

Mobile Phone Surveys Methods for Measuring Social Discrimination



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For further information on the SARI survey, including data and documentation, please visit: <https://riceinstitute.org/data-page/>

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EXECUTIVE SUMMARY

Many countries regularly collect representative data on social attitudes in order to measure and understand social inequality. The Social Attitudes Research, India (SARI) project studies prejudice and discrimination in India using a low-cost mobile phone survey. We collect representative data on explicit prejudice and discrimination against women, Dalits, and Muslims. We also measure public attitudes about social policies. This report explores the promise of using mobile phone surveys to conduct research on social attitudes in India.

Part 1 of the report describes the background and purpose of SARI, discusses its importance in the Indian context, and describes the topics that SARI studies. SARI has so far been administered in seven places, including two cities and five States, in India: Delhi, Mumbai, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, and Maharashtra. In each place, SARI interviewed representative samples of adults aged 18 to 65 years.

Part 2 of the report details SARI's data collection practices. It covers the sampling strategy, including how respondents were found and selected; the construction of statistical weights for data analysis; protocols for interviewing respondents; the tools used by interviewers to keep track of calls and interviews; and monitoring practices used to ensure high-quality data. It ends with a discussion of the strategies used in SARI to measure a respondent's caste group.

Part 3 of the report analyses the quality of SARI data. It describes SARI's response rates and compares them to phone surveys in other contexts. We find that SARI's response rates are high as compared to phone surveys from the United States, but they are lower than the response rates of face-to-face interviews in India.

The report then compares the demographic characteristics of respondents in the raw SARI data to the demographic characteristics of respondents in India's 2015-16 Demographic and Health Survey, the National Family Health Survey (NFHS-4). We find that the raw SARI data under-represent older people, less educated people, those living in rural areas, and Dalit and Adivasi people. Part of the reason for this is incomplete household-level mobile phone coverage: people with these characteristics are more likely to live in households without a phone. In Delhi and Mumbai, where household-level mobile phone coverage is nearly universal, the unweighted SARI data better represent the population than they do in places such as Jharkhand, where household-level mobile phone coverage is lower.

Similar to face-to-face surveys, we solve the problem of under- and over-representation of groups using statistical weights. We find that the differences between the weighted and unweighted means are smaller in the India Human Development Survey (IHDS), a face-to-face survey, than in SARI (regardless of the data source used for weighting), but that the overall difference made by weighting between these two methods of data collection is not large. This suggests that even though face-to-face surveys currently achieve higher-quality samples, weighted mobile phone surveys can also be of a reasonably high quality.

Part 3 of the report also describes the duration of SARI interviews in different places, as well as refusal rates and rates of partial completion. We find that partial interviews are more likely to occur when the questionnaire is longer. We find that item non-response is higher in SARI than in IHDS, which, as mentioned earlier, is a face-to-face survey. This suggests that respondents are more willing to skip a question when interviewed by phone. However, the differences in the item non-response rates are not large.

Lastly, Part 3 of the report investigates the presence or absence of question order effects in SARI. SARI used question and block randomisation in order to minimise question order effects. There was no difference in responses by question order for most questions. We did, however, find that people's attitudes towards inter-caste and inter-religious marriage depended on the order in which other questions about marriage attitudes were asked.

Part 4 of the report compares the responses to questions administered by phone in SARI with responses to similar questions administered face-to-face in the IHDS. This comparison is possible because some SARI questions were modelled off of the IHDS questions.

We find that many respondents are willing to report socially conservative attitudes over the phone, and that measurements of gender discrimination, discrimination against Dalits, and attitudes towards inter-marriage are similar across the two modes of data collection. Overall, responses from the SARI data weighted using the NFHS-4 are similar to responses from the weighted IHDS. This gives us confidence that SARI is able to collect valid estimates of social attitudes, and that using the phone as a mode of data collection does not negatively impact data quality.

Overall, we conclude that SARI is able to achieve high-quality data and that respondents are willing to report socially conservative attitudes in a mobile phone survey. Such mobile phone surveys have the potential to allow researchers to gather social scientific data at a lower cost than before, even for topics as sensitive as discrimination and prejudice. As mobile phone coverage expands in India, phone surveys will become increasingly reliable as a method of collecting survey data.

We hope that this greater capacity for measuring social inequality will expand public discourse on how best to bring about social progress in India. These uncomfortable but important problems are not discussed deeply enough today, as many people assume that economic progress will automatically bring social progress. Accurately measuring the extent of the problem may open up space for more frank discussions about social inequality in India, and the need for social policies to address it.

We hope that the findings and interpretations in this report encourage others to use the SARI data, which can be found at <https://riceinstitute.org/data/social-attitudes-research-india-sari-data/>. Our experience with mobile phone surveys suggests that they comprise a valuable tool for measuring social attitudes and social progress. We invite other research groups to adapt what we have learnt about conducting mobile phone surveys to their own contexts and research questions. Together, we can deepen the public and scholarly conversation about social inequality in India.

PART 1: BACKGROUND—Social Attitudes Research, India (SARI)

1.1. Purpose

Researchers around the world measure and track social attitudes through representative, repeated, cross-sectional surveys. Survey data is important for understanding social inequality in India, where strict caste, gender, and religious hierarchies often inhibit human development (Ramalingaswami et al., 1997; Coffey and Spears, 2017).

Social inequality has consequences for individuals, too (Thorat, 2010; Baru et al., 2010; Thorat and Desai, 2012). Discrimination against Dalits prevents them from accessing water, qualifying for loans, entering police stations, and eating with upper castes. Dalits experience mistreatment at school, at work, and in hospitals (Shah et al., 2006; Thorat and Joshi, 2015). Indian Muslims also face severe discrimination, which leads to lower literacy and employment rates, and to poor mental health among them (Chaudhuri, 2018; Coffey and Gupta, 2019). Finally, women in India face discrimination throughout their lives: before birth, girl babies experience sex-selective abortion; girl children face neglect; and young women are expected to be hard-working and self-sacrificing during their childbearing years (Barcellos et al., 2014; Coffey, 2015; Jeffrey, Jeffrey, and Lyon, 1989).

The Social Attitudes Research, India survey (SARI) measures explicit prejudice and practices of discrimination using cost-effective, mobile phone technology. SARI is unique because, to our knowledge, no representative survey has previously made the measurement of social attitudes in India its primary focus.

1.2. Surveyed Populations and Survey Topics

As of May, 2020, SARI has been administered in seven States and cities: in Delhi and Uttar Pradesh in 2016, Mumbai and Rajasthan in 2016-17, and Bihar, Jharkhand, and Maharashtra (excluding Mumbai) in 2018. Men and women aged 18 to 65 years were interviewed in every sample, except in Mumbai, where only men aged 18 to 65 years were interviewed. In SARI, men interview men and women interview women. The Mumbai sample includes only men because at the time of the survey, we could not recruit enough female, Marathi-speaking interviewers. Table 1 describes the locations, dates, and populations in each of the seven SARI samples.

Table 1. SARI Sample Descriptions

Sample	Dates	Population
Delhi	April to July 2016	Men and women, aged 18-65
Uttar Pradesh	April to July 2016	Men and women, aged 18-65
Mumbai	August 2016 to May 2017	Men, aged 18-65
Rajasthan	August 2016 to May 2017	Men and women, aged 18-65
Bihar	March to August 2018	Men and women, aged 18-65
Jharkhand	March to August 2018	Men and women, aged 18-65
Maharashtra	March to August 2018	Men and women, age 18-65

Respondents were asked different sets of questions based on their State/city, sex, and social identities. For example, in Delhi or Uttar Pradesh, an upper-caste Hindu man was asked questions about inter-marriage with Dalits and with Muslims, as well as questions about his attitudes towards and practice of untouchability. A lower-caste Hindu man was asked questions about inter-religious, but not inter-caste, marriage, and about his own experiences with caste discrimination. Women, both single and married,

were asked about whether they practise *ghunghat/pardah*, while married men were asked about their wives' practice of *ghunghat/pardah*.

Table 2 describes the topics asked about in each SARI sample. Some topics, like sanitation, gender, and untouchability were asked in all samples. Others, like personal experiences of discrimination, opinions on climate change, and mental health, were asked in some samples and not others.

Table 2. Survey Topics Covered in SARI in Each State/City

State/City	Survey Topics Covered
Delhi and Uttar Pradesh	<ol style="list-style-type: none">1. Religion and Caste2. Sanitation3. Gender4. Reservations5. Inter-marriage (General)6. Untouchability7. Personal Experiences of Discrimination
Rajasthan and Mumbai	<ol style="list-style-type: none">1. Religion and Caste2. Sanitation3. Gender4. Reservations5. Inter-marriage (General)6. Untouchability7. Personal Experiences of Discrimination8. Group Likelihood of Experiencing Discrimination9. Climate Change10. Class Identification
Bihar, Jharkhand, and Maharashtra	<ol style="list-style-type: none">1. Religion and Caste2. Sanitation3. Gender4. Reservations5. Inter-marriage (General)6. Aadhaar and Government Benefits7. Untouchability8. Household Assets9. Mental Health10. Beef Eating and Violence against Muslims11. Compassion for the Poor12. Inter-caste Marriage (Personal) + Caste of Spouse13. Reservations Knowledge and Policies14. Meat Eating15. Violence against Spouse16. Medical Abortion17. Group Likelihood of Experiencing Discrimination18. Class Identification19. Social Choice Experiment

PART 2: DATA COLLECTION

2.1. Sampling Strategy

2.1.1. Probability-weighted Random Digit Dialling

Random digit dialling is a common method for recruiting representative samples of survey respondents (Tucker and Lepkowski, 2008; Groves et al., 2009). SARI uses a form of random digit dialling designed around India’s mobile network. In India, the Department of Telecommunications assigns mobile phone companies a five-digit “series” that phone companies are allowed to use at the beginning of the ten-digit mobile phone numbers that they sell in a particular mobile circle. The SARI team generates a sampling frame of potentially active numbers in each mobile circle by first creating a list in which the series appear in equal proportion to the number of subscribers that a company reports [Telecom Regulatory Authority of India (TRAI)],¹ divided by the number of series it has. We then add a randomly generated five-digit number to each series to form a ten-digit mobile number. SARI interviewers call these numbers in a random order.

Although phone surveys have been used in developed countries for many years, they are relatively new in India because mobile coverage has only recently been observed to be high enough to generate estimates with minimum coverage bias. Data from the TRAI on mobile teledensity (wireless subscriptions per 100 people) show that teledensity is higher in urban areas than rural areas, which suggests that statistics computed from phone survey data will be more accurate for urban India than for rural India. However, it is important to remember that the number of mobile subscriptions *per adult* will be higher than those officially reported by TRAI, which are *per person* (both children and adults). Finally, as we discuss below, statistical weights are used to adjust for the fact that certain groups tend to be under-represented in our sample.

2.1.2. Within-household Respondent Selection

In order to ensure that adults who do not have their own mobile phones are included in our sample, we use within-household respondent selection.

The person who answers the phone is asked to list the eligible respondents—adults aged 18 to 65 years who are the same sex as the interviewer—living in his/her household. Qualtrics survey software, which interviewers use for recording responses, randomly selects a respondent from that list. If the person owns a mobile phone, we randomise among him/her and any adult household members of the same sex who do not own a mobile phone. If the person does not own a mobile phone, we randomise among him/her and all other eligible household members. In order to reach less educated respondents, for a fraction of the surveys in Bihar, Jharkhand, and Maharashtra, the respondents were asked to list the education level of each listed individual. Qualtrics then chose the least educated person in the household to be interviewed.

¹ For example, this TRAI report from April 2018 shows the number of subscribers per company, per State/city: https://main.trai.gov.in/sites/default/files/Press_Release_No4_Eng_11012018.pdf. For each State/city, we used the most recent report at the time of the start of the survey to create sampling frames.

2.2. Statistical Weights

Like other surveys, we use statistical weights to adjust for the fact that people from some demographic groups are more likely to be included in the sample, and that some are more likely to respond to the survey than others. For each State, the weights given in the publicly available dataset used the 2011 Census to construct weights that account for the intersection of:

- Two sex categories: male, female;
- Two place of residence categories: urban, rural;
- Five education level categories: no schooling, primary and below, middle and below, secondary and below, above secondary; and
- Ten age group categories: 18-19 years, nine 5-year age bands from 20-65 years.

Therefore, respondents are assigned to one of 200 possible bins in Uttar Pradesh, Rajasthan, Bihar, Jharkhand, and Maharashtra, 100 possible bins in Delhi (which has no rural respondents) and 50 possible bins in Mumbai (which has no female or rural respondents). A respondent's statistical weight is the ratio of the number of people in the 2011 Census in that bin to the number of people in the SARI sample who are in that bin. Some of the results presented in this report use weights constructed using this same methodology, but using the NFHS-4 as a comparison, as the NFHS-4 data was collected in 2015, and so is more recent than the 2011 Census [International Institute for Population Sciences (IIPS) and ICF, 2017]. Using NFHS-4 versus the Census does not ultimately make any significant difference to the conclusions of the report.

Abstracting away from possible biases due to non-sampling error (such as social desirability bias), the estimates we produce will be biased only if, conditional on the intersection of education, age, sex, and place of residence, people in households in which someone owns a mobile phone would give different answers to our questions than people in households in which no one owns a mobile phone.

2.3. Interviewing Protocols

2.3.1. Locating Same-sex Respondents within a Household

Interviews were conducted between interviewers and respondents of the same sex, in order to ensure maximum levels of comfort in taking the survey. In cases when the person who answers the phone is the same sex as the interviewer, the interviewer proceeds by asking for consent to participate in the survey. If, however, a male answers the phone when a female interviewer calls the household, the interviewer explains her purpose briefly and then asks to speak with a woman in the household, if one is available.

2.3.2. Informed Consent

Interviewers must get consent from the respondent before proceeding with the survey, by asking the respondent if they are willing to spend approximately 10 minutes on the phone with them, answering questions for a study on how people live and what they think about the area in which they live. This happens first with the individual who answers the phone, as respondents get consent to begin the process of the household listing. After the household listing has been completed, the Qualtrics software selects a respondent from within the household to take the actual survey. This selected person may be same or different from the person who first answers the phone. If the selected person is different, the interviewer

must additionally ask for consent from the selected respondent before proceeding with the remainder of the survey.

2.3.3. The Interview

Interviewers try to make respondents feel comfortable in sharing their opinions, respecting any response without showing approval or disapproval, and without sharing any personal information that might influence respondent answers. For example, interviewers use caste-neutral and religion-neutral names for themselves in order to reduce interviewer-induced social desirability bias. Additionally, interviewers adhere exactly to the wording of the questionnaire to avoid the addition of personal biases and to reduce errors. An exception to this norm is that interviewers are allowed to rephrase questions if the respondents do not understand them as written. Rephrasing of questions is approved by the survey managers in advance. If, after the interviewer repeats a question and rephrases it, the respondent still does not understand what is being asked, interviewers skip the question.

Question and question block randomisations were used to reduce question order effects. This meant that questions were displayed in a random order within a certain topic, or that respondents were randomly selected so that they were only asked one question out of a larger set of related questions. This allowed us to balance questions and options to ensure that the structure of the question, rather than its content, was not what was driving results (see Section 3.2.4).

2.4. Calling Protocols

In this section, we describe our calling protocols, starting with Table 3, which shows an example call log that our interviewers use to keep track of each phone call that they make. Although this call log has only one “call back” section shown, the actual call logs have five such sections. The status column was programmed in Excel to change based on the last call made, directing interviewers how to proceed.

Table 3. Example of Call Log in Excel

Call No.	Full Phone Number	Date	Month	am (1) pm (2)	What Happened (Code Only)	Respondent Name/Description	Notes	Call Back 1: Date	Month	am (1) pm (2)	What Happened (Code Only)	Respondent Name/Description	Notes	Status
1	88901XXXXX	30	7	2	23		half done							refusal
2	90245XXXXX	30	7	2	20									refusal
3	97851XXXXX	30	7	2	4									refusal
4	96498XXXXX	30	7	2	20									refusal
5	72979XXXXX	30	7	2	3									refusal
6	95711XXXXX	30	7	2	3									refusal
7	97857XXXXX	30	7	2	19									callback
8	99827XXXXX	30	7	2	21		woman talking							refusal
9	91667XXXXX	30	7	2	1									refusal
10	95301XXXXX	30	7	2	12									completed
11	86963XXXXX	30	7	2	3									refusal
12	92516XXXXX	30	7	2	21		cal tmrw 9clk							refusal
13	96607XXXXX	30	7	2	1									refusal
14	78913XXXXX	30	7	2	2									refusal
15	87693XXXXX	30	7	2	20									callback

Note: The status column does not necessarily match the codes seen above because codes in the columns for call backs 1 through 5 have been deleted. In a functioning call log, the status column is automatically updated in Excel when subsequent codes are placed in the code columns for each call back. See Appendix Table A1 for full list of codes.

2.4.1. Original Calls

A team of eight interviewers call respondents for approximately eight hours per day, in two four-hour shifts between 8 am and 12 pm, and 3:30 pm and 7:30 pm. These timings were chosen to maximise reaching a wide variety of respondents: for example, those who work in an office are often easier to reach in the mornings before they leave for work or in the late evening after they leave the office, while women who work in the home are often easier to reach in the afternoons. Each interviewer is given a list of phone numbers to call (see Section 1.2.2 for details on how phone numbers are generated), of which approximately 50 per cent are valid numbers. Valid numbers are tried up to five times. The interviewers dial numbers into hand-held mobile devices. They record call outcomes in Excel spreadsheets as seen in Table 3 (see codes in Appendix Table A1), and record respondents' answers to survey questions in Qualtrics in real time.

2.4.2. Call Backs

Respondents are often called back multiple times before an interview is completed. Interviewers ask respondents for a convenient time to complete the interview. Interviewers can either schedule a date and time for a call back if a respondent agrees, either before an interview begins or if it is partially complete. If a respondent does not give a specified time to be called back, if the line is engaged, or if the phone number rings with no answer, interviewers try to call the same number again at the beginning of the subsequent shift. If, after a fifth call back, the respondent has not been reached or has not agreed to be interviewed, the number is considered to be a refusal.

2.4.3. Refusals

In cases when no one of the correct sex lives in the household; the respondent declines participation prior to respondent selection; or if a valid number was engaged but not answered for all five initial calls; interviewers follow "refusal conversion" practices common in phone survey methodology, in which a set number of additional calls are made to these numbers by a different interviewer to try to reach respondents and convince them to participate. Since we are reaching respondents on mobile phones which are sometimes shared among several users, it is possible that one user might be willing to participate even though the initial respondent was not. Following an interval of at least four weeks from the initial call, a different interviewer of the same sex calls phone numbers initially classified as a refusal, using the same procedure as first-time calls. After five additional tries, a call is considered a final refusal and not called again.

2.5. Monitoring

2.5.1. Interviewer Performance Monitoring

On a weekly basis, based on interviewer call logs, interviewer performance is checked by compiling statistics on the number of new calls and call backs that each interviewer made, as well as the fraction of numbers that were valid, and the fraction of valid phone numbers that were converted into interviews. On a bi-weekly basis, the frequencies of how calls are coded by interviewers are checked to ensure that no interviewer has excessive refusals or too few call backs. The rate at which certain interviewers record positive or negative answers to specific questions is also monitored in the Qualtrics data to check for social desirability bias introduced by the interviewer's interactions with the respondent. Survey managers track

call backs to make sure none remain incomplete, and also to track overall interviewer performance based on the number of completed interviews.

2.5.2. Sample Quality Monitoring

In each shift, a survey manager randomly selects one interviewer to monitor. The manager checks to make sure that all call backs (scheduled and unscheduled) have been completed and selects two phone numbers from amongst those in which the interviewer has begun an interview. For these phone numbers, the survey manager will check the call duration recorded in Qualtrics against the call duration listed on the bill provided by the phone company. This allows the survey manager to ensure that interviewers are not filling out surveys in Qualtrics without having a respondent on the phone.

Additionally, once every two weeks, SARI data is compared to the distribution of Census data on dimensions of age, education, caste, place (rural/urban), and sex. Although sample weights adjust for differential non-response, interviewers are intentional in trying to reach individuals from all education levels, castes, ages, and places. The survey manager uses these results to share constructive feedback with the interviewers both as a group and individually at the beginning of each new work week.

A fraction of the surveys in Bihar, Jharkhand, and Maharashtra were done with the least educated person in the household, as a method to reach less educated respondents so that our sample more closely matched the education distribution of the Census. This procedure was implemented based on advice received from a senior Gallup researcher. Monitoring of the sample quality continued in the same way as described above.

2.5.3. Data Quality Monitoring

The SARI survey managers monitor data quality, to improve data collection practices as soon as potential problems are identified. In each shift, a survey manager provides structured feedback to one interviewer on his/her performance by listening in on at least one of his/her calls. While listening to the call, the survey manager fills out an Interview Quality Checklist (see Appendix Table A2 for the content of the checklist). Among the things that the survey manager checks are whether the interviewer speaks respectfully to the respondent, how accurately the interviewer asks the questions, and whether the interviewer remains neutral while asking questions so as to avoid biasing responses.

2.6. Measurement of Caste

Measuring the respondent's caste group—that is, Dalit, Adivasi, Other Backward Caste (OBC), General, Brahmin, Other—is important to the SARI project because people from different caste groups are asked different questions about untouchability, intermarriage, and discrimination. SARI improved its methods for measuring caste over time.

In Delhi and Uttar Pradesh, in the first samples that were collected, respondents were asked about their caste group—Scheduled Caste (SC), Scheduled Tribe (ST), Forward, Brahmin, or Other—and then asked to identify their sub-caste (*jati* name). We learned that it is easier for people to tell interviewers their sub-caste than to tell interviewers their caste group. Therefore, in the other samples, respondents were asked their sub-caste first. In order to reduce errors in recording sub-caste names, the survey form used a drop-down menu of sub-caste names published by State governments. The drop-down lists also indicated which

caste group the sub-caste belongs to in that particular State/city. Before recording the respondent's caste group, the interviewer verified the listed group with the respondent. In instances in which a respondent classified him/herself into a different caste group than indicated by the State caste list, interviewers classified the respondent according to his or her answer. When a respondent did not know his or her sub-caste or caste group, the interviewer requested him or her to ask other family members, or to check his/her ration card or other government documents.

PART 3: QUALITY OF SARI MOBILE PHONE SURVEY SAMPLES

3.1. Comparisons of Demographic Characteristics in Raw SARI Data and NFHS-4

In order to monitor the composition of the SARI sample as it was being collected, we compared the demographic characteristics of SARI respondents with the population of the relevant State/city, as recorded in the 2011 Census. Here, we compare demographic characteristics from the raw (unweighted) SARI with weighted data from the NFHS-4, a State-level representative sample collected in 2015. We use NFHS-4 data here because they provide a more recent comparison.

We present these comparisons in two ways. For categorical variables, like caste and place, we use simple bar graphs to compare the SARI and NFHS-4 samples. Figures 1 and 2 show breakdowns of caste and place categories, respectively, in the raw SARI data and the weighted NFHS-4 data, for each sample separately. For continuous variables, like age and education, we present quintile-quintile (Q-Q) plots, which compare distributions from SARI and the NFHS-4. In Figures 3 and 4, if the distributions of these demographic variables are identical across the two datasets, the points will lie on the 45-degree line. Deviations from the line show sections of the distribution for which the raw SARI data do not match the NFHS-4 data.

We now present results for each demographic variable in turn. States/cities are shown in order from greatest to least mobile phone coverage according to NFHS-4 data (see Table 7 in Section 3.2.2.1).

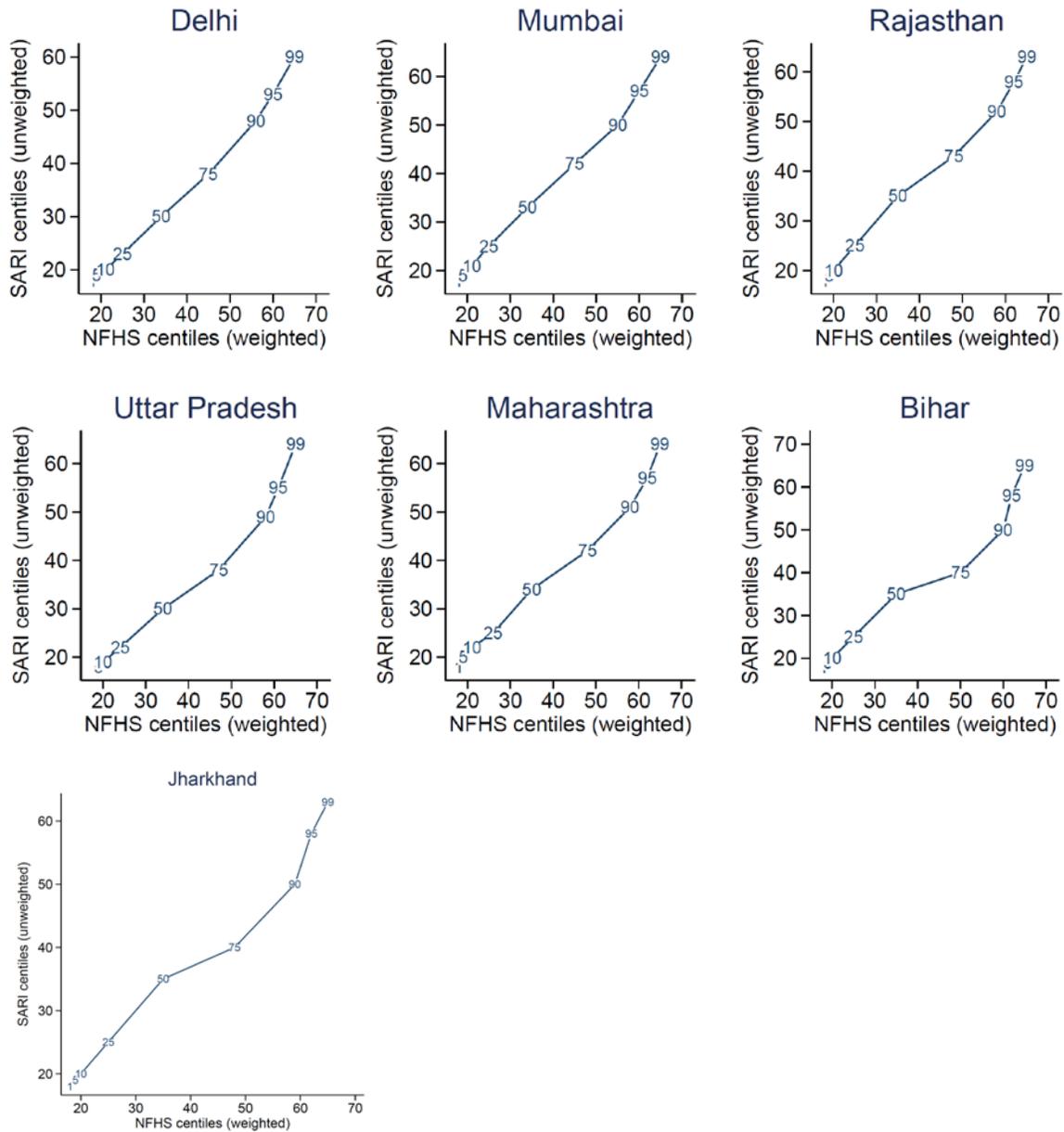
3.1.1. Age

Figure 1 shows QQ plots comparing the age distribution in SARI to the age distribution in the NFHS-4. Since SARI only interviewed adults aged 18-65 years, the NFHS-4 data are also restricted to the same ages.

These QQ plots graph the estimated weighted age quintiles of the NFHS-4 on the x-axis and the estimated unweighted age quintiles of SARI on the y-axis. An imaginary 45-degree reference line is where all the points would be if the SARI and NFHS-4 data had the same distribution, thus the further away the points are from the line, the less similar the two distributions are. Points above the 45-degree line show sections of the distribution for which SARI age values are higher than the corresponding NFHS-4 values, and points below the 45-degree line show sections of the distribution for which SARI age values are lower than the corresponding NFHS-4 values.

In Figure 1, we see that for younger ages, SARI data matches NFHS-4 data closely. However, for older ages, SARI has values that are lower than the values in the NFHS-4, across all samples, meaning that SARI under-represents older people. This could be because older people are less likely to own a mobile phone, or that they are less willing to be interviewed by phone. Although SARI's Mumbai sample most closely matches the Mumbai sample in the NFHS-4, the extent of phone coverage does not otherwise appear to be correlated with better or worse representativeness of older individuals.

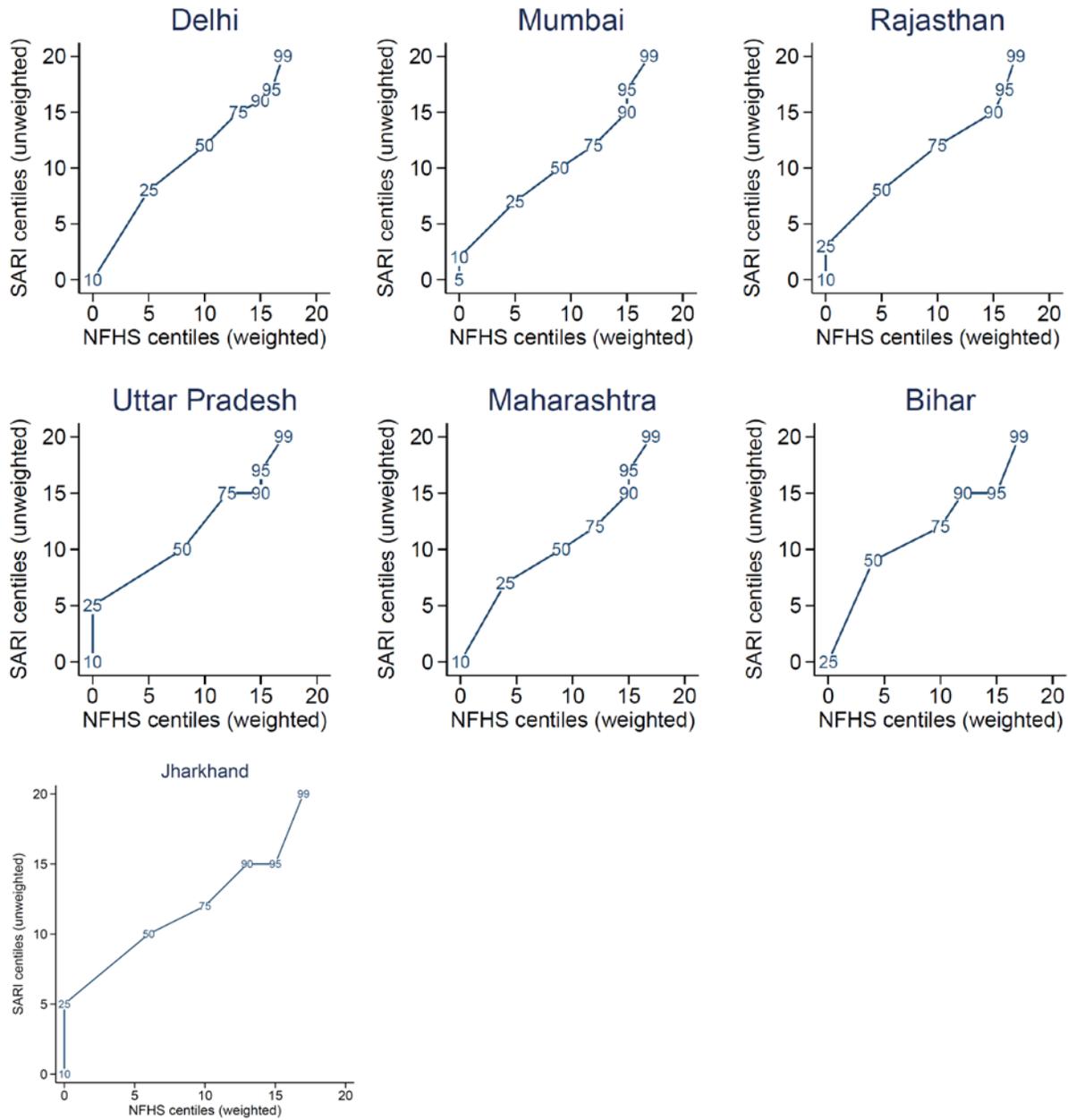
Figure 1. QQ Plot for Age: NFHS-4 versus SARI, by State/City



3.1.2. Education

SARI collects data on the number of completed years of schooling for each respondent. In Figure 2, we see that in many cases, the SARI data is below the imaginary 45-degree line, meaning that SARI under-represented less educated people. This could be because less educated people are less likely to own a mobile phone, or that they do not want to participate in the survey. As with age, SARI's Mumbai sample most closely matches the NFHS-4 Mumbai sample on education.

Figure 2. QQ Plot for Education: NFHS-4 versus SARI, by State/City

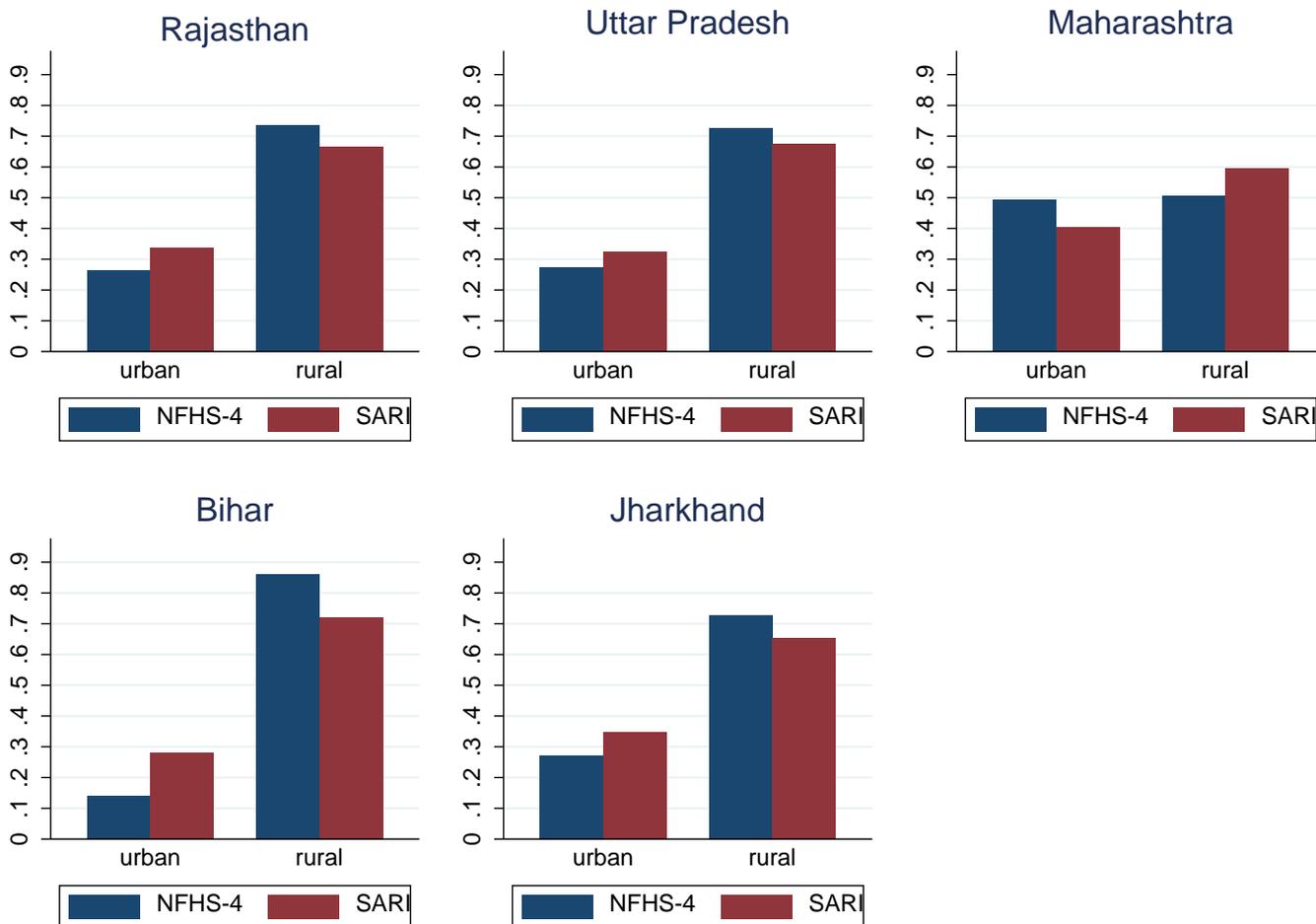


3.1.3. Place (Urban/Rural)

Figure 3 shows the five samples that have both urban and rural areas: Rajasthan, Uttar Pradesh, Maharashtra, Bihar, and Jharkhand. Delhi and Mumbai are not included since they are completely urban. In all the samples except Maharashtra, SARI under-represents rural areas. Again, this could be because individuals in rural areas are less likely to own a mobile phone, that they are harder to reach than those in urban areas, or that they are less willing to be interviewed by phone. Within these five samples, even though Jharkhand has the least phone coverage (84 per cent) and Rajasthan has the most (94 per cent), the

difference between the rural SARI sample and the rural NFHS-4 sample are similar, thus the extent of phone coverage does not appear to be clearly correlated with better or worse representativeness of rural individuals.

Figure 3. Place Breakdown: NFHS-4 versus SARI, by State/City



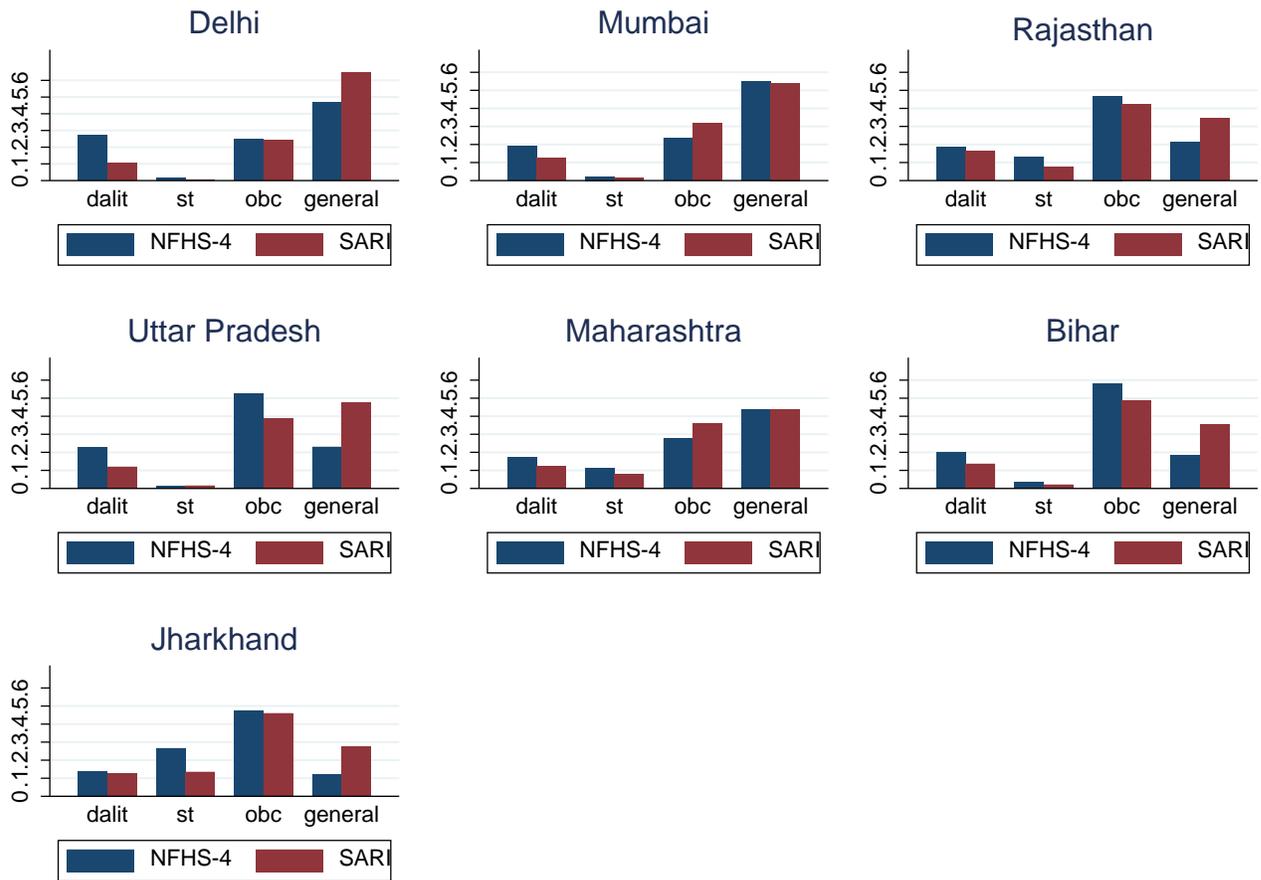
3.1.4. Caste

The NFHS-4 categorised caste groups into the following categories: SC, ST, OBC, “none of the above”, “don’t know”. In the NFHS, “none of the above” mostly consists of those who report belonging to the General caste. A small fraction of people are classified as “don’t know”, and have been included with the “none of the above” category. For clarity, Figure 4 describes people classified by the NFHS-4 as “none of the above” and “don’t know” as “General.”

SARI categorised caste groups into the following categories: SC, ST, OBC, General, Brahmin, Other. For comparability, those classified as “Brahmin” are included in the “General” category, and since only a small fraction of individuals are classified as “Other”, these have also been included in the “General” category.

Figure 4 shows that in all the samples, SARI under-represents Dalits and ST individuals, and over-represents individuals who are classified as “General.” SARI under-represents OBC individuals in all samples except for Mumbai and Maharashtra, where the SARI data over-represents OBC individuals. This may be the case for several reasons: it is possible that low-caste individuals are less likely to own mobile phones, or that they may be harder to reach by mobile phone than non-low-caste individuals, or that they are less willing to answer questions by phone about the particular topics that SARI covered. Phone coverage in and of itself does not appear to be clearly correlated with better representativeness of low-caste individuals.

Figure 4. Caste Breakdown: NFHS-4 versus SARI, by State/City



3.1.5. Summary Measure of the Number of People in the “Wrong Bin”

As described in Section 2.2, respondents were categorised into bins by sex, age, education level, and place (rural/urban) in order to calculate survey weights on our SARI samples. Another way to measure how much the characteristics of the sample deviated from that of the population is to compare the number of people in each bin in each SARI sample to the Census counts of people in each bin.

For example, with two sex bins (male and female), ten age bins (18-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, and 60-65 years), five education bins (0 years, 1-5 years, 6-8 years, 9-10 years, and 11+ years), and two place bins (rural and urban), a state like Uttar Pradesh would have a total of 200 bins, while a State like Delhi, which is all urban, would have a total of 100 bins. To explain, if, as a toy example, we assume only two categories, sex and place, and assume that an imaginary 100,000 individuals are evenly spread throughout the four categories, as in Table 4. If, in a SARI sample of this same population, we ended up with 20,000 rural women instead of 25,000, and 30,000 urban men instead of 25,000, then this measure would tell us that 10,000 individuals were classified in the “wrong bin.”

Table 4. Two-Category “Wrong Bin” Example

	Rural	Urban
Men	25,000	25,000
Women	25,000	25,000

By scaling each SARI sample and each Census population to 100,000 people, we are able to calculate the difference between the number of people who should have been in each bin according to the Census and the number of people in each bin that our sample actually reached. A summary measure of the number of people in the “wrong bin,” calculated as the summation of the absolute differences across all bins between the Census population and the sample, divided by 100,000, is given in Table 5. Larger fractions mean that there is greater deviation between the SARI sample and the Census population counts across all bins. Better matching very closely follows the pattern of mobile phone coverage: less of the sample is classified into the “wrong bin” in places with greater phone coverage.

Table 5. Fraction of People in “Wrong Bin” by Sample

	Fraction of people in “wrong bins” (out of an imaginary sample size of 100,000 individuals per state/city)
Mumbai	0.29
Delhi	0.41
Rajasthan	0.65
Maharashtra	0.69
Uttar Pradesh	0.75
Bihar	0.77
Jharkhand	0.84

3.1.6. Conclusions about Sample Composition

Ideally, the raw (unweighted) SARI distributions of demographic characteristics would match the demographic characteristics in the population of each State/city. In view of the fact that some groups, such as less educated people, are under-represented, and others, such as younger adults, are over-represented, the use of statistical weights is recommended. Weighted SARI responses are valid measures of the social attitudes in the population if the responses of the SARI participants are, on average, similar to responses

which would be given by people with the same age, sex, place of residence, and education who did not respond to the survey.

3.2. Data Quality

3.2.1. Response Rates

Table 6 provides response rates and sample sizes for the seven SARI samples. We compute response rates as the number of surveys in which a respondent answered at least a third of the questions, divided by the number of mobile numbers that were valid (as opposed to non-existent, switched off, or not available) when they were first called (Groves and Fultz, 1985):

$$\text{Response rate} = \frac{\# \text{ of complete + partial interviews}}{\# \text{ of valid numbers called}}$$

Table 6. Response Rates and Sample Sizes

Place	Response Rate (%)	Sample Sizes		
		Men	Women	Total
Delhi	16	753	658	1411
Uttar Pradesh	26	791	808	1599
Mumbai	16	1695	N/A	1695
Rajasthan	25	1611	1749	3360
Bihar	19	1450	1988	3438
Jharkhand		459	550	1009
Maharashtra	25	920	746	1666

Note: The rates for Bihar and Jharkhand cannot be calculated separately because the Bihar and Jharkhand mobile numbers are pooled into the same mobile circle. State of residence is only known for individuals who began the survey, but not for every valid phone number called.

SARI's response rates will appear low to people who are accustomed to working with field survey data collected in face-to-face interviews. However, these response rates are high as compared with phone surveys done in other countries; a Pew Research Center study from the United States by Kohut et al. (2012) found an average response rate of 9 per cent in its 2012 surveys. They concluded that despite relatively low response rates, phone surveys that are weighted to match the demographic composition of the population provide accurate estimates of public opinion. SARI's sample sizes are consistent with other representative samples used to analyse social attitudes.

3.2.2. Mobile Phone Coverage and Sample Quality

3.2.2.1. Teledensity

Is higher mobile phone coverage in a given place associated with a closer match between the raw SARI data and the NFHS-4 data? We assess the extent of phone coverage in two ways. First, the NFHS-4 gives us estimates of mobile phone ownership at the household level. While this is different from mobile phone ownership at the individual level, it gives us a lower bound on the extent of phone coverage by State/city. Second, TRAI regularly publishes statistics on the number of mobile phone subscriptions by the mobile phone circle. Mobile phone circles cover a State or a large city. Among the places where SARI undertook the surveys, Bihar and Jharkhand were included in the same mobile circle; thus, they are reported together. Uttar Pradesh is split into two circles, East and West. The Uttar Pradesh sample includes both the Uttar Pradesh East and the Uttar Pradesh West mobile circles. Using the TRAI subscription figures from March 2019 divided by the State/city population from the 2011 Census, we report the number of mobile phone subscriptions per person, and the number of subscriptions per adult (aged 18 years and over). Where the average person has more than one subscription, this number will be higher than one. Both individual and household level measures are useful for understanding mobile phone coverage in a population.

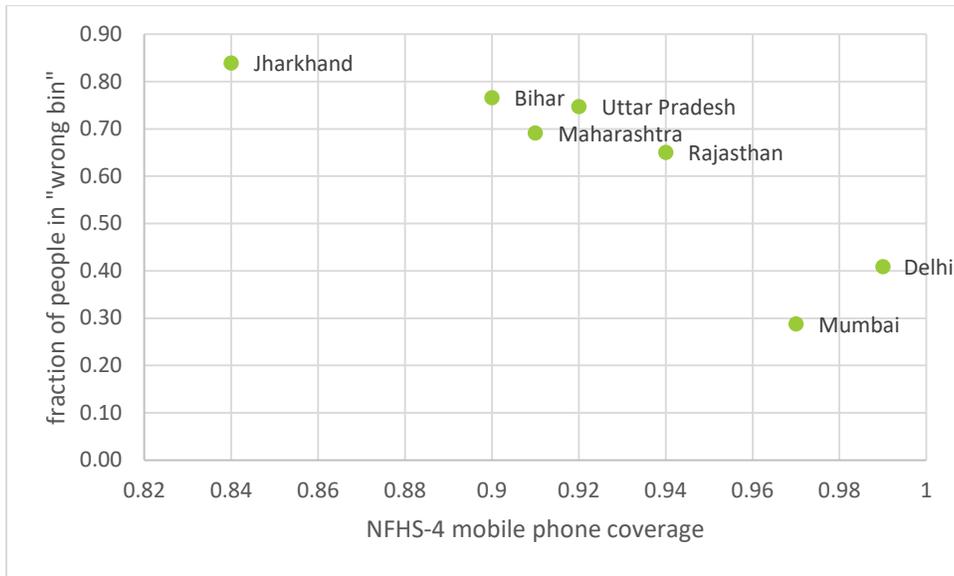
For each SARI sample, Table 7 shows these three measures of mobile phone coverage. The order of coverage is similar across the three measures, though Maharashtra and Uttar Pradesh are switched in ranking in terms of the number of subscriptions per person.

Table 7. Mobile Phone Coverage (NFHS-4) and Subscriptions per Person and per Adult (TRAI)

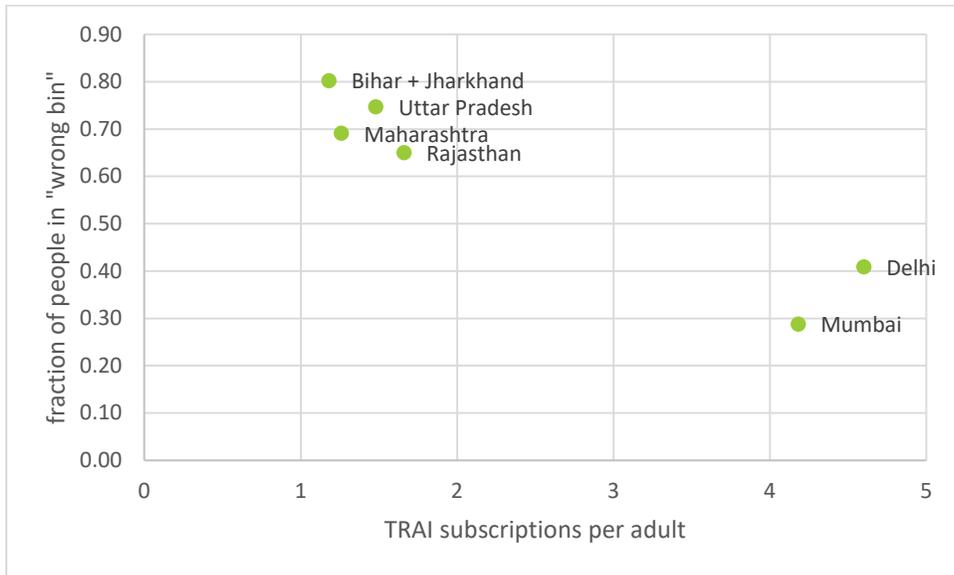
NFHS-4 (Greatest to Least) (%)		TRAI - Subscriptions per Person (Greatest to Least)		TRAI - Subscriptions per Adult (Greatest to Least)	
Delhi	99	Delhi	3.08	Delhi	4.60
Mumbai	97	Mumbai	3.04	Mumbai	4.18
Rajasthan	94	Rajasthan	0.97	Rajasthan	1.66
Uttar Pradesh	92	Maharashtra	0.85	Uttar Pradesh	1.48
Maharashtra	91	Uttar Pradesh	0.84	Maharashtra	1.26
Bihar + Jharkhand	89	Bihar + Jharkhand	0.65	Bihar + Jharkhand	1.18

The scatter plots in Figures 5 and 6 show that the samples with the greatest phone coverage and with the highest number of subscriptions per adult tend to have lower numbers of people in the “wrong bin”. The correlation between fraction missing and TRAI subscriptions per adult is slightly higher at -0.94 than the correlation between fraction missing and NFHS-4 mobile phone coverage at -0.87. It makes sense that greater teledensity and greater phone coverage would be associated with a greater ability to recruit participants from more bins, leaving less bins empty.

**Figure 5. Number of People in the Wrong Bin,
by NFHS-4 Mobile Phone Coverage**



**Figure 6. Number of People in the Wrong Bin,
by TRAI Subscriptions per Adult**



3.2.2.2. Mobile phone ownership by caste

Are low-caste households less likely to own mobile phones than higher-caste households? If so, this would constitute a reason as to why lower-caste people are less well-represented in the SARI data than higher-caste households.

We explore two ways of examining whether lower-caste individuals may be less well represented in SARI. First, Table 8 shows household-level data from the NFHS-4 on the fraction of households in each SARI State/city that own a mobile phone by caste group. It finds that Dalit and Adivasi households are less likely to have mobile phones than OBC and general households, but the differences are not dramatic. We note that Adivasi households have the lowest mobile phone coverage.

Table 8. Household Mobile Phone Coverage by Caste (NFHS-4) (%)

	UP	Delhi	Rajasthan	Mumbai	Bihar	Jharkhand	Maharashtra
Dalit	88	98	93	97	86	81	90
Adivasi	83	99	86	94	86	73	78
OBC	92	99	95	97	91	89	93
General ²	96	99	97	98	93	94	94

We then ask what the caste breakdown of our samples would be if the interviewers were able to recruit participants in proportion to their mobile phone ownership in the population. Table 9 thus shows the caste breakdown respondents in SARI, and compares this to the fraction of individuals aged 18-65 years (only men in Mumbai) who live in households that own mobile phones in the NFHS-4.

Table 9. Caste Profile of SARI Respondents Compared to People Aged 18-65 Years Living in Households That Own Mobile Phones in the NFHS-4 (%)

	Uttar Pradesh		Delhi		Rajasthan		Mumbai		Bihar		Jharkhand		Maharashtra	
	NFHS	SARI	NFHS	SARI	NFHS	SARI	NFHS	SARI	NFHS	SARI	NFHS	SARI	NFHS	SARI
Dalit	22	13	27	11	18	19	18	12	19	18	13	15	17	13
Adivasi	1	1	2	1	12	9	2	2	3	3	24	16	10	9
OBC	53	42	25	24	47	41	24	32	59	51	50	47	28	36
General ³	24	44	47	64	22	31	56	54	19	29	13	23	45	42

² The “None of the above” category in NFHS-4 consists mostly of those classified as “General” caste across all samples. NFHS-4 respondents who answered “Don’t know” are combined with “None of the above” here, and both are included in the category called “General”.

³ The “None of the above” category in NFHS-4 consists mostly of those classified as “General” caste across all samples. NFHS-4 respondents who answered “Don’t know” are combined with “None of the above” here, and both are included in the category called “General”. SARI respondents who answered “Other” are combined with “General” here for the sake of comparison with the NFHS-4.

Table 9 shows that lower-caste individuals (either Dalits or Adivasis) are less likely to participate in SARI relative to the proportion of people who live in households that own mobile phones. This is true in all States/cities, and indicates that even after accounting for an incomplete sampling frame, SARI tends to under-represent low-caste respondents and over-represent high-caste respondents. We rely on statistical weights to correct for such differentials, which is common practice in survey methodology. In future rounds of SARI data collection, we will endeavour to develop further tools to encourage participation by lower caste respondents.

3.2.3. Interview Characteristics (Duration, Refusal Rates, Partial Interviews) in SARI

While some topics and questions remained constant throughout all the SARI samples, the questionnaire changed over time: the same survey was administered in Delhi and Uttar Pradesh between April and July 2016, a new survey was created to be administered in Rajasthan and Mumbai between August 2016 and May 2017, and a third survey was created to be administered in Bihar, Jharkhand, and Maharashtra between March and August 2018. We added new questions each time a new set of States/cities was surveyed, and a few questions were removed. Therefore, States/cities that were surveyed later in time had longer questionnaires. Table 10 describes some important interview characteristics, including interview duration, rates of refusal, and missing data within the completed interviews, with descriptions of each aspect given below.

Table 10. Interview Characteristics

Sample	Interview Duration (of the Completed Interviews)		Refusals		Missing Data	Final Sample Sizes
	Average Duration in Minutes	Sample Size for Interview Duration	Initial Refusal Rate (%)	Final Refusal Rate (%)	Fraction Partial Interviews (%)	
Delhi	12.12	74	85.30	88.60	5.30	1411
Uttar Pradesh	13.20	90	75.30	83.40	4.40	1599
Mumbai	13.63	150	84.30	95.80	7.60	1695
Rajasthan	13.94	301	78.50	93.20	5.90	3360
Maharashtra	21.78	283	79.10	83.40	12.60	1666
Bihar + Jharkhand	23.52	974	85.00	95.30	16.50	4447

Note: The rates for Bihar and Jharkhand cannot be calculated separately because the Bihar and Jharkhand mobile numbers are pooled into the same mobile circle. The State of residence is known only for individuals who began the survey, but not for every valid phone number called.

3.2.3.1. Interview Duration

As part of quality monitoring practices, survey managers checked the phone numbers of the completed surveys in phone bill records to check how long the phone calls lasted, also providing a record of the approximate duration of an interview. Survey managers did this exercise for a randomly selected number of surveys, thus sample sizes for interview duration are not equal to the total sample sizes. This measure is approximate because these durations include not only the time taken for asking interview questions, but also the time spent convincing the person who answered the phone to continue with the survey, locating the correct selected respondent, and convincing that person to participate in the survey. If the interview was completed in multiple calls, the durations of those called are added up.

Interview durations in Bihar, Jharkhand, and Maharashtra are substantially longer than those in Delhi, Uttar Pradesh, Mumbai, and Rajasthan because several questions, many greater in complexity, were added to the survey administered in the former three States (see Section 1.2). Interview durations for Maharashtra, Bihar, and Jharkhand could only be ascertained by survey managers for a small sub-set of phone numbers because phone companies did not provide itemised bills for all months of the survey. For this reason, the interview duration was averaged over all the completed interviews, rather than the small random sub-set that was checked by the survey managers. There are many more phone numbers for which the duration could be counted in Bihar and Jharkhand because a larger fraction of the surveys in those States were conducted during the months in which itemised bills were provided.

3.2.3.2. Refusal Rates

We measure two types of refusals which are reported in Table 10:

- **Initial refusal.** According to SARI's protocol, interviewers call valid phone numbers up to five times. Cases when the respondent declines participation, either before or after a respondent is selected from his household, divided by the number of mobile phone numbers that are valid when the interviewer first calls that number, are considered as refusals (Groves and Fultz 1985):

$$\text{Refusal rate} = \frac{\# \text{ of refusals}}{\# \text{ of valid numbers called}}$$

The refusal rate is not simply one minus the response rate (see Section 3.2.1.) for two reasons. First, following an interval of at least four weeks from the initial call, in a common survey practice known as "refusal conversion", a different interviewer calls numbers that were classified as refusals before respondent selection in an attempt to convert the refusals to completed interviews. In addition to interview attempts that were clearly refused, SARI interviewers additionally called back numbers in which it was reported that no one of the correct sex lived in the house, as well as valid numbers that were simply not answered at all for all five attempts. Although we do not report the fraction of calls for which the refusal conversion occurred, interviews that were ultimately completed through this process are included in the final sample. Second, it is possible that a respondent completed a large fraction of the survey and then refused, in which case the interview would be counted both in the response rate and in the refusal rate.

- **Final refusal.** A refusal is considered final if an initial refusal goes to refusal conversion, meaning five additional calls to that number are attempted, but still cannot be converted.

3.2.3.3. Missing Data

Partial interviews are defined as interviews that were completed through the gender section (approximately one-third of the way through the survey) and thus included in the final dataset, but stopped the survey at a point other than the end of the survey. Table 10 reports rates of partial interviews for each State/city in order to assess the threat to data quality that comes from people losing interest or patience in the survey and refusing to respond before the interview is completed.

3.2.3.4. Relationship between Interview Duration, Refusal Rates, and Partial Interviews

We see that the interview duration increased slightly between the Delhi and Uttar Pradesh, and the Mumbai and Rajasthan interviews, and that it increased substantially in surveys administered in Bihar, Jharkhand, and Maharashtra. For example, an upper-caste, married Hindu man would have been asked approximately 34 questions in Delhi and Uttar Pradesh, 47 questions in Mumbai and Rajasthan, and 69 questions in Bihar, Jharkhand, and Maharashtra. The level of sophistication of the survey questions also increased substantially in the Bihar/Jharkhand/Maharashtra questionnaires. The most difficult-to-answer questions were asked towards the end of the survey. For example, one set of questions in Bihar, Jharkhand, and Maharashtra asked respondents about their possession of an Aadhaar card, and asked them to remember if there were any public services they were denied because they did not have an Aadhaar card. Rather than simply being a ‘yes’/‘no’ question about the respondent’s beliefs, this requires the respondent to consider whether lack of an Aadhaar card has impacted the services they are able to access. Thus, these surveys were not simply longer, but also perhaps cognitively more taxing than those administered in Delhi, Uttar Pradesh, Mumbai, and Rajasthan.

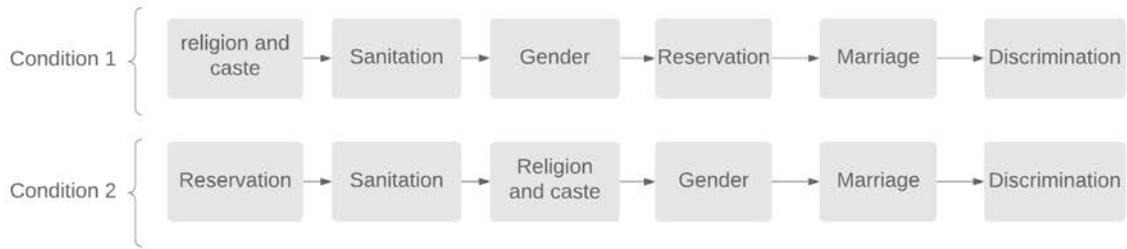
One reason as to why we see differences in interview duration within the surveys that were administered using the same questionnaire may be because of the interaction between this complexity and the respondent’s levels of education. For example, respondents in Maharashtra completed the survey in less time than those in Bihar and Jharkhand. Given greater levels of education in Maharashtra as compared to Bihar and Jharkhand, it is possible that respondents were able to complete the survey more quickly. Similarly, we see the same pattern between Delhi and Uttar Pradesh, and Mumbai and Rajasthan: in the places with higher average levels of education (that is, Delhi and Mumbai), interview durations are shorter than in the places with lower average levels of education (that is, Uttar Pradesh and Rajasthan). The fact that questions in Delhi, Uttar Pradesh, Mumbai, and Rajasthan were generally less complex may explain why differences in durations among these surveys conducted with similar questionnaires are smaller than the differences between Maharashtra and Bihar/Jharkhand.

Interview duration does not seem to lead to a higher likelihood of initial or final refusal. This makes sense if refusal rates are more a reflection of whether an interviewer is able to convince a respondent to agree to begin the survey. However, partial interviews are likely a reflection of whether interviewers are able to keep respondents comfortable and engaged as they participate. A difference in the rates of partial interviews emerges when the interviews become much longer.

3.2.4. Question Order Effects Are Minimal

The SARI survey used several randomisation strategies to investigate and to minimise the effect of question order on responses. Respondents were randomly assigned to be asked blocks of survey questions in one of two orders, as illustrated in Figure 7. The difference between the two conditions (or orders of question blocks) is that in Condition 1, respondents are asked to share their own caste and religion early in the survey, before they are asked their views on caste-related questions such as reservation. In Condition 2, respondents are asked about their views on reservation before being asked to share their own caste and religion. Random assignment of the two conditions allows us to investigate an instance of “in-group consciousness” effects. Prior research suggests that raising a respondent’s awareness of his/her in-group can influence the probability that he/she supports public policies related to that identity (Hogg and Terry, 2000).

Figure 7. Question Block Randomisation in the SARI Survey



Other randomisations included in the survey varied the order of questions asked within a particular block. For instance, the marriage section randomised whether a question on support for a law against inter-caste marriage appeared before or after a question on whether the respondent would oppose a member of his/her own family having an inter-caste or inter-religious marriage. The gender block asked four questions, including a question on whether women should work outside the home, in a random order. Table 11 presents the wording of all the questions in the marriage and the gender blocks, as well as the questions on reservation discussed above. For a full explanation of all randomisations done in each round, see Appendix Section 6.4.

Table 11. Questions Included in SARI Randomisation Blocks

Section	Questions
Marriage	<ol style="list-style-type: none"> 1. In your opinion, should there be a law stopping high-caste and low-caste people from marrying each other? 2. If a close relative or someone in your family married someone from a Harijan or Dalit caste would you oppose it or not? (asked only to <i>non-Dalits</i>)
Reservations	<ol style="list-style-type: none"> 1. In your opinion, do you favour or oppose having reservations for women? 2. In your opinion, do you favour or oppose having reservations based on caste?
Gender	<ol style="list-style-type: none"> 1. In your opinion, should a married woman, whose husband earns a good living, work outside the home or not? 2. In your opinion, should a young girl or boy select a spouse/life partner for himself/herself or should his/her parents select a spouse/life partner for him/her? 3. <i>For married women: Do you practise ghunghat/pallu/pardah/burkha?</i> <i>For married men: Does your wife practise ghunghat/pallu/pardah/burkha?</i> 4. When your family eats lunch or dinner, do the women usually eat with the men? Or do the women usually eat first? Or do the men usually eat first?

These question order randomisations allow us to look for frame-of-reference effects and consistency effects. Frame-of-reference effects occur when a proceeding question changes what is salient to a respondent or what is in her frame-of-reference. For instance, asking about inter-caste marriage in a person's own family before a question on support for a law against inter-caste marriage could increase support for such a law if it changes people's perception of the probability that an inter-caste marriage could be a social problem in their own lives.

Consistency effects might occur when a question to which most people might give a certain type of response occurs early in a question block. For instance, the vast majority of people give a conservative response to the question of whether parents or children should choose the child's spouse (most people say the parents should choose). If this question appears first, responses to the question that follow might be more conservative than if another question, on which the population were more divided, appeared first.

Table 12 shows the results of analyses investigating the presence of question order effects. It shows no question order effects for the block-randomisation of questions about the person's caste and religion on support for reservations. The lack of an in-group consciousness effect could possibly be explained by the fact that there were intervening questions about sanitation and gender that could have diminished the person's in-group consciousness.

Table 12 shows small question order effects on support for laws against inter-caste marriage. Support for laws against inter-caste marriage are indeed higher when the question is preceded by one about what the person would do if there were an inter-caste marriage in his/her own family.

Finally, Table 12 shows that support for women working outside the home was slightly different if it was preceded by a question about whether one's parents should choose his/her life partner. However, it was not different if preceded by a question on whether the respondent (if a woman) or the respondent's wife (if a man) practises *ghunghat/pardah*.

Although Table 12 shows two instances of question order effects influencing SARI's measurements of social attitudes, it is worth noting that the differences are quite small and that we investigated a number of other randomisations that had no effect on responses. Overall, question order effects did not pose a major threat to the interpretation of the data. We do, however, plan to continue randomising question order where possible in order to minimise such effects, where present.

Table 12. Question Order Effects in SARI

Panel A. Support for Caste and Gender-based Reservation					
Support Gender-based Reservation					
	mean	se	95% CI		n
Caste first, reservation second	0.87	0.006	0.854	0.876	3,655
Reservation first, caste second	0.87	0.006	0.861	0.883	3,502
Support Caste-based Reservation					
	Mean	SE	95% CI		n
Caste First, reservation second	0.59	0.008	0.572	0.605	3,539
Reservation first, caste second	0.59	0.008	0.575	0.608	3,390

Panel B. Support for Law Stopping Inter-marriage					
Support Law Stopping Inter-marriage					
	Mean	SE	95% CI		n
Law question after question about family	0.48	0.008	0.466	0.499	3,537
Law question before question about family	0.42	0.008	0.408	0.440	3,572

Panel C. Should Women Work?					
Women Should Work					
	Mean	SE	95% CI		n
Choose spouse not before women work	0.58	0.008	0.569	0.600	3,771
Choose spouse right before women work	0.53	0.012	0.502	0.548	1,843
Choose spouse before work, but intervening questions	0.53	0.012	0.511	0.557	1,850
Women Should Work					
	Mean	SE	95% CI		n
<i>Ghunghat</i> not before women work	0.56	0.008	0.547	0.579	3,688
<i>Ghunghat</i> right before women work	0.53	0.012	0.510	0.555	1,866
<i>Ghunghat</i> before women work, but intervening question	0.57	0.011	0.548	0.593	1,910

PART 4: COMPARING SURVEY MODES: MOBILE PHONE SURVEYS VERSUS FACE-TO-FACE SURVEYS

In seeking to understand the potential of mobile phone surveys to collect accurate data, it is important to check results against standard, in-person survey methods. This is particularly important for sensitive questions about topics such as discrimination and prejudice, for which we might expect that the survey mode would influence responses. In this section, we compare SARI results to those from the IHDS, India Human Development Survey (IHDS), a face-to-face panel survey (Desai and Vanneman, 2011-12).

4.1. IHDS and SARI

The IHDS is a nationally representative panel survey of over 41,000 households, conducted in 2004-05 and 2011-12. The IHDS included several questions on gender and caste discrimination; some of SARI's questions were modelled off of IHDS questions to be able to compare State/city level estimates (at another point in time), and to be able to learn about differences in responses between face-to-face and mobile phone interviews. For this report, we use data only from the 2012 IHDS.

Questions that are comparable across the two surveys, and the places in which they were asked, are listed in Table 13. Although Mumbai is listed in the table several times, the results presented in this section do not include Mumbai because SARI interviewed men, but not women, in Mumbai. Since the respondents to the IHDS household questionnaire are primarily women, and respondents to the IHDS women's questionnaire are entirely women, SARI data from Mumbai and IHDS data from Mumbai are not comparable. In the results we present here, SARI samples are restricted to female respondents for comparability.

Table 13. Description of Questions That Are Similar in IHDS and SARI

SARI Question	IHDS Question	Coding	State/City in Which Question Was Asked in Both Surveys
<i>Gender</i>			
When your family eats lunch or dinner, do the women usually eat with the men? Or do the women usually eat first? Or do the men usually eat first?	When your family takes the main meal, do women usually eat with the men? Do women eat first by themselves? Or do men eat first?	SARI: Coded 'yes' if men usually eat first IHDS: Coded 'yes' if men eat first	Delhi Uttar Pradesh Rajasthan Mumbai Bihar Jharkhand Maharashtra
(For Hindu women) Do you practise <i>ghunghat/pallu</i> ?	Do you practise <i>ghungat/burkha/purdah/pallu</i> ?	SARI: Coded 'yes' if respondent says yes IHDS: Coded 'yes' if respondent says yes	Delhi Uttar Pradesh Rajasthan Mumbai
(For Muslim women) Do you practise <i>pardah/burkha</i> ?			
When you want to go outside alone somewhere near your home, such as to visit a neighbour, do you need to ask your husband or family, or do you just tell them and go?	Now, I would like to ask you about going to the following places, please tell us whether you have to ask permission of your husband or a senior family member to go to the home of relative or friends (in the village/neighbourhood)?	SARI: coded yes if respondent has to ask husband or family IHDS: Coded 'yes' if respondent has to ask husband or family	Bihar Jharkhand Maharashtra
<i>Discrimination</i>			
Do any members of your family practise untouchability?	In your household, do some members practise untouchability? PLUS (If the answer was 'no' to the previous question), would there be a problem if someone who is a Scheduled Caste were to enter your kitchen or share utensils?	SARI: Coded 'yes' if anyone in the household (including respondent) answers yes IHDS: Coded 'yes' if answer to either question is yes	Delhi Uttar Pradesh Rajasthan Mumbai Bihar Jharkhand Maharashtra
<i>Inter-marriage</i>			
Are the castes of your wife's/husband's family and your family the same or different?	Is your husband's family the same caste as your natal family?	SARI: Coded 'yes' if the respondent reports that the castes of families are different IHDS: Coded 'yes' if the respondent says no, husband's family's caste is not the same as her natal family	Bihar Jharkhand Maharashtra

In Tables 14, 15, and 16, we compare results from the SARI and IHDS questions listed in Table 13 to understand if there are any important differences between the responses in face-to-face and mobile phone

surveys. For each sample, from left to right, we compare the unweighted SARI data; then the Census-weighted SARI data, then the SARI data weighted using NFHS-4 data, then the unweighted IHDS data, and finally the weighted IHDS data. In all the tables, the columns for the SARI data weighted by the NFHS-4 and the weighted IHDS columns are highlighted in gray, as these are the most comparable estimates.

We analyse the difference between the unweighted and weighted samples to assess if weighting makes a bigger difference to mobile phone estimates than face-to-face estimates. We present the SARI results with two different sets of weights (Census 2011 and NFHS-4). The differences between IHDS and SARI samples may arise because the surveys were done in different years: for example, if age structure has changed in the intervening years, weighting using the 2015-16 NFHS-4 might yield very different results from weighting using the 2011 Census. We find that the data source used for weighting does not make a large difference in SARI estimates.

4.1.1. Gender

The gender questions in Table 14 were asked to ever-married women in the IHDS. The SARI samples have thus been restricted to ever-married women for comparability.

Table 14. Fraction Reporting Food, Cover, and Permission Gender Practices

Panel A. Fraction of women who eat last					
	SARI, Unweighted (%)	SARI, Census Weighted (%)	SARI, NFHS-4 Weighted (%)	IHDS, Unweighted (%)	IHDS, Weighted (%)
Delhi					
Mean	30	34	34	21	21
95% CI	(26, 35)	(29, 39)	(28, 39)	(18, 24)	(18, 24)
Uttar Pradesh					
Mean	52	54	54	46	50
95% CI	(48, 56)	(49, 60)	(48, 59)	(46, 48)	(47, 52)
Rajasthan					
Mean	43	46	46	43	43
95% CI	(40, 45)	(43, 49)	(43, 49)	(41, 45)	(41, 45)
Bihar					
Mean	58	65	64	47	51
95% CI	(56, 60)	(62, 68)	(61, 68)	(45, 50)	(47, 54)
Maharashtra					
Mean	21	25	24	9	9
95% CI	(18, 24)	(21, 31)	(19, 28)	(8, 10)	(8, 10)
Jharkhand					
Mean	44	49	46	44	49
95% CI	(39, 48)	(43, 56)	(41, 52)	(40, 47)	(45, 54)
Panel B. Fraction of women who wear <i>gunghat/pallu</i>					
Delhi					
Mean	60	61	62	75	75
95% CI	(56, 65)	(56, 66)	(56, 67)	(71, 78)	(71, 78)
Uttar Pradesh					
Mean	81	88	86	83	86
95% CI	(78, 84)	(84, 91)	(82, 89)	(82, 84)	(84, 88)
Rajasthan					
Mean	89	92	91	95	96
95% CI	(87, 90)	(90, 93)	(90, 93)	(94, 96)	(95, 97)
Panel C. Fraction of women who have to ask permission to go to a neighbour's house					
Bihar					
Mean	59	65	64	80	80
95% CI	(57, 61)	(62, 68)	(61, 67)	(76, 82)	(77, 82)
Maharashtra					
Mean	66	66	66	73	73
95% CI	(62, 69)	(60, 71)	(60, 70)	(71, 74)	(71, 74)
Jharkhand					
Mean	48	53	51	72	69
95% CI	(43, 52)	(46, 60)	(45, 57)	(69, 75)	(65, 73)

Note: These questions were asked in the IHDS to ever-married-women, thus we restrict the SARI samples also to ever-married-women.

For women eating last (Panel A), the IHDS estimates are consistently lower than the SARI estimates. One reason for this may be that greater anonymity in phone surveys as compared to face-to-face surveys allows respondents to more openly admit this conservative practice.

For *ghunghat/pardah* (Panel B), the IHDS estimates are slightly higher than SARI estimates, though not by much. This may be because interviewers can physically see respondents in a face-to-face survey, and thus cannot hide whether *ghunghat/pardah* is practised in their home, whereas on the phone, respondents can more easily claim that it is not done.

For permission to go to a neighbour’s house (Panel C), the IHDS estimates are consistently higher than the SARI estimates. Perhaps on this measure, the respondents feel that it is socially more acceptable for women to stay in the home, and so feel more socially pressured in-person to say that they have to ask permission.

The practice of *ghunghat/pardah* and the practice of having to ask permission to go to a neighbour’s house might vary by age, since empowerment often increases with age, with younger women often being more controlled within the household and older women often having more freedom.

Figures 8 and 9 show estimates of *ghunghat/pardah* and asking permission, by age. Both datasets show that older women are less likely to practise both *ghunghat/pardah* and having to ask for permission, though the IHDS trends are more dramatic. The trend is more steeply downward sloping for asking permission compared to *ghunghat/pardah*, suggesting that *ghunghat/pardah* may be influenced by other factors more strongly than age.

Figure 8. Ghunghat/Pardah Practice by Age, SARI and IHDS

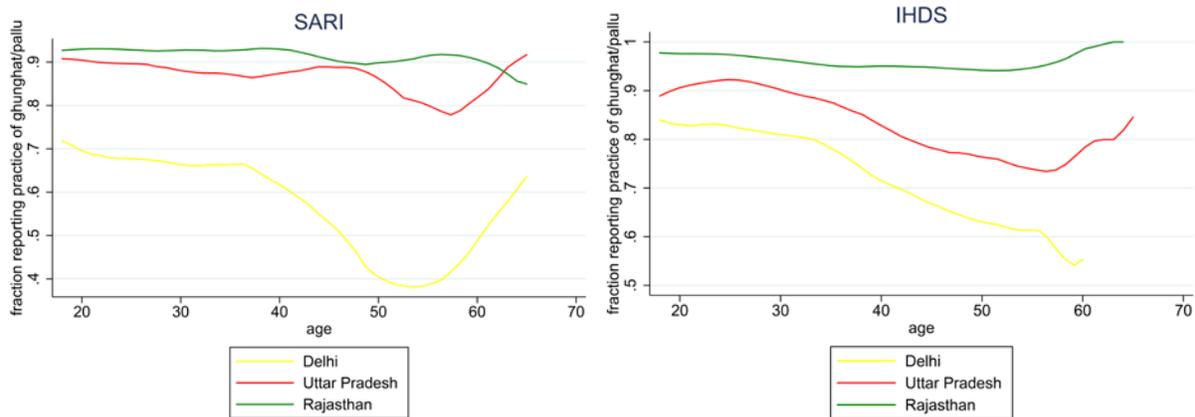
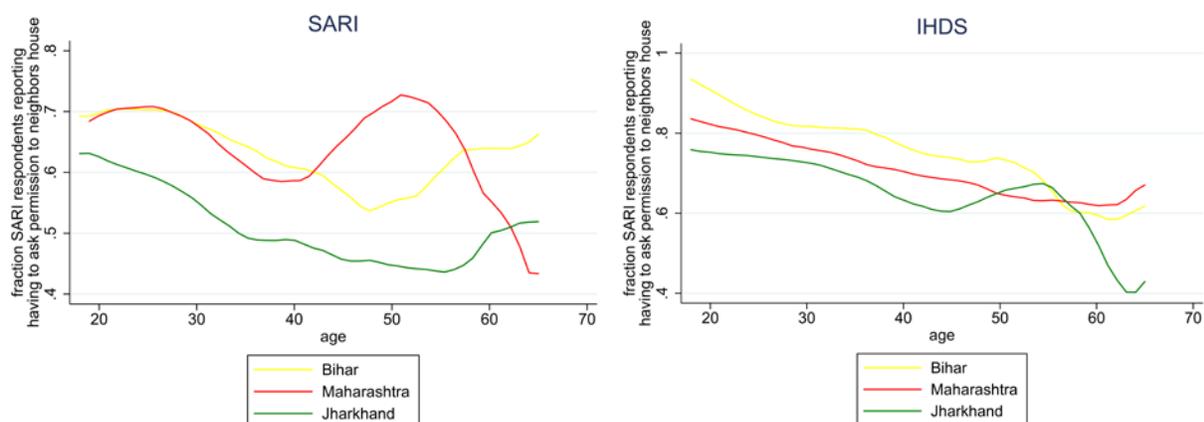


Figure 9. Practice of Having to Ask Permission to go to the Neighbour’s House by Age, SARI and IHDS



4.1.2. Discrimination against Dalits

The IHDS asked about practices of untouchability to households of all caste backgrounds. SARI asked about the practice of untouchability only to non-SC, non-ST, and non-Muslim households, so IHDS was restricted for purposes of comparability. The IHDS household survey, which included the untouchability questions, was answered by both male and female respondents, and therefore, thus SARI samples include all respondents.

In the Delhi, Uttar Pradesh, and Rajasthan samples of SARI, the respondents were first asked whether someone in their household practised untouchability. If they said ‘yes’, they were subsequently asked if they themselves practised untouchability. In the Bihar, Jharkhand, and Maharashtra samples of SARI, the respondents were first asked whether they practised untouchability. If they said ‘no’, they were subsequently asked if someone in their family practised untouchability. The SARI respondents were coded as practising untouchability if anyone in the household, including the respondent, was reported to practise untouchability.

The IHDS first asks directly if someone in the household practises untouchability. If the respondent says ‘no’, a subtler question is asked about whether it would be OK with the respondent if a low-caste person were to go into her/his kitchen and use utensils. The IHDS respondents were coded as practising untouchability if the respondents answered ‘yes’ to either question.

In Table 15, we find that for untouchability, the IHDS yielded much lower estimates than SARI in Delhi, Bihar, Maharashtra, and Jharkhand. Perhaps where estimates were lower in in-person surveys, respondents felt much more comfortable admitting caste prejudice anonymously by phone. This may be an indication that in these places, there is a consciousness of casteism and that it is wrong to discriminate and hold prejudiced beliefs.

On the other hand, IHDS yielded higher estimates in Rajasthan and Uttar Pradesh, though the UP results are not statistically significant. These are some of India's most conservative States, thus perhaps talking openly about untouchability by phone or in-person is not seen to be very different.

Table 15. Fraction Reporting That Someone in Their Household Practises Untouchability

	SARI, Unweighted (%)	SARI, Census Weighted (%)	SARI, NFHS-4 Weighted (%)	IHDS, Unweighted (%)	IHDS, Weighted (%)
Delhi					
Mean	34	34	33	20	20
95% CI	(31, 37)	(30, 37)	(29, 37)	(16, 25)	(16, 26)
Uttar Pradesh					
Mean	46	51	49	57	55
95% CI	(43, 49)	(46, 56)	(45, 53)	(54, 59)	(52, 59)
Rajasthan					
Mean	49	54	52	64	65
95% CI	(47, 51)	(51, 56)	(50, 55)	(61, 66)	(63, 68)
Bihar					
Mean	53	61	60	54	53
95% CI	(51, 55)	(58, 64)	(57, 63)	(51, 57)	(49, 58)
Maharashtra					
Mean	31	37	35	4	4
95% CI	(29, 34)	(33, 42)	(31, 38)	(3, 5)	(3, 5)
Jharkhand					
Mean	44	51	49	18	20
95% CI	(40, 48)	(45, 57)	(44, 55)	(14, 22)	(15, 26)

4.1.3. Inter-marriage

The inter-caste marriage question (see Table 13) in the IHDS does not specify to respondents how inter-caste marriage is defined, thus a response of ‘yes’ could mean that the person is married to someone of a different caste group (that is, an OBC individual married to an SC individual), or it could mean that the person is married to someone of a different sub-caste within the same caste group (that is, a Chamar individual married to a Nai individual, though both are Dalit). For comparability purposes, SARI also asked a similarly broad question, which is used in the analysis here. However, in order to understand how the respondents understand the question of inter-caste marriage, SARI also followed up by asking about the respondents’ spouse’s caste group and sub-caste in the event that they reported having an inter-caste marriage. Those results are not shown here.

Estimates of inter-caste marriage in Table 16 are higher in the IHDS than in SARI, even though inter-caste marriage continues to be taboo across the country. This finding is counter-intuitive if we believe that people are more comfortable admitting to things that are not the social norm in more anonymous phone surveys. Perhaps IHDS respondents and SARI respondents were understanding inter-caste marriage to be defined in different ways, or it may be the case that IHDS respondents somehow felt social pressure to answer in the affirmative about their own marriage. Alternatively, perhaps inter-caste marriage is more common than is

understood and IHDS respondents felt more comfortable sharing that information with interviewers in person.

SARI additionally asked the inter-marriage question with a prompt to a randomly selected half of respondents, with interviewers prefacing the question by saying, “Many people marry within their own caste, but some people marry outside their caste” (the other half of respondents were asked the same question in the same way as the IHDS, with no prompt). The purpose was to see if making inter-caste marriage appear more socially acceptable would change the respondents’ responses. Preliminary results show that prompting yields similarly low results among the SARI respondents.

Table 16. Fraction Reporting They Are in an Inter-caste Marriage

	SARI, Unweighted (%)	SARI, Census Weighted (%)	SARI, NFHS-4 Weighted (%)	IHDS, Unweighted (%)	IHDS, Weighted (%)
Bihar					
Mean	3	2	2	10	12
95% CI	(2, 4)	(1, 4)	(1, 3)	(8, 11)	(10, 15)
Maharashtra					
Mean	2	3	2	3	3
95% CI	(0.6, 4)	(1, 7)	(1, 6)	(3, 4)	(2, 3)
Jharkhand					
Mean	6	3	4	9	11
95% CI	(3, 10)	(1, 6)	(2, 8)	(8, 12)	(9, 14)

Note: This question was asked in the IHDS to ever-married-women, thus we restrict the SARI sample also to ever-married-women.

4.2. Non-response: SARI versus IHDS

Non-response to sensitive questions about social inequality may be higher in mobile phone surveys (perhaps because there is less social pressure to answer the question of a person who is not in front of you) or it might be lower (perhaps because a respondent to a phone survey is more anonymous). We are aware of no prior data that could be used to test these hypotheses. The SARI data provide a unique opportunity to examine, and possibly improve upon mobile phone survey methods.

Non-response was calculated as the fraction of respondents who did not answer a given question, out of those who were asked the question. In order to ensure comparability across the SARI and IHDS samples, the samples were restricted to match the more restrictive sample for each question. For example, the question of eating order was asked only to ever-married women in the IHDS, but it was asked to all individuals in SARI. For comparability, we restrict the SARI sample to only ever-married women. Sub-sample restrictions are shown in the third column of Table 17.

Non-response is not very different between IHDS and SARI on eating last. However, it is clearly higher in SARI for *ghunghat*, permission, untouchability, and inter-marriage. From Table 17, it appears that respondents are more willing to skip a question on the phone. There are several reasons why this may be true. First, it may be because there is less pressure to answer when the interviewer is not physically with

the respondent. It could also be the case that interviewers have to work harder on the phone to make sure that the respondent does not hang up the phone. Losing a respondent in this way is less of a risk in-person. Last, it could also be that the questions are simply easier to understand in-person where interviewers can use visual cues to check if a respondent has understood what is being asked, and rephrase as needed.

Overall, non-response is low across both surveys, and while differences in non-response exist, they are not very large between the two surveys. This suggests that respondents are similarly willing to answer questions about social inequality in-person and by phone. This is promising in terms of the potential of phone surveys in capturing respondent attitudes to these important issues.

Table 17. Fraction Non-response on Sensitive Questions, SARI versus IHDS

Question	Sample	Sub-sample	SARI (%)	IHDS (%)
When your family eats lunch or dinner, do the women usually eat with the men? Or do the women usually eat first? Or do the men usually eat first?	Delhi	Ever-married women	0.21	0.13
	Uttar Pradesh	Ever-married women	0.00	0.08
	Rajasthan	Ever-married women	0.26	0.04
	Bihar	Ever-married women	0.39	0.33
	Maharashtra	Ever-married women	0.44	0.54
	Jharkhand	Ever-married women	0.00	0.26
Do you wear <i>ghunghat/pallu/pardah/burkha</i> ?	Delhi	Ever-married women	0.63	0.00
	Uttar Pradesh	Ever-married women	0.72	0.00
	Rajasthan	Ever-married women	2.14	0.04
When you want to go outside alone somewhere near your home, such as to visit a neighbour, do you need to ask your husband or family, or do you just tell them and go?	Bihar	Ever-married women	5.75	0.87
	Maharashtra	Ever-married women	4.37	0.27
	Jharkhand	Ever-married women	7.88	0.90
Does anyone in your family believe in/practise untouchability?	Delhi	Non-SC/ST/Muslim	4.34	0.00
	Uttar Pradesh	Non-SC/ST/Muslim	3.23	0.10
	Rajasthan	Non-SC/ST/Muslim	2.18	0.06
	Bihar	Non-SC/ST/Muslim	2.57	0.42
	Maharashtra	Non-SC/ST/Muslim	2.30	0.09
	Jharkhand	Non-SC/ST/Muslim	1.33	0.28
Are the castes of your husband's family and your family the same or different?	Bihar	Ever-married women	0.81	0.47
	Maharashtra	Ever-married women	0.67	0.66
	Jharkhand	Ever-married women	1.93	0.26

PART 5: CONCLUSIONS

Mobile phone surveys have the potential to radically reduce the time and expense of conducting social scientific surveys in India, which would allow researchers to collect data on more questions, and to do so more frequently, than is possible using face-to-face interviews. As India's mobile phone ownership steadily increases, SARI has been able to reach individuals on their mobile phones and interview them on a range of social issues, demonstrating that mobile phone surveys offer a lower-cost alternative to traditional face-to-face surveys, even when asking sensitive questions about discrimination and prejudice.

PART 6: APPENDIX

6.1. Call log codes

Table 18. List of Call Log Codes

Code	Reason
1	Incorrect number; number does not exist
2	Incoming facility not available; call end, no beep, no bell; call cannot be connected/call cannot get through; your call is rejected; request cannot be completed
3	Switched off
4	Not reachable
5	Not available
6	Temporarily not unavailable
7	All lines are busy/network busy
8	Beeps
9	No one of correct sex lives in the household
10	Refusal before respondent selection
11	Refusal after respondent selection, did not speak to the selected respondent
12	Survey completed
13	Refusal after survey partially completed with the selected respondent or after the selected respondent came on the phone
14	Interviewer could not understand person before the respondent selection
15	Interviewer could not understand the selected respondent
16	Person could not understand the interviewer well enough for the respondent selection
17	Selected respondent could not understand the interviewer
18	Other (enter reason in notes)
19	Person speaking to someone else (number busy)
20	Phone rang, no answer
21	Call back to select the respondent
22	Respondent selected, call back to speak to the respondent
23	Survey partially completed with the selected respondent, call back to finish
25	No one falls in the required age group: 18-65 years

6.2. Interview Quality Monitoring

Table 19. Checklist for Interview Quality

This checklist will give you a way to systematically track what is going well and what can be improved for each interviewer, so you can show them what you're noticing during your weekly one-on-ones. For each week, we will generate a random order in which you will sit with each interviewer until you are able to observe three answered calls or one completed interview. We can decrease the frequency of this monitoring after a few weeks if needed. Use this sheet only once the interviewer gets someone on the phone who is willing to talk to them.

Date: _____ Interviewer Code: _____ Interviewer Name: _____ Shift: (1) Morning (2) Evening _____

A. Introduction:

No.	Question	Call 1	Call 2	Call 3	Notes
A.0	STATUS OF SURVEY (CODES 9-18, 21-23)	[] []	[] []	[] []	
A.1	Did the interviewer introduce him/herself politely?	Yes.....1 No.....2	1 2	1 2	
A.2	Did the interviewer introduce the study using the correct language?	Yes.....1 No.....2	1 2	1 2	
A.3	How much did the interviewer try to convince the respondent for an interview?	Not at all.....1 A little.....2 Quite a lot.....3	1 2 3	1 2 3	
A.4	How effective was the interviewer's convincing?	Not effective.....1 Somewhat effective2 Very effective.....3	1 2 3	1 2 3	
A.5	How could the interviewer have done better at convincing the respondent to talk to him/her?	_____ _____			
A.6	Did the interviewer ask the mobile phone/household selection questions correctly, in order to do the household listing correctly?	Yes.....1 No.....2	1 2	1 2	

B. Questions:

No.	Question	Call 1	Call 2	Call 3	Notes
B.1	Did the interviewer read each question in Qualtrics carefully, to make sure that he/she was asking the correct version of each question, in the correct order?	Yes.....1	1	1	
		No.....2	2	2	
B.2	Did the interviewer wait until the respondent gave his/her full answer before filling out options in Qualtrics, and moving to the next question?	Yes.....1	1	1	
		No.....2	2	2	
B.3	Did the interviewer probe when it was necessary/useful?	Yes.....1	1	1	
		No.....2	2	2	
B.4	Did the interviewer do a good job answering the respondent's questions (being patient, using the correct language, etc.)?	Yes.....1	1	1	
		No.....2	2	2	
		N/A.....3	3	3	
B.5	Did the interviewer indicate approval or disapproval in reaction to any of the respondent's answers?	Yes.....1	1	1	
		No.....2	2	2	
		N/A.....3	3	3	
B.6	When the respondent didn't provide an immediate answer, did the interviewer try patiently three times, and then skip the question if she got no response?	Yes.....1	1	1	
		No.....2	2	2	
		N/A.....3	3	3	
B.7	Overall, was the interviewer speaking nicely to the respondent, throughout the interview?	Yes.....1	1	1	
		No.....2	2	2	
B.8	Did the interviewer use the correct code in recording the interaction?	Yes.....1	1	1	
		No.....2	2	2	

6.3. SARI Questionnaires

6.3.1 Questionnaire for Uttar Pradesh and Delhi

A1. Interviewer code _____

A2. Which circle is this number in?

1. Uttar Pradesh
2. Maharashtra
3. Delhi NCR
4. Mumbai

A3. Introduce the study. What happened after getting consent to continue from the person on the phone?

1. They said to call later
2. There is no one of the interviewer's sex in this household
3. Start the interview
4. Consent not given
5. Other

Close the tab, if 4 or 5

A4. Do you live in Uttar Pradesh only, or do you live somewhere else? (*depending on answer to A2*)

1. Uttar Pradesh
2. Uttarakhand
3. Other _____

Close the tab, if Uttarakhand or Other is the answer

A5. How long have you been living there?

1. No. of years _____
2. Since always
3. After marriage

A6. Which type of place is your home in?

1. Big city
2. Town
3. Village
4. Own fields

B1. We want to understand generally how big people's families are. Can you tell me how many people live with you? (*Fill in the number*)

B2. Out of the total, how many are women/men? (*Fill in the number*)

B3. Out of these, how many are women/men between the ages of 18 and 65 years? (*Fill in the number*)

B4. Can you tell me who the men/women between the ages of 18 and 65 years are? (*List them*)

Select the Respondent

B5. Can I speak with [name – randomised from B4]? *Get consent to speak to the selected respondent. If they ask why we want to speak to them, give an answer from the script. If the selected respondent is not*

available, find out what time to call back and record this information on the call log and calendar.

B6. Use the script to tell the respondent about the study. Is the person willing to answer questions?

1. Yes
2. No
3. Call later

B7. How many years of schooling have you completed? (Choose from the drop-down list)

B8. How old are you? (Fill in number, or 88 if the respondent doesn't know his/her age)

B9. Are you married?

1. Yes
2. No
3. Yes, but not anymore

Religion and Caste

(Randomisation applies, refer to randomisation document for details)

C1. What is your religion?

1. Hindu
2. Muslim
3. Sikh
4. Christian
5. Jain
6. Other

C2. What is your caste? (Fill in jati name)

C3. Which caste group do you belong to? Scheduled Caste, General caste, Other Backward Caste, Scheduled Tribe, or Brahmin?

1. Scheduled Caste
2. OBC
3. General caste
4. Brahmin
5. ST
6. Other

Sanitation

D3. Have you heard of the Swachh Bharat Abhiyan?

1. Yes
2. No

D4. What activities do you think are included in the Swachh Bharat Abhiyan? (Multiple options allowed, asked only if respondent says yes to D3)

1. Cleaning
2. Picking up trash
3. Latrines
4. Other _____

Gender

(Randomisation applies, refer to randomisation document for details)

K1. In your opinion, should a married woman, whose husband earns a good living, work outside the home or not?

1. Yes, she should work
2. No, she should not work

K2. In your opinion, should a young girl or boy select a spouse/life partner for him/herself or should his/her parents select a spouse/life partner for him/her? *If the respondent says that both should have equal say, ask: What do you think would be better – for the young person to select her own life partner or for her parents to select one for her?*

1. Yes, they should select their own life partners
2. No, the parents should select their life partners

K3. *For married women: Do you practise ghunghat/pallu/pardah/burkha (Language of practice depends upon the respondent's religion). For married men: Does your wife practise ghunghat/pallu/pardah/burkha?*

1. Yes
2. No
3. Don't have a wife *(for men who do not live with their wives in the place where they are being interviewed, or if their wife has died)*

K4. When your family eats lunch or dinner, do the women usually eat with the men? Or do the women usually eat first? Or do the men usually eat first?

1. They eat together
2. Women eat first
3. Men eat first
4. Nothing is fixed, other

Reservations: Women and Low Caste

(Randomisation applies, refer to randomisation document for details)

I1. In government colleges and jobs, the government keeps certain openings just for women. In some places, the government also keeps certain openings just for those of Harijan or Dalit castes or other backward castes. This is called reservations. Before today, had you heard of reservations?

1. Yes
2. No

I2. In your opinion, do you favour or oppose having reservations for women?

1. Favour
2. Oppose

I3. In your opinion, do you favour or oppose having reservations based on caste?

1. Favour
2. Oppose

Reservations: Why? *(If answer to I1 is yes)*

J1. Why do you favour having reservations based on caste?

1. Support reservations for the development of lower castes
2. Support reservations to reduce discrimination
3. Support reservation to help the poor
4. Support reservations to open opportunity in jobs/studies
5. Can't say why support reservations
6. Support reservations for other reasons

J2. Why do you oppose having reservations based on caste?

1. Oppose reservations because people should put in effort
2. Oppose reservations because government should give seats for merit
3. Oppose reservations because it should be based on income
4. Oppose reservations because it causes conflict
5. Oppose reservations because it should be given to everyone
6. Oppose reservations because it is no longer needed
7. Oppose reservations because within Dalits, only the rich benefit
8. Can't say why oppose reservations
9. Oppose reservations for other reasons

J3. Why do you think the government has reservations?

1. To obtain votes
2. To reduce discrimination
3. To help the poor
4. To give equal opportunities in work and education
5. Can't say/don't know
6. Other

Marriage

(Randomisation applies, refer to randomisation document for details)

L1. In your opinion, should there be a law stopping high-caste and low-caste people from marrying each other?

1. Yes
2. No

L2. If a close relative or someone in your family married someone from a Harijan or Dalit caste would you oppose it or not? *(Asked only to non-Dalits)*

1. Yes, I would oppose it
2. No, I would not oppose it

L3. If a close relative or someone in your family married a Muslim/Hindu *(Respondent will be asked the opposite religion to themselves)* would you oppose it or not?

1. Yes, I would oppose it
2. No, I would not oppose it

Discrimination: Untouchability (Asked to Non-Dalits)

S1. Does anyone in your family believe in/practise untouchability?

1. Yes
2. No

S3. Do you yourself believe in/practise untouchability? (*Only Asked if respondent says yes to S1*)

1. Yes
2. No

Discrimination: Friends (Asked to Non-Dalits)

(Randomisation applies, refer to randomisation document for details)

T1. Do you have any friends or acquaintances who are from a Harijan or Dalit caste?

1. Yes, a close friend
2. Yes, an acquaintance
3. No, no one

T2. In the past few years, have you eaten at the home of any Harijan or Dalit friend or acquaintance?

(Asked only if respondent answered yes in T1)

1. Yes
2. No

T3. In the past few years, has your Harijan or Dalit friend or acquaintance come to your home to have food? *(Asked only if respondent answered yes in T1)*

1. Yes
2. No

Discrimination: Dalit (Asked to Dalits Only)

(Randomisation applies, refer to randomisation document for details)

As you know, discrimination and injustice based on caste is wrong, but still, we hear instances of this kind sometimes. Perhaps you have personally experienced such problems, or perhaps you have not. I just want to understand if any of the following things have happened to you or not.

U2. In the past five years have you ever felt that anyone disrespected or insulted you because of your caste?

1. Yes
2. No

U3. Can you tell me what happened the last time that this happened to you? (*Open-ended, only asked if respondent says yes to U2*)

U4. In your childhood or youth, did you ever feel that someone had disrespected or insulted you because of your caste?

1. Yes
2. No

U5. Can you tell me about this? (*Open-ended, only asked if respondent says yes to U4*) *If the person says that many things happened, asked the person: What was the time that made you feel the worst?*

U6. Have you ever had a job or done manual labour?

1. Yes
2. No

U7. Has it ever happened that you didn't get a job that you could have gotten (meaning that you were qualified for) because of your caste? *(Only asked if respondent said yes to U6)*

1. Yes
2. No

U8. Has it ever happened that you didn't get paid as much as you were supposed to be paid for some work that you did because of your caste? *(Only asked if respondent said yes to U6)*

1. Yes
2. No

U9. Has it ever happened to you in a work environment that someone did not treat you properly because of your caste? *(Only asked if respondent said yes to U6)*

1. Yes
2. No

U10. In your opinion, has caste injustice decreased, increased, or stayed the same as compared to a few years ago?

1. Decreased
2. Increased
3. Same as before

U11. In your opinion, is caste as important in people's lives today as it was 10 years ago?

1. Yes
2. No

Discrimination: Muslim (Asked to Muslims Only)

(Randomisation applies, refer to randomisation document for details)

As you know, discrimination and injustice based on religion is wrong, but still, we hear instances of this kind sometimes. Perhaps you have personally experienced such problems, or perhaps you have not. I just want to understand if any of the following things have happened to you or not.

V2. In the past five years, have you ever felt that anyone disrespected or insulted you because of your religion?

1. Yes
2. No

V3. Can you tell me what happened the last time that this happened to you? *(Open-ended, only asked if respondent says yes to U2)*

V4. In your childhood or youth, did you ever feel that someone had disrespected or insulted you because of your religion?

1. Yes
2. No

V5. Can you tell me about this? *(Open-ended, only asked if respondent says yes to U4) If the person says that many things happened, asked the person: What was the time that made you feel the worst?*

V6. Have you ever had a job or done manual labour?

1. Yes

2. No

V7. Has it ever happened that you didn't get a job that you could have gotten (meaning that you were qualified for) because of your religion? (*Only asked if respondent said yes to V6*)

1. Yes
2. No

V8. Has it ever happened that you didn't get paid as much as you were supposed to be paid for some work that you did because of your religion? (*Only asked if respondent said yes to V6*)

1. Yes
2. No

V9. Has it ever happened to you in a work environment that someone did not treat you properly because of your religion? (*Only Asked if respondent said yes to V6*)

1. Yes
2. No

V10. In your opinion, has religious intolerance decreased, increased, or stayed the same as compared to a few years ago?

1. Decreased
2. Increased
3. Same as before

V11. In your opinion, is religion as important in people's lives today as it was 10 years ago?

1. Yes
2. No

6.3.2. Questionnaire for Rajasthan and Mumbai

A1. Interviewer Code

A3. Introduce the study. What happened after getting consent to continue from the person on the phone?

6. They said to call later
7. There is no one of the interviewer's sex in this household
8. Start the interview
9. Consent not given
10. Other

A4.1 Do you live in Rajasthan or do you live in some other State?

5. Rajasthan
6. Other___

Close the tab, if other

A5.1 How long have you been living there?

1. No. of years _____
2. Always
3. After Marriage

A6. Which type of place is your home in?

5. Big city
6. Town
7. Village
8. Own fields

B1. We want to understand generally how big people's families are. Can you tell me how many people live with you? (*Fill in the number*)

B2. Out of the total, how many are women/men? (*Fill in the number*)

B3. Out of these, how many are women/men between the ages of 18 and 65 years? (*Fill in the number*)

B4. Can you tell me who the men/women between the ages of 18 and 65 years are? You can tell them as per the relation you share with them such as mother/father, sister-in-law/brother? (*List them*)

Select the Respondent

B5. Can I speak with [name – randomised from B4]? *Get consent to speak to the selected respondent. If they ask why we want to speak to them, give an answer from the script. If the selected respondent is not available, find out what time to call back and record this information on the call log and calendar.*

B6. Use the script to tell the respondent about the study. Is the person willing to answer questions?

4. Yes
5. No
6. Call later

B7. How many years of schooling have you completed? (*Choose from the drop-down list*)

B8. How old are you? *(Fill in the number, or 88 if the respondent doesn't know his/her age)*

B9. Are you married?

4. Yes
5. No
6. Yes, but not anymore

Religion and Caste

(Randomisation applies, refer to randomisation document for details)

C1. What is your religion?

7. Hindu
8. Muslim
9. Sikh
10. Christian
11. Jain
12. Other

C2. What is your caste? *(Fill in the name/choose from the drop-down menu)*

C3. Which caste group do you belong to? Scheduled Caste, General caste, Other Backward Caste, Scheduled Tribe, or Brahmin?

7. Scheduled Caste
8. OBC
9. General caste
10. Brahmin
11. Scheduled Tribe
12. Other

Sanitation

D3. Have you heard of the Swachh Bharat Abhiyan?

3. Yes
4. No

D4. What activities do you think are included in the Swachh Bharat Abhiyan? *(Multiple options allowed, asked only if respondent says yes to D3)*

5. Cleaning
6. Picking up trash
7. Latrines
8. Other_____

Gender

(Randomisation applies, refer to randomisation document for details)

K1. In your opinion, should a married woman, whose husband earns a good living, work outside the home or not?

3. Yes, she should work
4. No, she should not work

K2. In your opinion, should a young girl or boy select a spouse/life partner for him/herself or should his/her parents select a spouse/life partner for him/her? (*If the respondent says that both should have equal say, ask: What do you think would be better – for the young person to select her own life partner or for her parents to select one for her?*)

3. Yes, they should select their own life partners
4. No, the parents should select their life partners

K3. *For married women: Do you practise ghunghat/pallu/pardah/burkha (The language of practice depends upon the respondent's religion). For married men: Does your wife practise ghunghat/pallu/pardah/burkha?*

4. Yes
5. No
6. Don't have a wife (*For men who do not live with their wives in the place where they are being interviewed, or if their wife has died*)

K4. When your family eats lunch or dinner, do the women usually eat with the men? Or do the women usually eat first? Or do the men usually eat first?

5. They eat together
6. Women eat first
7. Men eat first
8. Nothing is fixed, other

Reservations: Women and Low-caste

(Randomisation applies, refer to randomisation document for details)

I1. In government colleges and jobs, the government keeps certain openings just for women. In some places, the government also keeps certain openings just for those of Harijan or Dalit castes or Other Backward Castes. This is called reservations. Before today, had you heard of reservations?

3. Yes
4. No

I2. In your opinion, do you favour or oppose having reservations for women?

3. Favour
4. Oppose

I3. In your opinion, do you favour or oppose having reservations based on caste?

3. Favour
4. Oppose

Reservations: Why?

(Randomisation applies, refer to randomisation document for details)

J1. Why do you favour having reservations based on caste?

7. Support reservations for the development of lower castes
8. Support reservations to reduce discrimination
9. Support reservation to help the poor
10. Support reservations to open opportunity in jobs/studies
11. Can't say why I support reservations
12. Support reservations for other reasons

J2. Why do you oppose having reservations based on caste?

10. Oppose reservations because people should put in effort
11. Oppose reservations because government should give seats for merit
12. Oppose reservations because it should be based on income
13. Oppose reservations because it causes conflict
14. Oppose reservations because it should be given to everyone
15. Oppose reservations because it is no longer needed
16. Oppose reservations because within the Dalits, only the rich benefit
17. Can't say why oppose reservations
18. Oppose reservations for other reasons

J3. Why do you think the government has reservations?

7. To obtain votes
8. To reduce discrimination
9. To help the poor
10. To give equal opportunities in work and education
11. Can't say/don't know
12. Other

Marriage

(Randomisation applies, refer to randomisation document for details)

L1.1 In your opinion, should there be a law stopping high-caste and low-caste people from marrying each other?

3. Yes
4. No

L2.1 If a close relative or someone in your family married someone from a Harijan or Dalit caste would you oppose it or not? *(Asked only to non-Dalits)*

3. Yes, I would oppose it
4. No, I would not oppose it

L3. If a close relative or someone in your family married a Muslim/Hindu *(The respondent will be asked the opposite religion to themselves)* would you oppose it or not?

3. Yes, I would oppose it
4. No, I would not oppose it

Discrimination: Untouchability (Asked to non-Dalits)

S1. Does anyone in your family believe in/practise untouchability?

3. Yes
4. No

S3. Do you yourself believe in/practise untouchability? *(Only asked if the respondent says yes to S1)*

3. Yes
4. No

Discrimination: Friends (Asked to non-Dalits)

(Randomisation applies, refer to randomisation document for details)

T1. Do you have any friends or acquaintances who are from a Harijan or Dalit caste?

4. Yes, a close friend
5. Yes, an acquaintance
6. No, no one

T2. In the past few years, have you eaten at the home of any Harijan or Dalit friend or acquaintance?

(Asked only if the respondent answered yes in T1)

3. Yes
4. No

T3. In the past few years, has your Harijan or Dalit friend or acquaintance come to your home to have food? *(Asked only if the respondent answered yes in T1)*

3. Yes
4. No

Discrimination: Dalit (Asked to Dalits Only)

(Randomisation applies, refer to randomisation document for details)

U1. As you know, discrimination and injustice based on caste is wrong, but still, we hear instances of this kind sometimes. Perhaps you have personally experienced such problems, or perhaps you have not. I just want to understand if any of the following things have happened to you or not.

U.2. 1p Now we will talk about school and college. Have you ever felt that you have personally been discriminated against in school or college because you are a Dalit?

3. Yes
4. No

U.3.1p Now we will talk about government officials. Have you ever felt that you have personally been discriminated against in school or college because you are a Dalit?

1. Yes
2. No

U.4.1p Now we will talk about police. Have you ever felt that you have personally been discriminated against in school or college because you are a Dalit?

3. Yes
4. No

U6.1 Now I want to ask you about work and job. Have you ever been employed?

3. Yes
4. No

U7.1p Has it ever happened that you didn't get a job that you could have gotten (meaning, that you were qualified for) because of your caste? *(Only asked if the respondent said yes to U6)*

3. Yes
4. No

U8.1p Has it ever happened that you didn't get paid as much as you were supposed to be paid for some work that you did because of your caste? *(Only asked if the respondent said yes to U6)*

3. Yes

4. No

U9.1p Has it ever happened to you in a work environment that someone did not treat you properly because of your caste? (*Only asked if the respondent said yes to U6*)

3. Yes
4. No

U.11.1 Have you ever hidden your caste from a stranger?

1. Yes
2. No

U10.1 In your opinion, how often does it happen that a Dalit person in your State face discrimination? Does it happen every day, often, sometimes or never?

1. Everyday
2. Often
3. Sometimes
4. Never

U.2.1h Now we will talk about school and college. In your opinion, how likely is it for a Dalit to face discrimination at school or college? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.3.1h Now we will talk about government officials. In your opinion, how likely is it for a Dalit to face discrimination while getting some work done from a government official? Is it highly likely, somewhat likely or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.4.1h Now we will talk about the police. In your opinion, how likely is it for a Dalit to face discrimination by the police? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.6.1 Now I want to ask about your work and job. Have you ever been employed?

1. Yes
2. No

U.7.1h In your opinion, how likely is it for a Dalit to face discrimination while finding a job? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.8.1h In your opinion, how likely is it for a Dalit to face discrimination in wage payment and not get what he/she earned for the work he/she did? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely

2. Somewhat likely
3. Less likely

U.9.1h In your opinion, how likely is a Dalit to be treated badly by other people at his/her workplace because of his/her caste? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

Discrimination: Adivasi/ST (Asked to Adivasis only)
(Randomisation applies, refer to randomisation document for details)

UU.3 As you know, discrimination and injustice based on caste is wrong, but still, we hear instances of this kind sometimes. Perhaps you have personally experienced such problems, or perhaps you have not. I just want to understand if any of the following things have happened to you or not.

U2. 3p Now we will talk about school and college. Have you ever felt that you have personally been discriminated against in school or college because you are an ST?

1. Yes
2. No

U.3.3p Now we will talk about government officials. Have you ever felt that you have personally been discriminated against in school or college because you are an ST?

1. Yes
2. No

U.4.3p Now we will talk about police. Have you ever felt that you have personally been discriminated against in school or college because you are an ST?

1. Yes
2. No

U6.3 Now I want to ask you about work and job. Have you ever been employed?

1. Yes
2. No

U7.3p Has it ever happened that you didn't get a job that you could have gotten (meaning, that you were qualified for) because of your caste? (Only asked if the respondent said yes to U6)

1. Yes
2. No

U8.3p Has it ever happened that you didn't get paid as much as you were supposed to be paid for some work that you did because of your caste? (Only asked if the respondent said yes to U6)

1. Yes
2. No

U9.3p Has it ever happened to you in a work environment that someone did not treat you properly because of your caste? (Only asked if the respondent said yes to U6)

1. Yes
2. No

U.11.3 Have you ever hidden your caste from a stranger?

1. Yes
2. No

U10.3 In your opinion, how often does it happen that an ST person in your State faces discrimination? Does it happen everyday, often, sometimes or never?

1. Everyday
2. Often
3. Sometimes
4. Never

U.2.3h Now we will talk about school and college. In your opinion, how likely is it for an ST to face discrimination at school or college? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.3.3h Now we will talk about government officials. In your opinion, how likely is it for an ST to face discrimination while getting some work done from a government official? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.4.3h Now we will talk about the police. In your opinion, how likely is it for an ST to face discrimination by the police? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.6.3 Now I want to ask about your work and job. Have you ever been employed?

1. Yes
2. No

U.7.3h In your opinion, how likely is it for an ST to face discrimination while finding a job? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.8.3h In your opinion, how likely is it for an ST to face discrimination in wage payment and not get what he/she earned for the work he/she did? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.9.3h In your opinion, how likely is an ST to be treated badly by other people at his/her workplace because of his/her caste? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely

3. Less likely

Discrimination: Muslim (Asked to Muslims Only)

(Randomisation applies, refer to randomisation document for details)

As you know, discrimination and injustice based on religion is wrong, but still, we hear instances of this kind sometimes. Perhaps you have personally experienced such problems, or perhaps you have not. I just want to understand if any of the following things have happened to you or not.

U2. 2p Now we will talk about school and college. Have you ever felt that you have personally been discriminated against in school or college because you are a Muslim?

1. Yes
2. No

U.3.2p Now we will talk about government officials. Have you ever felt that you have personally been discriminated against in school or college because you are a Muslim?

1. Yes
2. No

U.4.2p Now we will talk about police. Have you ever felt that you have personally been discriminated against in school or college because you are a Muslim?

1. Yes
2. No

U6.2 Now I want to ask you about work and job. Have you ever been employed?

1. Yes
2. No

U7.2p Has it ever happened that you didn't get a job that you could have gotten (meaning, that you were qualified for) because of your religion? *(Only asked if the respondent said yes to U6)*

1. Yes
2. No

U8.2p Has it ever happened that you didn't get paid as much as you were supposed to be paid for some work that you did because of your religion? *(Only asked if the respondent said yes to U6)*

1. Yes
2. No

U9.2p Has it ever happened to you in a work environment that someone did not treat you properly because of your religion? *(Only asked if the respondent said yes to U6)*

1. Yes
2. No

U.11.2 Have you ever hidden your religion from a stranger?

1. Yes
2. No

U10.2 In your opinion, how often does it happen that a Muslim person in your State faces discrimination? Does it happen every day, often, sometimes, or never?

1. Everyday
2. Often
3. Sometimes
4. Never

U.2.2h Now we will talk about school and college. In your opinion, how likely is it for a Muslim to face discrimination at school or college? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.3.2h Now we will talk about government officials. In your opinion, how likely is it for a Muslim to face discrimination while getting some work done from a government official? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.4.2h Now we will talk about the police. In your opinion, how likely is it for a Muslim to face discrimination by the police? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.6.2 Now I want to ask about your work and job. Have you ever been employed?

1. Yes
2. No

U.7.2h In your opinion, how likely is it for a Muslim to face discrimination while finding a job? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.8.2h In your opinion, how likely is it for a Muslim to face discrimination in wage payment and not get what he/she earned for the work he/she did? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

U.9.2h In your opinion, how likely is a Muslim to be treated badly by other people at his/her workplace because of his/her religion? Is it highly likely, somewhat likely, or not very likely to happen?

1. Highly likely
2. Somewhat likely
3. Less likely

Climate Change

(Randomisation applies, refer to randomisation document for details)

V.1 My next question is regarding weather and climate. In the past five years, do you think the

temperature is getting warmer, colder, or is same as before?

1. Warmer
2. Colder
3. Same as before

V.2. a (*If Warmer is Selected in V.1*) You said that the temperature is getting warmer. Do you think it is good that it is getting warmer, it is bad that it is getting warmer, or does it not make a difference?

1. Good
2. Bad
3. Does not make a difference

V.2.b (*If Colder is Selected in V.1*) You said that the temperature is becoming colder. Do you think it is good that it is getting colder, is it bad that it is getting colder, or does it not make a difference?

1. Good
2. Bad
3. Does not make a difference

V.3 Do you have electricity at your home?

1. Yes
2. No

V.4 Do you ever face electricity cuts? (*If 'yes' is selected for V3*)

1. Yes
2. No

V.5 In the past 24 hours, what was the duration of the electricity cut? (*If yes is selected for V3*)

V.6 Now I will talk about the problem that your grandchildren might have to face. Many scientists believe that the earth will become really warm, to an extent that agriculture will become difficult and people will start falling sick. One of the reasons could be that the way electricity is produced today creates a lot of heat. This is making the earth warmer. Some scientists feel that one solution to this problem could be to cut down the use of electricity which may reduce rising temperatures in the future.

V.7. 1a Would you be willing to bear an additional hour of electricity cuts so that the temperature doesn't rise more by the time your grandchildren are living? (*If 'yes' is selected for V3*)

1. Yes
2. No

V.7.2a Would you be willing to bear three additional hours of electricity cuts so that the temperature doesn't rise more by the time your grandchildren are living? (*If 'yes' is selected for V3*)

1. Yes
2. No

V.7.3a Would you be willing to bear five additional hours of electricity cuts so that the temperature doesn't rise more by the time your grandchildren are living? (*If 'yes' is selected for V3*)

1. Yes
2. No

V.7.3a Should those who have electricity be willing to bear an additional hour of electricity cuts so that the temperature doesn't rise more by the time your grandchildren are living? (*If 'no' is selected for V3*)

1. Yes

2. No

V.7.2b Should those who have electricity be willing to bear three additional hours of electricity cuts so that the temperature doesn't rise more by the time your grandchildren are living? (*If 'no' is selected for V3*)

1. Yes
2. No

V.7.3b Should those who have electricity be willing to bear five additional hours of electricity cuts so that the temperature doesn't rise more by the time your grandchildren are living? (*If 'no' is selected for V3*)

1. Yes
2. No

Class Category

(Randomisation applies, refer to randomisation document for details)

W1.1 My last question is: In your opinion, is your family poor, middle class, or comfortable?

1. Poor
2. Middle class
3. Comfortable

W1.2 My last question is: In your opinion, is your family poor, labour class, middle class, or comfortable?

1. Poor
2. Labour class
3. Middle class
4. Comfortable

6.3.3. Questionnaire for Bihar, Jharkhand, and Maharashtra

A1. Interviewer Code _____

A2. What happened after you were able to get through to speak to someone of your own gender?

1. Need to call back again
2. Start interview
3. Did not consent/Refused to be interviewed

Close the tab if did not consent/refused to be interviewed

A.3.1. Do you live in Bihar or in Jharkhand or in some other State?

1. Bihar
2. Jharkhand
3. Other State _____

A.4.1. How long have you been living there?

1. No. of years _____
2. Since always
3. After marriage

A.4.2. Does your family live with you?

0. No
1. Yes

A.4.3. Interviewer: Which State is this interview about?

1. Bihar
2. Jharkhand
3. Other _____

A.5. I will read out some options to you and you tell me where your home is. Is your home in a big city, town, village, or do you live on your own fields?

1. Big city
2. Town
3. Village
4. Own fields

B.1.1. We want to understand generally how big people's families are. Can you tell me how many people live with you including all women, children, and men in your home? (*Fill in the number*)

B.2.1. How many of these are girls and women/men and boys? (*Fill in the number*)

B.3.1a. How many of these women or girls/men or boys are aged between 18 and 65 years old? (*Fill in the number*)

Respondent Selection: Using Mobile Phone

B.3.1b. Do you have your own mobile or does it belong to someone else in your home?

1. Yes, it's my own
2. No, it's not my own

B.4.1b. Based on your relationships, can you tell me who are the women and girls/men and boys aged between 18 and 65 years in your home? For instance, your mother, sister-in-law/father, brother – please tell based on relationships like this. (*List them and ask if each of them have a mobile phone*)

Respondent Selection: Based on Education

B.4.1. Based on your relationships, can you tell me who are the women and girls/men and boys aged between 18 and 65 years in your home? For instance, your mother, sister-in-law/ father, brother – please tell based on relationships like this. (*List them and ask for each of them how many classes have they attended.*)

Select the Respondent

B5. Can I speak with [name—randomised from the roster]? *Get consent to speak to the selected respondent. If they ask why we want to speak to them, give an answer from the script. If the selected respondent is not available, find out what time to call back and record this information on the call log and calendar.*

B.6. Use the script to tell the respondent about your study. *Is the respondent ready to speak with you?*

1. Yes
2. No (The person on the phone does not want to go ahead)
3. Call later
4. No (The selected respondent does not want to go ahead)

X.1. In which language would it be better to have the rest of the interview?

1. Hindi
2. Bhojpuri or Mithili/Jharkhandi or Chhota Nagpuri
3. Other _____

B.7. Till where have you studied? *If respondent does not understand, then ask: Till what level have you studied? (Choose from the drop-down list)*

B.8. How old are you? *If respondent does not understand, then ask: What is your age? (Fill in the number, or 88 if the respondent doesn't know his/her age)*

B.9. Have you gotten married?

1. Yes
2. No
3. Yes, but not married now

B.10a. Do you live with your mother-in-law and father-in-law? *If surveyor cannot understand the respondent's answer, then ask: In the last one month, did your mother-in-law and father-in-law live with you or not?*

1. Both live with me
2. Only mother-in-law lives with me
3. Only father-in-law lives with me
4. Neither lives with me

B.10b. Do you live with your mother and father? *If the surveyor cannot understand respondent's answer, then ask: In the last one month, did your mother and father live with you or not?*

1. Both live with me
2. Only mother lives with me
3. Only father lives with me
4. Both do not live with me

B.12. Does this person's wife live with him here?

0. No
1. Yes

B.13a. Till where has your husband studied? *If respondent does not understand, then ask: Till what level has your husband studied? (Choose from the drop-down list)*

B.13b. Till where has your wife studied? *If respondent does not understand, then ask: Till what level has your wife studied? (Choose from the drop-down list)*

Sanitation

D.3. Have you heard of the Swachh Bharat Mission?

0. No
1. Yes

D.4. What activities do you think are included in the Swachh Bharat Mission? *(Multiple options allowed, asked only if respondent 'yes' to D.3)*

1. Cleaning
2. Picking up trash
3. Latrines
4. Other _____

Religion and Caste

C.1. What is your religion?

1. Hindu
2. Muslim
3. Sikh
4. Christian
5. Jain
6. Other

C.2a. Which caste group do you belong to? *(Select from the drop-down menu)*

C.2b. What is your caste? *(Fill in the jati name)*

C.3. Which caste group do you belong to? Scheduled Caste, General caste, Other Backward Caste, Scheduled Tribe, or Brahmin?

1. Harijan or Dalit
2. Backward caste
3. General or forward caste
4. Brahmin
5. Tribal
6. Other

Gender

(Randomisation applies, refer to randomisation document for details)

K.1. In your opinion, should a married woman, whose husband earns a good living, work outside the home or not?

0. No, she should not work
1. Yes, she should work

K.2. In your opinion, should a young girl or boy select a spouse/life partner for him/herself or should his/her parents select a spouse/life partner for him/her? *If the respondent says that both should have equal say, ask: What do you think would be better – for the young person to select her own life partner or for her parents to select one for her?*

0. Parents' choice
1. Own choice

K.4. When your family eats lunch or dinner, do the women usually eat with the men? Or do the women usually eat first? Or do the men usually eat first?

1. They eat together
2. Women eat first
3. Men eat first
4. Nothing is fixed, other

K.6.1. When you want to go outside alone somewhere near your home, such as to visit a neighbour, do you need to ask your husband or family, or do you just tell them and go?

1. Have to ask
2. Tell them and go
3. Do not need to tell them for nearby visits
4. Someone accompanies me
5. Don't go
6. There's no elder person in household

K.6.2. When you want to go outside alone somewhere near your home, such as to visit a neighbour, do you need to ask an elder person in your family, or do you just tell them and go?

1. Have to ask
2. Tell them and go
3. Do not need to tell them for nearby visits
4. Someone accompanies me
5. Don't go
6. There's no elder person in household

K.6.3. When your wife wants to go outside alone somewhere nearby alone, such as to visit a neighbour, does she need to ask you or someone, or does she just tell you and go?

1. Has to ask
2. Tells them and goes
3. Does not need to tell for nearby visits
4. Someone accompanies her
5. Does not go outside
6. There's no elder person in household

K.6.4. When you want to go outside alone somewhere near your home, such as to visit a neighbour, do you need to ask an elder person in your family, or do you just tell them and go?

1. Have to ask
2. Tell them and go
3. Do not need to tell them for nearby visits
4. Someone accompanies me
5. Don't go
6. There's no elder person in household

Marriage

(Randomisation applies, refer to randomisation document for details)

L.1.1. In your opinion, should there be a law to stop marriages between upper and lower castes?

0. No
1. Yes

L.2.1. If one of your close relatives or a member of your family gets married to someone from a lower caste, i.e. Harijan or Dalit caste, will you oppose this or not? *(Asked only to non-Dalits)*

0. No
1. Yes

L.3.1a. If one of your close relatives or a member of your family gets married to someone who is Muslim, will you oppose this or not? *(Asked only to non-Muslims)*

0. No
1. Yes

L.3.1b. If one of your close relatives or a member of your family gets married to someone who is Hindu, will you oppose this or not? *(Asked only to Muslims)*

0. No
1. Yes

Aadhaar

E.1. Do you have an Aadhaar card?

0. No
1. Yes

E.2. Do you think that Aadhaar is necessary to get government benefits? For example, ration, pension, gas, bank account.

1. Yes
2. No
3. Required for some things, not for others

Discrimination: Untouchability (Asked to non-Dalits)

S.2. Do you practise untouchability? (*Asked only to non-Dalit and non-Adivasi Hindus*)

0. No
1. Yes

S.1. Do any members of your family practise untouchability? (*Only asked if respondent says 'No' to S.2*)

0. No
1. Yes

Household Assets

G.1. We want to understand what things are used by people in <State>. I'll name some items and you should tell me if you have it or not.

0. No
1. Yes

- Mixer
- Motorcycle/Scooter
- Fan
- Fridge
- Cooker

G.2. Do you have a latrine or not?

0. No
1. Yes

G.3. Did you use this latrine yesterday to defecate or did you go outside? (*Only asked if the respondent says 'yes' to G.2*)

1. Used latrine
2. Defecated in the open

G.4. Did you build the latrine using your own funds or did the government build it? (*Only asked if the respondent says 'yes' to G.2*)

1. Built on our own
2. Government built it
3. Both

Mental Health

(Randomisation applies, refer to randomisation document for details)

We don't always feel the same way. Sometimes we are sad and sometimes we are happy, sometimes we are worried and sometimes relaxed. In the next few questions, I will ask how you have felt in the past one month.

M.1. Sometimes people are afraid or anxious about some things. In the past one month, how often did you feel **anxious**? What would you say – Most of the time, sometimes, or never?

1. Most of the time
2. Sometimes
3. Never
4. Can't say
5. Does not want to respond

M.2. Sometimes people feel hopeless about their future. In the past one month, how often did you feel **hopeless**? What would you say – Most of the time, sometimes, or never?

1. Most of the time
2. Sometimes
3. Never
4. Can't say
5. Does not want to respond

M.3. Sometimes there are lots of thoughts in our head or we can't sit in one place. In the past one month, how often did you feel **restless**? What would you say – Most of the time, sometimes, or never?

1. Most of the time
2. Sometimes
3. Never
4. Can't say
5. Does not want to respond

M.4. Sometimes we are so unhappy that nothing pleases us. In the past one month, how often did you feel **depressed**? What would you say – Most of the time, sometimes, or never?

1. Most of the time
2. Sometimes
3. Never
4. Can't say
5. Does not want to respond

M.5. Sometimes we feel **disinterested in work** that we normally do, or it takes a lot of **effort to do work**. In the past one month, how often did you feel this way? What would you say—Most of the time, sometimes, or never?

1. Most of the time
2. Sometimes
3. Never
4. Can't say
5. Does not want to respond

M.6. Sometimes we feel that we are worthless. In the past one month, how often did you feel **useless or worthless**? What would you say – Most of the time, sometimes, or never?

1. Most of the time
2. Sometimes
3. Never
4. Can't say
5. Does not want to respond

N.1. In the next few questions, I will ask you about the sadness or problems you faced in the last 30 days. If something like this happened in the last 30 days, say yes. If this did not happen in the last 30 days, say no. Now I will ask you questions one-by-one.

N.1.1. In the last 30 days, did you feel less hungry?

0. No
1. Yes

N.1.2. In the last 30 days, did you have trouble sleeping?

0. No
1. Yes

N.1.3. In the last 30 days, did you have trouble thinking clearly?

0. No
1. Yes

N.1.4. In the last 30 days did you feel tired all the time?

0. No
1. Yes

N.1.5. In the last 30 days, did you have trouble taking decisions?

0. No
1. Yes

N.1.6. In the last 30 days, did you think about ending your life?

0. No
1. Yes

Beef-eating

(Randomisation applies, refer to randomisation document for details)

T.1. Some days ago a Hindu person suspected that a Muslim person had eaten beef and beat him up badly. According to you, was it right what the Hindu person did to the Muslim person?

0. Not right
1. It was right

T.2. Some days ago a Hindu person saw that a Muslim person had eaten beef and beat him up badly. According to you, was it right what the Hindu person did to the Muslim person?

0. Not right
1. It was right

T.3. Some days ago a mob of Hindu people suspected that a Muslim person had eaten beef and beat him up badly. According to you, was it right what the mob of Hindu people did to the Muslim person?

0. Not right
1. It was right

T.4. Some days ago a mob of Hindu people saw that a Muslim person had eaten beef and beat him up badly. According to you, was it right what the mob of Hindu people did to the Muslim person?

0. Not right
1. It was right

Compassion for the Poor

(Randomisation applies, refer to randomisation document for details)

F.1. Now I will ask you about the government. Do you think that the government should increase the work it does for the poor, reduce it, or is the government doing fine?

1. Increase
2. Decrease
3. Doing fine

F.2. Now I will ask you about the government. Do you think that the government should increase the spending it does towards the poor, reduce it, or is the government spending fine?

1. Increase
2. Decrease
3. Doing fine

Inter-caste Marriage

(Randomisation applies, refer to randomisation document for details)

P.1.2. Many people marry within their own caste, but some people marry outside their caste. Are the castes of your wife's/husband's family and your family the same or different?

1. Same
2. Different

P.2.2. Are the castes of your wife's/husband's family and your family the same or different?

1. Same
2. Different

Caste of Spouse

R1.2. What was your wife's/husband's "biradari" before marriage?

If the respondent does not understand, then ask: what is your wife's family's caste?

*If the respondent still does not understand, then ask: what does your wife's family put after their name?
(Drop-down list)*

R1.2a. If the name of caste is not in the drop-down menu, then write it below

R.2.2. Which group does that "biradari" belong to? Harijan or Dalit, backward caste, general or forward caste, Brahmin, or tribal? *If the respondent does not know which group their caste belongs to, then select the appropriate option yourself from the caste list given to you. And if the respondent's caste is not included in the caste list, then write 88 in the "Other" box.*

1. Harijan or Dalit
2. Backward caste
3. General or forward caste
4. Brahmin
5. Tribal
6. Other

Reservations knowledge

(Randomisation applies, refer to randomisation document for details)

I.7. Have you heard of reservations before today?

0. No
1. Yes

I.7.1. Have you heard of reservations or quotas before today?

0. No
1. Yes

Policies for Reservations

I.8. I will ask you about some government rules. You should tell me if you think these rules are right or not.

Government colleges keep some seats reserved only for Dalits/Harijans, backward castes, and tribal students

0. Not right
1. Right

Government jobs keep some seats reserved only for Dalits/Harijans, backward castes, and tribal students

0. Not right
1. Right

In some village sarpanch elections, only Dalits/Harijans or tribals can stand

0. Not right
1. Right

Meat-eating

V.1. Some people eat meat and fish and some people don't. Do you eat meat and fish?

0. No
1. Yes

V.2. Do you feel that it's really ok for people to eat meat and fish or not ok? (*only asked if the respondent says No to V.1*)

0. No
1. Yes

Is meat eating dirty?

V.3.1. Now I want to ask you a question about cleanliness. Among some people, eating meat and fish is common, for instance, among Muslims. Do you feel that due to eating meat and fish, their homes are less clean or not? (*Only asked to non-Muslims if they responded with a 'no' in V.2*)

0. No, not less clean
1. Yes, less clean

Aadhaar and Government Benefits

E.3. You said some time ago that you have an Aadhaar card. When you did not have an Aadhaar card, did you miss out on getting some government benefit? (*Only asked if the respondent says 'yes' to E.1*)

0. No
1. Yes

E.4. You said some time ago that you do not have an Aadhaar card. Because of not having an Aadhaar card, have you missed out on getting some government benefit? (*Only asked if the respondent says 'No' to E.3*)

0. No
1. Yes

E.5. Which government service or benefits did you miss out on? (*Only asked if respondent says 'Yes' to E.3 or E.4*)

- Ration
- Pension
- Gas
- Bank account
- Loan
- Mobile service or SIM card
- NREGA wages
- Scholarship
- Other _____

E.6. When you got an Aadhaar card made, which service did you benefit from?

- Got nothing
- Ration
- Pension
- Gas
- Bank account
- Loan
- Mobile service or SIM card
- NREGA wages
- Scholarship
- Other _____

Violence

O.1. Do you think it is right for parents to beat their kids or not right?

- 0. No
- 1. Yes

O.2. According to you, is it right for school masters to beat kids or not right?

- 0. No
- 1. Yes

O.3. Do you think it is right for a husband to beat his wife or not right?

- 0. No
- 1. Yes

Medical Abortion (All Men and Married Women)

J.1. I would like to speak to you about pregnancy now. Some people have a lot of information about pregnancy and health, and some people know less. Do you know that when a pregnant woman wants to abort a child, then she can get medicines at the chemist or hospital for abortion? Have you heard about such medicines before?

- 0. No
- 1. Yes

J.2. Here's how this medicine works: there's a pack of five tablets. If a pregnant woman takes these, she feels spasms or stirring in her stomach and starts to bleed as if during menstruation. Then the child is aborted. Have you ever taken such medicines to abort a child?

- 0. No
- 1. Yes

J.3. Here's how this medicine works: there's a pack of five tablets. If a pregnant woman takes these, she feels spasms or stirring in her stomach and starts to bleed as if during menstruation. Then the child is aborted. Has your wife ever taken such medicines to abort a child?

- 0. No
- 1. Yes

J.4. According to what you know, till when can a pregnant woman safely take these medicines to abort a pregnancy? Can these medicines be taken in first three months, first six months, or any time during a pregnancy?

1. Any time in the first three months
2. Any time in the first six months
3. Any time during pregnancy
4. Don't know

Abortion Attitudes (All Men and Married Women)

J.5. If a pregnant woman does not want to keep the child, do you think she should abort the child or not?

1. Abort
2. Should not abort

J.6. Do you think that the decision to abort the child should be taken by the woman or should she ask the family?

1. Decide on her own
2. Ask family

Discrimination (Asked to Dalits /Adivasis/Muslims)

(Randomisation applies, refer to randomisation document for details)

U.3.1h. Now we will talk about government officers. In your opinion, how often does it happen that a Dalit person faces discrimination while trying to get some work done by a government officer? A lot, a little, or rarely? *(Only asked to Dalits)*

1. A lot
2. A little
3. Rarely
4. Never

U.10.1. Do you think that in the last five years, there is less discrimination based on caste, more or same as before? *(Only asked to Dalits)*

1. Less
2. More
3. Same as before

U.3.3h. Now we will talk about government officers. In your opinion, how often does it happen that a tribal person faces discrimination while trying to get some work done by a government officer? A lot, a little, or rarely? *(Only asked to Adivasis/Tribals)*

1. A lot
2. A little
3. Rarely
4. Never

U.10.2. Do you think that in the last five years, there is less discrimination based on caste, more or same as before? (*Only asked to Adivasis/Tribals*)

1. Less
2. More
3. Same as before

U.3.2.h. Now we will talk about government officers. In your opinion, how often does it happen that a Muslim person faces discrimination while trying to get some work done by a government officer? A lot, a little, or rarely? (*Only asked to Muslims*)

1. A lot
2. A little
3. Rarely
4. Never

U.10.3. Do you think that in the last five years, there is less discrimination based on caste, more, or same as before? (*Only asked to Muslims*)

1. Less
2. More
3. Same as before

Middle Class

W.1.2. In your opinion, is your family poor, labour class, middle class, or well off?

1. Poor
2. Middle class
3. Labour class
4. Well-off

Social Choice Experiment⁴

(*Randomisation applies, refer to randomisation document for details*)

F.3.1. In the next question, I would like to know your thoughts on “how the benefits given by the government should be distributed”. **Parmeshwar Jha and Kamal Paswan** are both residents of Bihar. Both have families with five members. Parmeshwar Jha’s family has a monthly income of Rs. **8000**. Kamal Paswan’s family has a monthly income of Rs. **6000**. Under a government scheme, the village chief has to distribute Rs. 10,000 between these two families. Now the chief has to decide how much out of Rs. 10,000 to give to each family. In your opinion, how much money should Parmeshwar Jha get?

⁴ Given are two examples of social choice experiments used; please refer to the SARI documentation online, here: <https://riceinstitute.org/data/sari-dataset-documentation/> for the full list.

F.3.2. In the next question, I would like to know your thoughts on “how the benefits given by the government should be distributed”. **Parmeshwar Jha and Kamal Paswan** are both residents of Bihar. Both have families with five members. Parmeshwar Jha’s family has a monthly income of Rs. **10,000**. Kamal Paswan’s family has a monthly income of Rs. **4000**. Under a government scheme, the village chief has to distribute Rs. 10,000 between these two families. Now the chief has to decide how much out of Rs. 10,000 to give to each family. In your opinion, how much money should Parmeshwar Jha get?

District

Q180 In which district of Bihar do you live? (*Drop-down list*)

Q183 In which district of Jharkhand do you live? (*Drop-down list*)

6.4. SARI Explanation of Randomisation

6.4.1. Explanation of Randomisation for the Survey in Uttar Pradesh and Delhi

Survey order [variable name: condition]: The entire survey was ordered in two different ways. Half of all respondents were asked about their caste early in the survey, before the questions on reservations. In case making caste salient affected their answers, half of all respondents were asked about reservations first, before being asked about caste. Questions were asked to respondents in one of the following two orders:

1. Condition 1 = religion and caste, sanitation, gender, reservations, marriage, discrimination
2. Condition 2 = reservations, sanitation, religion and caste, gender, marriage, discrimination
 - a. When respondents were asked about reservations right at the beginning of the survey, they were not asked why they agreed or disagreed with the policy since we felt that this would make the respondents uncomfortable to the point where they would be likely to discontinue the survey.

Gender [variable name: rand_gender]: The following four gender questions were presented to respondents in a random order:

1. Gender 1 = women working outside of home (asked to all respondents)
2. Gender 2 = choosing own spouse (asked to all respondents)
3. Gender 3 = *ghunghat/pardah* (asked only to married respondents, and asked about *ghunghat* or *pardah* depending upon the respondent's religion)
4. Gender 4 = who eats last (asked to all respondents)

Reservations questions [variable name: rand_reserv]: All the respondents were asked whether they had heard about reservations prior to the survey. If they had not, they were given a short description of what reservations are. Then all the respondents were asked whether they support or oppose reservations for women, and then whether they support or oppose reservations based on caste. The order of the two questions about women's or caste questions was randomised, and questions were presented to the respondents in one of two ways:

1. Either question about women's reservations first, and then question about caste reservations
2. Question on caste reservations question first, and then question about women's reservations

Marriage questions [variable name: rand_marriage]: All the respondents were asked about whether they would support a law opposing high-caste and low-caste individuals from marrying each other. Then the respondents were asked personal questions regarding inter-marriage within their own families. The order of the law question and the personal questions was randomised, and questions were presented to the respondents in one of two ways:

1. Law question first
 - a. Law question
 - b. Then the order of the following two personal questions was also randomised:
 - i. If the respondent would oppose a close relative marrying a low-caste person (if the person is low-caste themselves, then they are not asked this question. Low-caste respondents are only asked the question about inter-religious marriage)
 - ii. If the respondent would oppose a close relative marrying a Hindu or a Muslim (depending on the religion of the respondent)
2. Law question last
 - a. Then the order of the following two personal questions was also randomised:
 - i. If the respondent would oppose a close relative marrying a low-caste person (if the person is low-caste themselves, then they are not asked this question. Low-caste respondents are only asked the question about inter-religious marriage)

- ii. If respondent would oppose a close relative marrying a Hindu or a Muslim (depending on religion of respondent)
- b. Law question

Untouchability questions about friend/acquaintance [variable name: rand_dalitfrd]: Non-Dalit respondents were asked if they had a Dalit friend or acquaintance. If they reported having a Dalit friend or acquaintance, they were asked one of two questions about that friend/acquaintance:

1. Whether the Dalit/Harijan friend/acquaintance had eaten a meal at their home
2. Whether they had eaten a meal at the Dalit/Harijan friend/acquaintance's home

Caste discrimination questions [variable name: rand_cstdisc]: Questions about experiences of caste discrimination were asked only to Dalits and Adivasis. Personal questions included those asking if the respondent had experienced caste discrimination in their youth and in the past five years, and if the respondent reported having worked, if they had experienced various kinds of discrimination while looking for work or at the workplace. General questions included one about how the respondent believes caste discrimination had changed in the previous five years and one about whether the respondent believes caste is as important as it was five years ago. The order of personal and general questions was randomised, and questions were presented to respondents either as:

1. General questions asked first, and then personal questions
2. Personal questions first, and then general questions

Religious discrimination questions [variable name: rand_rlgdisc]: Questions about experiences of religious discrimination were asked only to Muslims. Personal questions included those asking if the respondent had experienced religious discrimination in their youth and in the past five years, and if the respondent reported having worked, if they had experienced various kinds of discrimination while looking for work or at the workplace. General questions included one about how the respondent believes religious discrimination had changed in the previous five years and one about whether the respondent believes religion is as important as it was five years ago. The order of personal and general questions was randomised, and questions were presented to respondents in one of two ways:

1. General questions asked first, and then personal questions
2. Personal questions first, and then general questions

6.4.2. Explanation of Randomisation for the Survey in Rajasthan and Mumbai

Survey order [variable name: condition]: The entire survey was ordered in two different ways. Half of all the respondents were asked about their caste early in the survey, before the questions on reservations. In case making caste salient affected their answers, half of all the respondents were asked about reservations first, before being asked about caste. Questions were asked to respondents in one of the following two orders:

3. Condition 1 = religion and caste, sanitation, gender, reservations, marriage, discrimination
4. Condition 2 = reservations, sanitation, religion and caste, gender, marriage, discrimination
 - a. When the respondents were asked about reservations right at the beginning of the survey, they were not asked why they agreed or disagreed with the policy since we felt that this would make the respondents uncomfortable to the point where they would be likely to discontinue the survey.

Gender [variable name: rand_gender]: The following four gender questions were presented to respondents in a random order:

5. Gender 1 = women working outside of home (asked to all the respondents)
6. Gender 2 = choosing own spouse (asked to all the respondents)
7. Gender 3 = *ghunghat/pardah* (asked only to the married respondents, and asked about *ghunghat* or *pardah* depending upon the respondent's religion)
8. Gender 4 = who eats last (asked to all the respondents)

Reservations questions [variable name: rand_reserv]: All the respondents were asked whether they had heard about reservations prior to the survey. If they had not, they were given a short description of what reservations are. Then all the respondents were asked whether they support or oppose reservations for women, and then whether they support or oppose reservations based on caste. The order of the two questions about women's or caste questions was randomised, and questions were presented to respondents in one of two ways:

3. Either question about women's reservations first, and then question about caste reservations
4. Caste reservations question first, and then question about women's reservations

Reservations why questions [variable name: rand_reserv_why]: Within Condition 1, in which the respondents were asked about reservations later in the survey (after their own caste), the respondents who had heard of reservations before the survey were randomly selected to answer follow up questions about why they agreed or disagreed with caste reservations, and why they thought the government gave reservations at all. Thus, the respondents who received the survey in the order of Condition 1 and who had heard of reservations before the survey either:

1. Received follow-up 'why' questions asking them why they agree/disagree with caste reservations policy (depending upon what opinion they gave), and follow-up questions about why they think the government gives reservations
2. Did not receive these follow-up questions (just as in Condition 2)

Marriage questions [variable name: rand_marriage]: All the respondents were asked about whether they would support a law opposing high-caste and low-caste individuals from marrying each other. Then, the respondents were asked personal questions regarding inter-marriage within their own families. The order of the law question and the personal questions was randomised, and questions were presented to respondents in one of two ways:

3. Law question first
 - a. Law question
 - b. Then the order of the following two personal questions was also randomised:

- i. If the respondent would oppose a close relative marrying a low-caste person (if the person is low-caste themselves, then they are not asked this question. Low-caste respondents are only asked the question about inter-religious marriage)
 - ii. If the respondent would oppose a close relative marrying a Hindu or a Muslim (depending on religion of respondent)
 - 4. Law question last
 - a. Then the order of the following two personal questions was also randomized:
 - i. If respondent would oppose a close relative marrying a low caste person (if the person is low caste themselves, then they are not asked this question. Low caste respondents are only asked the question about interreligious marriage)
 - ii. If respondent would oppose a close relative marrying a Hindu or a Muslim (depending on religion of respondent)
 - b. Law question

Untouchability questions about friend/acquaintance [variable name: rand_dalitfrd]: Non-Dalit respondents were asked if they had a dalit friend or acquaintance. If they reported having a Dalit friend or acquaintance, they were asked one of two questions about that friend/acquaintance:

- 3. Whether the Dalit/Harijan friend/acquaintance had eaten a meal at their home
- 4. Whether they had eaten a meal at the Dalit/Harijan friend/acquaintance's home

Caste discrimination questions [variable name: rand_disc_sc, rand and rand_disc_st]: Questions about experiences of caste discrimination were asked only to Dalits and Adivasis. Within the Dalits and within the Adivasis, the respondents were randomly selected to receive either questions framed personally, about whether the respondent had personally experienced discrimination in various venues, or as likelihood questions, about how likely the respondent thought a person from his/her group would face discrimination in various venues. Personal and likelihood questions included those asking if the respondent had experienced caste discrimination in school/college, while getting work done by government officials, while interacting with the police, and while looking for work/working. Additionally, Dalits and Adivasis were asked general questions: these included one about whether the respondent had ever hidden his/her caste from a stranger, and the respondent's opinion about the frequency with which someone of their caste usually experiences discrimination. The order of personal/likelihood and general questions was randomised, and questions were presented to the respondents either as:

- 1. Personal venue questions, then general questions
- 2. General questions, then personal venue questions
- 3. How likely venue questions, then general questions
- 4. General questions, then how likely venue questions

Religious discrimination questions [variable name: rand_disc_mus]: Questions about experiences of religious discrimination were asked only to Muslims. Within Muslims, respondents were randomly selected to receive either questions framed personally, about whether the respondent had personally experienced discrimination in various venues, or as likelihood questions, about how likely the respondent thought a person from his/her group would be to face discrimination in various venues. Personal and likelihood questions included those asking if the respondent had experienced religious discrimination in school/college, while getting work done by government officials, while interacting with the police, and while looking for work/working. Additionally, Muslims were asked general questions: these included one about whether the respondent had ever hidden his/her religion from a stranger, and the respondent's opinion about the frequency with which someone of their religion usually experiences discrimination. The order of personal/likelihood and general questions was randomised, and questions were presented to the respondents either as:

- 1. Personal venue questions, then general questions

2. General questions, then personal venue questions
3. How likely venue questions, then general questions
4. General questions, then how likely venue questions

Personal discrimination questions in various venues [variable names: rand_venue_disc_sc_p, rand_venue_disc_mus_p, rand_venue_disc_st_p]: Questions about discrimination in specific venues were asked to Dalits, Muslims, and Adivasis. These venues included school/college, while getting work done by government officials, and while interacting with the police (discrimination in looking for work and at the workplace were not included in this randomisation). When the respondents were asked about their personal experiences of discrimination in these venues, the order in which the respondents were asked the three venue questions was one of the following:

1. School/college, government official, police
2. School/college, police, government official
3. Government official, school/college, police
4. Government official, police, school/college
5. Police, school/college, government official
6. Police, government official, school/college

How likely discrimination questions in various venues [variable names: rand_venue_disc_sc_h, rand_venue_disc_mus_h, rand_venue_disc_st_h]: Questions about discrimination in specific venues were asked to Dalits, Muslims, and Adivasis. These venues included school/college, while getting work done by government officials, and while interacting with the police. When the respondents were asked about how likely members of their group were to experience discrimination in these venues, the order in which respondents were asked the three venue questions were in one of the following ways:

1. School/college, government official, police
2. School/college, police, government official
3. Government official, school/college, police
4. Government official, police, school/college
5. Police, school/college, government official
6. Police, government official, school/college

General discrimination questions [variable names: rand_gen_disc_sc, rand_gen_disc_mus, rand_gen_disc_st]: Two general discrimination questions were asked to Dalits, Muslims, and Adivasis. One question asked whether the respondent had ever hidden his/her caste/religion from a stranger, and the second asked the respondent how frequently they felt caste/religious discrimination occurred to members of their group. The order in which these two general questions were presented to respondents was randomised, and questions were presented to respondents either as:

1. Frequency question first, then hiding question
2. Hiding question first, then frequency question

Electricity power cuts questions (own electricity) [variable name: rand_elec_own]: Respondents who reported having electricity in their homes were asked if they would be willing to sacrifice additional hours of power cuts daily for the benefit of future generations. The respondents with electricity were asked one of the following three questions;

1. Whether they would be willing to bear 1 extra hour of power cuts daily for future generations
2. Whether they would be willing to bear 3 extra hours of power cuts daily for future generations
3. Whether they would be willing to bear 5 extra hours of power cuts daily for future generations

Electricity power cuts questions (others electricity) [variable name: rand_elec_others]: The respondents who reported not having electricity in their homes were asked if they believed those who do have electricity in their homes should be willing to sacrifice additional hours of power cuts daily for the benefit

of future generations. The respondents without electricity were asked one of the following three questions:

1. Whether those with electricity should be willing to bear one extra hour of power cuts daily for future generations
2. Whether those with electricity should be willing to bear three extra hours of power cuts daily for future generations
3. Whether those with electricity should be willing to bear five extra hours of power cuts daily for future generations

Middle class questions [variable name: rand_mdclass]: The respondents were asked which economic class they believe their household fits within. Respondents were given either three categories to select from, or four, as follows:

1. Three categories: poor, middle class, or comfortable
2. Four categories: poor, labour class, middle class, or comfortable

6.4.3. Explanation of *randomisation* for survey in Bihar, Jharkhand and Maharashtra

Respondent selection [variable name: condition]: Within each household, the person who answered the phone was asked to list all adults between the ages of 18 and 65 of the same sex as the interviewer. Selection was done in one of two ways: either (i) respondents were asked whether each person listed owned their own mobile phone or not, or (ii) respondents were asked the education level of each person listed. Method (i) was used through May 15th, 2018 and method (ii) was used afterwards.

For method (i), the respondent and individuals who do not own their own mobile phone were considered eligible to be selected for the survey. Qualtrics survey software randomly selected an individual from the list of eligible respondents to be surveyed. Within method (i), only for version 22 of the survey, interviewers would administer a survey in which either:

1. Condition 1 = the first person listed in the household roster (usually “self”) was included in the list of eligibles for random respondent selection
2. Condition 2 = the first person listed in the household roster (usually “self”) was not included in the list of eligibles for the random respondent selection

For method (ii), Qualtrics survey software selected the least educated individual from everyone listed to be surveyed.

Gender [variable name: rand_gender]: The following four gender questions were presented to all the respondents in a random order:

9. Gender 1 = women working outside of home (asked to all the respondents)
10. Gender 2 = choosing own spouse (asked to all the respondents)
11. Gender 4 = who eats last (asked to all the respondents)
12. Gender 6 = whether the respondent is allowed to go to a neighbor’s home without asking permission from senior members of the household (asked to all respondents)

Marriage questions [variable name: rand_marriage]: All the respondents were whether they would support a law opposing high-caste and lowcaste individuals from marrying. Then respondents were asked personal questions regarding intermarriage within their own families. The order of the law question and the personal questions was randomised, and questions were presented to the respondents in one of two ways:

5. Law question first
 - a. Law question
 - b. Then the order of the following two personal questions was also randomised:
 - i. If the respondent would oppose a close relative marrying a low-caste person (if the person is low-caste themselves, then they are not asked this question. Low-caste respondents are only asked the question about inter-religious marriage)
 - ii. If respondent would oppose a close relative marrying a Hindu or a Muslim (depending on the religion of the respondent)
6. Law question last
 - a. Then the order of the following two personal questions was also randomised:
 - i. If respondent would oppose a close relative marrying a low-caste person (if the person is low-caste themselves, then they are not asked this question. Low-caste respondents are only asked the question about inter-religious marriage)
 - ii. If the respondent would oppose a close relative marrying a Hindu or a Muslim (depending upon the religion of the respondent)
 - b. Law question

Mental health [variable names: rand_mentalhealth]: All the respondents were randomly assigned to be asked one of two sets of mental health questions, about their experiences over the past 30 days. They were either asked:

1. Kessler: these questions gave the respondents the option to answer that they had experienced a specific emotion a lot of the time, sometimes, or never.
2. SRQ: these questions asked respondents to answer a 'yes' or 'no' about whether they had experienced specific symptoms.

Beef eating [variable names: rand_beef]: All the respondents were randomly assigned to be presented with one of the following versions of a question about whether physical violence for meat eating is alright or not:

1. Whether it is alright for a Hindu person to beat a Muslim person on the suspicion that the Muslim person eats meat
2. Whether it is alright for a Hindu person to beat a Muslim person for eating meat
3. Whether it is alright for a Hindu mob to beat a Muslim person on the suspicion that the Muslim person eats meat
4. Whether it is alright for a Hindu mob to beat a Muslim person for eating meat

Compassion for the poor [variable names: rand_compassion]: All the respondents were randomly assigned to be presented with one of the following questions, about whether they feel the government is doing enough for the poor or not:

1. Whether the government is doing enough for the poor
2. Whether the government is spending enough for the poor

Inter-caste marriage [variable names: rand_inter-caste]: All the married respondents are asked whether their spouse is of the same caste (*jati*) as them, or of a different caste (*jati*) from them. Married respondents are randomly assigned to be presented with this question in one of two ways:

1. Either the question is asked on its own, or
2. A statement saying "Many people marry within their own caste, but some people marry into other castes" prior to the question.

Reservations knowledge [variable names: rand_reserv]: All the respondents were asked whether they had heard of reservations. They were randomly assigned to be presented with this question in one of two ways:

1. Either the question if they had heard of "aarakshan, reservations, or quota", or
2. If they had heard of "aarakshan or reservations"

Caste and religious discrimination questions [variable names: rand_discrim]: Dalit, Adivasi, and Muslim respondents were asked how often they believed people of their group were discriminated against by government workers. They were also asked if they believe that discrimination against their group has

gotten worse, gotten better, or stayed the same over the past five years. The order of these two questions was randomly presented in one of two ways:

1. Either the question about government workers was asked before the change over time question, or
2. The change of time question was asked before the question about government workers

Social choice experiment [variable names: rand social]: All the male respondents heard a short vignette about two men: both are from the same place and have five people in their family. The names of the individuals change, and how much they currently earn changes based on the vignette. The respondents were asked to allocate a total of Rs. 10,000 between the two men. Out of a total of 28 variations, each respondent was randomly assigned to be presented with one vignette.

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