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No representation without information

Politician responsiveness to citizen preferences

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No Representation without Information: Politician Responsiveness to Citizen Preferences*

Abstract

Information asymmetries plague many markets. Studies on the role of information in political accountability usually ask whether citizens know enough about politicians. In this paper, I ask instead whether politicians know enough about citizens to adequately represent them. Using original politician and citizen surveys in Pakistan, I show that politicians hold highly inaccurate beliefs about citizen preferences. In collaboration with a large political party, I conduct a field experiment with 653 politicians to understand how politicians respond when they receive information on citizen preferences. I find that politicians who receive information make recommendations to their party leadership that are closer to what citizens prefer. Directly elected politicians are more responsive than indirectly elected ones. Politicians are more responsive to information about women's preferences compared to men's preferences. I interpret my results using a simple model of belief updating and responsiveness. The model suggests that higher responsiveness to women's preferences should be expected if politicians are less confident in their prior beliefs about women, for which I find evidence in the data. This paper shows that politicians' inaccurate beliefs constrain accountability and public good provision in developing democracies. My results point to the need for better channels for the flow of information from citizens to politicians—channels that include those who are currently underrepresented.

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1 Introduction

Information asymmetries cause market failures in many domains.[1] Do such asymmetries exist in politics? If so, how do they affect accountability and public good provision? Studies on the role of information in accountability usually ask whether voters know enough about politicians' actions to sanction them (see e.g. Banerjee et al., 2011; Dunning et al., 2019). In this paper, I ask instead whether politicians know enough about voters to adequately represent them. This is important because without this knowledge, even well meaning politicians would be unable to provide the public goods that citizens desire.

I first examine the extent to which local politicians in Pakistan possess accurate information about citizen preferences by surveying politicians and citizens. Second, I test whether local politicians respond to new information on citizen preferences by conducting a field experiment in partnership with the second-largest political party in Pakistan. Third, I test whether politicians' response varies by the type of politician who gets information and the type of citizens whose preferences are provided. Finally, I observe how politicians' demand for further information responds to treatment. I interpret my findings using a simple model, which suggests that responsiveness should be higher when beliefs are less accurate, when politicians are less confident in their prior beliefs, and when they place a higher weight on citizen preferences compared to their own preferences.

I start by establishing that politicians have highly inaccurate beliefs about citizen preferences. My sample includes 653 local politicians and 4,578 voters in Lahore. Politicians are only marginally more accurate than a random guesser. They correctly guess which one of two policies is preferred by the majority 59 percent of the time. I introduce a measure of accuracy that provides a fine-grained random guess benchmark across issues. When asked what citizens prefer, politicians score 15 on average, which is far closer to the random guess benchmark (0) than to perfect accuracy (100). I use the sampling distributions of citizen preferences to show that this result is not driven by noise in measurement.

My measures of accuracy show sensible variation across issues. Beliefs about local issues that these politicians handle directly (such as drainage and piped water) are more accurate compared to issues (such as unemployment and infrastructure projects) that are the *de jure* responsibility of higher levels of government. Even on these local issues, however, they are closer to the random guess benchmark than to perfect accuracy. Strikingly, politicians are not more accurate about groups they interact more frequently with (i.e. men and supporters

[1] See Handel and Schwartzstein (2018) for a review.

of their own party). This suggests that political contact may be unrepresentative, preventing politicians from using larger samples to become more accurate.

Showing this information gap is not sufficient to establish that what politicians know has consequences for accountability and public good provision. An information gap could reflect that politicians do not care what citizens prefer.[2] I find that politicians show a high demand for information under the status quo: two-thirds (67%) of politicians sign up for a report about citizen preferences and customize it to their liking.[3] Even though they demand this information, however, it is possible that they act in the same way after receiving it.

I next ask whether experimentally alleviating the information gap affects how politicians act. I conduct this field experiment in partnership with the second-largest political party in Pakistan. Two-thirds of the 653 local politicians in my sample are randomized into receiving information on citizen preferences. Treatment politicians are further randomized into receiving the preferences of one out of six sub-populations defined along two dimensions: gender (men only, women only or both) and partisanship (supporters of their own party or voting age citizens in general). Each treatment politician receives information on six out of nine issues while control politicians do not receive any information.[4]

I measure responsiveness by observing what local politicians recommend to their higher tier party leadership, which is the primary way in which they influence outcomes for citizens. Under the status quo, recommendations are made on a frequent but informal basis. Working with the party, I develop a formal "policy recommendation mechanism". The party sends its local politicians an official letter soliciting their recommendations and promises to use these recommendations in policymaking, ensuring that the stakes are real.

I find that politicians respond to information about citizen preferences. When presented with this information, they are 7.6 percentage points more likely to recommend the policies supported by the majority of citizens. This is a 14.5 percent improvement over the control group in which only 52.5 percent of recommendations are in line with the majority's preference. Treatment effects on recommendations elicited by a party representative on the phone a few days after treatment are similar, indicating that responsiveness is not due to demand

[2] e.g. because they are driven by opportunities for rent-seeking or by their own views of what is best

[3] These sign-ups are not for the experimental treatment, but instead for a secondary report that is delivered after the experiment is conducted and outcomes are observed. All 653 sample politicians are part of the experimental randomization.

[4] This design allows me to estimate effects at the politician-issue level. My dataset contains 9 observations for each politician. Treatment is assigned both at the politician level and at the issue level within politician. See Section 4.3 for more details.

effects and that the effects of information do not quickly dissipate. I show that treatment effect do not operate through an increased perceived importance of citizen preferences by cross-randomizing an explicit priming treatment. This shows that the information gap limits politicians' ability to provide the public goods citizens desire.

Next, I ask whether responsiveness varies by the type of politician who receives information and by the type of citizen who preferences are provided to politicians. To examine variation by politician type, I estimate heterogeneity in treatment effects by whether politicians are elected directly or indirectly. To examine variation by citizen type, I estimate responsiveness to sub-treatments in which politicians are provided with information on (i) their party's supporters or everyone, and (ii) men, women or both genders. These results are causally identified since sub-treatments are randomly assigned.

I find that directly elected politicians are significantly more responsive than indirectly elected ones. The former category includes politicians who are directly elected on a ward member or union council chair position, while the latter category includes appointed woman councilors and union council vice chairs who run on a joint ticket with the chair.[5] This result is robust to (i) manually controlling for the demographic characteristics of politicians, and (ii) when controls are selected from the 104 available politician covariates using a machine learning method. This is compatible with my model in which directly elected politicians are more responsive because they place a higher weight on citizen preferences, suggesting that politicians' incentives affect responsiveness.

Politicians are not more responsive to the preferences of their own party's supporters (7.1 percentage points) versus the electorate at large (8.1 percentage points). This shows that politicians do not use new information to discriminate in favor of their core supporters.[6] Responsiveness to information on women's preferences is substantially *higher* compared to information on men's preferences. When presented with data on women's preferences, politicians are 10.9 percentage points (20.8 percent) more likely to recommend the policy supported by the majority. When presented with data on men's preferences, the corresponding increase is 5.8 percentage points (11.0 percent). In a context where women are largely excluded from political networks, this indicates that returns to increased meaningful partic-

[5] Randomization was stratified by politician type.

[6] My model explains why politicians may not respond differentially to their own party's supporters versus the electorate at large. There are two counter-acting influences that balance out: (i) they are more confident in their prior beliefs about their own party's supporters, which results in lower belief updating and hence lower responsiveness, and (ii) they place a higher weight on the preferences of their own party's supporters which results in higher responsiveness.

ipation by women may be high.[7]

Why do politicians respond more to information on women's preferences? Under my model, this occurs because they are less confident in their prior beliefs about women compared to men. When they receive a new 'signal' about women, they place a higher weight on this signal and hence update their beliefs more. I provide suggestive evidence for this channel using survey responses showing that politicians are thrice as likely to state that they know more about the preferences of men than women. I provide evidence that is inconsistent with other explanations. Beliefs about women are not less accurate, and politicians do not believe that responding to women might provide greater electoral returns or that the party expects greater responsiveness towards women.

Next, I explore how exposure to information affects politicians' demand for more information. If information is considered to have diminishing returns, exposure to information may decrease politicians' demand for more information. I test this by offering politicians in my sample an option to sign up for a report on citizen preferences, to be delivered in the near future. Signing up for a report involves making detailed choices about the contents of the report and the mode of delivery, making it costly. The most relevant choice is the dimension along which citizen preferences should be reported: gender, partisanship, class or age.

I find that instead of decreasing demand, treatment increases politicians' demand for information. This increase is only observed, however, on the one dimension that control politicians do not consider important: age. Demand for information on the preferences of young, middle-aged and elderly citizens doubles from 6% to 12%. Demand for information along the three dimensions that are popular among the control group (gender, partisanship and class) remains unaffected. This constitutes suggestive evidence that exposure to information makes politicians more attentive to dimensions they do not consider important otherwise.

These results imply that politicians' inaccurate beliefs about citizen preferences are a constraint on politicians' ability to deliver. Our understanding of low accountability and inefficient public good provision in developing countries is thus missing an essential ingredient: politicians' inaccurate beliefs. These findings also raise the question of why politicians do not exert greater effort to acquire better information about citizen preferences when they value this information and are responsive to it. I provide suggestive evidence that the reasons are gendered: they believe they do not need more information about men, and social

[7]In other co-authored experimental work, I show that nonpartisan canvassing reduces the gender gap in political participation - but only when it targets men and not when it targets women. This result indicates that men act as 'gatekeepers' (Cheema et al., 2019).

norms prevent them from acquiring more information about women.[8] One counterintuitive implication is that direct contact may undermine representation as politicians become overconfident in their inaccurate beliefs about men.

This paper contributes to several literatures in economics. It ties in with literatures on information frictions in various domains such as the market for used cars (Akerlof, 1978), labor (Schönberg, 2007), housing (Anenberg, 2016), health (Handel and Kolstad, 2015), energy (Allcott and Taubinsky, 2015) and agriculture (Hanna et al., 2012). I find that similar problems plague political 'markets', which is a stark finding since politicians have incentives to be well informed.

What affects public good provision is a central question for development economics. Researchers have investigated potential determinants of public good provision including corruption (Ferraz and Finan, 2011; Reinikka and Svensson, 2005; Banerjee et al., 2012),[9] the effectiveness of state personnel (Bertrand et al., 2015; Rasul and Rogger, 2018; Khan et al., 2015),[10] and clientelism or vote buying (Anderson et al., 2015; Finan and Schechter, 2012) among several others. This paper is the first to show that what politicians know about citizens may affect how public goods are provided.

In doing so, it also makes a contribution within political economy to the rich literature on the role of information in democratic accountability. We have mixed evidence on whether informing voters about politicians results in better selection and improved accountability (Banerjee et al., 2011; Wantchekon, 2003; Fujiwara and Wantchekon, 2013).[11] Casey et al. (2019) show that informing party leaders about voter preferences improves candidate selection. This paper complements these studies by showing that informing existing politicians also improves representation. This finding is critical for contexts where altering selection is hard due to high barriers to entry such as expensive electoral campaigns or dynastic politics.[12]

[8] In other experimental work, I document the high relative costs that parties face when engaging with women. When the party monitors the effort of its workers in an electoral campaign, workers increase their effort on men but do not increase their effort on women (Liaqat, 2019).

[9] See Olken and Pande (2012) for a review.

[10] See Finan et al. (2015) for a review.

[11] See Pande (2011) for a review and Dunning et al. (2019) for results from a set of coordinated studies. More recent work shows that the effects of improved information may be enhanced when the issue is salient for voters (Boas et al., 2019) or when the sanctioning mechanism is more explicit or salient for politicians (Grossman and Michelitch, 2018; Banerjee et al., 2019)

[12] In its focus on politicians' beliefs and actions, this paper also ties in closely with the literature on legislator knowledge and responsiveness in the American politics subfield in political science. A set of papers including Miller and Stokes (1963) and Tausanovitch and Warshaw (2014) study responsiveness by observing correlations between enacted policies and public opinion data. Causal evidence is limited and mixed. Butler and Nickerson (2011) find that providing legislators with public opinion data moves their voting behavior

This paper also contributes to the literature on when policy shifts in line with women's preferences. Chattopadhyay and Duflo (2004) show that public good provision shifts towards women's preferences when village council head positions in India are randomly reserved for women. Lott and Kenny (1999) show that women's suffrage in the United States was followed by increases in government spending in line with women's preferences. This paper suggests that in the absence of large exogenous shifts in women's representation as politicians or voters, policy may still shift closer to women's preferences if existing politicians are better informed about what women want.

A common argument for decentralization in private and political organizations is that lower-tier agents have an informational advantage (Mookherjee, 2006; Dessein, 2002). There is little to no direct empirical evidence on whether this informational advantage exists (Dal Bo et al., 2019). This paper shows that contrary to these expectations, agents at the lowest tier may not have the information needed to make better decisions. At the same time, by showing that directly elected politicians respond to new information, this paper validates a common argument for political decentralization, namely that the incentives of decision makers at the decentralized tier are tied closely to their performance in the locality (Seabright, 1996).

Within behavioral economics, this paper joins a group of studies including Hjort et al. (2019), Banuri et al. (2017) and Vivalt and Coville (2017) that capture policymakers' beliefs in a realistic setting and examine the relationship between these beliefs and behavior.[13] It advances this nascent literature by being the first paper to study how prior beliefs shape policymakers' responsiveness to citizen preferences.

The rest of this paper proceeds as follows. In Section 2, I present relevant contextual details. In section 3, I introduce my conceptual framework and set up a simple model of belief updating and responsiveness. In Section 4, I describe the data on citizen preferences and politician beliefs as well as the experimental design. In Section 5, I present results on how accurate politicians' beliefs are. In Section 6, I present experimental results on politician responsiveness to citizen preferences. I conclude in Section 7 by commenting on the policy relevance of these findings and suggesting avenues for further research.

on a highly salient issue, but Kalla and Porter (2019) show that legislators do not access such information or update their beliefs when they do access it. This paper complements these studies by providing the first causal measure of responsiveness to citizen preferences in a developing democracy, and showing that politicians in Pakistan do value such information. This paper also provides the first causal estimates of responsiveness to the preferences of different subgroups of citizens.

[13]Most studies involving belief elicitation take place in the laboratory (Schotter and Trevino, 2014) which has considerable costs in terms of ecological validity and the representativeness of subject pools.

2 Context

2.1 Local Politicians in a Developing Metropolis

This study is set in Lahore, the capital of the Punjab province in Pakistan and the 9th most populous city in the world. Studying urban governance in Asia is especially important since more than than half the global population (55%) lives in urban areas, and more than half (54%) of global urban dwellers live in Asia (DESA, 2018).

I focus on politicians at the lowest-tiers of elected government, referring to them as 'local' politicians. They serve in four different positions at the level of the Union Council (UC) and the ward within the UC, as depicted in Figure 1. These positions are (i) directly elected politicians at the ward level known as 'Ward Councilors', (ii) directly elected Union Council chairpersons, (iii) Union Council vice-chairpersons on a joint ticket with the chairperson and (iv) woman councilors appointed on reserved seats by the party. The politicians in the first three categories are almost all men. Even though there is no such legal requirement, parties tend to award tickets for directly positions to men, using the reserved seats for women in every Union Council as an excuse to deny these positions to women.

Politicians in the first two categories (Ward Councilors and UC chairpersons) face a direct re-election incentive, while the incentives for the last two categories of politicians are tied less directly to voters. Much like the candidates for Vice-President in the United States, the career prospects for UC vice-chairpersons depend upon the preferences of the main ticket-holder.[14] Similarly, candidates for women councilors are appointed by each party at the union council level, and whether one or both reserved positions for women councilors go to a party is determined by the party's vote share for the UC chairperson candidate.

These politicians are deeply embedded in the communities they live in. The average politician has lived in the neighborhood for 41 out of their 47 years. They form an integral part of their political party's machine at the local level. This machine is typically headed by the party's candidates for parliamentary constituencies. In my sample, 90% of local politicians campaign for their party's parliamentary candidates in general elections. Local politicians thus serve in a dual capacity: as local elected representatives, and as party workers.

[14] Devine and Kopko (2013) find that Vice-Presidential candidates in the US are not even able to affect the outcome of their home state in presidential elections in the United States

2.2 How Local Politicians Influence Public Good Provision

They influence outcomes for citizens in two main ways: by directly influencing the provision of local services and by transmitting recommendations to higher tier politicians.[15] The latter is the primary way in which they influence outcomes, for two reasons. First, Union Councils receive a limited discretionary budget and often depend upon transfers from higher tiers. Second, even on the local service delivery issues over which they have *de jure* jurisdiction and decision making power, the bureaucracy involved in delivering these services is often centralized. This implies that local politicians must channel their agenda through higher tiers of political leadership who are the counterparts of senior bureaucrats.

In cases local politicians directly provide local services, it is hard to empirically isolate responsiveness at the individual politician level. These decisions are subject to group decision making processes within the Union Council, the political vision of the party in general, and a range of logistical and bureaucratic hurdles. An observed outcome cannot be cleanly attributed to an individual politician. The literature on responsiveness in the United States municipalities suffers from the same empirical issue (see e.g. Tausanovitch and Warshaw, 2014). My method of operationalizing responsiveness described in the next section provides a way of identifying an individual politician's responsiveness on a given issue.

The second, and more dominant, way in which local politicians influence outcomes for citizens is by transmitting their recommendations to a higher-tier decision maker. This is an important function that local politicians play within their party machine. These recommendations may be about (i) local services that are provided by local government but where some consequential decisions are taken at a higher tier or about (ii) public services or policies that are under the jurisdiction of higher tiers of government but where the decision making process is informed by the views of local politicians.[16] In the status quo, local politicians transmit their preferences to higher tier politicians in an informal manner through communication with the parliamentarians in their area or at party meetings or summits. In my sample, two-thirds of local politicians had met their area's parliamentarian to make recommendations at least once in the previous month and almost all had such meetings with their area's parliamentarian in the year leading up to the survey.

[15] Since local elections are partisan, there are often close connections between local and higher-level politicians within a given area. I show in other work that voters recognize these connections and consider them important in their voting decisions (Liaqat et al., 2019a)

[16] These higher-tier decisions may be taken by a higher tier politician (such as the Chief Minister of Punjab or the the Minister of a particular provincial department) or a political body (such as the national or provincial parliament or the political party's executive committee). Anecdotal pictorial evidence of these two ways in which local politicians influence outcomes are presented in Appendix E

2.3 How Local Politicians Engage with Citizens

Local Politicians frequently engage with citizens. In a companion book chapter, I document evidence of frequent contact between citizens and local politicians (Liaqat et al., 2019b). Using an original survey of 2,150 citizens, I show that close to 10 percent of citizens report contacting their local politician in the previous 12 months. This is broadly consistent with the median politician's claim that they meet close to 40 citizens a week .

While politicians engage frequently, they do not engage with a representative group of citizens. Those who contact politicians are meaningfully different from the average voters in terms of their demographic and personality characteristics, in terms of the issues they care about and how they wanted local budgets to be allocated (Liaqat et al., 2019b).

Women are much less likely to be in contact with politicians compared to men (Liaqat et al., 2019b). Similarly, Khan (2019) shows that there are sizable gaps in the level of politicians' contact with men and women in Faisalabad, a district close to Lahore in Punjab province. This gender gap is not restricted to direct contact: women are 12 percentage points less likely to vote (Cheema et al., 2019), 15-24 percentage points less likely to attend rallies and corner meetings (Khan, 2019), and 21 percentage points less likely to be targeted by canvassers (Liaqat, 2019).

3 Theoretical Framework

Does information about citizen preferences affect the decisions that politicians make? The answer to this question depends on (i) how accurate and precise their prior beliefs about citizen preferences are and (ii) the extent to which they care about these preferences. In section 3.1, I describe the informational environment of politicians. In section 3.2, I develop a simple model of belief updating to show how the informational environment and politician incentives affect the extent to which politicians respond to citizen preferences.

3.1 The Information Environment of Local Politicians

To understand the beliefs of local politicians in Pakistan about what citizens prefer, we must consider the duality of their role. Their first role is that of elected representatives and the second is that of workers or brokers in a party machine that is at times clientelistic. Pakistani local politicians share this characteristic with politicians in other clientelistic democracies (Novaes, 2014).

The literature on elected politicians in the United States (Miller and Stokes, 1963; Fenno, 1977) and brokers in clientelistic democracies (Stokes, 2005; Kitschelt et al., 2007; Stokes et al., 2013) argues that knowing what citizens want is central to these roles.[17] Yet, recent studies from the United show that legislators (Broockman and Skovron, 2018) and congressional aides (Hertel-Fernandez et al., 2019) in the United States have systematically biased beliefs about citizen preferences. While there is no existing evidence of how well brokers know what citizens prefer, the first direct tests of the ability of local brokers to predict the vote choice of their constituents have found that local leaders in India and Ghana do not have good knowledge about the partisan preferences of voters (Schneider, 2019; Brierley and Nathan, 2019).[18]

What accounts for these systematic misperceptions by legislators in the United States and brokers in the developing world? One primary way in which politicians find out what citizens prefer is by direct contact with them (Fenno, 1977; Miler, 2009). If direct contact takes place in an unrepresentative manner, it may result in politicians having biased and inaccurate beliefs about citizen preferences (Butler and Dynes, 2016). There is evidence of unrepresentative contact in Pakistan (Liaqat et al., 2019b) and the United States (Broockman, 2014; Broockman and Skovron, 2018).[19] Any misperceptions that arise as a consequence of lack of representation in contact are even more likely to occur in young democracies such as Pakistan where large-scale polling is not the norm and politicians must rely on direct contact with voters for information about the policy preferences of citizens. This leads to the expectation that local politicians have inaccurate beliefs about citizen preferences. As a result, even in the absence of clientelism, corruption, vote buying or a preference for pork-barrel spending, representatives would end up making policy decisions that are not in line with average citizen preferences.

When do we expect variation in the accuracy and precision of politicians' beliefs? Since they engage with citizens more explicitly on local issues, we expect them to experience more equitable representation and therefore more accurate beliefs about local issues compared to higher-tier issues. While contact with women is less common than contact with men, it

[17] For elected politicians, this aligns with the normative ideal of a delegate who acts in line with citizen preferences as opposed to a trustee who acts according to his own better judgment (Fox and Shotts, 2009). For brokers, this knowledge is used (under the logic of clientelism) to target individual gifts or local services in exchange for votes.

[18] In line with these findings, recent scholarship has begun to question the centrality of this mechanism in sustaining a clientelistic equilibrium (Muñoz, 2014; Mares and Young, 2016; Hicken and Nathan, 2019)

[19] These studies show that politicians are much more likely to be contacted by constituents of their own race or partisan affiliation.

is not necessarily the case that beliefs about women are expected to be less accurate. If contact with both men and women is unrepresentative to a similar extent, politicians can end up with similarly inaccurate beliefs about either gender. It is important to consider not just the first-order beliefs (how accurate politician beliefs are), but also the second-order beliefs (how accurate politicians think they are). Given that gender is a far more salient and easily observable dimension than the dimensions along which men self-select into contact, it is expected that politicians are more aware of their lower contact with women, compared to of the fact that they speak to a non-representative sample of men. In other words, the relatively higher rates of contact may lead them to become overconfident in how well they know the preferences of men.

The prediction of large gaps in politicians' knowledge leads to the expectation that politicians will respond to new information by adjusting their beliefs towards true citizen preferences. The extent to which they update their beliefs is expected to depend not only on the accuracy of their beliefs, but also the precision. In other words, for a given level of accuracy, politicians will update their beliefs more if they are not very confident about their prior beliefs. The extent to which updated beliefs translated into increased responsiveness will depend on the weight that politicians place on these preferences. Even in the presence of objectives that run counter to citizen interest, it remains the case that politicians' future career prospects are linked to citizens' assessments to some extent. We expect, therefore that local politicians will place some positive weight on citizen preferences, hence allowing their updated beliefs to translate into responsiveness. By "responsiveness", I refer to the relationship between the services or policies that local politicians attempt to deliver, and signals from citizens about what services or policies they prefer. Politicians are responsive if they implement or takes action to support the service or policy that citizens prefer, conditional on having received a signal about what citizens prefer.[20]

Politicians whose incentives are tied more closely to voters are expected to be more responsive to citizen preferences. The long tradition of work on electoral accountability through the sanctioning mechanism (see e.g. Barro, 1973; Ferejohn, 1986; Austen-Smith and Banks, 1989) predicts that elections solve the moral hazard problem in that politicians exert effort to

[20]In adopting this definition, I follow Przeworski et al. (1999) except for two important deviations. One is a devolution down to an individual politician rather than the 'government' as a whole whose responsiveness they are broadly interested in. Second, I expand their definition beyond a consideration of policies by explicitly including preferences over public services. This is because far more often than advising on policy decisions, local politicians are concerned with and have influence over the provision of public services compared to the legislators that Przeworski et al. (1999) and other defining works before them such as Miller and Stokes (1963) and Eulau and Karps (1977) study. In Section 4, I describe in detail exactly how I operationalize this definition.

perform up to the point where they cross a re-election threshold set by voters. This theoretical literature and even subsequent complications introduced in the sanctioning framework (for a review see Ashworth, 2012) do not take into account politicians' information about what citizen prefer. Notwithstanding this omission, it follows from this literature that if a politician's incentives are tied closely with voters' evaluation of their performance, they would place a greater emphasis on the preferences of citizens when taking decisions.

Since belief updating depends both on the accuracy and precision of priors, I expect that politicians will respond more to women's preferences since they have equally inaccurate but less precise priors about women's preferences. On the other hand, given similar levels of both accuracy and precision about the beliefs of their own party's supporters versus the population in general, we expect that they do not respond differentially to these two groups.

3.2 A Simple Model of Responsiveness through Belief Updating

To formally illustrate my theoretical expectations about politician responsiveness to new information about citizen preferences, I set up a simple model of belief updating. In this model, a local politician is making a decision about what to recommend to their higher-tier party leadership on a set of issues. They can recommend that the party pursue policy M which is preferred by the majority of citizens or policy N which is not. The politician's decision depends on their beliefs about citizen preferences and on their own preferences.

3.2.1 Prior Belief Formation

The interactions politicians have with citizens could be unrepresentative of citizen preferences in a number of ways. They could be (i) speaking to an unrepresentative sample of truth-telling citizens who reveal all their preferences, (ii) speaking to a representative group of truth-telling citizens who selectively reveal some of their preferences, (iii) speaking to a representative or unrepresentative group of lying citizens, or (iv) imperfectly recalling from fully representative interactions. Each of these possibilities could lead to politicians having inaccurate beliefs. Below, I sketch out how one of these possibilities leads to inaccurate beliefs, namely when politicians interact with an unrepresentative group of truth-telling citizens who reveal all their preferences to the politician.

The politician acquires their prior belief about citizen preferences through direct interactions with citizens. They are trying to ascertain what share of the population prefers policy M over policy N. They form their beliefs entirely through direct interactions, by taking the average of the preferences expressed to them by the citizens who contact them. I assume

that politicians are not aware that the citizens who come to them are not a representative sample of the population.[21] The mean and variance of these beliefs are denoted by μ_{0g} and variance σ^2_{0g} respectively, where g indicates the group that the belief is about. For instance, the politician has separate beliefs about men and women, or about the supporters of their own party or supporters of other parties. g could also denote the entire population.

Within g, there exist two sub-groups: A that contacts politicians at a higher rate r and B that contacts politicians at a lower rate τr where $0 \leq \tau \leq 1$. Sub-group A comprises proportion a of g while sub-group B comprises the remaining $1-a$. From the members of group A and B, $m-\beta$ and m respectively prefer policy M to policy N, with $(m-1) \leq \beta \leq m$ without loss of generality. The politician is not able to observe sub-group membership. The preferences of each of the sub-groups approximate a normal distribution by the Central Limit Theorem since they are a sum of many independent Bernoulli trials. The mean of the politician's prior belief is the average of the two subgroup preferences weighted by their contact with the politician. Since the politician's belief is a linear combination of two independent distribution of preferences that are each normally distributed, the beliefs follow a normal distribution with the following mean:

$$\mu_{0g} = \frac{ar}{ar + (1-a)(\tau r)}(m-\beta) + \frac{(1-a)\tau r}{ar + (1-a)(\tau r)}(m) \tag{1}$$

In comparison, the true proportion is:

$$\theta_{0g} = (a)(m-\beta) + (1-a)(m) \tag{2}$$

This leads to the following linear distance between true preferences and prior beliefs:

$$dist_{0g} = \frac{a\beta(a-1)(\tau-1)}{\tau a - \tau - a} \tag{3}$$

In the absence of any divergence in preference ($\beta = 0$), contact rates ($\tau = 1$), or grouping ($a = 0, 1$), the distance equals zero. The absolute rate of contact (r) does not enter into the expression for $dist_{0g}$ and therefore does not affect the accuracy of the prior. Similar to any sampling process from the same population, however, more contact implies that the mean belief is more precise. Whether the politician overestimates or underestimates support for the popular policy M depends on whether β is positive or negative. β is negative when the high contact group A supports the policy M more than the low contact group B, and is positive in the opposite case. A negative β implies a positive distance which corresponds to the

[21] Enke (2015) shows in a laboratory setting that such 'selection neglect' is a fairly common phenomenon. This implies that this theory does not apply to beliefs across visible ascriptive characteristics such as gender. It applies within gender categories, to beliefs about men and beliefs about women respectively.

politician overestimating support for policy M because they interacted disproportionately with group A that supports policy M more. A positive β implies the opposite. The extent to which the politician's belief is inaccurate depends on the extent to which the sample is representative (τ) and the extent to which preferences diverge (β):

Proposition 1a: Beliefs become less accurate with rising divergence in preferences. $\partial dist_{0g}/\partial\beta = a(a-1)(\tau-1)/(\tau a - a - \tau) < 0$. *Case 1:* $\beta < 0$. *A decrease in* β *implies higher divergence in preferences and an increase in the positive distance, hence less accurate beliefs. Case 2:* $\beta > 0$. *An increase in* β *implies higher divergence in preferences and a decrease in the negative distance, hence less accurate beliefs.*

Proposition 1b: Beliefs become less accurate with rising divergence in contact rates. $\partial dist_{0g}/\partial\tau = a\beta(a-1)/(\tau a - a - \tau)^2$. *Case 1:* $\beta < 0 \implies \partial dist_{0g}/\partial\tau < 0$. *Distance is positive (underestimate) and decreasing, which implies higher accuracy as* τ *increases. Case 2:* $\beta > 0 \implies \partial dist_{0g}/\partial\tau > 0$. *Distance is negative (overestimate) and increasing, which implies higher accuracy as* τ *increases.*

This simple setup shows that it is possible for politicians to end up with inaccurate beliefs by coming into contact with an unrepresentative sample of citizens, regardless of the number of citizens they contact.

3.2.2 Belief Updating and Responsiveness

In this model, when the politician receives an external shock to their prior beliefs about citizen preferences, they update their beliefs using Bayes' rule. Assuming that this external data is obtained using a representative survey of citizens, it is distributed as:

$$p_g(\mu_{Dg}|\mu_{0g}) \sim \mathcal{N}(\mu_{Dg}, \sigma^2_{Dg}) \tag{4}$$

If the prior and likelihood are both normally distributed as above, then the normal prior acts as a conjugate prior and the posterior is also normally distributed as follows:

$$p_g(\mu_{1g}|\mu_{Dg}) \sim \mathcal{N}(\mu_{1g}, \sigma^2_{1g}) \tag{5}$$

where

$$\mu_{1g} = \frac{\sigma^2_{Dg}\mu_{0g} + \sigma^2_{0g}\mu_{Dg}}{\sigma^2_{Dg} + \sigma^2_{0g}} \tag{6}$$

and

$$\sigma^2_{1g} = \frac{\sigma^2_{Dg}\sigma^2_{0g}}{\sigma^2_{Dg} + \sigma^2_{0g}} \tag{7}$$

The politician uses these posterior beliefs to decide which of two policy options to recommend to their higher tier leadership on a given issue. The policy that is in fact preferred by a majority is denoted M while the other option is denoted N. The politician's propensity to recommend policy M over N is increasing in his expected utility from recommending policy M, which can be characterized as:

$$EU_M = \alpha([\sum_{g \in G}(\gamma_g)(\mu_{1g})) + (1-\alpha)(z) \tag{8}$$

where γ_g is the weight the politician assigns to the preferences of those in group g, with $\sum_g(\gamma_g) = 1$. G could include various ways of dividing the population, but the two most relevant for this paper are gender and partisanship. μ_{1g} is the politician's posterior beliefs about group g. The politician derives utility z from a range of factors other than representing citizen preferences. These could include self-interest that runs counter to citizen interest (e.g. corruption), self-interest that is in line with citizen interest (believing that citizens do not know what is good for them but will realize later and will vote for the politician) or benevolence (doing what the politician thinks is right regardless of whether citizens will vote for the politician or not). Finally, α and $1-\alpha$ are the weights assigned to citizen preferences and z respectively. This simple framework allows me to make the following predictions about how politicians are expected to respond to new information about citizen preferences. receiving an unbiased signal moves the politician's posterior belief closer to the truth.

Proposition 2a: Politicians will update their beliefs towards the truth and respond to new information.[22]

Proposition 2b: Politicians who place a higher weight on citizen preferences are more responsive.

In my experiment, there are politicians with both direct and indirect election incentives. Assuming that directly elected politicians have a closer link with voter and a higher re-election incentive, it follows that directly elected politicians are expected to be more responsive.

Proposition 2c: Politicians are expected to respond more to new information when their prior beliefs are less precise.

In my experiment, less precise beliefs map on to beliefs about women. I expect politicians to

[22] In an extension of the model in Appendix C, I show that politicians will respond even if the mean of their prior beliefs is accurate, as long as their prior belief is not very precise. The intuition is that the distribution of an accurate but imprecise belief has some mass below the threshold that makes a politician recommend M over N.

respond more to women's preferences compared to men's preferences, because the standard deviation of prior beliefs is expected to be higher for women.

4 Data & Experimental Design

To test whether politician information is a constraint on democratic accountability, I first estimate how accurate politician beliefs about citizen preferences are, and then randomly provide politicians with accurate information on citizen preferences to test how politicians respond. The sample for this study consists of 653 elected representatives in 89 geographically contiguous UCs in Lahore.[23] My estimates of accuracy are based on comparisons between directly elicited citizen preferences and politician beliefs about these preferences. Next, to test whether politicians respond to citizen preferences, I partner with the second-largest political party in Pakistan to operationalize responsiveness as local politicians' high-stakes recommendations to their higher tier party leadership. Under this design, I experimentally provide local politicians accurate data on the preferences of citizens from sub-populations and observe effects on their recommendations to test my predictions on responsiveness.

4.1 Citizen Preferences

As the first step in testing how well politicians know citizen preferences, I gather data on what citizens prefer on nine local and higher tier issues. These include three local service trade-offs and six higher-tier service or policy trade-offs. I pick these issues based on what citizens identify as issues that matter to them in a baseline survey.[24] The data comes from original surveys with 4,578 randomly selected voters living across 458 wards in 89 Union Councils, within the boundaries of 4 National Assembly constituencies in Lahore.[25] Each of the nine issues are coded as binary choices. I aggregate citizen preferences to the level of the National Assembly. Within each National Assembly, I also calculate the preferences of six sub-populations: (i) entire sample, (ii) all men in the sample, (iii) all women in the sample, (iv) supporters of PML-N, (v) men who support PML-N and (vi) women who support PML-N. For instance, on the local issue of solid waste versus drainage, a citizen's choice is coded as a binary variable for whether they think solid waste is a bigger issue or drainage is a bigger issue. These preferences are aggregated in the way described above, giving percentages of

[23]The study location was chosen to exclude areas close to the Indian border and high income residential societies where local government has limited responsibility.

[24]One of the issues is an exception to this rule - a Punjab government scheme to provide subsidized motorbikes to women. All nine issues are listed in Appendix D.1

[25]I describe the sampling strategy in Appendix D.2

respondents in each of the six subpopulations who think solid waste or drainage is a bigger issue.

4.2 Politician Beliefs

Using original surveys with 653 local politicians elected from the same Union Councils, I estimate how accurate politicians are about citizen preferences. Each politician is asked what citizens in their National Assembly constituency prefer on each of the nine issues. To test whether beliefs are differentially accurate by the gender or partisan affiliation of citizens, I randomize which one of the six sub-populations each politicians is asked about. For instance, a politician randomized into being asked about the preferences of men in their National Assembly constituency is asked questions of the following form: "In your opinion, what proportion of men in your National Assembly constituency stated that solid waste is a bigger issue than drainage?" Politician beliefs are thus measured on a 0-100 scale, denoting the politician's belief about the percentage of citizens who stated that, for instance, solid waste is a bigger issue than drainage. Citizen preferences are also on the same 0-100 scale, denoting the actual percentage of respondents in that sub-population who stated that solid waste is a bigger issue than drainage.

I construct several measures to compare politician beliefs to aggregate citizen preferences. I start by calculating the simple linear and quadratic distances between politician beliefs and citizen preferences on sub-population i about policy issue j as follows:

$$distance_{ij} = belief_{ij} - truth_{ij} \tag{9}$$

$$distance.sq_{ij} = (belief_{ij} - truth_{ij})^2 \tag{10}$$

The linear distance penalizes each marginal deviation from the truth equally, while the quadratic distance penalizes each marginal deviation to a greater extent. These distance are not satisfactory measures of accuracy for two reasons. First, the maximum possible distance between politician beliefs and citizen preferences depends on the actual citizen preferences. If 40 percent of respondents in a sub-population think solid waste is a bigger issue than drainage, the maximum possible distance between these preferences and politician beliefs is 60 - which would occur if the politician stated that 100 percent of respondents think drainage is a bigger issue than solid waste. On the other hand, if 0 percent of respondents in a sub-population think solid waste is a bigger issue, the maximum possible distance is 100. The second reason why a simple distance is not a good measure of accuracy is that it does not provide us with a benchmark against which to adjudicate the accuracy of beliefs.

I introduce a novel measure of belief accuracy that solves both these problems. This measure normalizes the simple linear distance between politicians' beliefs and citizen preferences by the average distance between the true preferences and a randomly thrown dart k on the one dimensional 0-100 number line, when n such darts are thrown. This denominator ranges from 25 to 50. The lowest value of 25 occurs when the 'true' proportion is at 50 percent, and the highest value of 50 occurs when the 'true' proportion is at either of the two extremes of 0 or 100. This original measure of accuracy can be expressed as:

$$accuracy_{ij} = 100 - (\frac{distance_{ij}}{(\sum_{k=1}^{n} dart_k - truth_j)/n} * 100) \tag{11}$$

An accuracy score of 100 means that the belief about citizen preferences is perfectly accurate. An accuracy score of 0 means that the belief is only as accurate as a random dart thrown on the number line, while a negative accuracy score means that the belief is less accurate compared to the random dart.

4.3 Experimental Design

In partnership with the PML-N, the second-largest political party in Pakistan, I design and implement a field experiment to test how local politicians respond to data about citizen preferences. The experimental intervention involves providing politicians with accurate data on citizen preferences, with sub-treatments designed to test whether politicians respond differently to men's preferences versus women's preferences or the preferences of their party's supporters versus the general population. This experiment allows me to test hypotheses about politician responsiveness to citizen preferences.

4.3.1 Randomization

Sample politicians are randomized into a control group or one of six treatment groups, as shown in Figure 2. This randomization is stratified by the National Assembly constituency the politician's UC is situated in, and the position the politician serves in. Politicians placed in each of the six treatment groups receive the preferences of a different subpopulation.[26] For each treatment politician, I randomize the six issues on which they receive information. I block this randomization on three issue categories, such that treatment politicians always receive data on two out of three issues within each of the three issue categories. This design yields 9 observations for each politician. For treatment politicians, 6 of these are treatment

[26] Table B2 in the appendix shows that the randomization achieved balance.

observations and 3 are within-treatment controls. For control politicians, all 9 are control observations.

4.3.2 Treatment: Data on Citizen Preferences

The experimental treatment involves providing politicians with a report on what citizens in their National Assembly constituency prefer. This report is provided during an in-person visit by a member of the research team, who explains both the data gathering process and the summary statistics included in the report. Appendix E shows such a sample report. The reports are customized for each politician based on data gathered through random surveys of 4,578 voters. This treatment mimics what a preference gathering exercise by the politician may look like.

4.3.3 Outcomes

The primary outcome of interest is politicians' policy recommendations to their party's higher-tier leadership. In order to credibly implement this outcome measure, I develop a partnership with the Pakistan Muslim League - Nawaz to create a formal "policy recommendation mechanism". This partnership is borne out of the desire within the party to develop better informational channels. Under this mechanism, the party leadership issues a letter to their party's local elected representatives in Lahore, asking them to make recommendations on each of the policy issues in question and stating that they will take these recommendations into account when making decisions. Politicians make these recommendations on a pre-formatted recommendation letter by indicating their preferred choice on a set of nine issues. Making each choice involves a trade-off between two options. Importantly, they make these recommendations in private and hand over their filled recommendation form in a sealed envelope. The party seeks local politicians' recommendations on both local and higher-tier issues. This mimics the status quo under which local politicians not only influence outcomes in their *de jure* role of local services, they also engage with the party leadership on higher-level services and policy.

This main outcome variable is carefully designed to capture a signal of policy support from the politicians that is consequential for future policy decisions taken by the party leadership. Despite these design features, however, the policy recommendations are a step removed from direct outcomes observed in the real world. This raises the question of how well these recommendations correlate with even higher stakes decisions taken by local politicians in the past on local issues. To answer this question, I show in Table B1 in the appendix that the recommendations on local issues are correlated with budgetary allocations made by

local politicians in the past. To test robustness to a recommendation elicitation mechanism that does not take place in the same meeting, a random subset of politicians are asked for their recommendations a few days after the meeting, on the phone. This alternate measure is deployed to assuage potential concerns of experimenter demand effect given that the recommendation forms are filled by local politicians in the same meeting during which those in treatment are presented with data on citizen preferences. These phone calls are made a few days after treatment, on behalf of the party's district leadership. Recommendations elicited using both these mechanisms are very similar, as shown in the results section.

5 Results: Accuracy of Politicians' Beliefs

In this section, I present results on the accuracy of politicians' beliefs about citizen preferences and the responsiveness of politicians to information about citizen preferences. Section 5.1 shows that citizen preferences follow expected patterns and Section 5.2 shows that local politicians hold highly inaccurate beliefs about these preferences.

5.1 Citizen Preferences

The partisan differences in preferences are small but statistically significant. The gender differences are larger, in line with expectations from the literature. Some of the issues being considered in this study show a high degree of polarization in public opinion, while others show fairly broad agreement. Given that these issues are framed as trade-offs or binary choices, polarization is indicated by how close the aggregated citizen preferences are to 50 percent. The most polarizing issue is that of whether women should be given subsidized motorbikes by the Government of Punjab, under a program known as "Women on Wheels", where overall support for the program is very close to 50 percent. The least polarizing issue is whether the supply of piped water or local roads is a bigger issue at the local level. More than 80 percent of respondents indicate that the supply of piped water is a bigger issue. This is likely a result of the large number of road projects undertaken in Lahore in the previous two tenures of the PML-N led Government of Punjab and the significantly higher quality of current road infrastructure compared to water infrastructure.

How different are the preferences of men and women? The answer to these varies considerably given the issue under consideration, as shown in Figure 3a. The smallest gender differential in preferences exists on the least polarizing issue: water supply versus local roads. The biggest gender differential is seen on the issue of whether street lights or water filtration plants are a bigger issue at the local level. Close to 45 percent of men as opposed to less

than 30 percent of women prioritize street lights. The greater prioritization of drinking water among women is consistent with previous evidence from a similar context. Khan (2017) demonstrates that women in Faisalabad district in Punjab show a much higher preference for drinking water than men even though they are not usually responsible for actually carrying water. She argues that this gender differential in preferences in arises due to the greater burden of care that falls upon women when a child falls sick due to water-borne diseases.

Are preferences for these issues defined along partisan lines? Figure 3b shows that this is rarely the case. The largest difference in preferences between supporters of the two main parties PML-N and PTI is less than 10 percentage points. The two issues on which the largest differentials are seen are national level issues. The first is whether corruption or unemployment is a bigger national issue, and the second is whether water shortages or electricity shortages are a bigger national issue. PTI supporters are 7-8 percentage points more likely to indicate that corruption is a bigger issue, which is expected given that anti-corruption has been the main campaign slogan of the PTI since its inception.

5.2 Accuracy of Politician Beliefs

This sub-section shows that politician beliefs about citizen preferences are highly inaccurate - but that their beliefs are significantly more accurate on local issues compared to higher tier issues. Politicians are equally inaccurate about men and women, and about the supporters of their own party versus the general population. This suggests that there is substantial potential for improvements in politicians' existing information about citizen preferences.

Politicians' beliefs about citizen preferences are not much more accurate than a random guessing benchmark. Politicians are only correct about which of two policies the majority prefers 59% of the time, which is only marginally better than the random guesser who would guess correctly half of the time. As shown in Panel A of Table 1, politicians score an average of 15 on the accuracy score introduced in equation 11. This score is far closer to the random guess benchmark (0) than complete accuracy (100). Politicians' beliefs are on average 25 percentage points away from citizen preferences on a 0-100 scale. Figure 4 plots the raw data on politician beliefs against citizen preferences as visual evidence of how stark the information gap is. This shows that politicians do not know enough about citizen preferences to adequately represent them.

This result is robust to several potential concerns. One such concern is that noise in the measurement of citizen preferences may contribute to the high degree of measured inaccu-

racy. To address this concern, I estimate the sampling distribution of the mean of citizen preferences and test what proportion of politician beliefs lie within a 95% confidence interval of the mean. I compute the confidence interval using the following:

$$CI_{isc} = \hat{p_{isc}} \pm \sqrt{\hat{p_{isc}}(1 - \hat{p_{isc}})/n_{sc}} \tag{12}$$

where $\hat{p_{isc}}$ refers to the proportion of citizens from subgroup s in constituency c who support the policy on issue i and n_{sc} refers to the number of citizens from subgroup s in constituency c who were interviewed. Since I consider the preferences of 6 subgroups in 4 constituencies on 9 issues, I am computing 216 distinct distributions. If my measure is biased against finding accuracy due to sampling noise, I would expect that a large proportion of politician beliefs would be within the 95% confidence interval. Instead, I find that only 9.4 percent of politician beliefs fall within the relevant confidence interval, while 90.6 percent do not.

If politicians typically deliberate amongst themselves before making a decision, then an individual politician's belief may matter less than the distribution of politicians' collective beliefs about a particular quantity. To test whether politicians are collectively accurate, I compute the sample mean and standard error of politician beliefs about each of the 216 quantities politicians were asked to estimate. The mean number of politicians who report beliefs on each quantity is 30, with a standard deviation of 11. Using the mean and standard deviation, I compute the 95% confidence interval of politicians' collective beliefs about each of these 216 quantities. I find that for 64 percent of these quantities, the 95% confidence intervals of politicians' collective beliefs and citizen preferences do not overlap *at all*. This indicates that even if we allow for the possibility that politicians deliberate amongst themselves before reaching a decision, they are more likely than not to be substantially inaccurate.

Finally, this result is not driven by the fact that citizen preferences are aggregated at a higher level (parliamentary constituency) instead of the local politician's own constituency. There are two reasons why preferences are aggregated at the NA level. First, obtaining a precise estimate of citizen preferences at the Union Council or ward level would be prohibitively costly. Second, the NA constituency is a salient and meaningful unit for these politicians since they campaign for the higher-tier politicians running for parliament. Their natural 'cohort' is the other local politicians in the same national assembly constituency with whom they interact with on a regular basis.

To test if this decision has a cost in terms of measuring accuracy, I compute average citizen preferences in the actual constituency of each politician and compare their belief about citizen preferences in the larger national assembly constituency to the average citizen preferences

in their own constituency. If politicians are systematically more accurate about their own constituency, then we would expect to see a higher accuracy score using this comparison. In fact, I find that the accuracy score is 13 when politician beliefs are compared to average preferences in their own constituency alone, which is not distinguishable from the accuracy score of 15 computed using citizen preferences in the larger national assembly constituency.

Collectively, the tests reported above point to politicians not being well informed about what citizens in their area prefer on important policy and service delivery issues - but they also highlight substantial variation in politician's knowledge of these issues. What explains variation in accuracy? I test whether the type of issue, the type of politician and the sub-populations whose preferences are being guessed explains variation in the accuracy of politician beliefs. First, I test whether politicians are more accurate about local issues compared to non-local issues using the following equation:

$$Y_{pi} = \beta_1 Local_i + \gamma_p \tag{13}$$

where Y_{pi} is a measure of the accuracy of politician i's belief on issue p, $Local_i$ is an indicator for local issues and γ_p are politician fixed effects. Secondly, to test whether certain types of politicians are more accurate, I estimate the following equation:

$$Y_{pi} = \beta_1 Chair_i + \beta_2 ViceChair_i + \beta_3 WomanCouncilor_i + \gamma_q \tag{14}$$

where $Chair_i$, $ViceChair_i$ and $WomanCouncilor_i$ are indicators for three of the four positions local politicians serve in, with general members as the omitted category. γ_q are National Assembly constituencies times issue fixed effects to partial out the effects of differential accuracy across issues and constituencies. Finally, to estimate whether beliefs about certain sub-populations are more accurate, I estimate the following two equations:

$$Y_{pi} = \beta_1 Women_i + \beta_2 Men_i + \gamma_q \tag{15}$$

$$Y_{pi} = \beta_1 OwnParty_i + \gamma_q \tag{16}$$

where $Women_i$, Men_i and $OwnParty_i$ are indicators for whether the politician was asked about the preferences of women only, men only or the supporters of their own party. These are run as two separate equations since the elicitation of beliefs was cross-randomized along these two dimensions and this approach allows me to pool observations.

Beliefs about local issues are significantly more accurate compared to beliefs about higher tier issues, as shown in Panel B of Table 1.[27] The average accuracy score for higher-tier poli-

[27] In addition, Figure 5 shows the raw data separately for local and higher-tier issues, and Figure 7 shows

cies is 7.4 with a standard deviation of 65.8. The accuracy score for local policies is higher by 22.1 on average, which is a 0.33 standard deviation difference from higher-tier policies. While politicians know more about local issues, their beliefs about these local issues are also far closer to the random guessing benchmark than complete accuracy, indicating that there is considerable room for improvement. There are no stark differences in how accurate politicians serving in different positions are, as shown in Panel C of Table 1. Union Council Chairs and Woman Councilors are marginally more accurate than General Members, but these differences are only statistically significant at the 10% significance level. There are no differences in accuracy along the directly vs. indirectly elected dimension highlighted in Section 2.

Even though politicians interact with men on a far more frequent basis than with women, the accuracy of beliefs about women's preferences are not significantly different compared to beliefs about men, as shown in Panel D of Table 1.[28] Similarly, Panel E shows that even though politicians interact more regularly with the supporters of their own party, their beliefs about the supporters of their own party are not differentially accurate.

The finding that politician beliefs about both men and women are equally inaccurate is in contrast with politicians' confidence in their beliefs about men and women. A random 45% of sample politicians were asked whether they believed they knew more about the preferences of men, knew more about the preferences of women or knew both equally well. Almost thrice as many (46 percent) male politicians stated that they knew more about the preferences of men, compared to those who stated they knew more about the preferences of women (16 percent).[29] This disconnect between the accuracy of politician beliefs and their confidence in these beliefs is consequential for how they process new information about citizen preferences.

The low accuracy of politician beliefs raises the question of whether politicians think of this as a problem and in fact want more information on citizen preferences. I find that there is high demand for information about citizen preferences. After the elicitation of priors, sample politicians were asked whether they would like a report based on a future survey of citizen preferences. In order to sign up, the politicians had to provide and verify a phone number and had to make detailed selections about the nature of the report they wanted,

the distribution of accuracy scores for local and non-local.

[28] In addition, Figure 6 shows the raw data separately for beliefs about men and women, and Figure 7 shows the distribution of accuracy scores for men and women.

[29] In comparison, the majority of politicians (55%) stated that they know the preferences of their own party's supporters as well as those of other parties, indicating less of a disconnect between accuracy and confidence

which imposed a time burden. Two-thirds (67 percent) of control group politicians signed up for these reports. While this suggests that these politicians do place value on information about citizen preferences, the experimental results provides more credible evidence of how politicians' actions respond to this information.

6 Experimental Results: Politician Responsiveness

Does the information gap matter? Section 6.1 shows that politicians are responsive to new information about citizen preferences. Section 6.2 explores differential responsiveness by sub-treatments, politician types and issue types, showing that politicians respond significantly more to women's preferences compared to men's preferences. Section 6.3 provides evidence consistent with the theory that higher responsiveness to women's preferences is driven by less confidence in prior beliefs about women. Section 6.4 shows that treatment increases demand for more information.

6.1 Do Politicians Respond to Information about Citizen Preferences?

6.1.1 Estimation Strategy

I estimate the pooled treatment effect on politician responsiveness using the following regression:

$$Y_{pi} = \beta_1 Treatment_{pi} + \beta_2 Within_{pi} + \gamma_s \tag{17}$$

where Y_{pi} is an indicator for whether politician p's recommended the policy preferred by the majority on issue i to their higher-tier party leadership, $Treatment_{pi}$ is an indicator for whether politician p received data on citizen preferences on issue i, $Within_{pi}$ is an indicator that takes the value 1 when politician p received data on citizen preferences on issues other than i but not on i itself, and γ_s are strata fixed effects, where the strata are defined by the National Assembly times politician position blocks on which treatment was stratified. Standard errors are clustered at the politician level, where treatment is first assigned. Alternatively, I also show results using politician fixed effects to focus on the differences between treatment and within-treatment control observations.

6.1.2 Main Results

Politicians respond to citizen preferences. When provided accurate data on citizen preferences, politicians are significantly more likely to recommend the policies that the majority prefers. In the control condition, politicians recommend the policy that is supported by the majority 52.6 percent of the time. If politicians were randomly choosing which policy to recommend, we would expect them to recommend the policy preferred by the majority 48.1 percent of the time.[30] In the control condition, therefore, politicians are only marginally more likely to recommend popular policies in treatment than they are to recommend unpopular policies.

Receiving data on citizen preferences results in a 7.6 percentage point increase in the likelihood that politicians recommend the policy preferred by the majority. This is a 14.4 percent increase over the control mean of 52.6%, as shown in Column (1) of Table 2 and in Figure 8. This effect is statistically significant with a p-value of less than 0.001 across a range of empirical specifications.[31]

6.1.3 Threats to Validity

One possible concern about the validity of the primary outcome variable is that of experimenter demand effects. Many features of the experimental design are aimed at preventing or minimizing such effects. The core design feature that does so is that the recommendations are sought through a signed letter by the party's district president, which promises that the politician's recommendations will be taken into account in policymaking. This raises the outcome beyond a lab-in-the-field or survey measure of policy support, since the recommendations carry real stakes. In rare cases where sample politicians doubted the authenticity of this letter, they contacted the party leadership directly and received verbal confirmation of the authenticity of the letter and the genuine intent of the leadership to use the recommendations. Another feature that reduces the possibility of demand effects is that the recommendations are not observed by the research team member delivering treatment and politicians are clearly asked before making recommendations to seal their recommendation letter without showing it to the research team. Despite these features, I entertain the possibility that some demand effects may have crept into the recommendations made on the same day.

[30] Given that eight out of the nine policy issues are binary choices while the third is a three-way choice

[31] Politicians are not only responsive when they underestimate support but also when they overestimate support, as shown in Figure A4. Panel 1 of Table 7 shows that on average, overestimators' responsiveness is positive but not statistically distinguishable from 0, while underestimators respond significantly more than overestimators.

To test whether this concern is valid, I use an additional recommendation elicitation mechanism in a random subset of Union Councils (40 out of 89). A few days after treatment, politicians in these Union Councils received a phone call on behalf of the district office of PML-N asking them to answer a few questions that will assist the party leadership in their decision making. No connection was made to the team delivering data during this phone call and the questions were worded differently from the wording used in the recommendation form. The issues in question are quite commonplace and politicians have conversations about them on a daily basis. Policy recommendations elicited using phone calls show similar treatment effects, as shown in Table 3 and Figure 9. Column 1 of Table 3 shows that receiving data on citizen preferences on a particular policy makes it 5.8 percentage points more likely that the politician will recommend the majority's preference on that policy. This is very similar to the treatment effect on recommendations given using the written form for the same sample, which is shown in Column (2) of Table 3. This indicates not only that treatment effects are not driven by experimenter demand effects, but also that the information is not forgotten in the matter of a few days, which is an encouraging finding.

A related concern is that presenting politicians with this data may either prime them to think that citizen preferences are important where they previously did not think so and thus impose an experimenter demand effect through a different channel. I use an explicit cross-randomized experiment to show that treatment effects are not driven by priming about the importance of citizen preferences. I explicitly cross-randomized attempts to either accentuate or dampen any such priming or social experimenter effects. This was achieved by explicitly reading out a scripted message about the importance of either citizen preferences (the 'citizen prime') or their own preferences (the 'politician prime') while handing them the recommendation form. If such priming has an effect on responsiveness regardless of whether it is accompanied by new information, we would expect to see a positive average treatment effect of the citizen prime and a negative average treatment effect of the politician prime. If such priming has an effect only in the presence of new information, we would expect to see a positive interaction effect of the preferences treatment and the citizens prime.

As shown in Table 4, there is no evidence of either an average treatment effect of the citizens prime or a positive interaction effect. In fact, the interaction effect is negative and marginally significant. Using an equivalence test, we can go further and conclude that at the standard significance level of 0.05, we can reject any average treatment effect of the citizens prime above 2.4 pp. Within the preferences treatment group, we can reject any treatment effect of the citizens prime above 0.5 pp. The minimum effect we can reject within the

preferences treatment group is lower since the interaction between the citizens prime and the preferences treatment is negative. Considering that the average treatment effect of the preferences treatment is 7.6, we can conclude that after accounting for potential priming, the average treatment effect is at least 7.1 pp.

The negative interaction effect between the preferences treatment and the citizens prime indicates that politicians are not a subject pool that are amenable to straight-forward priming or manipulation. If anything, attempts to guide them in a particular direction may backfire, which serves as suggestive evidence that the observed effect of the preference treatment may be an underestimate. During the pilot stage of this experiment, I observed a related phenomenon. The pilot involved testing the effect of explicitly telling politicians how accurate their prior beliefs were. Politicians, particularly those with inaccurate beliefs, were visibly upset after being told their accuracy score and in some cases spent a long duration of time explaining why they believed their prior views were correct. Far from being obliging towards the surveyor and giving into any perceived experimenter demand, they did the opposite and refused to believe in the data on citizen preferences. After this pilot, I amended the preferences treatment to its current subtle form and discarded the treatment that involved explicitly providing politicians with an accuracy score.

A further test is whether politicians can be explicitly primed away from citizen preferences. If the preferences treatment is able to make politicians think that citizen preferences are more important than they are, then an explicit message saying that a politician's own preferences are important should depress the effect of the preferences treatment. I find no evidence that this cross-randomized message has such an effect, as shown in Column (1) of Table 4.

Finally, responsiveness is not driven by a particular tier to which the recommendations are being sent. In the status quo, there is variation in the level at which politicians make their recommendations. Sometimes, recommendations are made in meetings with the district level party leadership while on other occasions, they are made at a higher forum in the party's central office. To test whether the level at which the recommendation is being made matters for the extent to which politicians are responsive, I randomize sample politicians into receiving either a generic letter stating that their party leadership is requesting their recommendations or a letter stating the party president is requesting their preferences. As shown in Table B4 in the appendix, the tier at which these recommendations are being made does not affect the extent to which politicians are responsive to citizen preferences.

6.1.4 External Validity

Applying the findings to other contexts merits careful consideration. First, while the design of this study allows for considerable analytical leverage by yielding measures at the level of the individual politician's behavior on a particular issue, it does have trade-offs. In particular, this study does not directly estimate the effect of consultations on decision-making. While the robustness of the main effects to a medium-run outcome measure demonstrates that politicians are responsive to information about citizen preferences even after they have had the chance to consult with others, these findings must still be read together with studies including Zelizer (2019) that explicitly test such effects.

Second, this study takes place in a context where politicians primarily acquire information about citizens through direct contact. The finding that politicians misperceive citizen opinion also replicates in the United States (Broockman and Skovron, 2018), but there is mixed evidence on whether they care about this information (Butler and Nickerson, 2011; Kalla and Porter, 2019). This may be because politicians in the United States have access to other sources of information, including frequent opinion polling. Whether my findings on differential responsiveness due to incentives and prior beliefs translate to other contexts remains a question for further research.

Third, the politician behavior studied in this paper is not directly observable to citizens, and therefore the results do not incorporate the effects of giving citizens access to information about politician performance. Since Grossman and Michelitch (2018) and Banerjee et al. (2019) find that making information about politicians' performance public makes politicians more responsive, this paper's effects may be an underestimate.

6.2 Differential Responsiveness

In this section, I test whether responsiveness varies by the type of politician and the subgroup of citizens whose preferences are provided to politicians. In Appendix B.5, I test whether responsiveness varies by the type of issue on which they are making recommendations.

6.2.1 Are Directly Elected Politicians More Responsive?

First, I test whether politicians whose incentives are tied more closely to voters are more responsive to citizen preferences. The politicians that are part of this study's sample are serving in four different positions, two of which face direct elections (ward member and union council chairperson) and two face indirect elections (union council vice-chair and

woman councilor). The differential incentives they face are discussed in Section 2. I estimate differential treatment effects on politician responsiveness using an equation of the following form:

$$Y_{pi} = \beta_1 DirectTreated_{pi} + \beta_2 IndirectTreated_{pi} + \beta_3 Indirect_i + \beta_4 Within_{pi} + \gamma_s \quad (18)$$

where $DirectTreated_{pi}$ and $IndirectTreated_{pi}$ are indicators that take on the value 1 when politician i is directly or indirectly elected respectively *and* receives treatment on policy p, and $Indirect_i$ is an indicator for whether politician i is indirectly elected, to capture whether there are differences in the control group among directly and indirectly elected politicians. γ_s are National Assembly constituency times issue-group fixed effects. To test any further differentials within the 'direct' and 'indirect' types, I estimate a similar equation, replacing 'direct' and 'indirect' with the four politician types.

Directly elected politicians are significantly more responsive than indirectly elected ones, as shown in Panel A of Table 5 and Figure 10. Directly elected politicians who receive data on citizen preferences are 9.4 percentage points more likely to recommend the policy supported by the majority, which is an 18.4 percent change over the control mean of 0.510 and is statistically significant at the 1% level. The average treatment effect for indirectly elected politicians (i.e. vice-chairpersons and women councilors) is not statistically distinguishable from zero. The differences in treatment effects on directly and indirectly elected politicians is statistically significant, with a p-value of 0.028. This difference is robust to manually controlling for a range of demographic controls and to selecting controls using LASSO, as shown in Columns (2) and (3) of Table 5 respectively.

UC chairs are significantly more responsive (15.3 percentage points) than ward members (8.5 percentage points) and UC vice-chairs (2.8 percentage points) to treatment, as shown in Panel B of Table 5. The two categories of politicians that are indirectly elected (vice-chairs and woman councilors) show very similar treatment effects (2.8 percentage points and 2.7 percentage points respectively), with both being statistically indistinguishable from zero. Indirectly elected politicians are likely to recommend the majority's preference in the absence of treatment. This raises the question of whether the lower treatment effects among indirectly elected politicians may be driven by a ceiling effect. The significantly higher effects among UC chairs indicates that there is no such limit to responsiveness that may explain the lower responsiveness of indirectly elected politicians.

These results have two direct implications. First, being directly dependent upon voters for re-election is associated with politicians being more responsive to citizen preferences. Second, it is not the case that this direct dependence results in politicians being closer to citizen preferences in the absence of good data on what citizens prefer. In fact, it may be the case that when politicians do not have to be selected on the usual popularity dimensions, they may be more likely to be selected along some other desirable dimension of quality.

6.2.2 Whose Preferences are Politicians More Responsive To?

Second, I test whether politicians respond differentially based on whose preferences are being provided to them. This involves testing differential responsiveness to women's preferences compared to men's preferences and differential responsiveness to the preferences of their own party's supporters compared to the general population. I perform these tests by estimating the following two equations:

$$Y_{pi} = \beta_1 TreatMen_{pi} + \beta_2 TreatWomen_{pi} + \beta_3 TreatBoth_{pi} + \beta_4 Within_{pi} + \gamma_s \quad (19)$$

where $TreatMen_{pi}$, $TreatWomen_{pi}$ and $TreatBoth_{pi}$ are indicators for whether politician i received data about men, women or both men and women respectively, and

$$Y_{pi} = \beta_1 TreatParty_{pi} + \beta_2 TreatAll_{pi} + \beta_3 Within_{pi} + \gamma_s \quad (20)$$

where $TreatParty_{pi}$ and $TreatAll_{pi}$ are indicators, respectively, for whether politician i received data on issue p about the supporters of their own party or regardless of partisan support.

Politicians are more responsive to the preferences of women compared to those of men, as shown in Column (2) of Table 6 and Figure 11a. When presented with the preferences of women in their national assembly constituency, politicians are 10.9 percentage points more likely to recommend the policies that women prefer - which is more than a 20 percent increase over the control group. In comparison, being presented with data on men's preferences results in a 5.8 percentage point increase in the likelihood of recommending policies that men prefer. The p-value on this difference is 0.033. There is no differential responsiveness by the partisan affiliation of citizens whose preferences are presented, as shown in Column(1) of Table 6 and Figure 11b.

6.3 Why do Politicians Respond More to Women's Preferences?

In this subsection, I explore potential mechanisms for why politicians respond more to women. I rule out the possibility that politicians respond more to women because of differential expectations of electoral rewards or because they are pandering to their party. Next, I explore whether differential responsiveness arises from the structure of politicians' priors. While accuracy is not differential by gender, politicians believe that they know more about men than they do about women. I conclude that this is the likely channel that explains greater responsiveness towards women.

The standard rational choice explanation of this result is that politicians respond more to women's preferences simply because they perceive greater electoral returns to this responsiveness. Given that women vote at lower rates in Pakistan and that parties mobilize women at lower rates (Cheema et al., 2019), it may be argued that politicians perceive that there is more room for women to reward responsiveness by turning out or that they expect women to appreciate responsiveness more since they do not often see attention from parties.

To test this mechanism, I ask a random subset of sample politicians the effect that they think responding to women's preferences would have on their electoral success among women, on a 1-5 scale. Another random subset is asked the same question about responding to men's preferences. In total, 292 out of the 653 sample politicians are asked this question. Figure 12 shows that politicians believe that responding to both men and women has high electoral returns - but do not have a belief that the returns are differential.

A second potential channel is that politicians think that their party wants them to pay more attention to women, and local politicians end up pandering to their party's wishes by responding more to women's preferences. To test this mechanism, I explicitly ask a random subset of sample politicians how they think their party leadership wants them to allocate their attention between men and women. Figure 13 shows the distribution of responses to this question, with higher numbers indicating that they believe the party wants them to allocate more attention to men. The modal response is 50, indicating that they believe the party does not want them to discriminate, with more people to the right of the modal response (indicating more attention to men) than the left. This result allows me to rule out this explanation, since even if they were to pandering to their perception of the party leadership's wishes, we would not see greater responsiveness to women.

Finally, I turn to explanations related to the prior beliefs of politicians about men's preferences versus women's preferences. The most straight-forward explanation would be that

politicians know more about men than they do about women and hence are able to update more in response to new information. This explanation is not supported by the results already shown in Section 6.2, indicating that politician beliefs are equally inaccurate about men and women.

I find evidence for another belief-based explanation, one that is grounded in politicians' second order beliefs. Politicians *think* they know more about men than they do about women, and therefore place more weight on signals they receive about women's preferences compared to men's preferences. To test this explanation, I ask a random subset of politicians the simple question of whether they think they know more about men's preferences or women's preferences or whether they think they know both equally. The distribution of responses is given in Figure 14. The modal response for male politicians is that they know men's preferences better, and this response is about three times as likely as responding that they know women's preferences better. The differential responsiveness to women's preferences is also driven by male politicians, as would be expected given this result. Given these results, I conclude that the likely explanation for greater responsiveness to women resides in these second-order beliefs of politicians.

Consistent with the explanation that politicians are less confidence in their beliefs about women than their beliefs about men, I find that politicians respond to women's preferences even when their prior beliefs overestimate true support. Column 2 of Table 7 shows that when presented with women's preferences, politicians in treatment who overestimated support for the policy are 8.7 percentage points more likely to recommend the majority's preference compared to overestimators in the control group. There is no effect on overestimators of being provided with information on men's preferences. These results are consistent with the model of responsiveness in section 2.2, where politicians respond more to women's preferences in both the overestimation and underestimation case.

6.4 Does Treatment Affect Demand for Information?

How does receiving information on citizen preferences affect demand for information? The answer to this is important both for understanding the value politicians place on information and also for considering the policy implications of this study. If receiving information depresses future demand, then policies should be designed to take maximum advantage of the limited window available before demand for information goes down. If receiving information increases future demand, then policymakers should consider a more regular delivery of information to politicians. It is also important to consider details about the information

to be provided to politicians. It is possible, for instance, that receiving information has a generally positive effect on demand for information, but has a counteracting negative effect on demand for information on the dimensions along with information is first provided.

To test these questions, I offered politicians the option of signing up for a report on the preferences of citizens in their national assembly constituency, to be delivered a few weeks after the initial visit. In order to sign up, politicians had to undertake three time-consuming tasks. One, they had to provide and verify a phone number on which they could receive the reports through the 'What's App' multimedia messaging platform. Second, they had to review four hard-copy versions of different report formats and make a choice about which one they would like. Third, they had to review a list of nine issues and choose five out of these nine issues on which their customized report would be based.

Table 8 reports the results on demand for information. As mentioned in Section 5.1, 67 percent of control group politicians signed up for a report, which indicates a high demand for new information in the absence of accurate prior beliefs about citizen preferences. In comparison, 73 percent of treatment politicians sign up for the report. This difference of 6 percentage points (or 9 percent) is not distinguishable from zero at conventional levels of statistical significance, with a p-value of 0.12.

When we break the choices down by the kind of report they signed up for, however, we see a pattern. The three dimensions on which demand was previously high (gender, class and partisanship) observe no differences in demand. The one dimension along with demand was lowest for the control group (age), sees a doubling of demand. This increase in demand for reports along the age dimension is statistically significantly with a p-value of 0.01. I take this as suggestive evidence that being exposed to new information about citizen preferences results in local politicians becoming more curious and open about information that they tend not to consider important under the status quo.

7 Conclusion

Studies on the role of information in democratic accountability tend to focus on the extent to which voters know about politicians. I ask instead whether politicians know enough about voters to adequately represent them. The descriptive evidence in this paper shows that politicians are insufficiently informed about citizen preferences. The experimental evidence shows that this lack of information is a constraint on democratic accountability. In a setting where politicians primarily acquire information about citizen preferences through direct con-

tact with voters, this paper shows that mere contact does not necessarily lead to substantive representation. Instead, higher levels of contact with an unrepresentative sample may even undermine representation as politicians become overconfident in their beliefs.

This study makes an important contribution by establishing the beliefs of politicians as an essential ingredient of accountability. How these beliefs are formed, the ways in which these beliefs are biased, and how they are updated is central to how citizen voice gets represented in political decision making. The central contribution of this paper is that even in the existence of corruption, voter misinformation and other accountability gaps, politicians are responsive to better information about what citizens care about to varying degrees depending on the nature of their prior beliefs.

These findings have several direct policy implications. Informational failures on the part of politicians lead to the underrepresentation of marginalized populations and add to a disconnect between citizens and politicians, which adversely affects citizens' trust in democracy. To address these problems, political parties should institutionalize better mechanisms for the flow of information from citizens to politicians. These mechanisms should pay particular attention to including those citizens that are underrepresented in existing channels. One such mechanism that complements existing informational channels is to introduce regular opinion polling and establishing think tanks within parties with the capacity of interpreting and using these opinion polls. Another mechanism that improves current informational channels is to increase the descriptive representation within parties of those who are less likely to directly contact politicians. Civil society organizations also have a role to play in promoting the dissemination of better information and creating platforms where marginalized citizens can engage with politicians. This role is especially important in cases where electoral incentives or institutional inertia discourage parties from engaging in internal reform.

This paper suggests exciting avenues for further research, which I pursue in ongoing companion papers. The high degree of responsiveness to women as a result of structural barriers begs the question of how this equilibrium shifts when these barriers are partially removed. Recent reforms aimed at increasing women's descriptive representation in local elections in Pakistan provide an opportunity to study this question. While such a reform increases the quantity of women representatives, concurrent mobilization campaigns can also potentially increase the quality of women representatives through the selection channel. Furthermore, women's participation in deliberative forums can increase the accuracy of politicians' beliefs about women's preferences, bringing policy closer to women's preferences.

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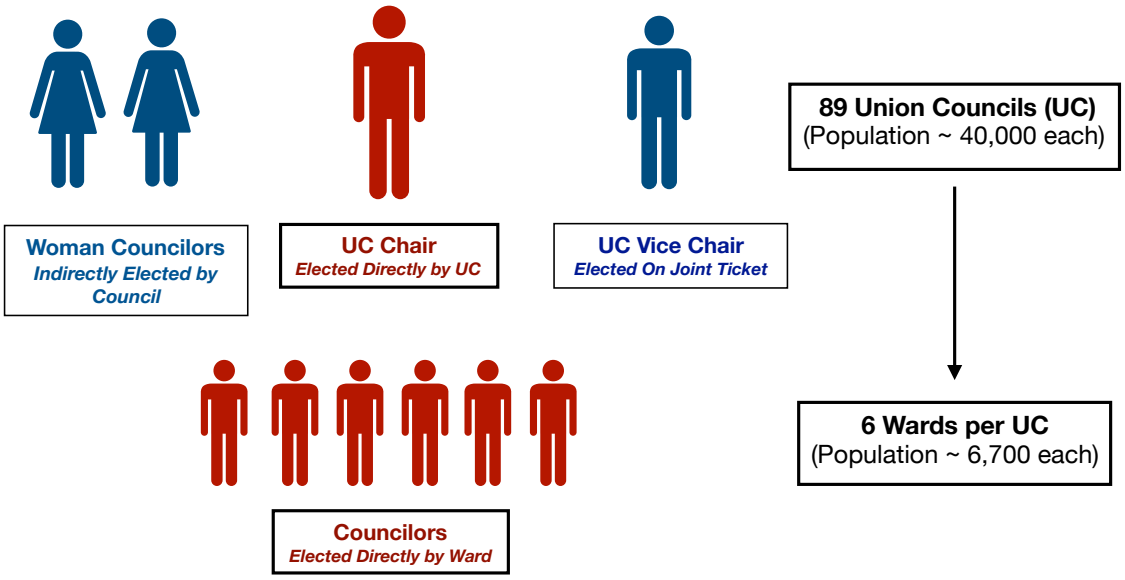
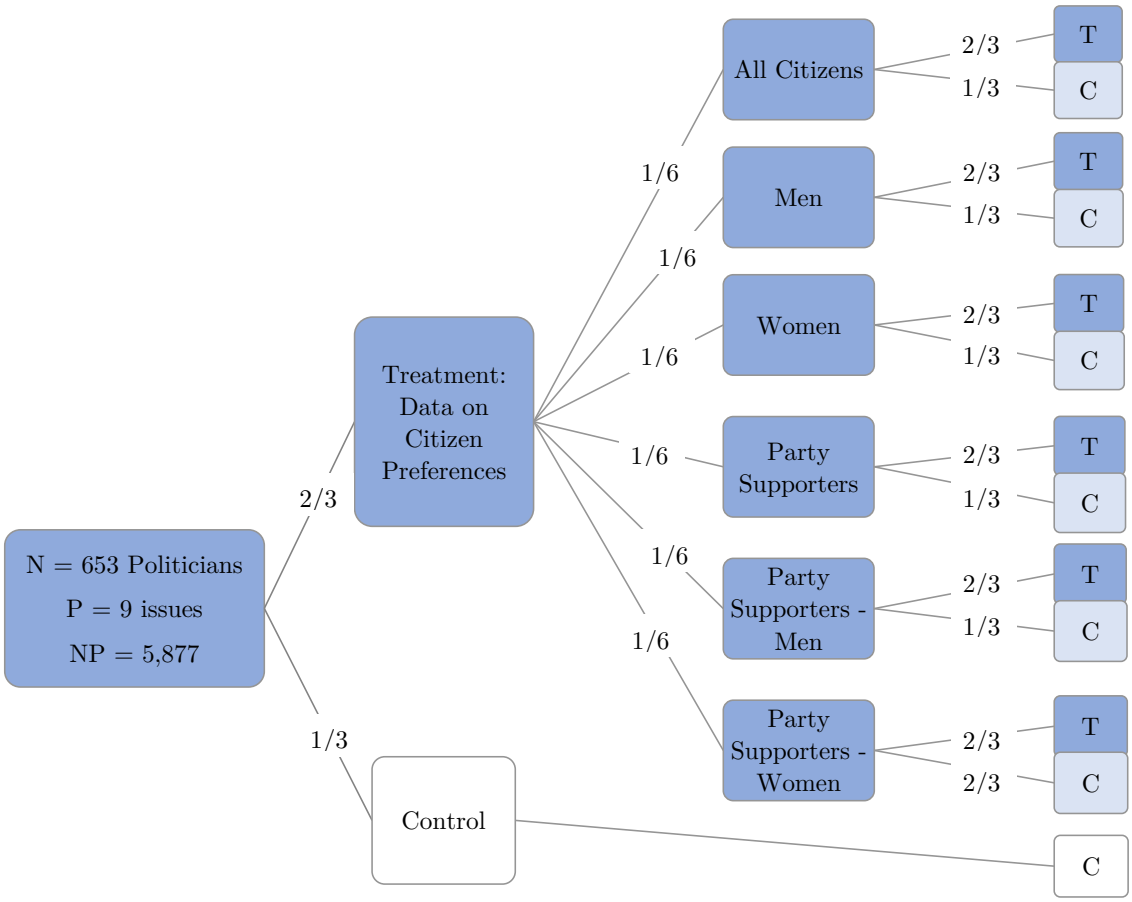
Figures

Figure 1: Structure of Union Councils in Lahore



(Appears in Section 2.1)

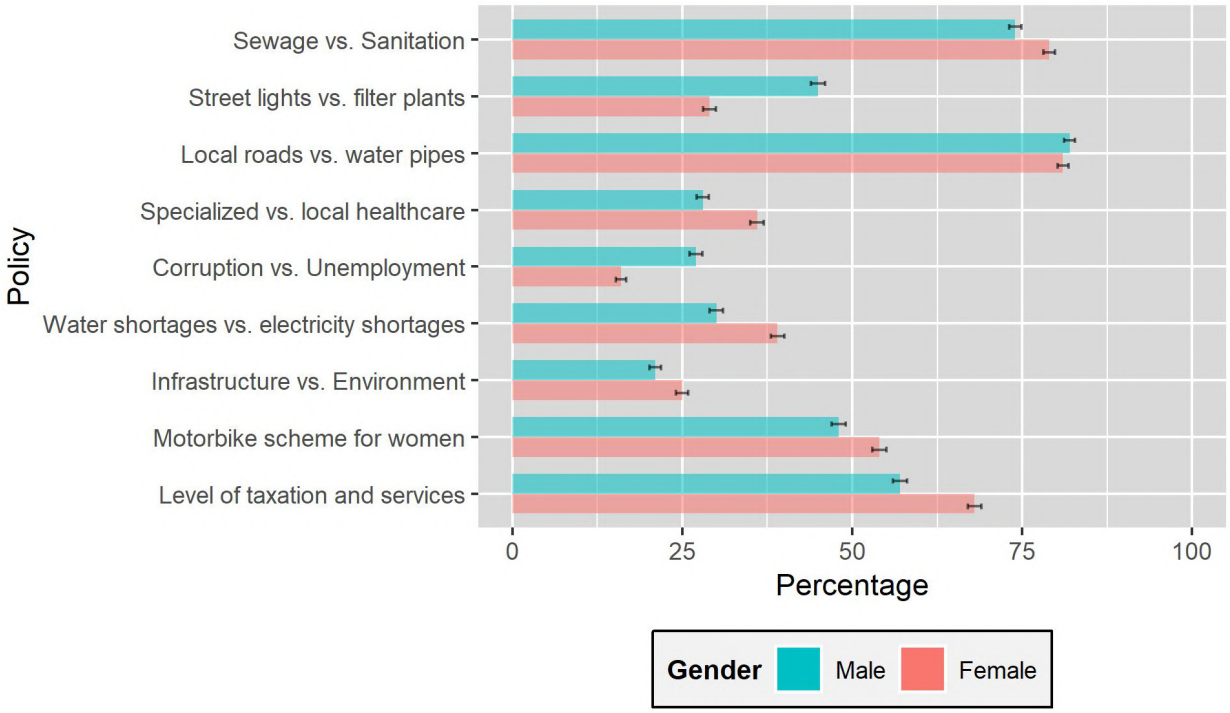
Figure 2: Two-Stage Randomization Design



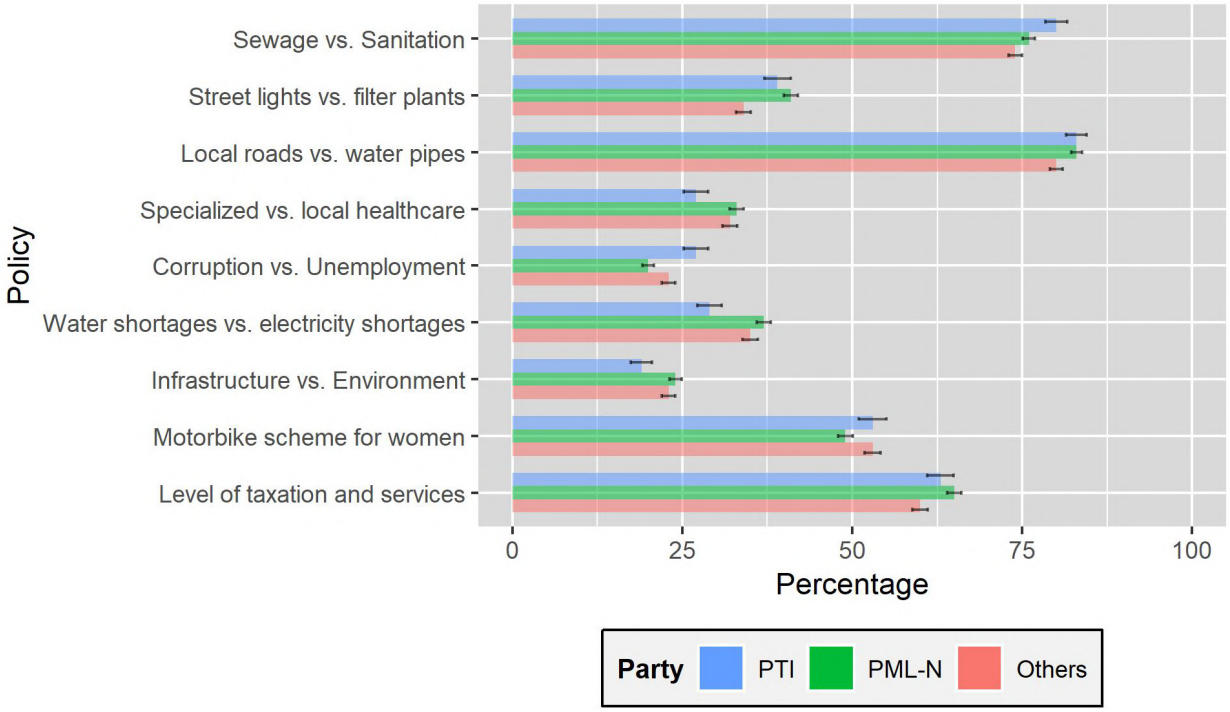
(Appears in Section 4.3)

Figure 3: Citizen Preferences by Issue

(a) By Gender

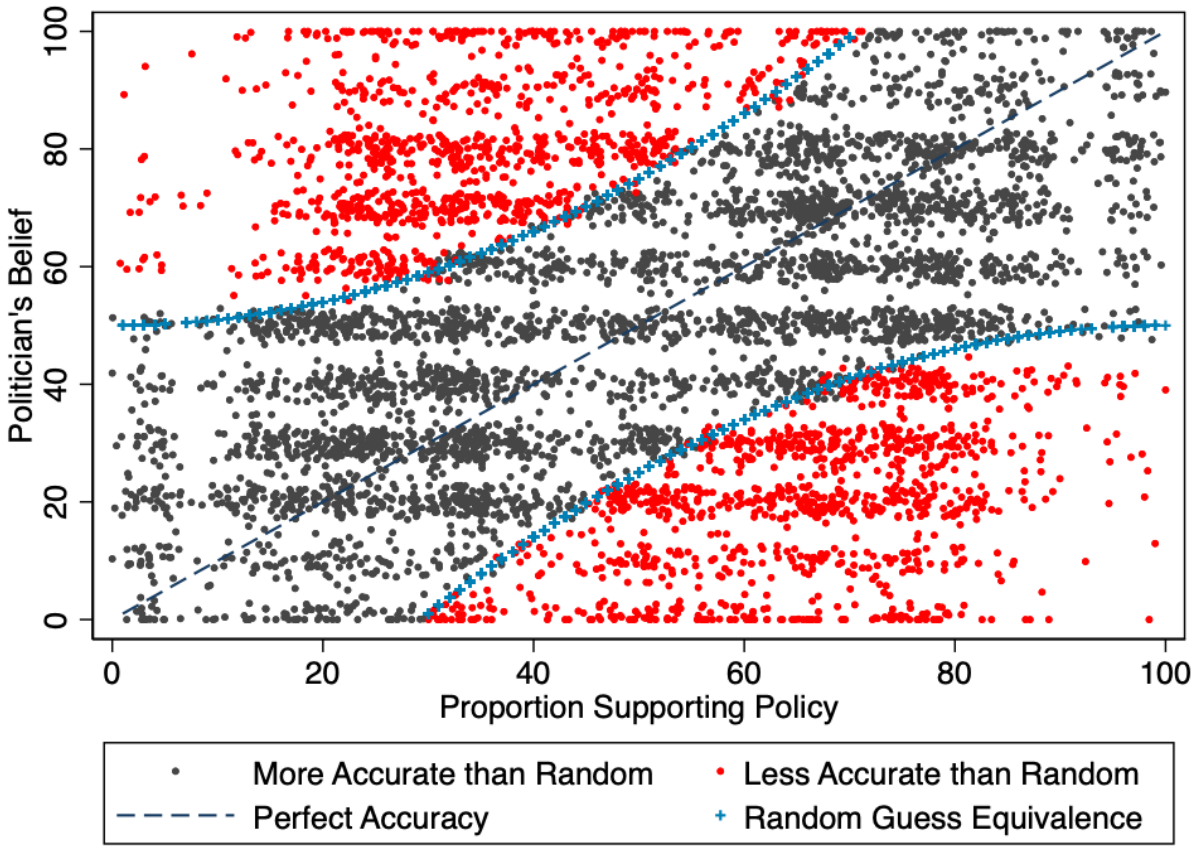


(b) By Partisan Support



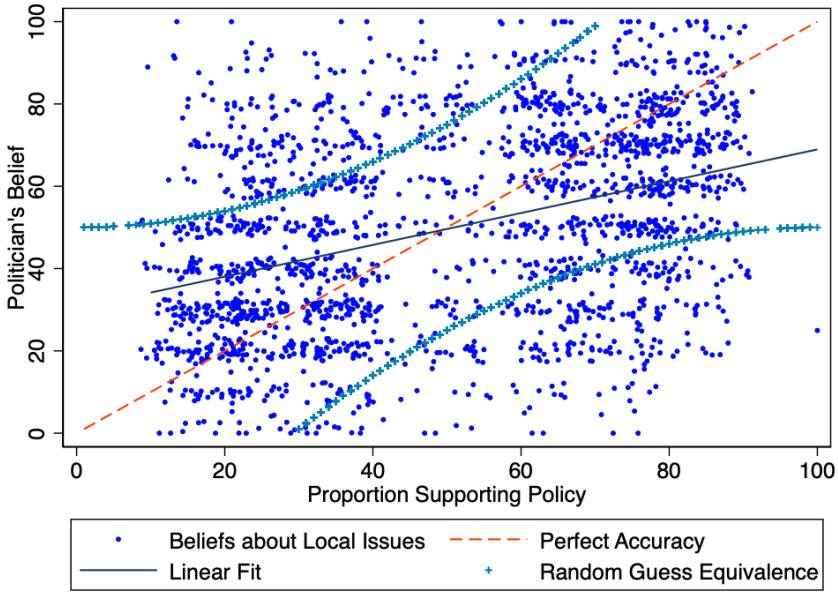
(Appears in Section 5.1)

Figure 4: Raw Data on Citizen Preferences & Politician Beliefs

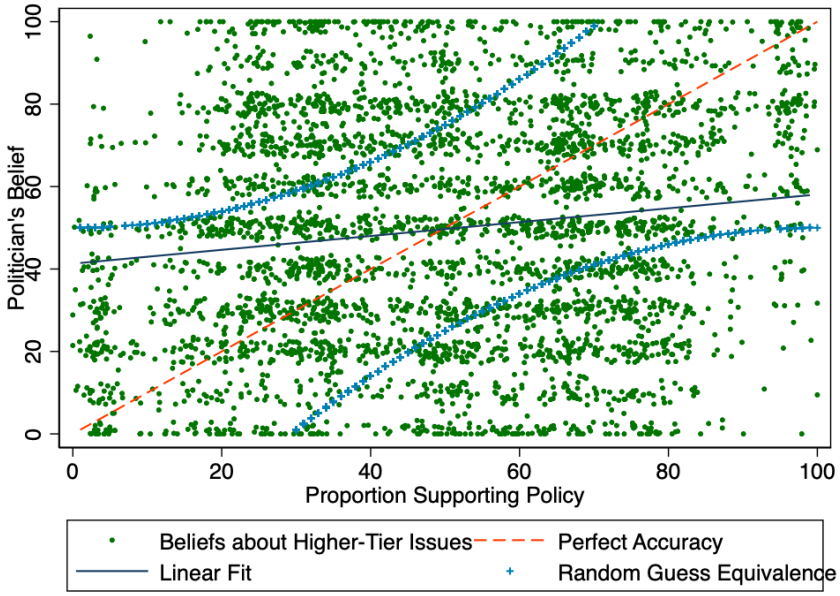


Notes: This figure plots the raw data on politicians' beliefs against the raw data on citizen preferences. The y-axis of each dot signifies a sample politician's belief about citizen support on a given issue, while the x-axis indicates against the proportion of citizens in that national assembly constituency who indicated support for that policy. The dashed line indicates where perfectly accurate beliefs would lie, and the blue plus signs indicate how far an average random guess would be from perfect accuracy. Black dots thus indicate beliefs that are more accurate than a random guess, and red dots indicate beliefs that are less accurate than a random guess. Politician beliefs do not follow any systematic patterns of being close to citizen preferences. Given that each issue is defined as having two policy options, to eliminate arbitrariness along the x-axis I randomize which of the two policy options is plotted. For example, on the local roads vs. water pipes issue I randomize whether each dot indicates support for and beliefs about local roads or water pipes. I also include random noise of 4 percentage points on average in order to better illustrate the clustering of beliefs. (Appears in Section 5.2)

Figure 5: Raw Data for Local and Higher-Tier Issues



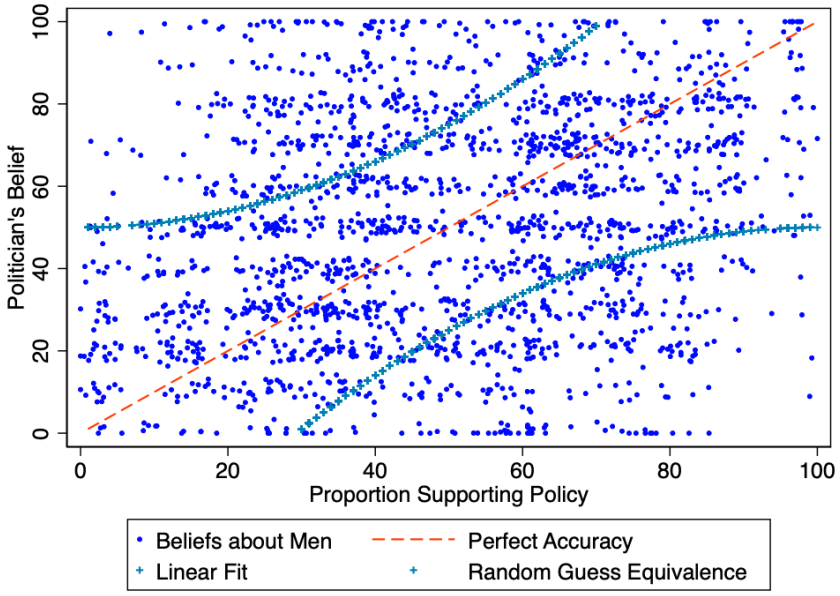
(a) Beliefs about Local Issues



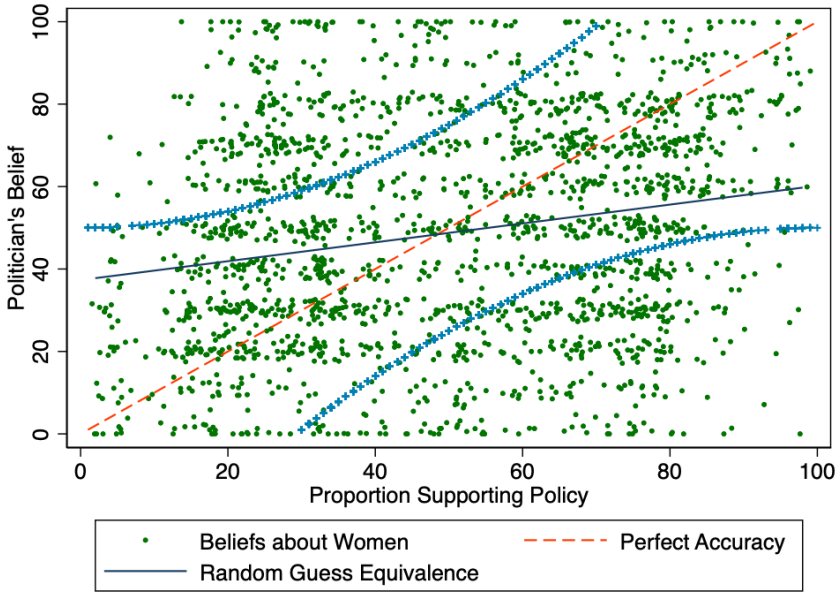
(b) Beliefs about Higher-Tier Issues

Notes: This figure plots raw data on citizen preferences and politician beliefs in the same manner as Figure 4, except that Panel (a) shows data on local issues and Panel (b) shows data on higher-tier issues. See notes for Figure 4 for more details. (Appears in Section 5.2)

Figure 6: Raw Data for Beliefs about Men and Women



(a) Beliefs about Men

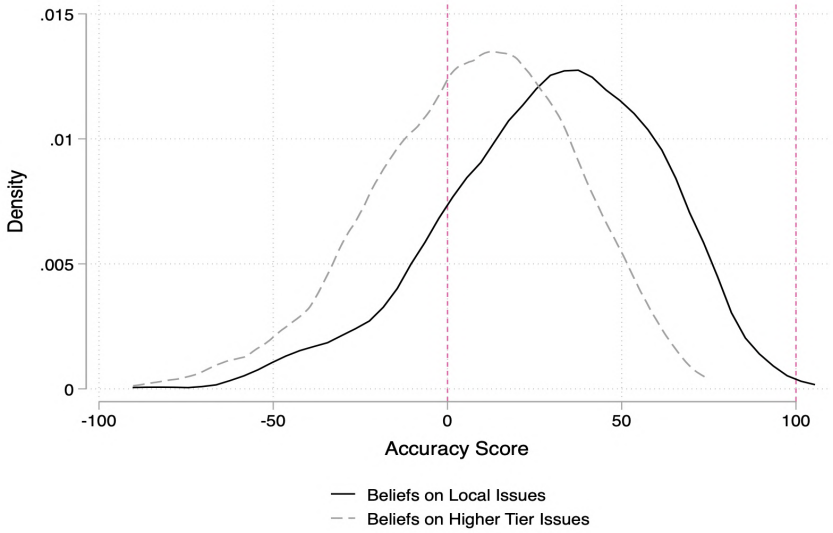


(b) Beliefs about Women

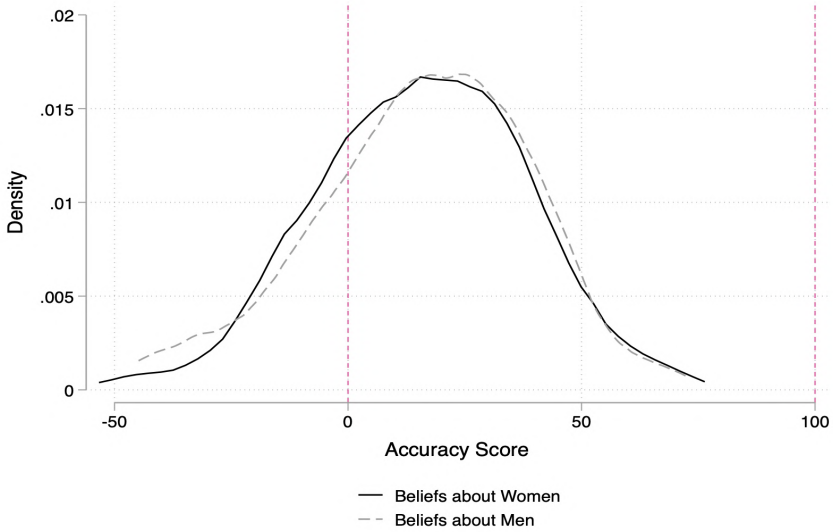
Notes: This figure plots raw data on citizen preferences and politician beliefs in the same manner as Figure 4, except that: Panel (a) shows data on women's preferences and politicians' beliefs about women, and Panel (b) shows data on men's preferences and politicians' beliefs about men. See notes for Figure 4 for more details. (Appears in Section 5.2)

Figure 7: The Distribution of Accuracy

(a) Beliefs about Local versus Higher-Tier Policies

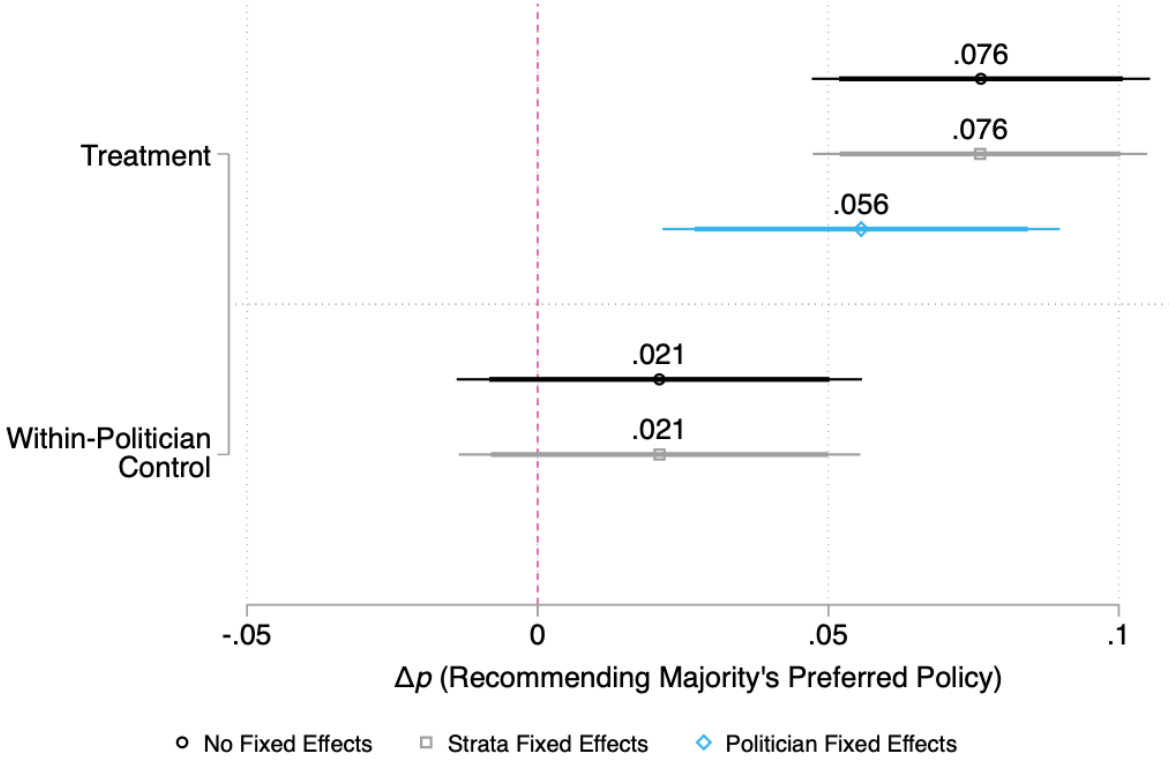


(b) Beliefs about Men versus Women



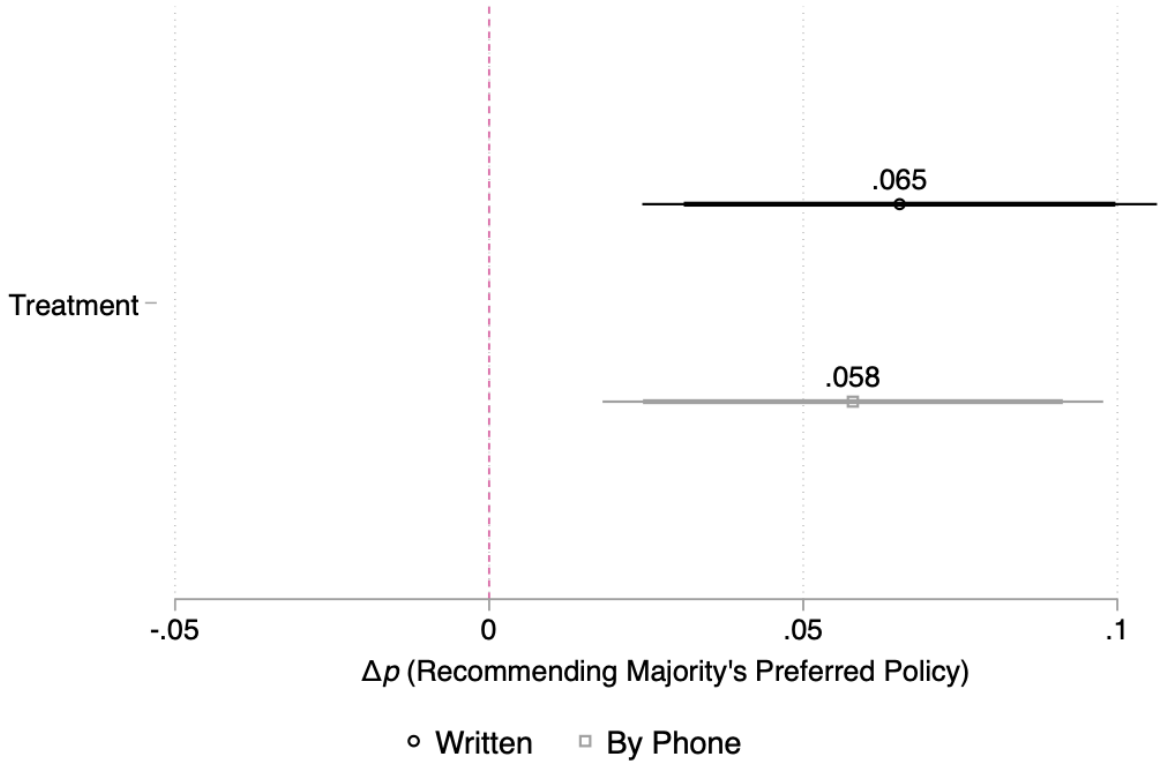
Notes: This figure shows density plots of the accuracy of politicians' beliefs about citizen preferences, aggregated at the level of the individual politician. The measure of accuracy used is my original 'Accuracy Score' introduction in Section 4.2. The score is benchmarked against random guesses (0) and perfect accuracy (100). (Appears in Section 5.2)

Figure 8: Pooled Experimental Results



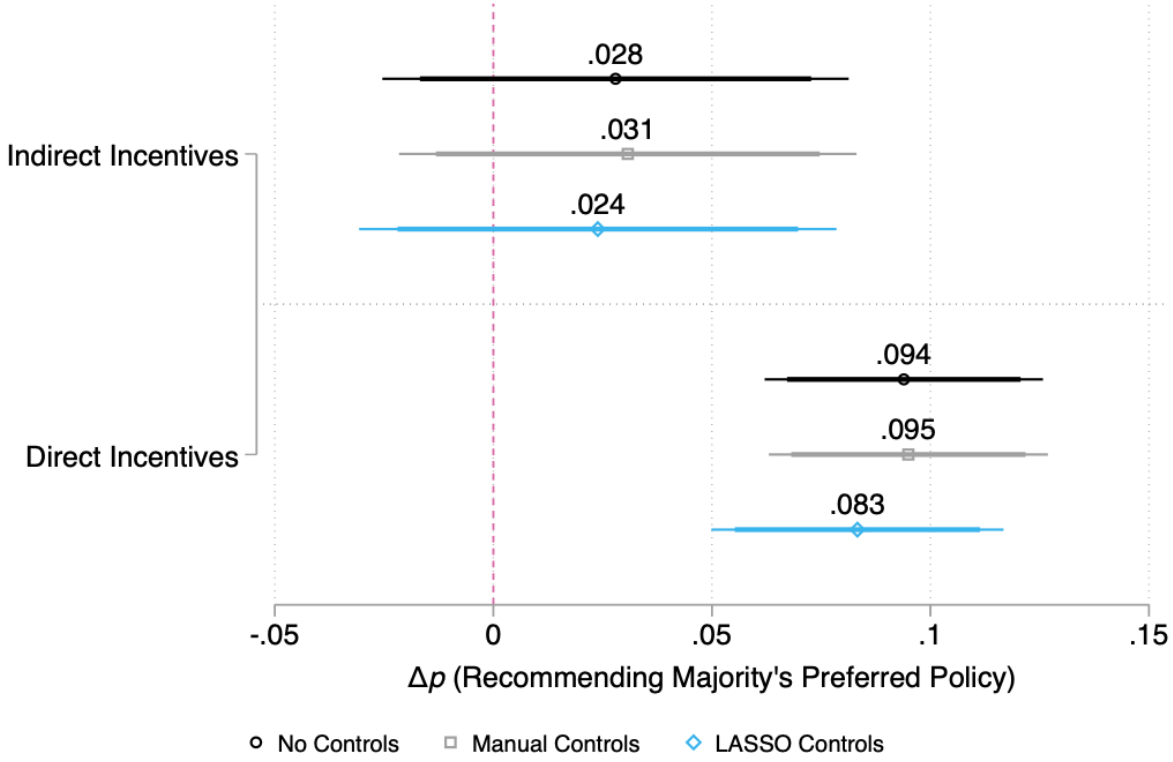
Notes: This figure shows coefficient plots of the average treatment effects of the experimental treatment (pooled across all six sub-treatment arms). The three specifications are: (i) No fixed effects, (ii) Strata fixed effects, where the strata are defined by the national assembly constituency, politician position, and three groups' of three issues each. (iii) Politician fixed effects. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens. Standard errors are clustered at the level of the individual politician. The control group mean is 0.525. (Appears in Section 6.1)

Figure 9: Experimental Results using Main Outcome versus Alternate Outcome



Notes: This figure shows coefficient plots of the average treatment effects of the experimental treatment (pooled across all six sub-treatment arms), using both the main outcome (written recommendations) and alternate outcome (phone calls). The specification employs strata fixed effects, where the strata are defined by the national assembly constituency, politician position, and three groups' of three issues each. Standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens. The figure only uses data for the random subset of sample politicians for whom the alternate outcome was measured. See Table 3 for more details. (Appears in Section 6.1)

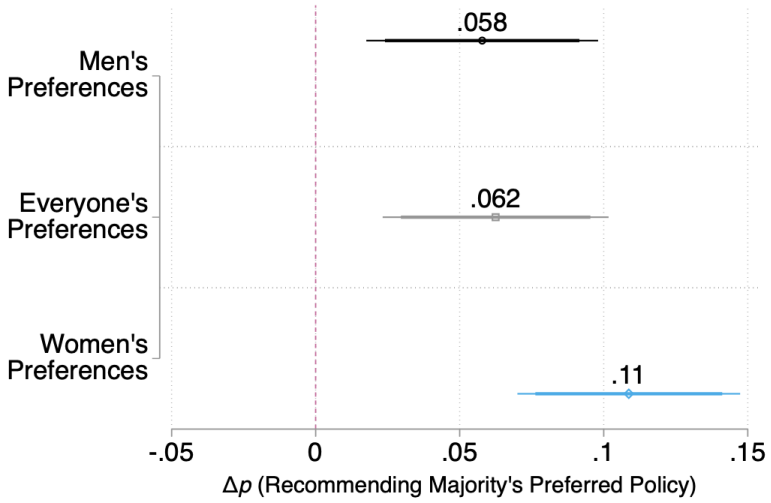
Figure 10: Experimental Results for Direct vs. Indirect Politicians



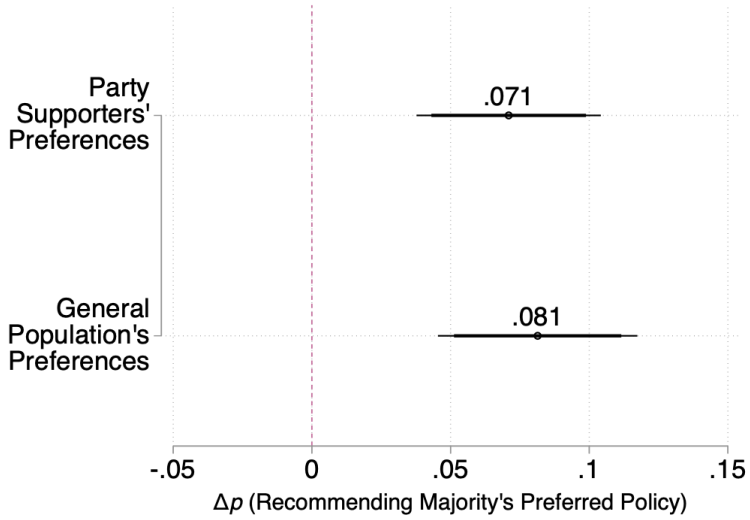
Notes: This figure shows coefficient plots of the average treatment effects of the experimental treatment for directly and indirectly elected politicians. Details on election procedure are described in Section 2.1. The first specification uses no controls. The second specification manually controls for the demographic traits of politicians. The third specification uses controls picked by LASSO (that predict the outcome or treatment or both) from all available covariates on politicians. All three specifications employ strata fixed effects, where the strata are defined by the national assembly constituency, politician position, and three groups' of three issues each. Standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens. See Table 5 for regression results. See Section 4.3 and Figure 2 for details on experimental design. (Appears in Section 6.2)

Figure 11: Experimental Results for Gender & Party Subtreatments

(a) Gender Subtreatments

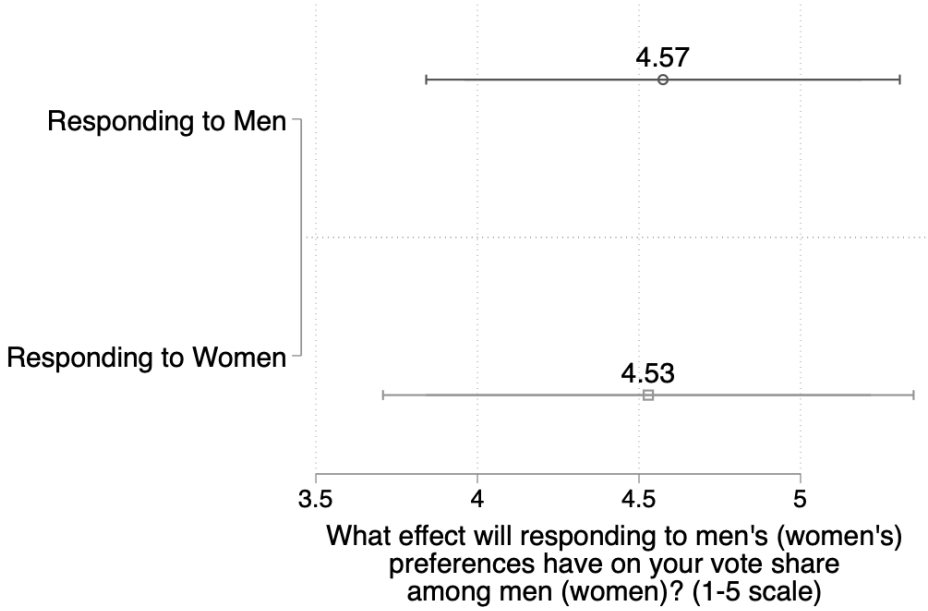


(b) Partisanship Subtreatments



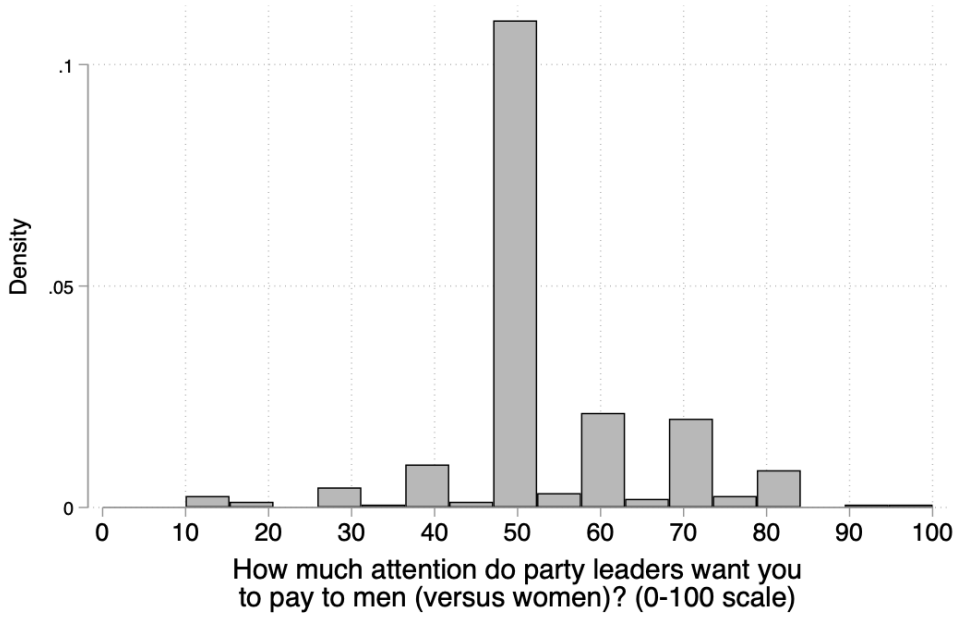
Notes: This figure shows coefficient plots of the average treatment effects of the experimental sub-treatments. Panel (a) shows the sub-treatments categorized by the gender of citizens, while Panel (b) shows sub-treatments categorized by the partisanship of citizens. The specifications employ strata fixed effects, where the strata are defined by the national assembly constituency, politician position, and three groups' of three issues each. Standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens. See Table 5 for regression results. See Section 4.3 and Figure 2 for details on experimental design. (Appears in Section 6.2)

Figure 12: Perceived Effect of Responsiveness on Electoral Success



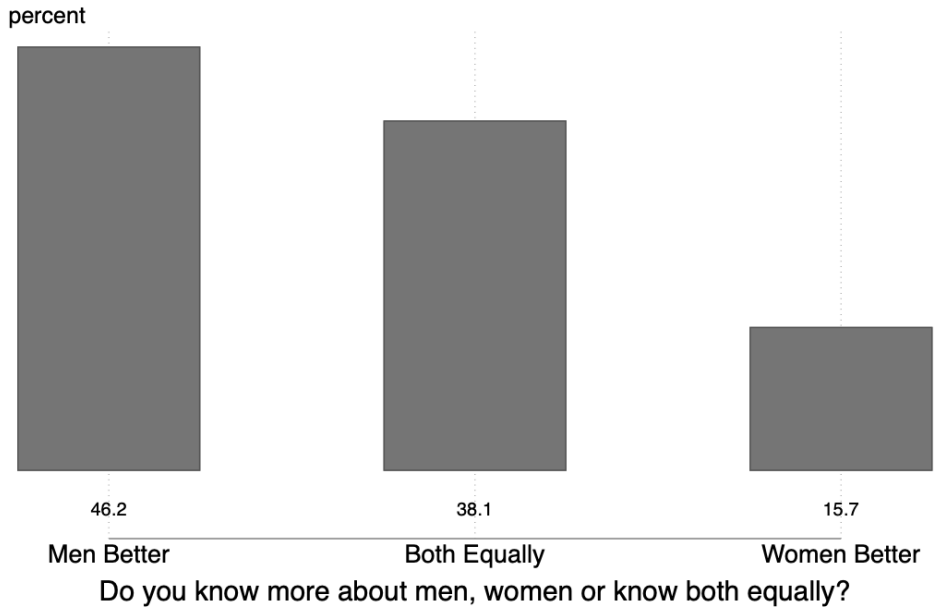
(Appears in Section 6.3)

Figure 13: Politicians' View of Whether Party Wants More Attention to Men or Women



(Appears in Section 6.3)

Figure 14: Male Politicians' Perception of Whose Preferences They Know Better



(Appears in Section 6.3)

Tables

Table 1: **Accuracy and its Correlates**

	A: Mean Accuracy		
	(1) **Accuracy Score**	(2) **Linear Distance**	(3) **Squared Distance**
Mean	14.59	-25.56	-1012.19
	(0.83)	(0.25)	(16.98)
	B: Accuracy by Issue Type		
	(1)	(2)	(3)
Local Policies	22.06***	6.27***	427.31***
	(1.67)	(0.52)	(33.71)
Mean for Higher-Tier	7.39	-27.60	-1149.63
	C: Accuracy by Politican Type		
	(1)	(2)	(3)
Chair	5.57*	1.78*	126.38**
	(3.16)	(0.92)	(61.38)
Vice Chair	-2.63	-0.82	-26.23
	(2.73)	(0.80)	(55.13)
Woman Councilor	4.42*	1.35**	81.84*
	(2.33)	(0.69)	(47.44)
Mean for General Members	13.76	-25.83	-1030.47
	D: Accuracy by Citizen Gender		
	(1)	(2)	(3)
Men	3.23	0.83	49.70
	(2.20)	(0.65)	(45.66)
Women	2.94	0.54	16.82
	(2.12)	(0.63)	(44.39)
Mean for All Genders	12.83	-25.94	-1028.01
	E: Accuracy by Citizen Partisanship		
	(1)	(2)	(3)
Own Party's Supporters	-2.15	-0.67	-46.56
	(1.76)	(0.52)	(36.61)
Mean for General Population	15.81	-25.19	-984.65
# Observations	5797	5797	5797

Notes: *All regressions are at the level of a politician's beliefs about citizen preferences on a particular policy. Panel A uses politician fixed effects while the remaining three columns used National Assembly constituency times issue fixed effects. Standard errors are clustered at the level of the individual politician. The outcome variable for Column (1) is an original 'accuracy score' constructed using the method described in Section 4. The outcome variables for columns (2) and (3) respectively are the negative linear and quadratic distance between the politician's prior and true citizen preferences (negatives are used for ease of comparison with the accuracy score).* $^{*}p < 0.10, ^{**}p < 0.05, ^{***}p < 0.01$

(Appears in Section 5.2)

Table 2: **Experimental Results: Pooled Treatment Effects**

	Outcome: Recommended Majority's Preference		
	(1) No FE	(2) Strata FE	(3) Politician FE
Preferences Treatment	0.076***	0.076***	0.056***
	(0.015)	(0.015)	(0.017)
Within-Treatment Control	0.021	0.021	
	(0.018)	(0.018)	
Constant	0.525***	0.525***	0.539***
	(0.011)	(0.011)	(0.008)
# Observations	5797	5797	5797

Notes: *All regressions are at the politician-policy level. Column (1) does not employ any fixed effects. Column (2) employs strata fixed effects while Column (3) employs politician fixed effects. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens. Standard errors are clustered at the level of the individual politician.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

(Appears in Section 6.1)

Table 3: **Experimental Results: Recommendations using Phone Calls**

	Outcome: Recommended Majority's Preference	
	(1) Call	(2) Written
Any Preferences	0.058***	0.065***
	(0.020)	(0.021)
Within-Treatment Control	0.006	0.019
	(0.024)	(0.024)
Constant	0.580***	0.570***
	(0.015)	(0.016)
# Observations	2749	2749

Notes: *All regressions are at the level of a politician's recommendation about a policy. Standard errors are clustered by the individual politician. Columns (1) and (3) use policies recommended during a phone call on behalf of the party as the outcome variable. Columns (2) and (4) use policies recommended using the written 'recommendation form' as the outcome variable.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

(Appears in Section 6.1)

Table 4: **Sensitivity to Primes on the Importance of Preferences**

	Outcome: Recommended Majority's Preference			
	(1) Politician Prime	(2) Politician Prime	(3) Citizen Prime	(4) Citizen Prime
Primed	0.000	-0.004	-0.003	0.026
	(0.016)	(0.020)	(0.015)	(0.020)
Preferences Treatment		0.075***		0.091***
		(0.016)		(0.017)
Treat * Primed		0.006		-0.059**
		(0.030)		(0.029)
Within-Treatment Control		0.021		0.023
		(0.018)		(0.018)
Constant	0.564***	0.526***	0.564***	0.518***
	(0.008)	(0.012)	(0.008)	(0.012)
# Observations	5797	5797	5797	5797
Positive Effect Threshold	0.027	0.039	0.024	0.005
Negative Effect Threshold	0.023	0.035	0.027	0.073

Notes: *All regressions are at the level of a politician's recommendation about a policy. Strata fixed effects are included. Standard errors are clustered by the individual politician.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

(Appears in Section 6.1)

Table 5: **Experimental Results: Pooled Treatment Effects by Politician Type**

	Outcome: Recommended Majority's Preference		
	Panel A: By Type		
	(1) **No Controls**	(2) **Manual Controls**	(3) **LASSO Controls**
Direct Treated	0.094***	0.095***	0.083***
	(0.016)	(0.016)	(0.017)
Indirect Treated	0.028	0.031	0.024
	(0.027)	(0.027)	(0.028)
Indirect	0.054***	0.062***	0.086***
	(0.020)	(0.020)	(0.025)
Within Treatment Control	0.021	0.022	0.012
	(0.018)	(0.017)	(0.019)
Constant	0.510***	0.548***	0.658***
	(0.012)	(0.041)	(0.066)
# Observations	5797	5788	5797
P-Value Direct = Indirect	0.028	0.031	0.044

Notes: *All regressions are at the politician-policy level, and employ strata fixed effects where a strata is a set of three issues within the same national assembly constituency. Standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens. Column (2) controls for demographics including age, education, language, assets, house ownership, and length of residence in the area. Column (3) uses controls picked by LASSO (that predict the outcome or treatment or both) from all available covariates on politicians.* $^{*}p < 0.10$,$^{**}p < 0.05$,$^{***}p < 0.01$

(Appears in Section 6.2)

Table 6: **Experimental Results: Sub-Treatment Effects**

	Outcome: Recommended Majority's Preference	
	(1)	(2)
	Party Sub-treatments	Gender Sub-treatments
Own Party	0.071***	
	(0.017)	
All Citizens	0.081***	
	(0.018)	
Within-T Ctrl	0.021	0.021
	(0.018)	(0.018)
Men		0.058***
		(0.020)
Women		0.109***
		(0.020)
Both Genders		0.062***
		(0.020)
Constant	0.525***	0.525***
	(0.011)	(0.011)
# Observations	5797	5797
P-value Own Party=All	0.593	
P-value Men=Women		0.033

Notes: *All regressions are at the level of a politician's recommendation about a policy. Strata fixed effects are included. Standard errors are clustered by the individual politician.* $^{*}p < 0.10, ^{**}p < 0.05, ^{***}p < 0.01$

(Appears in Section 6.2)

Table 7: **Experimental Results: Heterogeneity by Whether Prior was an Underestimate**

	Outcome: Recommended Majority's Preference	
	(1) Pooled Treatments	(2) Sub-Treatments
Preferences Treatment	0.034	
	(0.024)	
Underestimate (0/1)	-0.298***	-0.298***
	(0.023)	(0.023)
Treat * Underestimate	0.053*	
	(0.030)	
Within-Treatment Control	-0.003	-0.003
	(0.029)	(0.029)
Within-C * Underest	0.030	0.030
	(0.036)	(0.036)
Treat: Men's Pref.		-0.002
		(0.031)
Treat: Women's Pref.		0.087***
		(0.030)
Treat: Both's Pref.		0.024
		(0.033)
T-M * Distance		0.075*
		(0.038)
T-W * Distance		0.030
		(0.039)
T-B * Distance		0.046
		(0.042)
Constant	0.738***	0.738***
	(0.019)	(0.019)
# Observations	5797	5797

Notes: *The regression is at the politician-policy level. It employs strata fixed effects and standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

(Appears in Section 6.3)

Table 8: **Experimental Results: Effects on Demand for Information**

	Outcome: Demand for Report				
	(1) Any Report	(2) By Gender	(3) By Class	(4) By Age	(5) By Party
Citizen Preferences Treatment	0.06	0.01	-0.01	0.06**	-0.00
	(0.04)	(0.03)	(0.03)	(0.02)	(0.03)
Constant	0.67***	0.22***	0.19***	0.06***	0.20***
	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)
# Observations	653	653	653	653	653

Notes: *The regression is at the politician level. It employs strata fixed effects and standard errors are clustered at the level of the strata. The dependent variable is an indicator for whether the politician signed up for a report to be delivered in the near future on citizen preferences. Column (1) uses demand for any report as the outcome variable. Columns (2) to (5) use demand for reports along each of 4 possible dimensions as the outcome variable.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

(Appears in Section 6.4)

Appendix

A Additional Figures

A.1 Map of Sample Union Councils

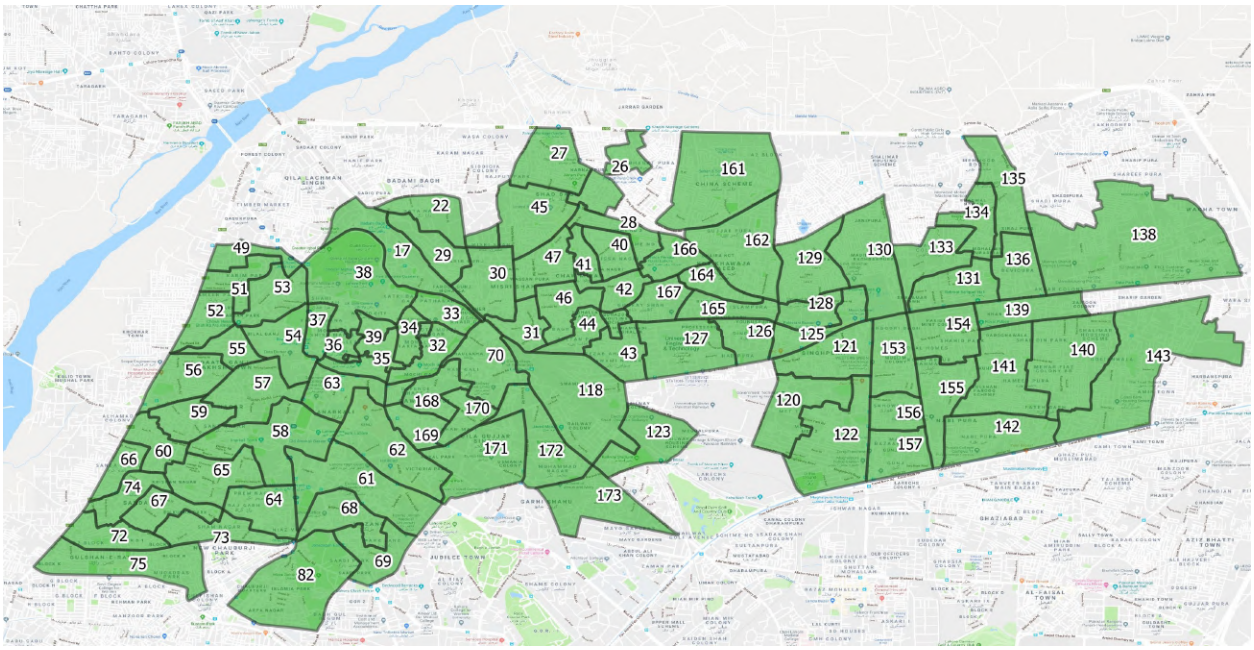
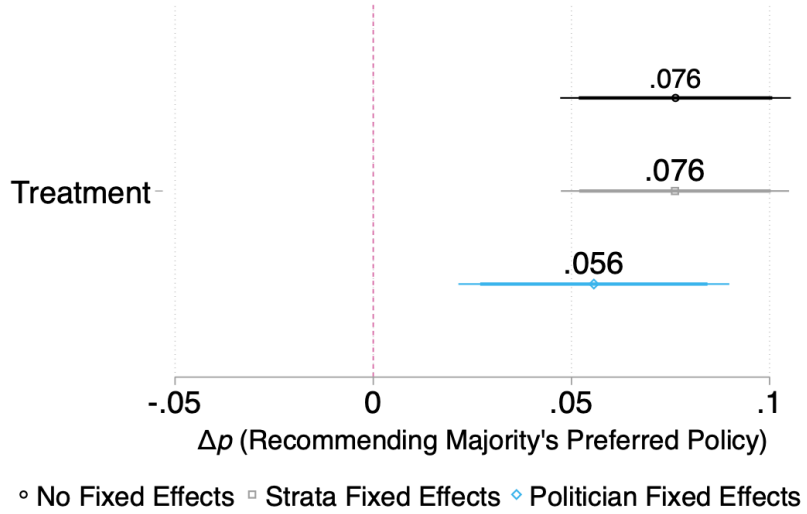


Figure A1: Sample Union Councils

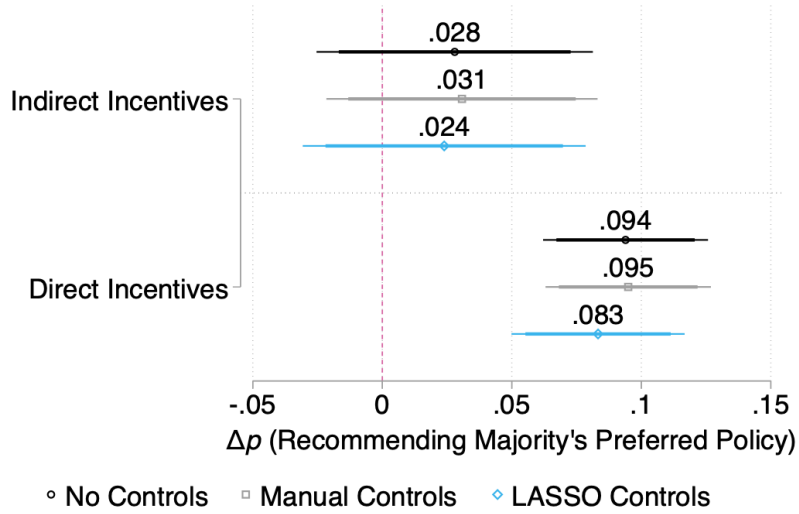
This figure shows the 89 contiguous Union Councils included in this study.

A.2 Experimental Results in One Figure

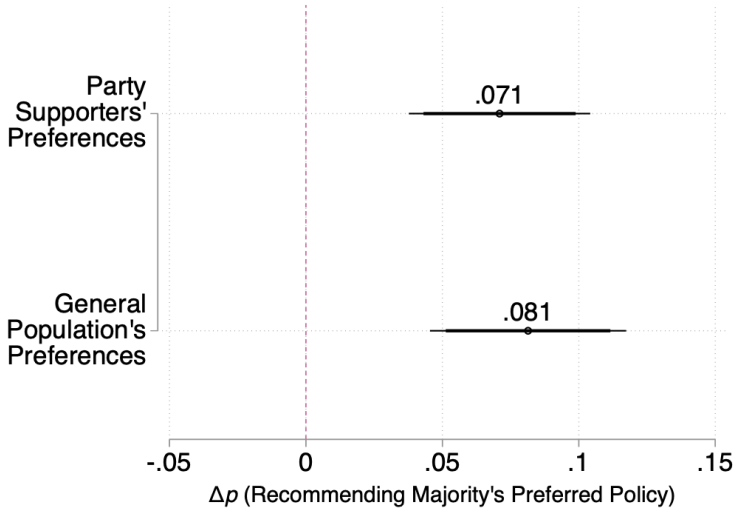
Politicians Respond to New Information About Citizen Preferences ($p < 0.001$)



Directly Elected Politicians Respond More to New Information ($0.028 < p < 0.044$)



Politicians Do *Not* Respond More to Information on Own Party Supporters' Preferences ($p = 0.593$)



Politicians Respond More to Information on Women's Preferences compared to Men's ($p = 0.033$)

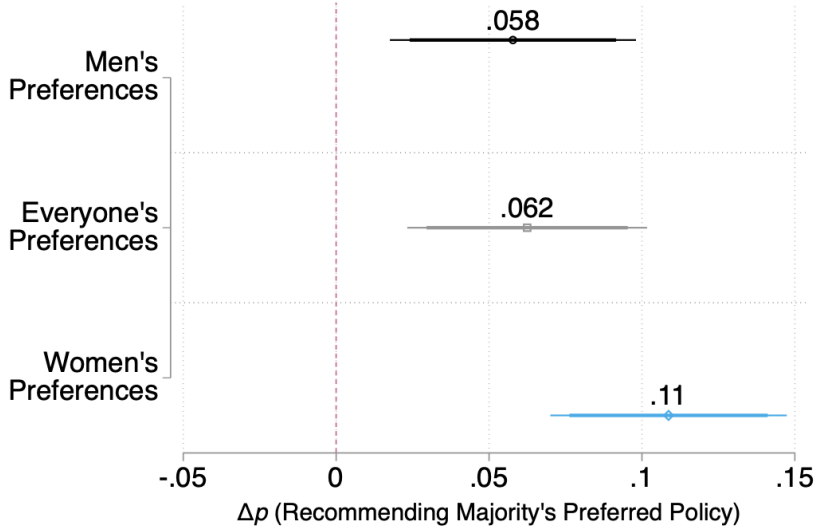
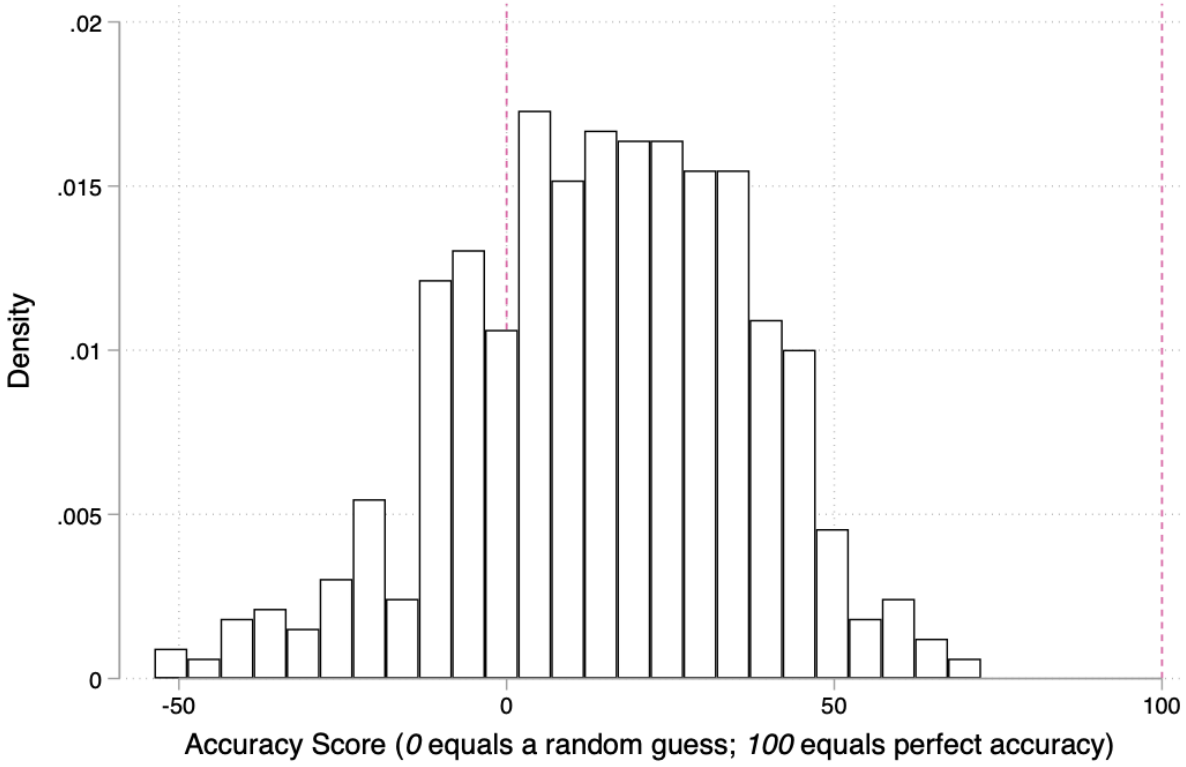


Figure A3: **Politicians Have Inaccurate Beliefs about What Citizens Prefer**



A.3 Responsiveness over Distribution of Prior Beliefs

The propensity to recommend the majority's preferred policy is strongly correlated with prior beliefs about the extent to which citizens support that policy. On average, treatment effects are higher among the underestimators compared to the overestimators (see Panel 1 of Table 7).

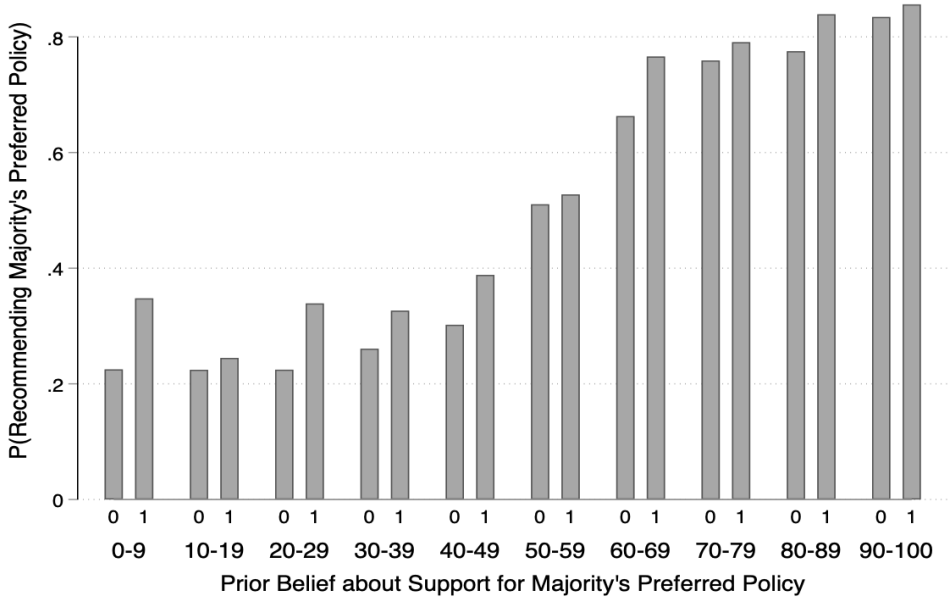


Figure A4: Responsiveness over Distribution of Prior Beliefs

B Additional Tables

B.1 Do Recommendations Correlate with Budgetary Allocations?

To ascertain whether recommendations made by local politicians correlate with even higher stakes decisions taken by local politicians in the past, I collect data from the Local Government Department, Government of Punjab on Union Council level projects initiated under the Local Government Development Program. These projects pertaining to local cemented roads and street lights, are the only decisions at the Union Council level involving real budgetary allocations for which data are available. Importantly, these projects were initiated in summer 2018, only one to six months before the experimental intervention took place.

I find that there is a strong correlation between whether a local politician recommended that a particular local service (roads or street lights) be given a higher share of resources and whether the politician's Union Council initiated a project on that same local service. In the control group, politicians in Union Councils that did initiate a project pertaining to the relevant service were almost twice as likely to prioritize that service in their recommendation forms. This is a strong indication that the recommendations map on to consequential real world outcomes.

Table B1: **Outcome Variable's Correlation with Budgetary Allocation**

	Service Prioritized on Recommendation Form			
	(1)	(2)	(3)	(4)
	Both Services	Both Services - Controls Only	Roads	Lights
Project Initiated Under LGDP	0.074***	0.085**	0.044	0.080
	(0.025)	(0.042)	(0.030)	(0.058)
Constant	0.128***	0.120***	0.126***	0.145***
	(0.021)	(0.034)	(0.023)	(0.054)
# Observations	1284	433	646	638

Notes: *All regressions are at the level of a politician's recommendation about a policy. Strata fixed effects are included. Standard errors are clustered by the individual politician.* $^{*}p < 0.10,^{**} p < 0.05,^{***} p < 0.01$

B.2 Statistical Balance

Table B2: Statistical Balance between Treatment and Control Groups

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	T-test P-value					
	Pref Control	All	Female	Male	Party All	Party Female	Party Male						
Variable	Mean/SE	Mean/SE	Mean/SE	Mean/SE	Mean/SE	Mean/SE	Mean/SE	(1)-(2)	(1)-(3)	(1)-(4)	(1)-(5)	(1)-(6)	(1)-(7)
Age(Yrs)	46.422	46.930	47.957	47.111	46.264	45.822	46.514	0.729	0.609	0.851	0.903	0.879	0.823
	(0.684)	(1.153)	(1.196)	(1.040)	(1.111)	(1.030)	(1.187)						
High School	0.816	0.789	0.771	0.833	0.694	0.808	0.819	0.424	0.732	0.563	0.032**	0.944	0.988
	(0.026)	(0.049)	(0.051)	(0.044)	(0.055)	(0.046)	(0.046)						
College	0.139	0.225	0.114	0.139	0.167	0.164	0.208	0.080*	0.925	0.701	0.798	0.524	0.128
	(0.023)	(0.050)	(0.038)	(0.041)	(0.044)	(0.044)	(0.048)						
Urdu Spoken	0.448	0.338	0.414	0.431	0.403	0.548	0.472	0.150	0.653	0.864	0.261	0.239	0.676
	(0.033)	(0.057)	(0.059)	(0.059)	(0.058)	(0.059)	(0.059)						
Own House	0.749	0.803	0.729	0.736	0.667	0.808	0.819	0.181	0.368	0.741	0.266	0.090*	0.057*
	(0.029)	(0.048)	(0.054)	(0.052)	(0.056)	(0.046)	(0.046)						
Asset Index	2.457	2.563	2.500	2.667	2.437	2.644	2.764	0.538	0.264	0.039**	0.920	0.130	0.047**
	(0.080)	(0.131)	(0.146)	(0.130)	(0.128)	(0.138)	(0.130)						
Years in Locality	40.668	39.845	41.271	41.083	41.708	40.767	41.528	0.517	0.590	0.891	0.818	0.616	0.940
	(0.920)	(1.462)	(1.395)	(1.307)	(1.407)	(1.615)	(1.475)						
Extroversion	5.318	5.121	5.492	5.271	5.484	5.297	5.399	0.056*	0.059*	0.702	0.165	0.496	0.826
	(0.055)	(0.102)	(0.096)	(0.102)	(0.088)	(0.087)	(0.095)						
Agreeableness	5.049	5.114	5.282	5.093	5.111	5.000	5.080	0.826	0.028**	0.790	0.840	0.198	0.877
	(0.056)	(0.109)	(0.095)	(0.088)	(0.097)	(0.095)	(0.089)						
Conscientiousness	5.227	5.098	5.306	5.085	5.206	5.195	5.254	0.232	0.601	0.093*	0.674	0.169	0.946
	(0.054)	(0.099)	(0.101)	(0.090)	(0.100)	(0.087)	(0.101)						
Emotional Stability	5.135	5.152	5.266	5.093	5.325	5.237	5.275	0.976	0.366	0.670	0.235	0.553	0.467
	(0.060)	(0.106)	(0.101)	(0.116)	(0.090)	(0.095)	(0.106)						
Openness	4.875	4.955	5.089	5.161	4.913	4.839	4.978	0.397	0.150	0.055*	0.731	0.538	0.816
	(0.067)	(0.111)	(0.111)	(0.106)	(0.101)	(0.111)	(0.126)						
N	223	71	70	72	72	73	72						
Clusters	223	71	70	72	72	73	72						
F-test of joint significance (F-stat)								1.963**	1.338	2.362***	1.147	1.164	1.117
F-test, number of observations								294	293	295	295	296	295

Notes: The value displayed for t-tests are p-values. The value displayed for F-tests are the F-statistics. Standard errors are clustered at variable uid. Fixed effects using variable na_block_pcygp are included in all estimation regressions. All missing values in balance variables are treated as zero.***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

B.3 Does the Order in Which Treatment is Delivered Matter?

Table B3: **Experimental Results: Order Effects**

	Outcome: Recommended Majority's Preference
	(1)
Treatment Order 1	0.11***
	(0.02)
Treatment Order 2	0.07***
	(0.02)
Treatment Order 3	0.10***
	(0.02)
Within-T Control Order1	0.01
	(0.02)
Within-T Control Order2	0.05**
	(0.02)
Within-T Control Order3	0.05*
	(0.03)
Control Order 2	0.02
	(0.02)
Control Order 3	0.02
	(0.02)
Constant	0.51***
	(0.01)
# Observations	5797
P-value Order 1 = 2	0.062
P-value Order 1 = 3	0.568
P-value Order 2 = 3	0.143

Notes: *All regressions are at the level of a politician's recommendation about a policy. Orders 1, 2 and 3 refers to the order in which data about the particular policy in question was presented to the politician. This order was determined randomly. Strata fixed effects are included. Standard errors are clustered by the individual politician.* $^{*}p < 0.10,^{**} p < 0.05,^{***} p < 0.01$

B.4 Does the Leadership Tier to Which Preferences are Delivered Matter?

The design includes random variation in the level at which politicians make their recommendations in the normal course of things. Some politicians make these recommendations in meetings with the district level leadership of their party while others are able to make such recommendations at a higher forum in the party's central office. To test whether the level at which the recommendation is being made matters for the extent to which politicians are responsive, I randomize the sample politicians into receiving either a generic letter stating that their party leadership is requesting their recommendations or a letter stating the party president is requesting their preferences. As shown in Table B4, the tier at which these recommendations are being made does not affect the extent to which politicians are responsive to citizen preferences.

Table B4: **Experimental Results: Letter from Party President vs. Leadership**

	Outcome: Recommended Majority's Preference
	(1)
Preferences Treatment	0.08***
	(0.02)
Received Party President's Letter	0.02
	(0.02)
Treat * President Letter	-0.03
	(0.03)
Constant	0.53***
	(0.01)
# Observations	5797

B.5 Are Politicians More Responsive on Local or Salient Issues?

The third dimension of differential responsiveness I test is the type of issue. The experimental design allows me to test differential responsiveness by issue on two dimensions: whether an issue is a local or non-local issue and how salient the issue is. I perform these test by using the following two equations that estimate heterogeneous treatment effects by issue type and salience respectively:

$$Y_{pi} = \beta_1 Treat_{pi} + \beta_2 Local_{pi} + \beta_3 Treat * Local_i + \beta_4 Within_{pi} + \gamma_s \tag{21}$$

$$Y_{pi} = \beta_1 Treat_{pi} + \beta_2 Salience_{pi} + \beta_3 Treat * Salience_i + \beta_4 Within_{pi} + \gamma_s \tag{22}$$

where $Local_{pi}$ is an indicator variable for whether issue i is one of the three local issues introduced in Section 3.1. $Salience_{pi}$ is a variable that takes on the values 0, 1/3, 2/3 or 1 based on how salient the politician ranks the issue as in a separate set of pre-treatment questions, with a higher number indicating greater salience.

Table B5: **Experimental Results by Issue Type & Salience**

	Outcome: Recommended Majority's Preference	
	(1)	(2)
	By Issue Type	By Issue Salience
Preferences Treatment	0.065***	0.064***
	(0.015)	(0.016)
Local Issue	0.097***	
	(0.017)	
Treat * Local Issue	0.010	
	(0.026)	
Salience		0.208***
		(0.022)
Treat * Salience		0.018
		(0.033)
Constant	0.501***	0.475***
	(0.011)	(0.011)
# Observations	5797	5797

Notes: *All regressions are at the level of a politician's recommendation about a policy. Strata fixed effects are included. Standard errors are clustered by the individual politician.* $^{*}p < 0.10$,$^{**}p < 0.05$,$^{***}p < 0.01$

Results show that politicians do not respond more to citizen preferences on local issues or more salient issues. Those in the control group, however, are more likely to recommend the majority's preferred policy on both the issues that are local and the issues that are salient, as shown in Table B5. Column 1 shows that on non-local issues, control politicians recommend the majority's preferred policy half of the time, and this propensity is 10 percentage points, or 20 percent, higher for recommendations made on local issues in the control group. This complements the finding that politicians know more about citizen preferences on local issues. Similarly, the propensity of control group politicians to recommend the majority's preferred policy increases from 47% for the least salient issues to 68% for the most salient issues. Taken together, these findings indicate that while the propensity to recommend the majority's preferred policy is higher for local and salient issues in the absence of treatment, more information does not lead to greater responsiveness on these issues.

B.6 Experimental Results by Individual Issue

Table B6: Experimental Results by Issue

	Outcome: Recommended Majority's Preference								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Preferences Treatment	0.151***	0.109***	-0.040	0.125***	0.065**	0.099**	0.029	0.092**	0.062
	(0.042)	(0.040)	(0.031)	(0.041)	(0.032)	(0.045)	(0.036)	(0.043)	(0.045)
Within Treatment Control	0.016	-0.002	-0.052	0.063	0.043	0.075	-0.006	0.045	-0.001
	(0.049)	(0.050)	(0.039)	(0.049)	(0.039)	(0.054)	(0.041)	(0.053)	(0.053)
Constant	0.272***	0.654***	0.876***	0.648***	0.826***	0.417***	0.183***	0.349***	0.508***
	(0.030)	(0.031)	(0.022)	(0.032)	(0.026)	(0.034)	(0.026)	(0.032)	(0.034)
# Observations	635	638	646	642	642	635	653	653	653

Notes: *The regression is at the politician-policy level. It employs strata fixed effects and standard errors are clustered at the level of the individual. The issues on which results are shown in each column are: (1) Sewerage vs sanitation, (2) Street lights vs. filtration plants, (3) Local roads vs. piped water, (4) Specialized healthcare vs. small general healthcare centers, (5) corruption versus unemployment as a national priority, (6) water shortages versus electricity shortages as a national priority, (7) environmental concerns over development projects, (8) support for Women on Wheels, (9) the level of taxation and services.* $^{*}p < 0.10$,** $p < 0.05$,*** $p < 0.01$

B.7 Responsiveness of Each Politician Type by Sub-treatment

Table B7: Experimental Results: Sub-treatment results by Politician Type

	Outcome: Recommended Majority's Preference				
	Panel A: Gender Sub-treatments				
	(1)	(2)	(3)	(4)	(5)
	All Politicians	Ward Councilors	Chair	Vice Chair	Women Councilors
Men's Preferences	0.058***	0.030	0.191***	0.062	0.068
	(0.020)	(0.026)	(0.054)	(0.061)	(0.051)
Women's Preferences	0.109***	0.119***	0.192***	0.059	0.056
	(0.020)	(0.024)	(0.057)	(0.076)	(0.047)
Both Genders' Preferences	0.063***	0.081***	0.141**	-0.036	-0.011
	(0.020)	(0.025)	(0.054)	(0.076)	(0.047)
Within-T Ctrl	0.021	0.003	0.067	0.034	0.055
	(0.018)	(0.022)	(0.050)	(0.067)	(0.040)
Constant	0.525***	0.518***	0.485***	0.558***	0.556***
	(0.011)	(0.014)	(0.028)	(0.042)	(0.026)
# Observations	5797	3629	590	532	1046
P-value Men=Women	0.033	0.003	0.990	0.969	0.836
	Panel B: Party Subtreatments				
	(1)	(2)	(3)	(4)	(5)
Own Party Supporters' Pref	0.071***	0.082***	0.168***	0.019	0.006
	(0.017)	(0.021)	(0.044)	(0.056)	(0.041)
All Citizens' Pref	0.081***	0.074***	0.175***	0.047	0.074*
	(0.018)	(0.023)	(0.052)	(0.074)	(0.043)
Within-T Ctrl	0.021	0.003	0.067	0.033	0.055
	(0.018)	(0.022)	(0.050)	(0.067)	(0.040)
Constant	0.525***	0.518***	0.485***	0.558***	0.556***
	(0.011)	(0.014)	(0.028)	(0.042)	(0.026)
# Observations	5797	3629	590	532	1046
P-value Party=All	0.593	0.735	0.909	0.702	0.148

Notes: *The regression is at the politician-policy level. It employs strata fixed effects and standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

B.8 Does the Gender Gap in Preferences Matter for Responsiveness?

Table B8: Experimental Results: Heterogeneity by Gender Gap in Preferences

	Outcome: Recommended Majority's Preference	
	(1)	(2)
Preferences Treatment (T)	0.074***	
	(0.023)	
Treat * Gap in Preferences	0.029	
	(0.164)	
Gender Gap in Preferences	-0.239**	-0.291***
	(0.112)	(0.111)
Within-Treatment Control	0.021	0.021
	(0.018)	(0.018)
Men's Preferences (T-M)		0.091***
		(0.032)
T-M * Gap in Preferences		-0.287
		(0.231)
Women's Preferences (T-W)		0.066*
		(0.034)
T-W * Gap in Preferences		0.420*
		(0.236)
Both Genders' Preferences (T-B)		0.070**
		(0.032)
T-B * Gap in Preferences		-0.059
		(0.237)
Constant	0.550***	0.555***
	(0.016)	(0.016)
# Observations	5797	5797
P-Value: T-M = T-W		0.538
T-M * Gap = T-W * Gap		0.014

Notes: *The regression is at the politician-policy level. It employs strata fixed effects and standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

B.9 Does the Partisan Gap in Preferences Matter for Responsiveness?

Table B9: Experimental Results: Heterogeneity by Partisan Gap in Preferences

	Outcome: Recommended Majority's Preference	
	(1)	(2)
Preferences Treatment (T)	0.065***	
	(0.020)	
Treat * Gap in Preferences	0.500	
	(0.557)	
Partisan Gap in Preferences	-1.840***	-1.839***
	(0.395)	(0.395)
Within-Treatment Control	0.021	0.021
	(0.017)	(0.017)
Party Supporters' Preferences (T-P)		0.057**
		(0.025)
T-P * Gap in Preferences		0.649
		(0.700)
Everyone's Preferences (T-E)		0.073***
		(0.025)
T-E * Gap in Preferences		0.358
		(0.678)
Constant	0.571***	0.571***
	(0.015)	(0.015)
# Observations	5797	5797
T-P * Gap = T-E * Gap		0.719

Notes: *The regression is at the politician-policy level. It employs strata fixed effects and standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

B.10 Does Polarization Matter?

Table B10: Experimental Results: Heterogeneity by Agreement of Opinion

	Outcome: Recommended Majority's Preference	
	(1)	(2)
Preferences Treatment (T)	0.087***	
	(0.019)	
Above-Median Agreement	0.116***	0.116***
	(0.017)	(0.017)
T * Above Median	-0.021	
	(0.026)	
Within-Treatment Control	0.018	0.018
	(0.018)	(0.018)
Men's Preferences (T-M)		0.064**
		(0.026)
T-M * Above Median		0.000
		(0.036)
Women's Preferences (T-W)		0.135***
		(0.029)
T-W * Above Median		-0.061
		(0.038)
Both Genders' Preferences (T-B)		0.072***
		(0.026)
T-B * Above Median		-0.013
		(0.038)
Constant	0.469***	0.469***
	(0.014)	(0.014)
# Observations	5797	5797
P-Value: T-M = T-W		0.033
P-Value: T-M*Above = T-W*Above		0.190

Notes: *The regression is at the politician-policy level. It employs strata fixed effects and standard errors are clustered at the level of the individual politician. The dependent variable is an indicator for whether the policy option recommended by the politician was the option preferred by a majority of the relevant subset of citizens.* $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

C Simulated Belief Updating

This appendix section sheds further light on the implications of my simple model of belief updating and responsiveness using simulations. In particular, I test how changes in the distribution of the prior and signal affect the politician's decision.

The politician uses their posterior beliefs to decide which of two policy options to recommend to their higher tier leadership on a given issue. The policy that is in fact preferred by a majority is denoted M while the other option is denoted N. The politician's propensity to recommend policy M is increasing in his expected utility from recommending policy M, which can be characterized as:

$$EU_M = \alpha(\mathbb{1}[\sum_{g \in G}(\gamma_g(P_g(\mu_{1g}|\mu_{Dg}))) > 0.5]) + (1-\alpha)(z) \tag{23}$$

where γ_g is the weight the politician assigns to the preferences of those in group g, with $\sum_g(\gamma_g) = 1$. G could include various ways of dividing the population, but the two most relevant for this paper are gender and partisanship. P_g is the cumulative distribution function of the posterior beliefs about group g evaluated at 0.5, thus indicating the posterior probability that a majority of group g supports policy M. The politician derives utility z from a range of factors other than representing citizen preferences. These could include self-interest that runs counter to citizen interest (e.g. corruption), self-interest that is in line with citizen interest (believing that citizens do not know what is good for them but will realize later and will vote for the politician) or benevolence (doing what the politician thinks is right regardless of whether citizens will vote for the politician or not). Finally, α and $1-\alpha$ are the weights assigned to citizen preferences and z respectively.

C.1 How does belief updating vary by prior characteristics?

I now analyze how changes in the prior mean and variance affect responsiveness. Doing so requires evaluating the difference between the cumulative density function (CDF) of the prior and posterior distributions at 0.5. Since the CDF of the normal distribution does not have a general closed form solution, an analytical solution is not possible. I turn instead to simulations. Fixing $\mu_{Dg} = 75$ and $\sigma_{Dg} = 10$, I vary μ_{0g} and σ_{0g} to observe how updating varies by the first two moments of the prior distribution. Specifically, I am interested in the difference in the value of the prior and posterior CDF evaluated at 0.5, which is plotted on the y-axis in the Figures C5

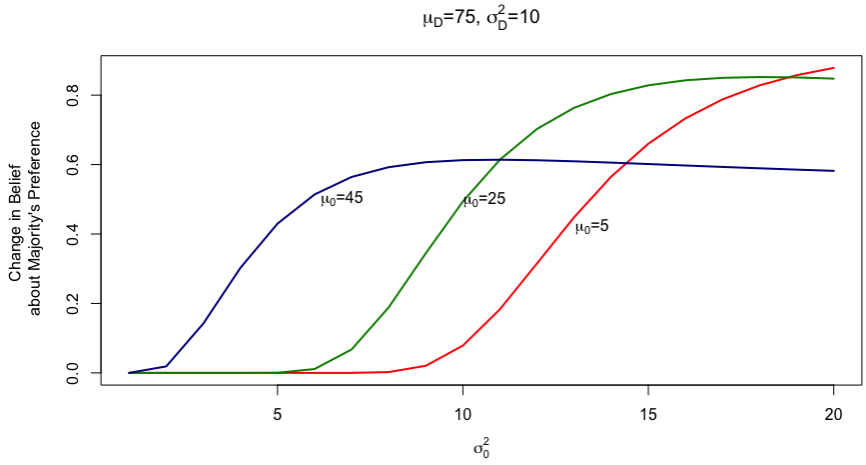
I find that in general, in both the overestimation and underestimation case, belief updating is positive. Secondly, updating (y-axis) generally increases with the imprecision of prior beliefs (x-axis). The curve corresponding to $\mu_0 = 45$ in Figure C5a shows, however, that updating can also decrease

with an increase in σ_0^2. The intuition behind this is that as σ_0^2 increases, an increasing proportion of the prior distribution travels beyond the 0.5 threshold but with almost all of the posterior distribution lying beyond 0.5 already, there is a ceiling effect on updating. Hence, marginal responsiveness becomes slightly negative. This is only the case for priors with means very close to 0.5 or very high standard deviations. Third, updating is generally higher when the prior mean is closer to the 0.5 threshold, barring ceiling effects that come into play for less precise priors.

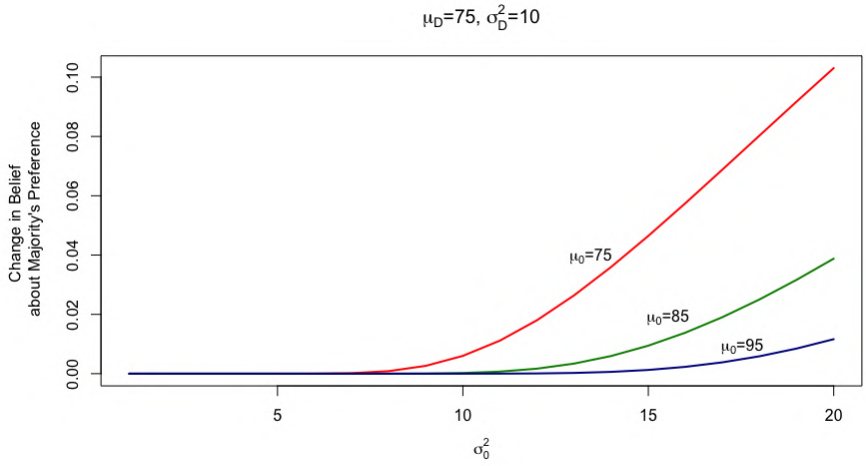
These simulations indicate my theoretical expectations about how politicians are expected to respond to new information about the preferences of citizens. First, I expect that politicians will update their beliefs and respond to new information. Second, they will do so even if the mean of their prior beliefs is accurate, as long as their prior belief is not very precise. Third, politicians are expected to respond more to new information when their prior beliefs are less precise. In particular, I expect them to respond more to women's preferences compared to men's preferences, because the standard deviation of prior beliefs is expected to be higher for women.

C.2 How does belief updating vary by signal characteristics?

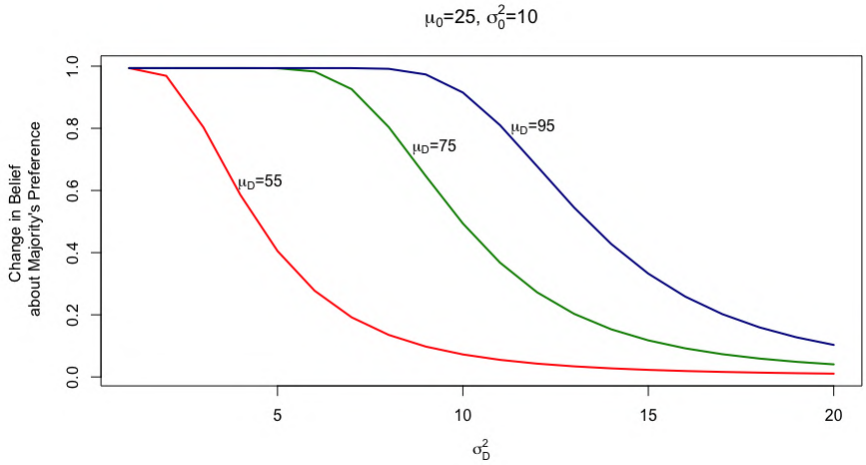
Figure C5c shows how belief updating varies by the mean and standard deviation of the signal. The prior mean is fixed at 25 while the prior standard deviation is fixed at 10. The signal mean varies from 55 to 95, with the standard deviation varying from 1 to 10. Results indicate that updating is higher when the signal is more precise, and when the distance between the prior mean and the signal mean is higher.



(a) Updating with Underestimated Prior



(b) Updating with Overestimated Prior



(c) Updating with Varying Signal Mean and Precision

Figure C5: Simulated Belief Updating

D Data & Sampling

D.1 The Issues

The three local issues are common trade-offs that local politicians face: whether additional resources or attention should be diverted to (i) solid waste versus drainage, (ii) fixing local streets or local water fixtures, and (iii) installing new street lights or new water filtration plants for clean drinking water. These six services are ranked by both citizens and politicians as being critical at the local level.

The six higher tier issues comprise both particular services or programs and policy issues. The *higher-tier services or programs* include the question of whether the government should prioritize the establishment and improvement of small clinics or large hospitals that provide specialized care. Second, they include whether the government at the national level should focus more on addressing electricity shortages or water shortages. Third, it includes a recent program by the provincial government to subsidize motorbikes for women, titled 'Women on Wheels'.

The *higher tier policy issues* are: (i) whether the government should address corruption or unemployment on a prioritized basis, (ii) whether infrastructure development project should go ahead if they risk causing environmental damage and (iii) whether the level of taxation and services should be decreased, should stay the same or should increase.

D.2 Sampling Strategy for Voter Survey

D.2.1 UC's and Wards

The sampling frame for the voter survey includes all households in 86 Union Councils in 4 geographically contiguous National Assembly (NA) constituencies in Lahore, Pakistan. The household survey sample is the same one used for Cheema et al. (2019). For three of the four NA constituencies (NA-125, NA-126 and NA-127), the sampled UC's comprise the universe of UC's that are contained in the NA. These numbered 23, 32 and 23 Union Councils respectively. For the remaining NA-128, a total of 8 geographically contiguous UC's were sampled. Within each UC, either (i) all six wards were sampled, for a randomly selected 28 UC's, or (ii) 5 out of 6 wards were sampled, for a randomly selected 48 UC's.

D.2.2 Individuals Within Wards

We used GIS software to drop 5 pins at random locations within the ward, with a minimum distance of 50m between any two pins. A team of enumerators comprising one male and one female enumerator proceeded to the random point using Google Maps. After arriving at the pin,

the enumerator team used the left hand rule to select a house to survey, which was described to enumerators as follows:

- Always follow the left-hand side of the street, such that houses are on your left-hand side and the street is on your right-hand side.
- From the start, leave the first four houses and knock on the door of the 7th house to survey. A house is defined as any building where people live, even if it has more than one families, it counts as one house.
- When you successfully survey a household, skip four houses and survey the 7th house on your left hand side.
- In the case when a household refuses or does not respond, do not skip houses. Go to the next house on the right. If that house also refuses, go to the house on the right of the house that originally refused. Once you are successful, then skip 6 houses again and survey the 7th household.
- If you reach the end of the street, turn left.
- If there are no more houses on the left-hand side or if you reach the ward boundary, cross the road/street and start walking in the opposite direction and follow the left-hand rule from there.
- If by following the left-hand rule you reach a house you already crossed, cross the road/street and start walking in the opposite direction and follow left hand rule from there.

Once a household has been selected using the left hand rule, the enumerators knock, introduce themselves to the person who opened the door and obtain consent. After obtaining consent, they note the number of adult men and women in the household. The survey software randomly selects male and female respondents from the household. The enumerators survey the selected respondents after obtaining consent.

D.2.3 Enumerator Training & Assignment

Experienced enumerators employed by the IDEAS in-house survey wing underwent an extensive in-office training session followed by an out-of-sample field pilot and a day of post-pilot debriefing. Following the training and piloting, the enumerators were assigned to teams comprising one female and one male enumerator each. Each team was randomly assigned a randomly picked set of 6-7 Union Councils. The order in which each team surveyed each Union Council was also randomly picked. Enumerators surveyed respondents of their own gender. A number of supervisors monitored each team on a rotating basis and data quality checks were applied on a daily basis as the enumerators uploaded surveys to the server.

D.3 Sampling Politicians

The sampling frame for the politicians includes all 776 PML-N elected local representatives in the 86 Union Councils elected in the 2015 Local Government Election. We were able to survey 653 local politicians, which constitutes 84% of all PML-N local elected representatives in the study area. This response rate compares favorably to other surveys of elite populations, which ranges from 15-20% in the United States (Butler and Dynes, 2016) to 15% in Canada, 25% in Israel and 75% in Belgium (Sheffer et al., 2018).

Table D11: **Response Rates by Politician Type**

Position	Universe	Surveyed	Percentage
General Member	475	411	86.5%
UC Chairman	77	66	85.7%
UC Vice-Chairman	77	60	77.9%
Woman Councilor	147	116	78.9%
Total	776	653	84.1%

The reasons for not being able to survey the remaining 123 includes death (14 politicians had passed away since their election), illness, migration, de facto retirement, and a lack of interest in being part of this study.

D.4 Randomization

The following is a complete list of randomizations performed for this study.

D.4.1 Politician Level

Politicians are divided into blocks defined by the National Assembly their Union Council is housed in and the position they serve in. All General Members in NA-125, for instance, constitute a block. Within each block, the following politician level randomizations take place:

- Preferences treatment: Each politician is assigned to one of six treatment groups ($p = 1/9$ each) or the control group ($p = 1/3$). The six treatments include receiving information on the preferences of (i) all citizens, (ii) men only, (iii) women only, (iv) all PML-N supporters, (v) male who support PML-N and (vi) women who support PML-N.
- Prior questions group: Each politician assigned to a treatment group is asked for their priors about that group. In the control group, each politician is randomized into being asked for their priors on one out of the six subgroups ($p = 1/6$ each).

- Letter Treatment: Each politician is assigned to receive the 'General Letter' or the 'President Letter' ($p = 1/2$ each).
- Priming: Each politician is assigned to receive the 'Citizens' Prime, the 'Own' prime, both of the primes or no prime ($p = 1/4$ each).

D.4.2 Issue Level

The nine issues are divided into three blocks of three issues each.

- For each treatment politician, the order in which treatment about each block is delivered is randomized. There are six possible permutations, and politicians are placed into each permutation with $p = 1/6$ each.
- Within each issue group, treatment politicians receive information about a particular issue with $p = 2/3$.

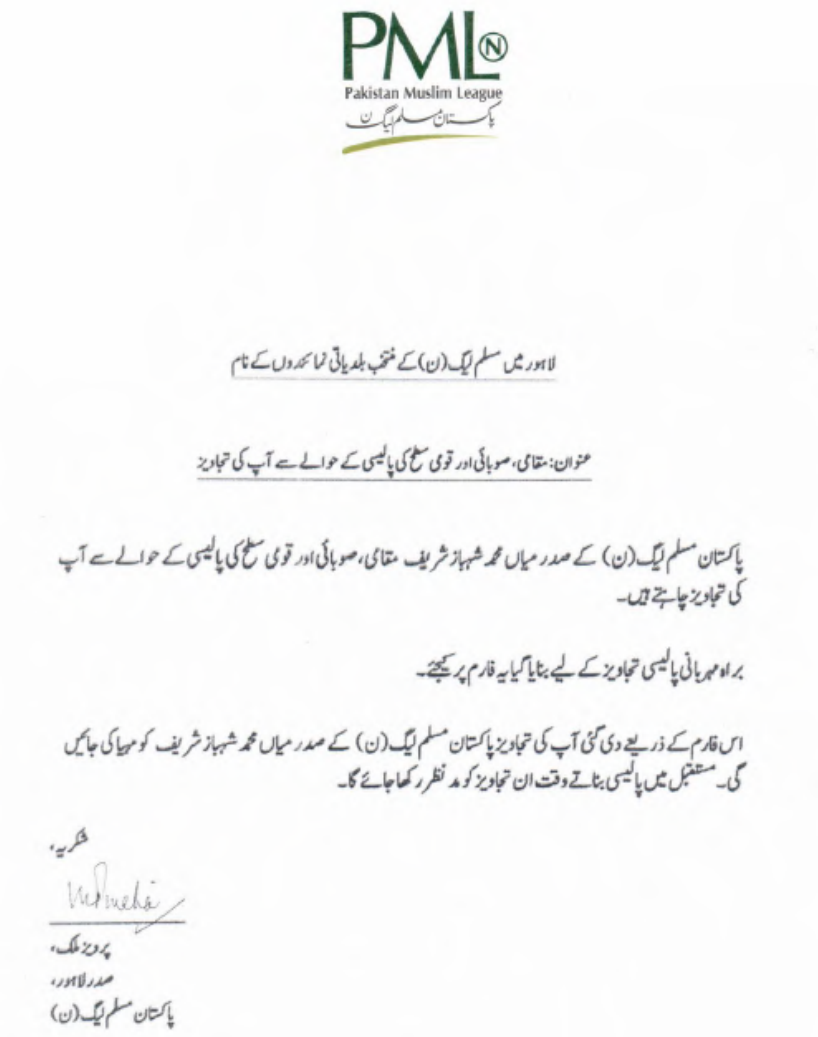
D.4.3 Union Council Level

Each Union Council is randomized into one of 9 'orders'. The experiment is conducted with all of the Union Councils in one order before moving on to the next. The alternate recommendations elicited through phone calls are elicited for order numbers 4, 5, 7, 8 and 9. While these orders were picked by the party based on availability, the collection of this outcome is uncorrelated with treatment since the orders were picked randomly.

E Materials

E.1 Party Letter to Local Politicians

This letter is addressed to the local elected representatives of PML-N in Lahore District, and is signed by the Lahore District President of PML-N. It states that the party leadership is seeking the recommendations of the party's local elected representatives on a set of local and higher-tier service delivery issues and requests them to fill out the recommendation form. It states that these recommendations will be provided to the party leadership and will be considered when making policy decisions. There were two variants of this letter: one mentioning the party leadership generally and one mentioning the PML-N President Shehbaz Sharif directly.



PML(N)
Pakistan Muslim League
پاکستان مسلم لیگ

لاہور میں مسلم لیگ (ن) کے منتخب بلدیاتی نمائندوں کے نام

عنوان: مقامی، صوبائی اور قومی سطح کی پالیسی کے حوالے سے آپ کی تجاویز

پاکستان مسلم لیگ (ن) کے صدر میاں محمد شہباز شریف مقامی، صوبائی اور قومی سطح کی پالیسی کے حوالے سے آپ کی تجاویز چاہتے ہیں۔

براہ مہربانی پالیسی تجاویز کے لیے بنایا گیا یہ فارم پر کیجئے۔

اس فارم کے ذریعے دی گئی آپ کی تجاویز پاکستان مسلم لیگ (ن) کے صدر میاں محمد شہباز شریف کو مہیا کی جائیں گی۔ مستقبل میں پالیسی بناتے وقت ان تجاویز کو مد نظر رکھا جائے گا۔

شکریہ،

پرویز ملک،
صدر لاہور،
پاکستان مسلم لیگ (ن)

E.2 Sample Page from Data Report

This is a sample of the citizen preferences treatment, providing politicians with data on what citizens prefer on a set of two local service delivery issues. It starts by stating the population whose preferences are being provided and giving some details about the survey. It then provides the proportions of citizens who preferred one option over the other in a set of three binary issues. The overall treatment consisted of three such pages.

حالیہ سروے پر مبنی عوام کی ترجیحات

کچھ پالیسیوں پر ہم آپ کو آپ کے وارڈ اور یونین کونسل سمیت قومی اسمبلی کے حلقے میں

مسلم لیگ (ن) کی حمایت کرنے والے مرد حضرات

کی رائے سے آگاہ کریں گے۔

یہ معلومات ہمارے حالیہ سروے پر مبنی ہیں جو کہ آپ کے حلقے سمیت لاہور کے مختلف حلقوں میں کیا گیا۔

یہ سروے الیکشن کے دو مہینے بعد اکتوبر ۲۰۱۸ میں کیا گیا، یعنی کہ شہریوں کی ترجیحات کے بارے میں یہ جدید ترین سروے ہے۔

سروے بین الاقوامی سٹینڈرڈز کے مطابق کیا گیا۔ آپ کو دی گئی معلومات صرف آپ کے حلقے کے سروے سے لی گئی ہیں۔

گلیوں کی صفائی یا نکاسی؟	
فیصد کا کہنا تھا کہ نکاسی زیادہ بڑا مسئلہ ہے	NA
فیصد کا کہنا تھا کہ گلیوں کی صفائی زیادہ بڑا مسئلہ ہے	NA

فلٹر پلانٹ یا سٹریٹ لائٹ؟	
فیصد کا کہنا تھا کہ سٹریٹ لائٹ زیادہ بڑا مسئلہ ہے	37
فیصد کا کہنا تھا کہ فلٹر پلانٹ زیادہ بڑا مسئلہ ہے	63

پانی کی سپلائی یا مقامی سڑکیں اور گلیاں؟	
فیصد کا کہنا تھا کہ مقامی سڑکیں اور گلیاں زیادہ بڑا مسئلہ ہے	14
فیصد کا کہنا تھا کہ پانی کی سپلائی زیادہ بڑا مسئلہ ہے	86

E.3 Sample Template for Future Preferences Report

منتخب بلدیاتی نمائندگان کے لیے شہریوں کی ترجیحات کی رپورٹ

نوجوان، درمیانی عمر اور زیادہ عمر کے شہریوں کی ترجیحات

نوجوان شہریوں کی ترجیحات (یہاں ترجیحات کا سوال آئے گا)	
فیصد نوجوان شہریوں کا کہنا تھا کہ وہ پہلے جواب کو ترجیح دیتے ہیں	---
فیصد نوجوان شہریوں کا کہنا تھا کہ وہ دوسرے جواب کو ترجیح دیتے ہیں	---

درمیانی عمر کے شہریوں کی ترجیحات (یہاں ترجیحات کا سوال آئے گا)	
فیصد درمیانی عمر کے شہریوں کا کہنا تھا کہ وہ پہلے جواب کو ترجیح دیتے ہیں	---
فیصد درمیانی عمر کے شہریوں کا کہنا تھا کہ وہ دوسرے جواب کو ترجیح دیتے ہیں	---

زیادہ عمر کے شہریوں کی ترجیحات (یہاں ترجیحات کا سوال آئے گا)	
فیصد زیادہ عمر کے شہریوں کا کہنا تھا کہ وہ پہلے جواب کو ترجیح دیتے ہیں	---
فیصد زیادہ عمر کے شہریوں کا کہنا تھا کہ وہ دوسرے جواب کو ترجیح دیتے ہیں	---

E.4 The Experimental Setting

This picture shows a typical setting in which the research team's interaction with politicians took place. Politicians typically met us in their offices. After a few survey questions, the research team member orally explained the three-page report on citizen preferences to treatment politicians. Next, they were given the letter from their party leadership shown in Appendix C and given a blank recommendation form from their party leadership, a blank envelope and some tape. They were asked to fill the form in private, sign the form, tape the envelope and to sign over the tape.

F Examples of Direct and Indirect Influences

These photographs provide examples of ways in which local politicians influence outcomes for citizens. The first picture shows an example of direct provision: a street light is installed directly due to the efforts of two local politicians, with their names being visible on the street light as a way to claim credit. The second picture shows an example of upward transmission of a local service delivery need to higher-tier party leadership. The filter plant mentions the "special effort" of local politicians elected from UC-32 who recommended the filter plant as well as the name of the Member of National Assembly (in this case, Hamza Shahbaz) who allocated funds.

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