

# Pre-Analysis Plan for “Social Norms, Men’s Beliefs, and Women Voting”

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January 31, 2024

## 1 Introduction

Women turnout at a lower rate to vote in elections compared to men in many societies. In this document, we describe a pre-analysis plan to investigate if the low turnout is the result of misbeliefs about social norms or misbeliefs of men about how women vote. The study is run in Pakistan before the general elections in February 2024.

## 2 Design

We implement the study in three phases. First, we undertake a survey of households collecting baseline beliefs of a male and female respondent from every household in our study sample. These include beliefs about the number (out of 10) of men supporting women’s right to vote. We also collect beliefs on the alignment of candidate choices between women and men in elections. This baseline helps us establish the village level support for women voting. We have already calculated from the administrative data that there is near perfect alignment between candidate choices of female and male voters.

In the second phase, we deliver the treatment information in order to correct the beliefs of respondents. We divide the sample of households surveyed in the baseline into two sub-samples. The first sample includes households where both male and female respondents are strongly pessimistic about other men in the village. We randomly select households to receive correct information on (i) the number (out of 10) men who support women voting and (ii) the number (out of 10) women who vote for the same candidate as men. These two interventions are cross randomized to give us a two by two design. In the second sample, we randomly select households to only receive information on the number (out of 10) women who vote for the same candidate as men. The remaining households serve as control.

In phase 3, we undertake a rapid survey to measure turnout of women in our sampled households during the national general elections 2024.

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### 3 Timeline

The project implementation started on January 18th, 2024. Election is scheduled to take place on February 8th, 2024.

### 4 Sampling and Randomization

**Sampling:** We first randomly selected 40 settlements where we implement the project. Then we implement a geographic randomization by drawing geocodes to represent about 10% of the households in the settlement. We conduct a baseline survey with one male and one female respondent from each of the sampled household via random pin drops on the map. We are trying to reach between 2500 to 4000 households before the elections. The wide range is the result of implementing the study in a short span of time due to receiving permissions very close to the election.

**Randomization:** The project is being implemented in a short time span. This requires randomization on the fly. As we receive the baseline data from households, we implement a randomization for the day. We first divide the sample into whether both male and female respondents are strongly pessimistic about support for women voting in the community or not. This is done by comparing their expectation of support among 10 random men in the village with the correct average number of men who support women voting. The households in pessimistic sample are randomly divided into four groups. We use the day of randomization and village to create randomization strata. The non-strongly-pessimistic sample households are randomly divided in two groups. We again use the day of randomization and village name as randomization strata.

### 5 Outcomes

**Primary Outcome:** Our primary outcome is female voter turnout. We will record our female respondent to have voted, if the enumerators can verify indelible ink mark on their thumbs after the elections through a household survey.

**Secondary Outcomes:** We have two secondary outcomes. These are measured in post treatment survey. *Beliefs about turnout*, Respondents will be asked to predict the turnout in upcoming elections in an incentivized manner. *Household decision making*, We will ask men if they allow women to make a decision about donating money to a political gathering of women or if the men want to make this decision for them. We will vary whether the political gathering could be hosted at the house of political opponents of the male respondents.

### 6 Surveys

We collect information at three stages of the project. First, at baseline, we interview one male and one female respondent from each household. Second, we collect information from

the same respondents at the treatment stage. This includes respondents from the control households as well who only respond to survey questions and do not receive the treatment. Third, we collect information after the election through a survey of households where we collect information women respondents' turnout in the election.

## 7 Treatments: Strongly Pessimistic Sample

The experiment has three treatments and one control. In each treatment condition, the respondent is reminded of their baseline answers and the information is conveyed with the help of visual aids. All respondents, irrespective of their treatment status, are visited by the enumerators.

*Treatment Norms:* Male and female respondents of each household assigned to this group are informed about the number of men out of 10 average men in the village who support women voting.

*Treatment Alignment:* Both male and female respondents are informed that based on the election data 10 out of 10 women vote for the same candidate as men in their area.

*Treatment Both:* This group is a combination of the previous two treatments.

*Control:* This group does not receive any information.

We will study the effects of these treatments on women voters' turnout in elections.

## 8 Treatments: Non-Strongly Pessimistic Sample

*Treatment Alignment:* Both male and female respondents are informed that based on the election data 10 out of 10 women vote for the same candidate as men in their area.

*Control:* This group does not receive any information.

## 9 Analysis

We may explore the following variables for heterogeneity analysis.

*Politically Active Families:* In the baseline, we ask male respondents if (i) their family has a run a political campaign for a candidate in the past, and (ii) anyone from their family has contested elections. We label the family as politically active if the answer to any to of the questions is yes.

*Unmarried Girls:* The number and proportion of unmarried girls in the family.

*Women's stated misalignment with men:* If women report that they will not consider voting for the same candidate as men.

*Women empowerment score:* A score based on whether women are solely responsible for or participate in taking decisions about children's schooling, purchase of cloths, going to the polling station, taking a job outside the house, and maintain social relationships in the village.