

Information and Accountability: Evidence from India

Update to the pre-analysis plan

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1 Introduction

We shared a pre-analysis plan prior to conducting our pilot in September. The pilot was small (N=95) and the purpose was to examine practical concerns with question wording, to finalise treatment script, to select survey sites and to plan enumerator training for the main study. Based on the pilot we made changes to the questions, as well as introduced new questions that help us to focus on both the sanction and selection mechanism of accountability. We also included in our survey questions for all levels of governance in Delhi to avoid priming citizens to focus on a particular governance level for answering questions regarding attribution.

2 Research Sites and Survey Sampling

Any citizen of Delhi who is at least 18 years of age, lives in Delhi for at least 3 years, has some access to a mobile phone (either personal or shared), and was available in Delhi during the month of December for the re-interview was eligible to participate in the study. Both Baseline and Endline interviews will be conducted in person.¹ Our target sample size is at least 90 individuals per ward, and overall 1530 individuals overall. Each individual will be re-interviewed in 3 weeks.

Delhi has a multi-layered governance structure and representatives are democratically elected every 5 years at the central, state and municipal/ ward levels using a first past the post system in single member electoral areas. Every five years, citizens elect 7 Members of Parliament to the Lok Sabha or National Parliament from large electoral units called the *lok sabha shetra* or parliamentary constituencies (PC). We first purposely selected three parliamentary constituencies in Delhi. These are North West, North East and South Delhi. They have been selected to get a broad geographic representation of Delhi.

At the state level, citizens elect 70 Members of Legislative Assemblies or MLAs to the Vidhan Sabha from electoral units called the *vidhan sabha shetra* or assembly constituencies (AC). Each assembly constituency fits neatly into a single parliamentary constituency, such that there are 10 AC's per PC. In our selected sample of PCs there are 30 AC's from which we exclude 9 relatively wealthy ACs of these regions. The only public, consistent and good quality indicator of wealth in Delhi comes from the Municipal tax category classification of neighbourhoods called localities within Municipal wards. In this classification, each locality is classified, as A, B, C, D, E, F, G and H. We excluded ACs that contain less than 80% of E,F,G and H localities. Majority of ACs in Delhi are comprised of at least 80% of E,F,G,H localities and wealthy population is segregated in select ACs. Given that finer data on income or wealth does not exist, excluding these AC's helps us in avoiding oversampling richer populations or neighbourhoods in our survey. Qualitatively, this ensures we restrict ourselves to poor to middle income neighbourhoods, which contain over 98%

¹A pilot of the study provides us some descriptive evidence that our rejection rates will be negligible. Both men and women had access to personal mobile phones; and most citizens were long term inhabitants of the city. In addition, we record ineligible attempts, that is, we record the the number of people who were attempted but were found out to be ineligible to participate in the survey.

of Delhi’s electorate. Our survey is representative for these poor-middle income populations that resides in such ACs, which is the predominant case in the context of Delhi as well as other Indian cities.

Each AC is further subdivided into an average of 4.5 municipal wards. Our sample of 21 ACs yields us 95 municipal wards. Out of these 95 wards, 45 wards are general and 50 wards are reserved for women. From this sample of AC-Wards, I randomly select 17 AC-ward combination such that we first select 9 wards reserved for women and 8 for general. From the remaining wards, I also select one general ward for the purpose of training for the survey. Selecting only one ward from each AC ensures that the survey is broader and representative also at the AC level.

Figure 1: Sampled Wards in Delhi



We obtained the most recent voter list of the Municipal elections conducted in 2017.² Keeping in mind the team (3 teams of 5/6 enumerators each) and a sample size of approximately 1500 individuals, each ward was divided into blocks of 1500 households, and a block of 1500 HHs was randomly selected such that each household had an equal chance of being selected into the survey.³

²The Municipal 2017 voter list was the only voter list available in an excel format which was important for the purpose of sampling. Most polling booths remain same across elections, and few new ones are added each election to account for increasing electorate. The 2017 polling booths from the municipal elections can also be mapped to state and national elections. So for every booth, we have electoral results for the municipal, state and central level elections from 2008 onwards. While borders for the electoral units at the state and central level were delimited in 2008, and the municipal wards in 2017, it is possible to map polling booths over time as a vast majority of them remain largely unchanged. This enables us to construct a geo-coded and mapped data set of electoral returns for all levels at booth level since data is available which is from 2008 onwards for all levels.

³That is, probability proportional to size of the block as measured by number of households in the block. On an average, each ward had 11 blocks and approx. 18050 households per ward.

The next two blocks for two other teams were selected such that there was a gap of 3000 HHs between blocks. For example, if a ward had 10 blocks, and the first block was randomly selected. Then the 4th and 7th blocks were selected. This was done to ensure diversity within the ward.

Enumerators arrived at agreed meeting points which was selected as any one of the polling booths for the particular team. Enumerators were instructed to attempt to survey every 3rd household in the polling booth that was instructed by their supervisor. Refusal, gender of the person who refused and the reason for refusal was recorded for every attempt. Ineligible attempts were also recorded. The entire list of polling booth was attempted serial wise within the team until the end of working day.⁴

The list of PC, AC, municipal wards and the randomly selected polling booths selected is available in the excel sheet attached.

3 Treatment script

We have two treatments, salience and attribution (as below), and they were communicated as a pre-recorded audio message in partnership with the Education Minister / Deputy Chief Minister of Delhi. The audio message was in Hindi. The Education Minister simply recorded the script that was provided to him at the time of recording without any editing. He had no input over the text of the speech and was not aware of any questions in the survey or about the sampling sites.

The scripts have been translated in English such that the translation closely reflects the order of the words that participants hear in Hindi, and is a translation that makes sense in Hindi but awkward to read in English. The italic part in Attribution is the same as the Salience treatment.

Attribution treatment

*Namaskar, this is Delhi's **Education Minister**, Manish Sisodia. For the progress of our society an educated society is crucial. For this, it is most important that our country's schools provide good education.* For secondary schools education provision, Delhi Government and its people's representatives, that is, MLAs or Vidhayaks have the responsibility. MLAs regarding your children's school have three responsibilities.

- First, MLAs for schools in their constituencies raise issues related with the situation and concerns of the schools in the Delhi parliament.
- Second, to the education department MLAs share the problems of their schools and play a special role in building new schools and classrooms in their constituencies.
- And third, MLAs are members of SMC or school management committees. As SMC members they ensure that schools remain clean, school repairs are done on time and vacant teacher posts are filled on time.

⁴In very few cases, one off polling booth that was far off from the other polling booths for the team was de-prioritised or removed for practical concerns of nearness and safety.

Educated population boosts the countries' economy. Children who receive good education school are more successful in their lives. Education is important for empowerment and good quality education is a fundamental human right. I hope you understand how important it is for our society that every child has a good quality education. Thank you.

Salience treatment

Namaskar, this is Delhi's Deputy Chief Minister, Manish Sisodia. For the progress of our society an educated society is crucial. For this, it is most important that our country's schools provide good education. Educated population boosts the countries' economy. Children who receive good education are more successful in their lives. Education is important for empowerment and good quality education is a fundamental human right. I hope you understand how important it is for our society that every child has a good quality education. Thank you.

4 Training and quality control

An intensive 4 day training program was undertaken by the authors to improve the quality of the survey. Two research assistants were hired that reported directly to the research team and accompanied enumerators during interviews. Each enumerator was roughly accompanied at least once during the day. The first author was in Delhi for the entire duration of baseline, and conducted an additional day of training for the end-line survey and was there for the first 10 days of the Endline. The survey was randomly audio recorded and the enumerators were aware of the random audio recording to ensure the quality of the interview is maintained. The first author was present at survey sites during the first week of the baseline, conducted surprise visits, and undertook daily audio audits to prepare feedback scripts every day for the survey team to ensure good quality of the data.

5 Randomisation strategy

Participants were block randomised into control, salience and attribution treatment at the ward level using `block_ra` function from the `Randomizr` package in R. The seed was uniformly set as `8081991`. The randomisation was done in three sets so that end-line interviewing could begin as soon as the baseline survey ended.

6 Treatment Schedule

Each participant received the treatment which is the voice call thrice over a period of 4 weeks. The voice call was implemented by a different partner than the survey agency, and had no view over where the survey was conducted, or what was being asked. Similarly, the survey agency had no knowledge about the randomising schedule. This was done to ensure that survey agency had no

conscious or subconscious bias while conducting the survey.

The calls were made through an automated process between 3-4pm. Participants receive the respective voice call depending on when they were interviewed for Baseline. Every participant generally received the first voice message after 10 days of being interviewed for the baseline and this was always a Monday. The second voice message was within the same week on Friday. The final message was received two days before the end-line interview. Because the partner that implemented the calls had a weekly off on Sunday, while the survey agency had a weekly off on Monday - this led to a different schedule for some participants. The details are shared in the image below.

Figure 2: Treatment Schedule

BASELINE INTERVIEW DATE		treatment 1	treatment 2	treatment 3	ENDLINE RE-INTERVIEW DATE		TREATMENT WEEK
21st Nov	Wednesday	3rd Dec - mon	7th - fri	10th DEC	12th Dec	Wednesday	WEEK 1
22nd Nov	Thursday			11th DEC	13th Dec	Thursday	
23rd Nov	Friday			12th DEC	14th Dec	Friday	
24th Nov	Saturday (4th Dec)			13th DEC	15th Dec	Saturday	
25th Nov	Sunday			14th DEC	16th Dec	Sunday	
26th Nov	Monday			17th Dec	Monday		
27th Nov	Tuesday			15th DEC	18th Dec	Tuesday	
28th Nov	Wednesday	10th dec - mon	14th dec - fri	17th DEC	19th Dec	Wednesday	WEEK 2
29th Nov	Thursday			18th DEC	20th Dec	Thursday	
30th Nov	Friday			19th DEC	21st Dec	Friday	
1st Dec	Saturday			20th DEC	22nd Dec	Saturday	
2nd Dec	Sunday			21st DEC	23rd Dec	Sunday	
3rd Dec	Monday			24th Dec	Monday		
4th Dec	Tuesday	17th dec - mon	21st dec - fri	22nd DEC	25th Dec	Tuesday	WEEK 3
5th Dec	Wednesday			24th DEC	26th Dec	Wednesday	
6th Dec	Thursday			25th DEC	27th Dec	Thursday	
7th Dec	Friday			26th DEC	28th Dec	Friday	
8th Dec	Saturday			27th DEC	29th Dec	Saturday	
9th Dec	Sunday			28th DEC	30th Dec	Sunday	

7 Hypothesis

We divide our analysis into two papers.⁵ The first paper uses the base-line data and end-line data for the control group, to examine whether voters likelihood to attribute responsibility differs across policy services (simple or complex), and whether they are more likely to demand and enforce accountability for services they attribute responsibility to the state government. We measure accountability via conjoint and using end-line questions for incumbent support (intention to vote, approval voting) and policy evaluations for the control group. We measure demand in several ways, for example, by asking what are the top three services the government should focus on, and by asking them to distribute a sum of Rs.100 amongst the five services of interest.

⁵Another study pre-registered at Egap, titled, *Do gender quotas improve political participation*, available at <https://egap.org/sites/default/files/20181123AA.PAP.pdf>, uses data from this study.

We expect that voters have a higher likelihood to attribute responsibility more easily for simple services such as roads, water relative to education and healthcare. However, given the Delhi context, where education has become more salient recently, we also expect Education to enjoy high attribution. We expect that respondent's attribution evaluations will influence their likelihood to demand the service. We also expect attribution to influence respondent's likelihood to select on basis of policy statements, as well as their support for the incumbent accounting for their policy evaluations. Given the Delhi Context, we recognise that voters will be limited by their partisan bias, and we expect partisanship to be a predictor of selection / sanction choices. Caste is less salient in Delhi context, and we expect the divide to be on religious lines, with Hindus displaying less preference for Muslim candidates, and vice versa in the conjoint.

In our second paper, we focus exclusively on education provision, and examine whether information improves the likelihood of attribution for education, raises demand and improves the ability of voters to enforce accountability for education. We expect that salience may only raise the demand for education service and therefore may have an impact on accountability through this mechanism, but we do not expect salience to influence respondents' attribution. Therefore, we expect the attribution to have a stronger effect on accountability evaluations relative to salience. The causal mechanism of interest is as below -

Attribution mechanism

Attribution treatment → Salience + Attribution for education → Attribution for education (moderated by partisanship and associating policy with political parties) → Demand for education → Accountability for education services (moderated by policy evaluations, preferences, and partisanship)

Salience mechanism

Salience treatment → Salience of education → Demand for education → Accountability for education services (moderated by policy evaluations, preferences, and partisanship)