1007	4.40	5.46	-0.93	1.45
p-val: enum=overall	0.16	0.43	0.06	0.29
Observations	18	13	51	34
Enumerator ID: 1008	5.46	0	-1.30	3.89
p-val: enum=overall	0.43	.	0.05	0.92
Observations	13	2	52	36
Enumerator ID: 1009	1.95	1.91	2.61	4.20
p-val: enum=overall	0.69	0.24	0.44	0.81
Observations	68	43	52	35
Enumerator ID: 1010	2.28	9.81	1.86	4.09
p-val: enum=overall	0.68	0.07	0.79	0.82
Observations	81	56	72	43
Enumerator ID: 1011	1.71	4.32	1.69	7.04
p-val: enum=overall	0.93	0.77	0.97	0.73
Observations	84	56	42	20
Enumerator ID: 1012	1.74	5.26	5.05	3.55
p-val: enum=overall	0.88	0.53	0.00	0.98
Observations	66	33	69	41
Enumerator ID: 1013	2.65	3.28	1.21	3.29
p-val: enum=overall	0.17	0.78	0.70	0.89
Observations	64	44	45	26
Enumerator ID: 1016	5.09	0	2.03	4.19
p-val: enum=overall	0.04	.	0.68	0.82
Observations	17	7	58	32
Enumerator ID: 1017	1.10	5.89	1.17	15.6
p-val: enum=overall	0.56	0.35	0.82	0.07
Observations	75	38	57	32
Enumerator ID: 1018	0.27	0.94	2.23	9.63
p-val: enum=overall	0.34	0.41	0.71	0.21
Observations	84	50	54	28
Enumerator ID: 1019	3.50	5.41	2.61	3.83
p-val: enum=overall	0.16	0.48	0.51	0.95
Observations	68	37	62	33
Enumerator ID: 1020	1.14	3.51	1.63	9.04
p-val: enum=overall	0.79	0.98	0.99	0.09
Observations	83	50	61	38
Enumerator ID: 1021	0.93	2.75	3.18	13.0
p-val: enum=overall	0.34	0.74	0.44	0.02
Observations	81	48	46	26
Enumerator ID: 1022	3.54	3.45	2.77	0
p-val: enum=overall	0.09	0.93	0.55	.
Observations	69	38	61	28
Enumerator ID: 1023	2.32	3.25	2.75	5.73
p-val: enum=overall	0.51	0.84	0.40	0.55
Observations	83	44	62	31
Enumerator ID: 1024	-0.35	-4.30	-1.26	6.93
p-val: enum=overall	0.33	0.02	0.09	0.18
Observations	45	22	52	44
Enumerator ID: 1026	3.35	3.22	0.93	5.54
p-val: enum=overall	0.35	0.91	0.59	0.57
Observations	48	31	54	29
Enumerator ID: 1027	0.97	-0.50	-0.40	-1.03
p-val: enum=overall	0.63	0.07	0.05	0.07
Observations	79	54	82	52
Enumerator ID: 1028	2.56	0	2.00	0.43
p-val: enum=overall	0.22	.	0.85	0.69
Observations	85	46	54	33
Enumerator ID: 2001			0.10	7.10
p-val: enum=overall			0.27	0.32
Observations			51	30
Enumerator ID: 2002			-0.54	8.12
p-val: enum=overall			0.17	0.24
Observations			55	31
Enumerator ID: 2009			1.68	3.13
p-val: enum=overall			0.93	0.74
Observations				

# I ADDITIONAL TABLES AND FIGURES

Figure A.4: OBJECTIVE VS. SUBJECTIVE UNDERSTANDING BY SEX



Notes: Figure A.2 compares the alignment of objective and subjective levels of understanding between the female and male respondents. Respondents are categorized into four types: (i) high objective and subjective understanding, (ii) low objective but high subjective understanding, (iii) high objective but low subjective understanding, or (iv) low objective and subjective understanding. High for subjective understanding refers to a self-report of understanding this aspect well or fully. High for objective understanding refers to assessing all statements related to this aspect correctly. The p-value of a Pearson's chi-squared test is displayed for each category of understanding. The test refers to the hypothesis that the distribution of types is the same between females and males.



## J HETEROGENEOUS EFFECTS

### J.I Female

Table A.8: CONSENT AND RESPONSE RATES

	Consent Rate		Response Rate
	(1)	(2)	(3)
	1st visit	2nd visit	2nd visit
Female	0.000 (.)	-0.001 (0.001)	0.005 (0.007)
Video ( $\beta_1$ )	0.000 (.)	-0.001 (0.001)	0.007 (0.007)
+Dialogue ( $\beta_2$ )	0.000 (.)	-0.000 (0.000)	0.009 (0.012)
Video x Female ( $\gamma_1$ )	0.000 (.)	0.001 (0.001)	-0.007 (0.008)
+Dialogue x Female ( $\gamma_2$ )	0.000 (.)	0.001 (0.001)	0.006 (0.014)
Diff. ( $\beta_2 - \beta_1$ )	0.00 (.)	0.00 (0.00)	0.00 (0.01)
Diff. Female ( $\gamma_2 - \gamma_1$ )	0.00 (.)	0.00 (0.00)	0.01 (0.01)
<i>Model description:</i>			
Interviewer FE	Yes	Yes	Yes
Adj. $R^2$	.	0.01	0.04
Control group mean	1.00	1.00	0.97
Observations	7735	7308	7735

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays different rates of consent. Column (1) is the rate of consent asked during the first visit during which the experiment took place, only 16 potential respondents did not give consent. Column (2) refers to a rate of consent acquired during the second visit, i.e. those you gave consent after being explicitly asked. Note that this was only well-documented after the data collection already began, such that 334 observations are missing. Further, not all who gave consent in the first visit were successfully approached for a second time and thus not asked for consent. Finally column (3) refers to the response rate during the second visit, i.e. giving consent during the second visit conditional on consent during the first.

Table A.9: OBJECTIVE MEASURES OF UNDERSTANDING (WITH TRUE CORRECT DUMMY)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Female	0.001 (0.019)	-0.044 (0.041)	0.002 (0.035)	-0.041 (0.034)	0.020 (0.032)	0.024 (0.032)	0.012 (0.033)	0.038 (0.031)
Video ( $\beta_1$ )			-0.004 (0.027)	-0.035 (0.026)	-0.006 (0.030)	-0.025 (0.027)	-0.003 (0.027)	-0.031 (0.025)
+Dialogue ( $\beta_2$ )	0.016 (0.018)	0.010 (0.039)	0.022 (0.029)	-0.018 (0.028)	0.057 (0.036)	0.036 (0.027)	0.049* (0.029)	-0.000 (0.030)
Video x Female ( $\gamma_1$ )			-0.009 (0.034)	-0.020 (0.035)	-0.033 (0.037)	0.012 (0.033)	-0.004 (0.036)	0.024 (0.033)
+Dialogue x Female ( $\gamma_2$ )	-0.011 (0.023)	0.034 (0.051)	-0.039 (0.038)	0.005 (0.039)	-0.071 (0.044)	-0.000 (0.035)	0.005 (0.039)	0.001 (0.039)
Diff. ( $\beta_2-\beta_1$ )			0.03 (0.03)	0.02 (0.03)	0.06 (0.04)	0.06** (0.03)	0.05 (0.03)	0.03 (0.03)
Diff. Female ( $\gamma_2-\gamma_1$ )			-0.03 (0.04)	0.03 (0.04)	-0.04 (0.05)	-0.01 (0.04)	0.01 (0.04)	-0.02 (0.04)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.53	0.48	0.50	0.56	0.65	0.58	0.44
Control group mean	0.67	0.38	0.78	0.74	0.42	0.58	0.58	0.80
Observations	888	888	2005	2033	2060	2049	2010	2018

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

Notes. The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

Table A.10: OBJECTIVE MEASURES OF UNDERSTANDING (TRUE CORRECT)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Female	0.001 (0.019)	-0.044 (0.041)	-0.032 (0.026)	-0.054** (0.024)	0.075* (0.040)	-0.009 (0.014)	-0.058*** (0.021)	-0.013 (0.029)
Video ( $\beta_1$ )			-0.024 (0.027)	-0.015 (0.023)	0.002 (0.055)	-0.026 (0.028)	-0.067* (0.034)	0.026 (0.023)
+Dialogue ( $\beta_2$ )	0.016 (0.018)	0.010 (0.039)	0.020 (0.025)	-0.015 (0.027)	0.087 (0.065)	-0.006 (0.023)	-0.052 (0.036)	-0.007 (0.031)
Video x Female ( $\gamma_1$ )			0.040 (0.035)	-0.009 (0.035)	0.011 (0.062)	0.010 (0.033)	0.101** (0.044)	-0.018 (0.034)
+Dialogue x Female ( $\gamma_2$ )	-0.011 (0.023)	0.034 (0.051)	-0.044 (0.037)	-0.034 (0.043)	-0.060 (0.071)	0.010 (0.025)	0.079* (0.043)	0.040 (0.043)
Diff. ( $\beta_2-\beta_1$ )			0.04 (0.03)	0.00 (0.03)	0.08 (0.07)	0.02 (0.03)	0.01 (0.05)	-0.03 (0.03)
Diff. Female ( $\gamma_2-\gamma_1$ )			-0.08* (0.04)	-0.02 (0.05)	-0.07 (0.08)	-0.00 (0.04)	-0.02 (0.05)	0.06 (0.04)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.53	0.36	0.37	0.43	0.17	0.26	0.36
Control group mean	0.67	0.38	0.90	0.90	0.77	0.99	0.94	0.88
Observations	888	888	1198	1214	844	824	804	1209

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

Notes. The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

Table A.11: SUBJECTIVE MEASURES OF UNDERSTANDING

	Overall			Rights	Purpose	Voluntariness	Confidentiality
	(1) Share	(2) All	(3) Score	(4)	(5)	(6)	(7)
Female	-0.048 (0.031)	-0.050 (0.039)	-0.097** (0.048)	-0.061** (0.025)	-0.060** (0.024)	-0.040* (0.024)	-0.054** (0.024)
Video ( $\beta_1$ )				0.021 (0.027)	-0.016 (0.026)	-0.043 (0.026)	0.010 (0.026)
+Dialogue ( $\beta_2$ )	-0.055* (0.029)	-0.066 (0.041)	-0.110** (0.052)	-0.001 (0.032)	-0.066** (0.033)	-0.057* (0.031)	-0.033 (0.033)
Video x Female ( $\gamma_1$ )				-0.032 (0.034)	0.013 (0.033)	0.033 (0.033)	-0.010 (0.033)
+Dialogue x Female ( $\gamma_2$ )	0.022 (0.038)	0.029 (0.051)	0.049 (0.065)	-0.039 (0.042)	0.010 (0.043)	0.006 (0.041)	-0.001 (0.043)
Diff. ( $\beta_2-\beta_1$ )				-0.02 (0.03)	-0.05 (0.04)	-0.01 (0.03)	-0.04 (0.03)
Diff. Female ( $\gamma_2-\gamma_1$ )				-0.01 (0.04)	-0.00 (0.05)	-0.03 (0.04)	0.01 (0.05)
<i>Model description:</i>							
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.66	0.59	0.64	0.47	0.48	0.49	0.48
Control group mean	0.59	0.41	3.56	0.57	0.61	0.64	0.61
Observations	881	881	881	2560	2611	2605	2615

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays outcomes based on our subjective measure of understanding of consent (Appendix B). Column (1) is the share of the four categories (columns (4)-(7)). Column (2) refers to an indicator that all categories are reportedly understood. Column (3) refers to a score based on the average understanding across all categories from 1 = “not at all” to 5 = “fully”. Columns (4)-(7) refer to a response of “I understood this well” or “I understood this fully” for the respective aspect. In more detail, the statement in column (4) is “My rights with respect to data protection and storage”. The statement in column (5) is “The purpose of this study”. The statement in column (6) is “My participation in the interview being fully voluntary”. The statement in column (7) is “How the confidentiality of my information is ensured”.

Table A.12: ITEM NON-RESPONSE RATES

	1st Visit		2nd Visit (HH Roster)		2nd Visit (Full Int.)		
	(1) Non-resp. rate	(2) Any non-resp.	(3) Non-resp. rate	(4) Any non-resp.	(5) Non-resp. rate	(6) Any non-resp.	
Female	0.088 (0.062)	0.006 (0.004)	-0.017 (0.016)	-0.011 (0.009)	-0.044 (0.036)	-0.031* (0.017)	
Video ( $\beta_1$ )	0.025 (0.080)	0.002 (0.006)	0.009 (0.018)	0.002 (0.010)	0.025 (0.040)	0.005 (0.018)	
+Dialogue ( $\beta_2$ )	0.067 (0.134)	0.005 (0.010)	0.022 (0.034)	0.014 (0.020)	-0.058 (0.061)	0.006 (0.038)	
Video x Female ( $\gamma_1$ )	-0.102 (0.096)	-0.007 (0.007)	-0.008 (0.021)	-0.001 (0.011)	-0.033 (0.049)	0.008 (0.023)	
+Dialogue x Female ( $\gamma_2$ )	-0.107 (0.174)	-0.008 (0.012)	-0.076** (0.037)	-0.038* (0.022)	0.004 (0.070)	-0.003 (0.045)	
Diff. ( $\beta_2-\beta_1$ )	0.04 (0.14)	0.00 (0.01)	0.01 (0.03)	0.01 (0.02)	-0.08 (0.06)	0.00 (0.04)	
Diff. Female ( $\gamma_2-\gamma_1$ )	-0.01 (0.18)	-0.00 (0.01)	-0.07* (0.04)	-0.04* (0.02)	0.04 (0.07)	-0.01 (0.05)	
<i>Model description:</i>							
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	
Adj. $R^2$	0.39	0.39	0.16	0.16	0.21	0.20	
Control group mean	0.48	0.03	0.11	0.06	0.19	0.10	
Observations	7735	7735	7518	7518	2767	2767	

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays results for non-response behavior. Columns (1) and (2) captures outcomes during the first visit, columns (3) and (4) captures outcomes in the household roster during the second, and columns (5) and (6) captures outcomes from the full interview during the second visit. Columns (1), (3), and (5) corresponds to the non-response rate in percent among sensitive questions (i.e. 0.1 means the respondent refused to answer 0.1 percent of sensitive questions) and columns (2), (4), and (6) to an indicator of any non-response to a sensitive question. A sensitive question is defined, as per pre-analysis plan, to be any question at least one respondent refused to answer. Note that, to ensure robustness towards outliers, the non-response rates are winsorized to 3 standard deviations from the mean. Table A.4 is similar but includes “Don’t know” in the definition of non-response.

## J.II Age Groups

Table A.13: CONSENT AND RESPONSE RATES

	Consent Rate		Response Rate
	(1)	(2)	(3)
	1st visit	2nd visit	2nd visit
18-40yrs	0.000	0.001	0.000
	(.)	(0.000)	(0.005)
Video ( $\beta_1$ )	0.000	0.000	0.006
	(.)	(0.001)	(0.005)
+Dialogue ( $\beta_2$ )	0.000	0.000	0.017**
	(.)	(0.000)	(0.009)
Video x 18-40yrs ( $\gamma_1$ )	0.000	-0.002*	-0.008
	(.)	(0.001)	(0.008)
+Dialogue x 18-40yrs ( $\gamma_2$ )	0.000	0.000	-0.011
	(.)	(0.000)	(0.014)
Diff. ( $\beta_2-\beta_1$ )	0.00	-0.00	0.01
	(.)	(0.00)	(0.01)
Diff. Age ( $\gamma_2-\gamma_1$ )	0.00	0.00	-0.00
	(.)	(0.00)	(0.01)
<i>Model description:</i>			
Interviewer FE	Yes	Yes	Yes
Adj. $R^2$	.	0.01	0.04
Control group mean	1.00	1.00	0.97
Observations	7736	7309	7736

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays different rates of consent. Column (1) is the rate of consent asked during the first visit during which the experiment took place, only 16 potential respondents did not give consent. Column (2) refers to a rate of consent acquired during the second visit, i.e. those you gave consent after being explicitly asked. Note that this was only well-documented after the data collection already began, such that 334 observations are missing. Further, not all who gave consent in the first visit were successfully approached for a second time and thus not asked for consent. Finally column (3) refers to the response rate during the second visit, i.e. giving consent during the second visit conditional on consent during the first.

Table A.14: OBJECTIVE MEASURES OF UNDERSTANDING (WITH TRUE CORRECT DUMMY)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
18-40yrs	0.007 (0.016)	-0.001 (0.035)	0.035 (0.032)	-0.010 (0.031)	-0.004 (0.025)	-0.017 (0.026)	-0.008 (0.027)	-0.003 (0.029)
Video ( $\beta_1$ )			0.013 (0.022)	-0.026 (0.024)	-0.015 (0.023)	-0.034 (0.023)	0.002 (0.024)	-0.016 (0.021)
+Dialogue ( $\beta_2$ )	0.016 (0.015)	0.039 (0.034)	0.003 (0.027)	-0.015 (0.027)	0.019 (0.029)	0.035 (0.024)	0.059** (0.028)	0.006 (0.025)
Video x 18-40yrs ( $\gamma_1$ )			-0.050 (0.033)	-0.042 (0.034)	-0.021 (0.034)	0.036 (0.032)	-0.015 (0.035)	0.002 (0.031)
+Dialogue x 18-40yrs ( $\gamma_2$ )	-0.011 (0.022)	-0.013 (0.050)	-0.005 (0.037)	0.001 (0.038)	-0.009 (0.042)	0.000 (0.034)	-0.012 (0.040)	-0.011 (0.037)
Diff. ( $\beta_2-\beta_1$ )			-0.01 (0.03)	0.01 (0.03)	0.03 (0.03)	0.07*** (0.03)	0.06* (0.03)	0.02 (0.03)
Diff. Age ( $\gamma_2-\gamma_1$ )			0.04 (0.04)	0.04 (0.04)	0.01 (0.05)	-0.04 (0.04)	0.00 (0.04)	-0.01 (0.04)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.48	0.49	0.56	0.65	0.58	0.44
Control group mean	0.67	0.38	0.78	0.74	0.42	0.58	0.58	0.80
Observations	889	889	2006	2034	2061	2050	2011	2019

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

Table A.15: OBJECTIVE MEASURES OF UNDERSTANDING (FALSE CORRECT)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
18-40yrs	0.007 (0.016)	-0.001 (0.035)	0.066* (0.040)	-0.008 (0.037)	0.027 (0.026)	0.019 (0.030)	-0.019 (0.032)	-0.018 (0.034)
Video ( $\beta_1$ )			0.052 (0.043)	-0.093** (0.044)	-0.028 (0.028)	-0.032 (0.034)	-0.008 (0.034)	-0.074* (0.041)
+Dialogue ( $\beta_2$ )	0.016 (0.015)	0.039 (0.034)	0.017 (0.051)	-0.036 (0.044)	0.042 (0.036)	0.075** (0.036)	0.136*** (0.042)	-0.029 (0.045)
Video x 18-40yrs ( $\gamma_1$ )			-0.143** (0.062)	-0.035 (0.063)	-0.005 (0.041)	0.014 (0.047)	0.012 (0.050)	0.023 (0.058)
+Dialogue x 18-40yrs ( $\gamma_2$ )	-0.011 (0.022)	-0.013 (0.050)	-0.027 (0.069)	0.008 (0.066)	-0.091* (0.052)	-0.060 (0.053)	-0.063 (0.062)	0.019 (0.063)
Diff. ( $\beta_2-\beta_1$ )			-0.04 (0.06)	0.06 (0.05)	0.07* (0.04)	0.11*** (0.04)	0.14*** (0.05)	0.04 (0.05)
Diff. Age ( $\gamma_2-\gamma_1$ )			0.12 (0.08)	0.04 (0.08)	-0.09 (0.06)	-0.07 (0.06)	-0.08 (0.07)	-0.00 (0.07)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.49	0.53	0.45	0.50	0.46	0.51
Control group mean	0.67	0.38	0.59	0.51	0.19	0.29	0.34	0.69
Observations	889	889	807	820	1216	1225	1207	810

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

Table A.16: OBJECTIVE MEASURES OF UNDERSTANDING (TRUE CORRECT)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
18-40yrs	0.007 (0.016)	-0.001 (0.035)	-0.018 (0.021)	-0.006 (0.021)	-0.028 (0.034)	0.022** (0.010)	0.007 (0.022)	-0.002 (0.023)
Video ( $\beta_1$ )			0.003 (0.021)	-0.009 (0.023)	0.035 (0.035)	-0.017 (0.019)	0.026 (0.029)	0.002 (0.021)
+Dialogue ( $\beta_2$ )	0.016 (0.015)	0.039 (0.034)	-0.013 (0.026)	-0.033 (0.030)	0.004 (0.042)	0.011 (0.014)	-0.018 (0.031)	0.017 (0.027)
Video x 18-40yrs ( $\gamma_1$ )			-0.003 (0.035)	-0.023 (0.036)	-0.053 (0.053)	-0.008 (0.027)	-0.054 (0.040)	0.029 (0.035)
+Dialogue x 18-40yrs ( $\gamma_2$ )	-0.011 (0.022)	-0.013 (0.050)	0.028 (0.036)	0.004 (0.043)	0.092 (0.061)	-0.024 (0.019)	0.037 (0.041)	-0.004 (0.044)
Diff. ( $\beta_2-\beta_1$ )			-0.02 (0.03)	-0.02 (0.03)	-0.03 (0.04)	0.03 (0.02)	-0.04 (0.04)	0.01 (0.03)
Diff. Age ( $\gamma_2-\gamma_1$ )			0.03 (0.04)	0.03 (0.05)	0.14** (0.07)	-0.02 (0.03)	0.09* (0.05)	-0.03 (0.05)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.35	0.36	0.43	0.17	0.25	0.36
Control group mean	0.67	0.38	0.90	0.90	0.77	0.99	0.94	0.88
Observations	889	889	1199	1214	845	825	804	1209

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

Table A.17: SUBJECTIVE MEASURES OF UNDERSTANDING

	Overall			Rights	Purpose	Voluntariness	Confidentiality
	(1) Share	(2) All	(3) Score	(4)	(5)	(6)	(7)
18-40yrs	0.002 (0.026)	-0.017 (0.034)	0.021 (0.040)	0.020 (0.021)	0.017 (0.020)	-0.001 (0.021)	0.048** (0.020)
Video ( $\beta_1$ )				-0.002 (0.023)	-0.017 (0.022)	-0.019 (0.021)	0.000 (0.022)
+Dialogue ( $\beta_2$ )	-0.036 (0.025)	-0.040 (0.032)	-0.065 (0.043)	-0.013 (0.029)	-0.045 (0.029)	-0.049* (0.029)	-0.005 (0.030)
Video x 18-40yrs ( $\gamma_1$ )				0.007 (0.033)	0.020 (0.032)	-0.007 (0.032)	0.005 (0.032)
+Dialogue x 18-40yrs ( $\gamma_2$ )	-0.013 (0.036)	-0.015 (0.047)	-0.035 (0.063)	-0.022 (0.041)	-0.033 (0.042)	-0.011 (0.040)	-0.061 (0.042)
Diff. ( $\beta_2-\beta_1$ )				-0.01 (0.03)	-0.03 (0.03)	-0.03 (0.03)	-0.01 (0.03)
Diff. Age ( $\gamma_2-\gamma_1$ )				-0.03 (0.04)	-0.05 (0.05)	-0.00 (0.04)	-0.07 (0.04)
<i>Model description:</i>							
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.66	0.59	0.64	0.47	0.47	0.49	0.48
Control group mean	0.59	0.41	3.56	0.57	0.61	0.64	0.61
Observations	882	882	882	2561	2612	2606	2616

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-Huber-White standard errors.

*Notes.* The table displays outcomes based on our subjective measure of understanding of consent (Appendix B). Column (1) is the share of the four categories (columns (4)-(7)). Column (2) refers to an indicator that all categories are reportedly understood. Column (3) refers to a score based on the average understanding across all categories from 1=“not at all” to 5=“fully”. Columns (4)-(7) refer to a response of “I understood this well” or “I understood this fully” for the respective aspect. In more detail, the statement in column (4) is “My rights with respect to data protection and storage”. The statement in column (5) is “The purpose of this study”. The statement in column (6) is “My participation in the interview being fully voluntary”. The statement in column (7) is “How the confidentiality of my information is ensured”.

Table A.18: ITEM NON-RESPONSE RATES

	1st Visit		2nd Visit (HH Roster)		2nd Visit (Full Int.)	
	(1) Non-resp. rate	(2) Any non-resp.	(3) Non-resp. rate	(4) Any non-resp.	(5) Non-resp. rate	(6) Any non-resp.
18-40yrs	-0.025 (0.065)	-0.002 (0.005)	-0.013 (0.013)	-0.008 (0.007)	-0.011 (0.031)	-0.026* (0.015)
Video ( $\beta_1$ )	-0.034 (0.063)	-0.002 (0.004)	-0.002 (0.013)	-0.003 (0.007)	0.001 (0.030)	-0.012 (0.015)
+Dialogue ( $\beta_2$ )	0.098 (0.146)	0.007 (0.010)	-0.009 (0.025)	0.002 (0.015)	-0.002 (0.042)	0.024 (0.031)
Video x 18-40yrs ( $\gamma_1$ )	-0.008 (0.091)	-0.000 (0.006)	0.013 (0.019)	0.010 (0.011)	0.030 (0.045)	0.048** (0.022)
+Dialogue x 18-40yrs ( $\gamma_2$ )	-0.138 (0.174)	-0.010 (0.012)	-0.021 (0.033)	-0.014 (0.020)	-0.095 (0.059)	-0.041 (0.043)
Diff. ( $\beta_2-\beta_1$ )	0.13 (0.15)	0.01 (0.01)	-0.01 (0.03)	0.00 (0.02)	-0.00 (0.04)	0.04 (0.03)
Diff. Age ( $\gamma_2-\gamma_1$ )	-0.13 (0.17)	-0.01 (0.01)	-0.03 (0.03)	-0.02 (0.02)	-0.12** (0.06)	-0.09** (0.04)
<i>Model description:</i>						
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.39	0.39	0.16	0.15	0.21	0.20
Control group mean	0.48	0.03	0.11	0.06	0.18	0.10
Observations	7736	7736	7519	7519	2767	2767

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays results for non-response behavior. Columns (1) and (2) captures outcomes during the first visit, columns (3) and (4) captures outcomes in the household roster during the second, and columns (5) and (6) captures outcomes from the full interview during the second visit. Columns (1), (3), and (5) corresponds to the non-response rate in percent among sensitive questions (i.e. 0.1 means the respondent refused to answer 0.1 percent of sensitive questions) and columns (2), (4), and (6) to an indicator of any non-response to a sensitive question. A sensitive question is defined, as per pre-analysis plan, to be any question at least one respondent refused to answer. Note that, to ensure robustness towards outliers, the non-response rates are winsorized to 3 standard deviations from the mean. Table A.4 in is similar but includes “Don’t know” in the definition of non-response.

## K ROBUSTNESS CHECKS

Table A.19: OBJECTIVE MEASURES OF UNDERSTANDING (WITH TRUE CORRECT DUMMY)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Video ( $\beta_1$ )			-0.009 (0.016)	-0.047*** (0.017)	-0.026 (0.017)	-0.017 (0.016)	-0.006 (0.017)	-0.016 (0.016)
+Dialogue ( $\beta_2$ )	0.011 (0.012)	0.033 (0.026)	0.000 (0.019)	-0.014 (0.020)	0.014 (0.021)	0.035** (0.017)	0.053** (0.021)	0.001 (0.019)
Diff. ( $\beta_2-\beta_1$ )			0.01 (0.02)	0.03 (0.02)	0.04* (0.02)	0.05*** (0.02)	0.06*** (0.02)	0.02 (0.02)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.47	0.49	0.56	0.65	0.58	0.44
Control group mean	0.67	0.38	0.78	0.74	0.42	0.58	0.58	0.80
Observations	889	889	2006	2034	2061	2050	2011	2019

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are indicators for a correct response (“Don’t know” and “Refuse to answer” are coded as 0).

Table A.20: OBJECTIVE MEASURES OF UNDERSTANDING (FALSE CORRECT)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Video ( $\beta_1$ )			-0.039 (0.059)	-0.228*** (0.057)	-0.055 (0.042)	-0.058 (0.047)	-0.016 (0.049)	-0.128** (0.057)
+Dialogue ( $\beta_2$ )	0.011 (0.012)	0.033 (0.026)	-0.004 (0.072)	-0.042 (0.062)	0.016 (0.054)	0.110** (0.053)	0.225*** (0.061)	-0.033 (0.065)
Diff. ( $\beta_2-\beta_1$ )			0.03 (0.08)	0.19*** (0.07)	0.07 (0.06)	0.17*** (0.06)	0.24*** (0.06)	0.10 (0.07)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.50	0.57	0.44	0.51	0.47	0.52
Control group mean	0.67	0.38	0.21	0.08	-0.56	-0.36	-0.29	0.39
Observations	889	889	807	820	1216	1225	1207	810

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are coded as 1 for a correct response, -1 for an incorrect response and 0 for “Don’t know” and *refuse to answer*.



Table A.21: OBJECTIVE MEASURES OF UNDERSTANDING (TRUE CORRECT)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Video ( $\beta_1$ )			0.002 (0.032)	-0.049 (0.032)	0.015 (0.050)	-0.032 (0.023)	-0.003 (0.039)	0.022 (0.031)
+Dialogue ( $\beta_2$ )	0.011 (0.012)	0.033 (0.026)	0.001 (0.037)	-0.043 (0.038)	0.066 (0.057)	0.005 (0.019)	-0.004 (0.043)	0.049 (0.038)
Diff. ( $\beta_2-\beta_1$ )			-0.00 (0.04)	0.01 (0.04)	0.05 (0.06)	0.04 (0.03)	-0.00 (0.05)	0.03 (0.04)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.31	0.33	0.41	0.16	0.24	0.36
Control group mean	0.67	0.38	0.83	0.84	0.61	0.98	0.89	0.79
Observations	889	889	1199	1214	845	825	804	1209

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are coded as 1 for a correct response, -1 for an incorrect response and 0 for “Don’t know” and *refuse to answer*.

Table A.22: OBJECTIVE MEASURES OF UNDERSTANDING (TRUE CORRECT DUMMY)

	Overall		Rights		Purpose	Voluntariness		Confidentiality
	(1) Score	(2) Informed	(3) Delete info.	(4) Can compl.	(5)	(6) Part. obliged	(7) Resp. obliged	(8)
Video ( $\beta_1$ )			-0.024 (0.031)	-0.103*** (0.032)	-0.057* (0.034)	-0.036 (0.031)	-0.017 (0.034)	-0.039 (0.030)
+Dialogue ( $\beta_2$ )	0.011 (0.012)	0.033 (0.026)	-0.004 (0.037)	-0.011 (0.035)	0.021 (0.041)	0.079** (0.034)	0.115*** (0.040)	0.019 (0.036)
Diff. ( $\beta_2-\beta_1$ )			0.02 (0.04)	0.09** (0.04)	0.08* (0.04)	0.12*** (0.04)	0.13*** (0.04)	0.06 (0.04)
<i>Model description:</i>								
Interviewer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.58	0.52	0.48	0.52	0.56	0.65	0.58	0.46
Control group mean	0.67	0.38	0.58	0.53	-0.11	0.19	0.19	0.63
Observations	889	889	2006	2034	2061	2050	2011	2019

\* :  $p < 0.10$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Eicker-White standard errors.

*Notes.* The table displays outcomes based on our objective measure of understanding of consent (Appendix B). Column (1) is a summary score based on the average number of correctly answered items. Column (2) refers to an indicator for having answered at most 1 of the 6 items incorrectly or at most 2 with “Don’t know”. These outcomes can only be measured for those receiving the video and dialogue treatment and part of the control group, the video only coefficient is thus omitted. Columns (3)-(8) refer to the single items ordered by category and are coded as 1 for a correct response, -1 for an incorrect response and 0 for “Don’t know” and *refuse to answer*.