# Norms, Beliefs, and Networks: Descriptive Findings on Women's Political Participation in Pakistan 

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#### Abstract

Why does women's political participation continue to lag behind men's in much of the world? This letter argues that one reason for the political participation gap is a discrepancy between what people believe others think about women's political participation and what those people actually think. Using data from 37 communities in Pakistan, we first show that expectations of norms around women's political participation are more pessimistic than actual beliefs. Second, despite previous evidence that the household primarily structures women's behavior in patriarchal societies, we find (1) that women's social networks are distinct from those of men in their households and (2) that women's pessimistic expectations about others' beliefs are more strongly correlated with beliefs of socially proximate women than with men in their households. Efforts to reduce the gender gap in political participation may therefore benefit from targeting pessimistic expectations of norms and focusing on women's distinct networks.


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## 1 Introduction

Across the developing world women's political participation continues to lag behind men (Revenga and Shetty, 2012). If women do not participate at parity with men, their distinct preferences may not get represented in the policy-making process (Gottlieb et al., 2016; Khan, 2017; Bleck and Michelitch, 2018; Brule and Gaikwad, 2020). Previous research has examined a host of ways in which women's political participation can be boosted including, among others, the election of more women to office (Campbell and Wolbrecht, 2006; Foos and Gilardi, 2019; Lawless, 2004), strengthening women's networks (Prillaman, 2018; Sinclair, 2012), and targeting men who act as gatekeepers (Cheema et al., 2019a).

In these studies and others (e.g. Teele, Kalla and Rosenbluth, 2018; Robinson and Gottlieb, 2019; Brule and Gaikwad, 2020), patriarchal norms are identified as key determinants of persistently low political participation among women. When choosing how to act, social norms interact with an individual's privately held beliefs as well as their internal calculus about the private benefits and costs to a behavior (Tankard and Paluck, 2016). In the context of turning out to vote, running for office, or discussing politics in general, social norms rewarding or punishing conformant behavior are likely to be large factors that may even shape private returns to political engagement, especially for women (e.g. Bond et al., 2012; Gerber, Green and Larimer, 2008).

Continuing from this line of inquiry, this letter argues that misplaced expectations around norms-for example, whether one expects that others believe women should have the right to participate in politics - could be one source for why women's political participation continues to suffer. In doing so, our aim is to highlight how examining expectations of what is appropriate can present scholars with both challenges and opportunities in the design of studies that aim to close the gender gap in political participation.

We analyze new census and social network data on 3,738 households in 37 communities in Pakistan, where turnout among women in the recent 2018 general elections was 9 percentage points lower than among men and almost no woman ran for office on an open seat. We
highlight two descriptive patterns.
First, moving beyond documenting the existence of patriarchal norms, we show that there exists considerable variation in people's expectations around those norms and, importantly, that this variation skews towards pessimism. Both men and women are likely to believe that others in their communities are substantially less supportive of women's political participation than they truly are. This first result connects existing lines of inquiry on individual and community level determinants of women's political participation by highlighting how variation in beliefs around norms carries implications for how we design interventions to improve political behavior to be less gender-biased.

Second, we explore both the household and social network correlates of expectations about norms. Focusing first on the household, we show that women's expectations around what is acceptable in the community exhibits no correlation $(r=-0.02)$ with the personal beliefs of men in their household. This finding is in line with new research that challenges the notion that women hold the same preferences as men in the household (Khan, 2017) and highlights social ties as a source of these distinct preferences. Next, unlike the household results, we show that the beliefs of other women in a woman's social network more strongly predict their expectations of what is appropriate in the community $(r=0.22)$. Finally, we show that women's social networks have little overlap with those of men, suggesting that the information environment that women face is distinct from that of men. Together, these findings highlight the potential role women's social networks play in the formation of their beliefs and expectations of norms, both correct and incorrect. In doing so, these results contribute to a growing appreciation of the role of social networks in the study of political participation and the gender gaps within (Prillaman, 2018; Sinclair, 2012).

## 2 The literature

Social norms and political participation Norms and expectations about norms have important roles in shaping human behavior. Norms are often defined as either the way things are or the way most people think things ought to be. Actual practices and behaviorshow people behave - are characterized as descriptive norms and individuals hold empirical expectations that are their beliefs about how others behave. The collection of beliefs about what ought to be-how people should behave - are often called prescriptive or injunctive norms and individuals hold normative expectations about what others believe ought to be. In this paper, we primarily focus on the first-order beliefs (the personally held beliefs about how things ought to be) and second-order beliefs (the normative expectations about what others think) individuals hold about female political participation.

A large body of evidence from around the world (e.g. Teele, Kalla and Rosenbluth, 2018; Robinson and Gottlieb, 2019; Brule and Gaikwad, 2020) and from Pakistan (Khan, 2017; Cheema et al., 2019b) highlights the role norms play in limiting female political participation. Recent experimental evidence suggests that correcting misperceptions of norms can alleviate constraints women face in the context of the labor market (Bursztyn, González and Yanagizawa-Drott, 2018). As a result it is important to consider both (1) perceptions of norms rather than personally held beliefs as well as (2) the gap between perceptions of norms and actual prescriptive norms.

The role of social networks Social networks affect both political participation and the norms that may influence political participation. Large-scale randomized controlled trials (e.g. Bond et al., 2012; Gerber, Green and Larimer, 2008) demonstrate how peer pressure and information about peer's behavior can mobilize voters. Furthermore, individuals who are central in social networks can influence norms and change behavior by acting as social referents (Paluck, Shepherd and Aronow, 2016)-those to whom individuals look for cues about appropriate behavior.

In the specific context of women's political participation in South Asia, recent experimental evidence reveals that the number of ties is also important for female political participation (Prillaman, 2018). Prillaman (2018) argues that one of the key pathways through which social networks mobilize women is through increasing capacity for collective action. Indeed, in Pakistan, voting for women may be a uniquely social activity for which social ties may be a necessary prerequisite. In a rural sample in Sindh, Pakistan, (Giné and Mansuri, 2018, p. 221) find that only two percent of women who voted in 2008 traveled to the polling station alone. Over 87 percent of women who voted traveled to the polling station with another woman.

## 3 Context and Data

Background Women's political participation lags far behind that of men's in Pakistan. Not only is there a large and persistent gap in turnout during elections, women almost never run in open races and are scarcely included in public deliberations on policy. The Election Commission of Pakistan has responded by instituting gender quotas on candidate lists as well as minimum female turnout thresholds for elections to be considered valid. In addition, elected governments have also set up national and provincial commissions on the status of women to ameliorate political and social impediments to women's participation.

Data collection In this context, we carried out a survey in March and April of 2019 in rural District Peshawar, Khyber Pakhtunkhwa (KP), Pakistan. District Peshawar is home to the capital of KP, Peshawar city, but also contains many settlements outside the city. District Peshawar is one of the most developed districts in KP, with a Human Development Index of 0.756 in 2015, around the same level of countries such as China, Ukraine, and Ecuador. Yet, women's political participation lags behind men, and there have even been
sporadic instances of women being barred from voting outright. ${ }^{1}$
We focus on rural settlements in District Peshawar in order to simplify the measurement of social networks. We only allow individuals to be connected to households within their own settlement. In urban areas, this is too restrictive as a distinct settlements or neighborhood is too difficult to define within an urban environment.

We attempted a census and door-to-door survey of all households in 37 settlements in District Peshawar. In total, there are 4,892 households in these 37 settlements, an average of about 132 households per settlement. In each household, we attempted to survey both male and female heads of household separately. ${ }^{2}$ We were able to survey both female and male heads of household in 3,738 households; to facilitate intra-household comparison, we only admit these households into our analysis.

Measuring beliefs and expectations We asked all men and women respondents how strongly they agreed or disagreed with statements that women (1) should discuss politics in public gatherings, (2) should have the right to vote, and (3) should be able to run for office, on a five point scale. We take responses to these questions as our measures of respondents' first-order beliefs-that is, what they personally think about these issues. ${ }^{3}$ We analyze the questions separately and in an additive index; we clarify which below. We also asked respondents how many other men and how many other women, out of a typical 10 in their

[^1] 29-ecp-takes-notice, accessed Jul 29, 2020
${ }^{2}$ Households are defined as families that share a common living and eating area. The average household size in our sample is 4.8 and household heads are often the oldest member of the household but are sometimes the more socially active middle-aged adults if there were multiple generations of adults in the household.
${ }^{3}$ Answers across the three domains are generally correlated within respondent but not within each household (see Appendix Table B.1).
community, would voice agreement with the three aforementioned statements. We take responses to these questions as our measure of respondents' second-order belief, that is their expectations around what other's in their community think. ${ }^{4}$

Measuring social networks To construct social networks we asked all respondents, both women and men, to nominate up to five other households within the same settlement that they engaged with in one of four ways: (1) family, (2) socialization, (3) discussion of community issues, and (4) discussion of who to vote for. ${ }^{5}$ We then take the union of these nominations as the network of interest.

We build directed social networks by linking households to one another separately for men and women. That is, the only difference across the female and male-nominated networks is whether the respondent nominating other households is the female or male head of household. Figure 1 is a representation of one settlement's women's (left) and men's (right) networks. We keep the position of each household fixed across the two panels. The size of the node for a household corresponds to the centrality as measured by the indegree of that household. In Figure 1, it can be seen that the female-nominated network is as dense as the male-nominated network.

## 4 Results

## Expectations about social norms are more pessimistic than actual beliefs. Ta-

 ble 1 presents evidence that both women and men are pessimistic about norms regarding women's political participation. In the first column of Panel A in Table 1, we report that just over 80 percent of women personally agree that women should be discussing politics in${ }^{4}$ See Appendix B for the question wording.
${ }^{5}$ Note, the limit of five households is not seriously problematic for our measurement as respondents only listed five households $1.02 \%$ of the time.

Figure 1: Example of one settlement's networks

public, have the right to vote, and be able to run for office. ${ }^{6}$. However, as reported in the second and third columns under second-order beliefs, other women and men in the community severely underestimate this support. Women underestimate these personal first-order beliefs by 15 to 18 percentage points, while men underestimate support for women's political participation among women by 22 to 32 percentage points.

The pattern for men in Panel B is similar. Men are also personally supportive of women's political participation as women, though there is interesting variation in their support for formal behavior, like voting and running for office, versus informal substantive participation in issues via deliberation. Furthermore, when asked about how likely men are to support women's political participation, both women and men are very pessimistic, and even more so than they were about women's beliefs.

These patterns are further evident when we plot the difference between the first- and second-order beliefs of respondents in Figure 2. We refer to this difference as the 'wedge' in beliefs following Bursztyn, González and Yanagizawa-Drott (2018). We can see that the
${ }^{6}$ We take either weak or strong agreement, as opposed to neither agreeing nor disagreeing, on the five point scale as a binary indicator of agreement.

## Table 1: Pessimistic expectations of community support for female political participation

| Panel A: What women think, and what other's think about their beliefs |  |  |  |
| :---: | :---: | :---: | :---: |
|  | First-order beliefs: | Second-order beliefs: |  |
|  | What women personally think | What women think about other women's beliefs | What men think about women's beliefs |
| \% who agree that women should ... |  |  |  |
| ...publicly discuss politics | $\begin{aligned} & 82.4 \\ & (0.6) \end{aligned}$ | $\begin{array}{r} 63.9 \\ (0.4) \end{array}$ | $\begin{aligned} & 49.6 \\ & (0.4) \end{aligned}$ |
| ...have the right to vote | $\begin{aligned} & 84.5 \\ & (0.6) \end{aligned}$ | $\begin{aligned} & 69.0 \\ & (0.4) \end{aligned}$ | $\begin{array}{r} 62.6 \\ (0.4) \end{array}$ |
| ...be able to run for office | $\begin{aligned} & 83.2 \\ & (0.6) \end{aligned}$ | $\begin{gathered} 64.9 \\ (0.4) \end{gathered}$ | $\begin{aligned} & 54.4 \\ & (0.4) \end{aligned}$ |
| Panel B: What men think, and what other's think about their beliefs |  |  |  |
|  | First-order beliefs: | Second-ord | beliefs: |
|  | What men personally think | What women think about men's beliefs | What men think about other men's beliefs |
| \% who agree that women should ... |  |  |  |
| ...publicly discuss politics | $\begin{aligned} & 75.6 \\ & (0.7) \end{aligned}$ | $\begin{aligned} & 58.3 \\ & (0.4) \end{aligned}$ | $\begin{aligned} & 40.1 \\ & (0.3) \end{aligned}$ |
| ...have the right to vote | $\begin{aligned} & 93.9 \\ & (0.4) \end{aligned}$ | $\begin{aligned} & 64.0 \\ & (0.4) \end{aligned}$ | $\begin{aligned} & 58.5 \\ & (0.4) \end{aligned}$ |
| ...be able to run for office | $\begin{aligned} & 85.0 \\ & (0.6) \end{aligned}$ | $\begin{aligned} & 57.9 \\ & (0.4) \end{aligned}$ | $\begin{aligned} & 46.8 \\ & (0.3) \end{aligned}$ |

[^2]distribution is skewed more towards pessimism (left of zero) than optimism (right of zero). Further, this skew is starker among men (right column) than women (left column), suggesting that men are more pessimistic than women. If men are important gatekeepers of women's political participation (Cheema et al., 2019a), this descriptive finding suggests that we might need to consider interventions that reduce the informational asymmetries between what men personally believe and what they think other men and women believe in this communities as one way of improving women's political participation.

However, in addition to the idea that men's misperceived beliefs are important, the results here also show that women too have pessimistic expectations of what others believe.

Figure 2: Distribution of differences between first and second order beliefs


Note: Second-order beliefs are respondents' expectations on others' beliefs. First-order beliefs are respondents' own beliefs.

On the one hand, one might argue that women's misperceptions are just a consequence of men's misperceptions because their beliefs should be linked in a model where women learn political information through the men in their households. On the other hand, as we will show, it could also be the case that women have independent networks that allow them to form beliefs through channels other than the men in their households. This opens space for interventions to move the needle on belief correction before behavior is controlled within the household. We now explore these questions with our network data.

Social desirability bias is a potential concern in the analysis above though recent evidence suggests that it is less prevalent than commonly assumed (Blair, Coppock and Moor, 2020). However, in our context where norms are conservative, as shown by the second order beliefs of respondents, it is likely the case that concerns of upwardly biased self-reported support for women's political rights are mitigated or even reversed, when the survey is carried out by enumerators from one's own district. ${ }^{7}$
${ }^{7}$ Indeed, Bursztyn et al. (2019) show that people from similar communities in Pakistan

## Women's expectations do not correlate with men's beliefs in their household.

 Using the social networks of both men and women, we can measure whether women's secondorder beliefs/expectations correlate with the beliefs of (1) men within their household and/or (2) others in households to which they themselves are socially tied. Women are not sorted into households or networks at random; nonetheless, the correlations we present below paint a stark picture of whose beliefs may matter-and whose may not-in shaping women's beliefs. If pessimistic beliefs impede political behavior, this analysis identifies the peers who may be most useful in correcting those beliefs.Contrary to the view that men's beliefs strongly dictate the beliefs and information held by women in their households, we see in Panel A of Figure 3 that women's expectations about the beliefs of men regarding women's political participation are not strongly correlated with the male head of their household. The correlation coefficient is near zero between the y-axisa sum of men's responses to the five point (0 to 4) agreement scale across the three domains of political participation that we study - and the x -axis - a binned average of women's secondorder beliefs about how many men out of 10 would support each of the three domains of women's political participation.

The implication of this near zero correlation is that the men in a woman's household may not be solely determining how their expectations of what others think emerge. Of course, we are not arguing that men in our setting are not exercising control over the behavior of women. Our point is simply to assess the information environment of belief formation and we show that that is not correlated with the actual beliefs of men of the same household.

## Women's expectations correlate with the beliefs of women in their social net-

 work. Scholars like Prillaman (2018) and Larson and Lewis (2017) have identified that social networks play a key role in the spread of information and political behavior. If theare less likely to publicly express anti-American beliefs because their second order beliefs suggest that their communities are more pro-American than them.

Figure 3: Correlation of women's second-order beliefs with actual beliefs of others
Panel A: With men within the household


Women's average second-order beliefs about men's beliefs

Panel B: With men and women in connected households


Note: The x-axis is a woman's second-order beliefs about the rate of support averaged across the three forms of political participation. Data are binned along the x -axis. In Panel A, the y-axis is the first-order beliefs of the man in the same household; it is a sum of their agreement with the three forms of female political participation (each measured as a five point scale from 0 to 4 ; see Appendix B for more detail). In Panel B, the y -axis is the average of first-order beliefs - the 12 point scale used in Panel A-of men (i) and women (ii) in households one step away on their social network. We report the correlation coefficient between the raw values of the x -axis and they y -axis as $r$, along with the relevant p -value.
social networks of men and women are the same, it could be the case that the women's social networks we measure are just measuring for information that men themselves are obtaining about norms around women's political participation. ${ }^{8}$ The reality however seems quite different: Table 2 shows that women's social networks in our communities have little overlap with those of men's, suggesting that women may face a separate social environment than men.

Table 2: Average number of social network ties per household

|  | All ties | Male-only | Female-only | Shared |
| :---: | :---: | :---: | :---: | :---: |
| Total network (union) | 8.03 | 3.75 | 3.79 | 0.49 |
| Family | 3.16 | 1.58 | 1.47 | 0.12 |
| Socialization | 3.2 | 1.59 | 1.47 | 0.14 |
| Community issues | 2.59 | 1.3 | 1.2 | 0.09 |
| Voting decisions | 2.41 | 1.15 | 1.21 | 0.05 |

To what extent then do women's expectations correlate with the actual beliefs of men and women in their social network? First, our data show that the second-order beliefs women hold about men in their communities are not correlated much with the actual support for women's political participation among men in the households these women are connected to. See the Panel B(i) of Figure 3 that shows the correlation is low and has a negative average sign. One interpretation of this is that women are largely guessing at what men in their communities believe, which may be the case if women rarely speak with men outside of their own household. This is the case for the communities we study.

In contrast to their beliefs about men, women have a better idea about what is believed by other women. Figure 3 Panel B(ii), shows that women's second-order beliefs are positively correlated with the first-order beliefs of women in their social network: that is, women who believe that the norm is more supportive also belong to social networks of women who are personally more supportive of women's political participation.

[^3]While a positive correlation exists between a woman's second-order beliefs and the beliefs of women who are her social neighbors, Panel B(ii) of Figure 3 also shows that the wedge might be particularly large for women who are the most pessimistic: the data show that women with second order beliefs below 50 still have social connections that still support most forms of female political participation. One reason for this could be that networks serve information and if one is not central, then one's information environment is weak. We show consistent evidence for this in Appendix D: the wedge is smaller for women who are the most central in social networks.

## 5 Conclusion

This letter contributes to the literature on reducing the gender gap in political participation (Campbell and Wolbrecht, 2006; Lawless, 2004; Prillaman, 2018; Foos and Gilardi, 2019; Cheema et al., 2019a) by presenting evidence of the existence of a pessimistic gap between what individuals expect are norms around women's political participation and what is actually believed by others in their community. We argue that this pessimistic gap could be one reason why women's political participation continues to lag behind that of men. The implication is that targeting these misperceived norms could be a fruitful avenue for further inquiry in the rich recent literature working to bring women's political participation at parity with those of men.

To that end, we examine correlates of this misperception, identifying avenues that may be particularly fruitful for further research. We show that women's pessimistic expectations has little correlation with the beliefs of men within the household. This challenges the notion that in patriarchal societies political beliefs are uniform within the household. Instead, we find that misperceptions are correlated with the beliefs of neighbors in a woman's own social network which are independent from the networks of men.

Why are these results theoretically important? While men may still be important gate-
keepers of women's behavior, the existence of independent social networks for women that predict their expectations implies that this gate-keeping may occur later in the behavioral decision making process than norm setting and social expectations. This opens the possibility for interventions that focus on women and their social networks.

Evidence on women's political participation in Pakistan, the fifth most populous country in the world, remains thin. While, this papers adds an important data point to the literature, our site of study is one where patriarchal norms are perhaps particularly strong. If interventions focused on the social context of women are promising in this setting, then it may be that in places with more permissive norms, targeting women and their social networks may be even more effective.

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## ONLINE APPENDIX

## A Statement of Ethics

We administered the survey questions to women and men respondents separately. Women were approached by women enumerators inside the households and were administered a verbal consent. Similarly, representative men of the household were interviewed by male enumerators after verbal consent. We did not pay any respondents for participation in the survey and there is no direct benefit from participating. We did not exclude any household from the survey.

## B Belief elicitation: survey wording and correlations

This appendix contains the exact English language question wording for the first- and secondorder beliefs analyzed in this paper, as well as the correlations across domains for the firstorder beliefs. These questions were translated and delivered in Pashto, the main language in our study area.

## B. 1 First-order beliefs

- Women should have the right to vote if they so choose. How much do you agree with this statement? (Strongly disagree, Disagree, Neither disagree nor agree, Agree, Strongly agree)
- In your personal view, do you think women should be able to participate in gatherings to discuss politics? (Definitely no, Probably no, Maybe, Probably yes, Definitely yes)
- In your personal view, do you think women be able to run for office in local elections? (Definitely no, Probably no, Maybe, Probably yes, Definitely yes)

Figure B. 1 presents the correlations across the three domains for each women and man in the sample. The correlations between women and men are the correlation of these beliefs
within the household. In general, there are positive correlations between the domains within each respondent while there is little correlation within the household.

Figure B.1: Correlation of a household's first-order beliefs across domains


This figure contains the Pearson correlation between the 5 point responses of personal support for each of the three domains of women's political participation. The correlation within gender is the correlation of each respondent's answers; the correlation across genders is the correlation of the household's answers.

## B. 2 Second-order beliefs

- Women should have the right to vote if they so choose. Out of 10 typical [women/men] in your village, how many would agree to this statement?
- Out of 10 typical [women/men] in your village, how many think that women should be able to participate in gatherings to discuss politics?
- Out of 10 typical [women/men] in your village, how many think that women should be able to run for office in local elections?


## C Social network for all settlements

Figure C.1: Women and men-nominated networks for all 37 settlements



$$
\text { Indegree • } 0 \quad \text { • } 100 \quad \bullet \quad 200 \quad \bullet \quad 300
$$

## D Network centrality and beliefs

The indegree is the number of times that a particular household is nominated by other households in any one of the four kinds of networks. As such, it serves as a measure of the centrality of a household in a social network. For example, if household A is mentioned as a family member of household B and as a household that household C socializes with, then it has an indegree of two.

In Figure D.1, we show that both first- and second-order beliefs of women are correlated with their indegree centrality: the more often a woman's household is nominated as a social tie by other women, the higher both her first- and second-order beliefs are.

One potential interpretation of this result that is that women who have more connections are likely to have a better information environment than women who are less connected with others. This allows them to form beliefs that are more accurate for the community as a whole.

Figure D.1: First- and second-order beliefs of women by network centrality



[^0]:    *We are grateful for funding from the Jameel Abdul Latif Poverty Action Lab, The Stanford King Center on Global Development, and the International Growth Center. We thank Wagma Farid, Mamoor Ali Khan, and Milad Khattak for research assistance and our enumerators for their work in the field. We also thank Sarah Khan and Soledad Prillaman, and seminar participants at EGEN and EGAP for helpful comments and suggestions.

[^1]:    ${ }^{1}$ See https://tribune.com.pk/story/1766054/women-voters-allowed-vote-na-

[^2]:    Standard errors reported in parentheses. The personal beliefs are the percent of respondents who either "agree" or "strongly" agree with statements of support for the different kinds of female political participation. The full question wording can be found in Appendix B. The expectations are averages of predicted percentages derived from the question: "How many other [men/women] in your settlement would agree with the statement ...". All differences between first and second-order beliefs are statistically different with $\mathrm{p}<0.01$.

[^3]:    ${ }^{8}$ This explanation is less plausible because we already noted above that men's beliefs are not predictive of women's beliefs within the same household.

