Tokenism or Agency? The Impact of Women's Reservations on Panchayats in South India[*]

Timothy Besley
London School of Economics

Rohini Pande
Yale University

Vijayendra Rao
World Bank

Radu Ban
London School of Economics

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1 Introduction

One of the most remarkable experiments in building inclusive democratic institutions has been the attempt to improve the representation of women in local government in India. The 73rd amendment to the Indian constitution, passed in 1992, mandated that no less than a third of the total number of seats in village governments (panchayats), and no less than a third of the office of Chairperson of the panchayat should be reserved for women. The aim of this was to ensure that women would have a voice in local government and, ultimately, help facilitate the formation of a more gender equal society.

There has been a lot of speculation, and some anecdotal evidence, on how well this policy has worked. These can be classified into four broad categories – we will label them "pessimistic" and "optimistic":

Pessimistic:

1)   That women who stand for elections in reserved constituencies would be tokens of powerful interests in the village. Poorly educated, elderly women from impoverished, easily manipulated, families would be picked by elites to run (e.g. Ramesh and Ali, 2001 [10]),

2)   A variant of 1) saying that the women would instead be poorly educated but picked from the same wealthy, powerful families as the existing political elite and would, therefore, serve the interest of the elite.

Optimistic:

3)   Effective, educated women would choose to run for elections, and would serve to represent the interests and preferences of women.

4)   That women, because they are newcomers to the political process, would be more enthusiastic and less corrupt and therefore more effective than entrenched male politicians. They would therefore generally improve the quality of governance (e.g. Vyasulu and Vyasulu, 1999 [13])

Recent econometric work by Chattopadhyay and Duflo (2004b)[5] - henceforth CD - looking at panchayats in West Bengal and Rajasthan examined these issues in some detail and found some evidence consistent with the third hypothesis: Women leaders tend to invest more in goods where women have expressed a preference, and less in goods preferred by men. Specifically, women leaders in West Bengal tend to invest more in water and road projects, and less in non-formal education,while in Rajasthan they invest more in water and less in roads. CD are able to identify the causal impact of reservations since they establish that reservation status is rotated among all GPs on a random basis – which allows the reservation process to be treated as a randomized trial.

While CD's results convincingly demonstrate the effectiveness of the panchayat reservations experiment, the results are restricted to two states, Rajasthan and West Bengal, of a very large and diverse country. These states, both from the north, are among the most male-biased in the country: Rajasthan ranks 21st and West Bengal 18th out of 24 states in a composite index of the status of women in India (Filmer, King and Pritchett 1998 [7]). Thus, a question remains of how applicable these results are to the rest of the country. One indicator of this is CD's finding that women pradhans in reserved constituencies tend to be worse educated than pradhans (almost all men) in unreserved constituencies, a fact that they attribute to the possible existence of tokenism. This, however, begs the question of whether this gender differential in education reflects patterns in the general population or is a consequence of the reservations system. It also raises an important secondary question of whether the quality of pradhans matters more in reserved panchayats; do better educated women function more effectively as pradhans?

Another important issue, a major theme in the "action research" literature, is the salience of local structures of inequality and power (e.g. Rai et al. 2001, Chp. 5 [9]) Villages dominated by powerful caste groups tend to be much more dictatorial. Thus, when such villages are reserved for women one expects that the pradhans would be more likely to be subservient to elites. This raises the question of whether local structures of oligarchy and inequality have more influence over women pradhans.

In this paper we examine the impact of women's reservations in village panchayats in South India. The four southern states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu are interesting for two reasons:

First in contrast to West Bengal and Rajasthan, they have relatively low gender disparities compared to the rest of the country – with Kerala ranked on the top of all major Indian states on the status of women index (Filmer, King, Pritchett 1998 [7]). Thus comparing the CD paper with these results could provide some valuable insights into how women's reservations works within relatively more gender-equal societies.

Second the four states present an interesting comparison within themselves in their approach to decentralization: Kerala and Karnataka have been among the leaders in promoting village democracy in India. Karnataka has had women's reservations in place since 1959, and in 1983 it passed landmark legislation giving panchayats a streamlined organizational structure that served as a model for the 73rd amendment. Kerala has had a more chequered history, but was one of the first states to adopt and implement the 73rd amendment. This has been followed by a commitment to

give panchayats meaningfully large budgets and the power and authority to make decisions. Andhra Pradesh on the other hand, despite a long history of panchayat legislation has not had regular elections. Moreover, since 1997 the state government also instituted a system of "participatory governance" that served to undermine the authority of panchayats. Tamil Nadu, similarly, has instituted reforms from the 73rd amendment but without giving village panchayats much teeth with budgets and placing most of the decision making at higher levels of government. The four states thus provide an interesting contrast to study the impact of the 73rd amendment [1].

2 Data and Methodology

2.1 Sampling Strategy

Our sample consists of 523 villages in the four states and about 5000 households within them. Details of the sampling strategy are available in Besley et al (2004)[2]. We selected, using a strategy designed to control for path-dependencies and cultural factors while making state comparisons, two districts in AP – Medak and Chithoor, three in Karnataka – Bidar, Kolar and Dakshin Kanada, two in Kerala – Kasargod and Palakkad, and two in Tamil Nadu – Dharmapuri and Coimbatore.

The blocks are divided into several Gram Panchayats (henceforth GPs) or village government units – each of which consist of between 1 and 6 villages depending on the state. From each sampled block , in the states of AP, KA and TN, we randomly sampled 6 GPs in every block. In Kerala the population per GP is roughly double that in the other three states. For this reason in Kerala we sampled 3 GPs in every block. This procedure gave a total of 201 GPs. From these we selected a village sample. In AP, Karnataka and Tamil Nadu we sampled all villages if the GP had 3 or fewer villages. If it had more than three villages, then we selected the pradhan's village and randomly selected two other villages. We excluded all villages with less than 200 persons from our sampling frame. All hamlets with population over 200 were considered as independent villages in drawing the sample. In Kerala we directly sampled wards instead of villages (as villages in Kerala tend to be very large) – we sampled 6 wards per GP. This gave us a final village sample size of 527 villages[2]. For sampled villages, any associated hamlets

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[1] See (Matthew and Buch, 2000 [8]) for a detailed account of the history of panchayats at the state level.

[2] The state-wise break up is AP: 69 villages, KA: 182 villages, KE: 126 wards; TN 129 villages.

were also included as part of the sample.

From every sampled block in AP, KA and TN we randomly selected 3 of our 6 sampled GPs and conducted household interviews in all sampled villages falling in these GPs. In Kerala we randomly selected 2 GPs in one block and one GP in the other block (the selection of which block to sample how many GPs from was also random), and within sampled GPs we conducted household interviews in all sampled wards. Overall this gave us a final sample size of 5180 households[3]. Twenty households were sampled at random from every selected village[4], of which four always belonged to Scheduled Caste or Tribes (henceforth SC/ST – who benefit from affirmative action programs mandated by the Indian constitution). In addition to these randomly sampled household the President of the GP – the pradhan – was also subjected to a household interview with some supplementary questions. Thus our sample of pradhans coincides exactly with the GPs. Pradhans were not available for interviews in a few of our GPs – so our final pradhan sample is reduced from 201 to 192.

2.2 Questionnaires

Data was collected at the village, pradhan and household level. At the village a questionnaire was administered using Participatory Rapid Appraisal (PRA) techniques (Chambers 1997[3]) to a group of men selected to represent different groups in the village, to assess their views on problems in the village, the work done by panchayat, and obtain measures of inequality and oligarchy. In addition PRA techniques were also employed on a group of selected women to get measures of women's preferences on problems faced by the village. A facilities assessment was conducted by an investigator devoted to the task of looking at the quality of schools, clinics, roads, drinking water, and sanitation. We also obtained secondary data from the 1991 census of India for the villages in our sample.

In addition to this village level data, one randomly chosen adult from every household in the sample was asked questions on the household's socio-economic status, household structure, views and use of public services in

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[3]Number of villages for household sample were: AP: 32 villages, KA: 90 villages, KE 66 villages, TN 71 villages.

[4]The survey team leader in every village walked the entire village to map it and identify total number of households. This was used to determine what fraction of households in the village were to be surveyed. The start point of the survey was randomly chosen, and after that every Xth household was surveyed such that the entire village was covered (going around the village in a clockwise fashion with X=Number of Households/20).

the village, private government benefits. They were also asked to rank-order problems in the village. Since the sample is divided between male and female respondents this provides yet another source of information on gender differences on preferences about village problems. All pradhans in the sampled GPs had to answer the household questionnaire, but were also asked a series of questions to assess their knowledge about the political process – such as the names of prominent elected officials and reservation rules.

2.3 Identification

The identification method employed in this paper is very similar to CD. All GPs within a block are selected for women's reservation by rotation, with a third of all GPs mandated to be reserved for women pradhans at any given time. The method of rotation varies across states and is determined by the state's election laws. Typically a list of GPs is prepared for each block – ordered by the proportion of women in the population, and the first GP in the list selected for reservation in the first election, along with the fourth, the seventh and so on, skipping three in sequence. In the next election the second GP in the list is selected, and additional GPs picked again by skipping three sequentially. This method, while not perfectly random, ensures that GPs are selected for women's reservation via an exogenous process. Two of the states – AP and Tamil Nadu have direct elections for the pradhan – akin to a presidential system, while two – akin to a prime ministerial system - have indirect elections. Every village is divided into wards, each of which elects a member to the panchayats, and each ward is also reserved using a rotation system. Thus 1/3 of all GP members are always women. In reserved GP's with indirect elections the pradhan is elected from among the women ward members.

To test the exogeneity of the reservations system we regress a dummy for women's reservations, one at a time, on 11 measures of public service quality and general levels of development from the 1991 census. We also regress it on measures of village inequality and caste composition collected from our survey in 2002. Since elections in these villages were all completed prior to our survey, and census data are available to the election commissions to determine the composition of constituencies, if villages were selected for reservations on the basis of any endogenous criteria we would expect to see a correlation between reservations status and at least some of the census outcomes. On the other hand if the villages were selected for reservations on the basis of some social or cultural criteria – e.g. being relatively equal

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or unequal, or with low levels of upper caste domination, etc. – measures of social inequality would be correlated with reservations status. State dummies are also included in all these regressions to allow for the possibility that states may have implemented the 73rd amendment reforms at a different pace, and used different rotation and election systems. Table 1 presents results from these regressions. Of the twenty variables we tested, nineteen have coefficients that are not significantly different from zero. Only one variable – medical facilities in the GP – is significant for reasons that are unclear. This suggests that reservations were unlikely to have been allocated to GPs on the basis of observable characteristics and supports the assertion that they were exogenously allocated.

If women's reservation status is exogenously determined, then OLS regressions should suffice to determine the causal impact of reservations on outcomes. One concern with this method is that the 73rd amendment also mandated reserved seats for scheduled castes and tribes (SC/ST) on the basis of their proportion in the village population. In the four states we are studying, SC/ST reservation overlap with women's reservations. Thus approximately a third of GPs with SC/ST reservations would – randomly – also be reserved for women. This is likely to confound the impact of the two types of reservations so we focus on contrasting GPs exclusively reserved for women with unreserved GPs. The impact of SC/ST reservations on panchayats has been examined elsewhere (Besley et al. 2004 [1], Chattopadhyay and Duflo 2004a [4]).

3 Results

3.1 Revisiting Chattopadhyay and Duflo

3.1.1 Preferences

We begin by revisiting the main results of CD who show that the impact of women's reservations on the activities of panchayats is affected by the preferences of women. We begin by testing whether men and women differ significantly in their preferences for public good investments in the village. Note our data on priorities of men and women is based on a retrospective question on problems faced two years ago, while CD's is based on preferences revealed by the issues women petition the GP about. Therefore the preference data in the two surveys are not exactly comparable. But even with our method we do notice significant differences between men and women both in PRA and household surveys - suggesting that the information is picking

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up gender differences. Table 2(a) reports the results comparing preferences from the men's and women's PRA. We see that the large differences are in sanitation, which women are more likely to see as a problem, and roads, which men are more likely to see as a problem. These differences are tested with a regression controlling for village fixed effects, and we see that the differences on sanitation and roads persist after village effects are controlled. However, on five of the seven priorities there is no gender difference observed.

PRAs are better suited to looking at public goods because they are the result of a public interaction where consensus issues are more likely to arise. To examine issues that may matter more at the level of households, we contrast the PRA data with data on the ranking of problems from two years ago at the individual level in Table 2(b). Here we see that men have a greater preference for education and infrastructure, while women are more likely to consider electricity and housing as a priority. Controlling for village fixed effects, however, only the electricity and housing differences remain suggesting that they are robust differences not driven by differences in village characteristics. Finally we look at the pradhans themselves in Table 3. Here we see that women-reserved pradhans seem to express a greater preference for education and electricity in a simple comparison of proportions. However, controlling for village fixed effects none of these differences remain suggesting that they are not robust to spatial differences. Thus conditional on village-level effects, reserved and unreserved pradhans do not have significant differences in their ranking for problems from two years ago. Thus, while we see differences in preferences across men in women from three different sources of data, these differences are neither consistent with CD nor across the data sources.

3.1.2   Differences in Panchayat Activities

Data on the activities of panchayats come from three sources. The majority of the outcomes[5] come from the PRA. In the PRA, respondents were asked to assess activities of the panchayats after the last election on a variety of public good investments. The number of days a week a medical practitioner is available in the village is obtained from the facilities assessment. Meeting higher panchayat and facing problems in discharging duties are obtained from the pradhan interviews. Since we have data on marginal improvements since the last election, it is possible to test the extent to which reservations

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[5]Overall activism; activism in water, education, health, roads, transport, sanitation, electricity, and irrigation

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in the last election influenced panchayat activity. Table 4 presents the summaries for these measures of GP activism.

In understanding these results, as mentioned earlier, it should be kept in mind that in most states, other than Kerala, panchayats are rather limited in what they can accomplish. They have limited sources of revenue that they can choose how to spend. While they have the ability to generate revenues via taxes on houses, sales taxes on items produced and sold within the village, and other limited sources, their main sources of revenue are grants from state and central governments that are tied to mandated activities such as food for work programs or housing for scheduled castes (World Bank, 2004)[6]. Therefore, much of the effectiveness of a panchayat depends on its ability to mobilize funds, investments and action from others – from the block and district headquarters, from village users groups in the case of AP, and from members of the state assembly who have a fund from which they can allocate grants to GPs (Matthew and Buch 2000 [8]).

Differences between states are easy to see in Table 2 which provide means and standard deviations for a wide set of outcome variables from the facilities, PRA, and pradhan Interview questionnaires. Table 2 clearly shows that Kerala dominates the other states in terms of the number of days a week with medical practitioner. The PRA data provides a slightly different perspective with Kerala less dominant. In overall GP activism, while Kerala still leads the other states – the gap is much smaller. Tamil Nadu on the other does the worst in all categories. The last two columns provide some interesting information on the extent to which the panchayat was able to fulfill its intermediary functions. Note the low percentage of panchayats in AP that were able to meet higher levels government on a regular basis. It is 6% in AP compared to 49-74% in the other states. This is suggestive of the extent to which the AP state government has shut out village panchayats from its apparatus. AP panchayats also lead the states in the extent to which they face problems with 55% of them reporting problems, compared to between 20-32% in the other states.

Table 5 attempts to replicate CD's results by examining the unconditional difference in panchayat activities, for a variety of goods and services, in reserved and unreserved GPs. We first report mean activity levels in the two categories, and then the coefficient of a dummy variable for women's reservations from a regression that controls for block fixed effects with stan-

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[6]In Karnataka, panchayats have access to a small grant (Rs. 100,000 in Karnataka) over which they have some discretion, while in Kerala they are relatively well funded with a variety of sources of taxation and untied grants from the state government (World Bank, 2004 [14]).

dard errors clustered at the GP level. From the fourteen activities we examine, only two show a significant difference between reserved and unreserved GPs: a standardized index of overall GP activity measured from the facilities survey, and a question from the PRA on whether the GP was able to regularly meet with officials from higher levels of government. In both these measures, women's reservation has an adverse effect. Without conditioning for anything else, but controlling for block fixed effects women's pradhans in reserved GPs perform worse on an overall measure of GP activity, but also are less effective at interacting with higher levels of government. However, on the vast majority of activities, reserved pradhans do no different than unreserved pradhans. Thus, there is no evidence to suggest that women pradhans are acting in a manner that is more sensitive to the preferences of women[7].

3.2 Selection

We begin by examining the selection issue. Are women in reserved constituencies of worse quality than unreserved pradhans? Are they tokens? Table 6 provides some simple comparisons. Reserved pradhans are younger, worse educated (by two years of schooling), have smaller land holdings, smaller knowledge scores[8], and less political experience than unreserved pradhans. Note that the standard deviations on education and the knowledge score are larger for reserved women than for unreserved pradhans – suggesting that women who stand for election in reserved seats are a very diverse group. However, it is possible that these differences merely reflect gender differentials in the general population, since 87% of pradhans in unreserved GPs are men – and women are distinctly worse educated than men on average. We can check this by comparing women who become pradhans with women in the general population who are eligible to stand for election (they have to be over 21 and literate). This comparison shows that women pradhans are from the top end of the distribution of women on all attributes.

Figure 1 makes this graphically clear. The distributions of age, edu-

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[7]We also conducted an analysis, similar to CD, with activity-specific regressions where women's reservations were interacted with women's preferences to see if these preferences were driving the activities of women-reserved pradhans. These results, available from the authors on request, also do not demonstrate any relationship between preferences and panchayat activites.

[8]Knowledge scores come from a series of political knowledge questions where respondents were asked to identify the names of prominent leaders such as the prime minister and chief minister, and to explain important rules such as the percentage of villages in a GP reserved for women.

cation, knowledge score and landholding for women-reserved pradhans are clearly much closer to those of unreserved pradhans than eligible women in the population. This suggests that reserved and unreserved pradhans are selected in a similar manner, and are much more like each other than they are like other members of their sex in the population.

Given the extent of dispersion in these distributions it is possible that there is a lot of spatial variation in attributes and that these trends may not persist once spatial controls are included. Another possibility is that other household characteristics may be driving these differences. For instances the differences in knowledge score may simply suggest that women who become pradhans come from worse-off households. A third question that requires further investigation is whether women pradhans are from the same elite families as men pradhans. To test all these hypotheses we run the following OLS regression on individual level data:

$$P_{bi} = \alpha_b + \kappa H_{bi} + DW_{bi} + \mu C_{bi} + \gamma V_{bi} + \varepsilon_{bi}$$

Where P_{bi} is the set of individual i's characteristics in block b, α_b are block fixed effects, H_{bi} are a set of characteristics of the individual's household – household size, religion SC/ST status, occupation and literacy of head, W_{bi} indicates whether the individual is elected pradhan in a seat reserved for women. C_{bi} indicates whether the individual is elected pradhan in a seat reserved for SC/STs. V_{bi} is a vector of inequality and oligarchy in individual i's village, and ε_{bi} is the error term. We run three specifications. In the first specification, the sample is the eligible (literate, above 21 years old) population. In this specification the coefficient D provides a measure of whether reserved(women) pradhans are different from the eligible population. In this specification we also set γ=0. In the second specification, we restrict the sample to eligible women. In this specification D measures how different reserved(women) pradhans are from other eligible women, thus providing a difference free of gender effects. In this specification we also set γ=0. In the third specification, we restrict the sample to the set of pradhans. D now measures how different reserved(women) pradhans are from unreserved pradhans in the observed attributes.

Table 7 reports the results for the coefficient D for a variety of attributes, for the three specifications mentioned above. Looking at the 3rd column which compares reserved and unreserved pradhans, we see that reserved pradhans are significantly worse off than unreserved pradhans in their education, knowledge and political experience, and also tend to be younger.

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However, looking at the 2nd column we see that they are much better off than comparable women in the population. Column 1 compares reserved pradhans to people of all genders, over the age of 21, and literate in the population and the results are very similar to the comparison with eligible women. Controlling for gender differences, women pradhans are better educated, wealthier, and more knowledgeable than the general population. This does not suggest that they are tokens.

Another claim often made about women in reserved seats is that they are drawn from the same upper caste groups that dominate village politics. Table 8 compares the caste status of reserved and unreserved pradhans (keeping in mind that we are not considering women who are also in SC/ST reserved seats). Here we see that reserved pradhans are less likely to be drawn from Forward (upper) castes, and are more likely to be OBCs (other backward castes) or BCs (backward castes). Finally we compare unreserved and reserved women pradhans on the question of who persuaded them to contest the election (Table 9.) We see that the responses for the two categories are similar – both groups were more or less equally likely to have been asked to contest by political elites - Members of the Legislative Assembly (MLAs), previous pradhans, and important members of the community. The largest difference comes from reserved women being more likely to have been persuaded by spouses to run than unreserved pradhans. This could again be reflective of general gender differences – that women who do not have supportive spouses are not likely to seek elected office. Thus there is little evidence to support the notion that women pradhans – in seats exclusively reserved for women – are tokens. However, there is a great deal of heterogeneity in the quality of women who become pradhans – a heterogeneity that is reflected in the general population of women. This heterogeneity may therefore matter in their effectiveness as pradhans.

3.3   Testing the Impact of Reservations

The structure of our data allows us to analyze the impact of reservations within blocks or within pairs of blocks. In our sample, a block consists of 6 GPs in Andhra Pradesh, Karnataka and Tamil Nadu, and 3 GPs in Kerala. Since reservations are at GP level, the block is the smallest grouping within which we can perform our analysis. In addition to considering block effects, the sampling design also allows us to form pairs of blocks across states, based on historical and cultural similarities. The districts within states were selected, with one exception, to focus on those that had belonged to same administrative unit during colonial rule, but had been transferred to

different units when the states were reorganized in 1956[9]. From these states, pairs of blocks (which are the next level of administrative unit) one from each state were selected to be similar on their majority language. Language tends to proxy for social structure and culture in these regions – so language-matched blocks would have similar sociocultural systems. All blocks from within the sampled districts are chosen to be the closest possible in their majority language to a block in the matching district of the neighboring state. Since language is a good proxy in these regions for cultural differences given the prevalence of caste and linguistic endogamy, language matching allows us to partially control for "unobservable" sociocultural differences.

The advantage of using block fixed effects is that we can control for unobserved variables at the block level. The advantage of using block pair fixed effects is that it allows us to estimate state effects and thus it permits us to examine how reservations work across states, controlling for historic and linguistic similarities. We perform the analysis with both types of fixed effects.

3.3.1 Block Fixed Effects

In testing the impact of women's reservation on panchayat activities, the heterogeneity in the quality of pradhans has to be kept in mind. Does the quality of the pradhan matter? Does it matter more in reserved GPs? Another important question that has to be addressed is the extent to which inequality and concentration of power in one caste in the village affect the effectiveness of women pradhans? Can elite control affect panchayat governance, particularly in reserved GPs? Cognizant of the exogeneity of women's reservations, we can test these hypothesis in an OLS framework in the following framework:

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[9] These are the districts of Bidar and Medak from the erstwhile state of Hyderabad, now in Karnataka and AP respectively, Pallakad, Coimbatore, Kasargod, Dakshin Kanada, Dharmapuri, and Chithoor, all from erstwhile Madras state and now in Kerala, Tamil Nadu, Kerala, Karnataka, Tamil Nadu and AP respectively. Since Bidar and South Kanara district in Karnataka are "special" in that they represent the worst and best districts in the state in development indicators, we also sampled Kolar district which is the one exception to the block matching rule in our sample. Kolar was a part of erstwhile Mysore state the precursor to modern Karnataka and thus does not follow the colonial-rule matching process described above. However, adding it does allow for more variation when we compare the other three states with Karnataka. Furthermore, Kolar has common borders with both Chithoor in AP and Dharmapuri in TN - which allows for a three part comparison within the same geographic area.

$$Y_{bv} = \alpha_b + \beta P_{bv} + \gamma V_{bv} + \eta W_{bv} + \mu C_{bv} + \omega D_{bv} + \phi(P'_{bv} * W_{bv}) + \theta(V'_{bv} * W_{bv}) + \varepsilon_{bv}$$

Y_{bv} is the set of panchayat activities in village v, block b, as outlined in Table 2, α_b are block fixed effects, P_{bv} is the set of pradhan characteristics[10], and V_{bv} is the set of village characteristics[11]. Table 10 provides summary statistics for these sets of characteristics. W_{bv}, C_{bv}, and D_{bv} are indicators for whether the GP to which the village v belongs is reserved strictly for women, strictly for SC/ST, and for SC/ST women, respectively. The coefficient η is an estimate of the impact of women's reservations conditioning on everything else. ϕ provides an estimate of how much pradhan characteristics matter in villages with GPs reserved for women and θ provides an estimate of whether village characteristics such as inequality and caste domination matter more when the pradhan is a reserved woman. P'_{bv} is a subset of P_{bv} and V'_{bv} is a subset of V_{bv}[12]. We test five sets of specifications. In the first set both ϕ and θ are set to zero, thus focusing on the reservation effect without conditioning on interaction terms. The next three specifications set θ to zero and P'_{bv} to *age*, *education*, and *political experience*, respectively. This allows for separate interactions between reservations and pradhan characteristics. The final specification sets ϕ to zero and V'_{bv} to *proportion land controlled by upper castes*[13].

Tables 11.1 through 11.5 report the results of these regressions. Table 11.1 presents the specification without interaction terms. We observe that generally women's reservation does not have an effect on GP activism. The exception is GP activism in education, which is significantly higher in GPs reserved for women. These results also show that heterogeneity, both in Pradhan and village characteristics, does influence GP activism. Specifically, activism is significantly influenced by the pradhans age and, in some instances, by their education. Pradhans in their "prime" perform better than "old" pradhans in terms of overall activism, activism in water, road, and irrigation issues. "Young" pradhans perform better in terms of activism

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[10] age categories: young (21-30), prime(30-50), old(50+); education categories(along natural breaking points): 0-5 years, 5-10 years, 10-15 years, 15+; dummy for any previous political experience; dummy for wealthy; landholding

[11] proportion land controlled by upper castes; land Gini categories: low (1st quartile), medium(interquartile range), high(4th quartile), literacy rate, fraction landless, pradhan's village

[12] 13% of pradhans in unreserved GPs are women so we can also control for pradhans sex in these regressions. Adding this slightly weakens the effect of reservation but does not change the effects of interactions. We do not report them.

[13] We have also interacted reservation with the categories of the Gini coefficient but results are not interesting.

in roads. Young pradhans and pradhans in prime ages are also more likely to face problems in discharging their duties than old pradhans. Pradhans with ten to fifteen years of education perform better than those with zero to five years in activism in electricity issues. Pradhans with a college degree (more than fifteen years of education) perform worse in activism in sanitation issues. Higher levels of pradhan's education is associated with fewer problems for the GP. Pradhans who have previous political experience are also less likely to face problems.

Village characteristics also influence GP activism. The higher the proportion land controlled by upper castes the fewer days is a medical practitioner available in the village. Pradhans in villages with a higher proportion of land owned by upper castes are more likely to meet with higher levels of government. Knowing that heterogeneity in pradhan and village characteristics matters, it is only natural to ask the question whether heterogeneity matters differently in reserved constituencies. To answer these question we turn to specifications with interactions.

Tables 11.2 through 11.4 present the results for the specifications with pradhan characteristics interactions. In table 11.2 we interact women's reservation with pradhan's age. We transform age into a categorical variable and we keep "old" (age above fifty) pradhans as the omitted category. We observe that in several instances, age matters differently in reserved constituencies. However, we cannot pinpoint a consistent pattern. In GPs reserved for women, young pradhans and pradhans in their prime perform worse than old pradhans in terms of number of days a week a medical practitioner is available in the village. Pradhans in their prime perform worse in GPs reserved for women in activism in education, but at the same time they perform better in activism in health and irrigation. In reserved constituencies, pradhans in their prime are also more likely to meet with higher levels of government suggesting that they do better in accessing resources from outside the GP.

Table 11.3 contains the results for the interaction of women's reservation with pradhan education. We transform education into a categorical variable, along the natural cut-off points: up to primary school(0-4 years of education), middle school to secondary school (5-9 years), completed high school (10-14 years), and completed college(15 years and more). We keep pradhans with primary school as the omitted category. College education seems to help women pradhans in reserved seats. It improves their performance in medical practitioner availability, water activism and health activism. Lower levels of education, however, have a mixed effect. Pradhans in reserved seats do better in activism in educated when they have either completed sec-

ondary of high school, but high school educated reserved pradhans perform worse than reserved pradhans with primary school or less in water activism and health activism. Thus there appear to be some non-linearities in the education interaction in water and health activism. Note also that reserved pradhans with secondary school education also perform worse than primary educated pradhans in meeting higher levels of government. Thus, high levels of education help pradhans in reserved seats, but pradhans with middle and secondary educations do not always do better than those with primary educations.

Table 11.4 presents the results for the interaction with Pradhan political experience, as measured in the number of terms previously served, as either Pradhan, Vice-Pradhan, or Ward Member. Since the average number of terms previously served is below 1(0.87), we transform political experience into an indicator for whether the Pradhan has ever served in either of the three positions. We observe that, in reserved GPs, political experience helps Pradhans in terms of overall activism, activism in water issues, and activism in sanitation. Since women have significantly lower political experience than unreserved Pradhans, these results point towards a hopeful trend. As elections become more regular, and the reservations system matures, women will become more experienced and, consequently, more effective leaders.

In table 11.5 we attempt to explore the differential effect of heterogeneity in village characteristics across reserved and unreserved GPs. The village characteristic of interest is the proportion land held by the upper castes - which indicates the extent to which upper castes are "dominant" - that is they dominate village life (Srinivas, 1959). We observe that, in reserved GPs, a higher proportion of land held by upper castes leads to lower overall GP activism, lower activism in water and electricity issues. These results suggest that power in the hands of the upper caste stifles the ability of women to function as pradhans in reserved constituencies. Since the caste distribution of women-reserved and unreserved Pradhans is not significantly different, these results should not be interpreted as high castes blocking the efforts of low caste women, but of patriarchy being more pronounced in villages dominated by upper castes.

3.3.2 Block Pair Fixed Effects

The purpose of analyzing the effect of reservation within block pairs is to isolate state effects and to contrast the reservation effects across states. Therefore, in this subsection we are no longer interested in how pradhan and village heterogeneity influence the effects of reservation. Keeping in mind

the exogeneity of reservations, we use OLS in the following framework:

$$Y_{pv} = \alpha_p + \delta S_{pv} + \beta P_{pv} + \gamma V_{pv} + \eta W_{pv} + \mu C_{pv} + \omega D_{pv} + \tau(S_{pv} * W_{pv}) + \varepsilon_{pv}$$

Y_{pv} is a measure of GP activism in village v, pair p. α_p represents the pair fixed effects. S_{pv} are state dummies[14]. The rest of the variables are the same as the block fixed-effects specification. τ measures the extent to which the effects of women's reservation differ across states. We estimate two specifications, one without state interactions (τ=0) and one with state interactions.

Tables 12.1 and 12.2 present the results of the block pair fixed effects specifications. In table 12.1 we estimate the state effects without including interactions with reservation. The state effects show the patterns in state differences observed in the outcome summaries. Given the larger group size, there is more variance within groups and hence the significance levels of some of the effects change, as compared to table 10.1. However, the signs of the effects remains by and large the same. Furthermore, we continue to see that heterogeneity in pradhan and village characteristics still continues to matter. State effects also matter, with Kerala doing better than the other states in health and in meeting higher level panchayats, but doing worse on problems faced by GPs., and in activism in roads.

In table 11.2 we explore the extent to which the effects of women's reservation differs across states. The general pattern is that reserved constituencies in Kerala perform better than AP in most categories of activism. This is possibly because Kerala is both more gender-equal than AP, and has a more political mature reservations and electoral system at the GP level. Note that Kerala and Karnataka are do not display much difference in their reservations effects, except that reserved GPs in Karnataka dominate Kerala's in irrigation. Karnataka's reservation system has been in place for even longer than Kerala's - so this again suggests that the political maturity of the reservations system improves its effectiveness. Kerala and Karnataka are also different from AP and Tamil Nadu in having indirect elections for the pradhan, and it is possible that this mechanism may also contribute the state differences. We have no way of sorting out those two effects.

[14] We keep Kerala as the omitted category

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4   Interpretation and Conclusion

The results of this analysis do not show a simple women's reservations effect. Unlike Chattopadhyay and Duflo (2004) there is no evidence to show that reserved women pradhans act in ways that are more congruent with the preferences of women. However, we do show that these women are not tokens. They are from the upper end of the distribution of women and tend to be far better educated, more knowledgeable about political activities, more experienced, and wealthier than the average woman. At the same time they are less likely than unreserved pradhans to belong to upper caste groups, and also less likely to have been asked to run for office by political elites - which again is evidence against the tokenism hypothesis. The contrast with Chattopadhyay and Duflo may reflect the fact that their evidence is from Rajasthan and West Bengal, an area of India with much higher gender differentials than South India where our survey was conducted.

Perhaps the primary message here is that pradhan heterogeneity matters. Women reserved pradhans are widely dispersed in their age, education, and experience - and this matters. In particular, women pradhans in reserved GPs are unambiguously more effective when they are more experienced and when they have a college level education. Comparing middle and high school education to primary education has more mixed results, but they do indicate that education generally helps reserved women pradhans. Age effects also matter in women's reservation - "prime age" women pradhans between the ages of 30 and 50 are more effective than "old" pradhans above the age of fifty in health, irrigation and networking activities, but are less effective in improving the availability of medical practitioners, and education investments. Thus, while age matters - it does not have clear, unambiguous effects.

Importantly, we see that women in reserved GPs perform worse when most of the land in the village is owned by upper castes. This suggests that caste structures may be correlated with structures of patriarchy making the job of women particularly difficult when they are confronted with entrenched hierarchies. We also see that women pradhans in reserved GPs in AP perform the worst, while those in Kerala and Karnataka tend to perform better. This again indicates the salience of the maturity of the reservations system since it has been in place much longer in Kerala and Karnataka than in AP. This effect in conjunction with the positive effect of the pradhans political experience together point towards a hopeful future. As women acquire more experience via the reservations system, and as the system continuous to mature, women will become more effective leaders.

Thus, our results are far more supportive of the "optimists" than the "pessimists." Reserved women pradhans are not tokens, and become more effective when they acquire more political experience and when they are well educated. Interestingly, they do not seem to act in ways that support the preferences of women, and when they are effective they tend to be effective on many different dimensions of panchayat activity. The results also suggest that women reserved pradhans would benefit from a more supportive environment in upper caste dominated villages, and in states like AP where the reservations system is less mature.

References

[1] Besley, Timothy, Rohini Pande, Lupin Rahman and Vijayendra Rao, "The Politics of Public Good Provision: Evidence From Indian Local Governments," *Journal of the European Economic Association*, April-May 2004

[2] Besley, Timothy, Rohini Pande, Lupin Rahman and Vijayendra Rao, [2004b], "Decentralization in India: A Survey of South Indian Panchayats," mimeo

[3] Chambers, Robert, *Whose Reality Counts: Putting the First Last*, Intermediate Technology Publications, London, 1997

[4] Chattopadhyay, Raghabendra and Esther Duflo (2004a): "The Impact of Reservation in the Panchayati Raj: Evidence From a Nationwide Randomized Experiment" , *Economic and Political Weekly* (forthcoming)

[5] Chattopadhyay, Raghabendra and Esther Duflo (2004b): "Women as Policy Makers: Evidence From a Randomized Policy Experiment in India" , *Econometrica* (forthcoming)

[6] Chathukulam J. and M.S John (2000): "Empowerment of Women Panchayat Members: Learning from Kerala (India)", *Asian Journal of Women Studies*, 6(4), 66-101

[7] Filmer, King and Pritchett, "Gender Disparity in South Asia", World Bank Policy Research Paper No. 1867, 1998

[8] Matthew, George and Nirmala Buch, *Status of Panchayati Raj in the States and Union Territories of India 2000*, Institute for Social Studies, Delhi, 2000

[9] Rai, Manoj, Malini Nambiar, Sohini Paul, Sangeeta Singh, Satinder Sahni, *The State of Panchayats : A Participatory Perspective*, Samskriti, 2001

[10] Ramesh, Asha and Bharti Ali (2001), *33 1/3: Reservation Towards Political Empowerment, Books for Change*, Bangalore

[11] Srinivas, MN, "The Dominant Caste in Rampura," *American Anthropologist,* Vol. 61, No. 1., pp. 1-16, February 1959

[12] Varatharajan, D, R. Thankappan, Sabeena Jayapalan, "Assessing the Performance of Primary Health Centres Under Decentralized Government in Kerala", *Health Policy and Planning* 19(1), Pp: 41-51, 2004

[13] Vyasulu P. and V. Vyasulu (1999): "Women in Panchayati Raj: Grass Roots Democracy in Malgudi", Economic and Political Weekly, 34(52), 3677-3686

[14] World Bank, "India: Fiscal Decentralization to Rural Governments", Rural Development Unit, South Asia Region, Report No. 26654-IN, 2004

Table 1: Exogeneity of reservation

	Variable	Marginal effect on probability of GP pradhan being reserved for women	Nr. Obs.
1991 census variables	Population	0.000	196
		(0.136)	
	Proportion Women	15.480	195
		(1.438)	
	Fraction villages with educational facilities in GP	-0.609	191
		-(1.525)	
	Fraction villages with medical facilities in GP	-1.033	191
		(-2.196)**	
	Fraction villages with drinking water in GP	-0.569	191
		-(1.281)	
	Fraction villages with postal facility in GP	-0.179	191
		-(0.570)	
	Fraction villages with communication facility in GP	-0.197	191
		-(0.564)	
	Fraction villages with power supply in GP	-0.612	191
		-(1.352)	
	Fraction irrigated land in GP	-1.212	192
		-(1.586)	
	Average distance from town in GP	0.000	192
		(0.015)	
	GP literacy	-0.824	195
		-(0.813)	
	GP employment	0.223	195
		(0.139)	
Current variables	Generalized Enthropy (a=1) based on land holding	-0.041	199
		-(0.215)	
	proportion inequality between caste groups	-0.359	200
		-(0.358)	
	non-pradhan oligarchy	-0.501	197
		-(0.715)	
	overall oligarchy	-0.907	199
		-(0.639)	
	pradhan oligarchy	-0.662	199
		-(0.601)	
	proportion land held by upper castes	-0.075	201
		-(0.160)	
	proportion landless households	-0.312	200
		-(0.576)	
	female agricultural wage rate	-0.031	199
		-(1.609)	
	female construction wage rate	-0.006	199
		-(0.892)	

Notes:
1) The marginal effects are computed from individual probit regressions with state fixed effects,
separately for each RHS variable
2) z-values in parentheses ** significant at 5 percent
3) In a probit with all the RHS variables included a F-test cannot reject the hypothesis that all the coefficients are jointly = 0

Table 2: Summary of GP activism measures

	Days with medical practitioner	Overall GP activism	GP activism in water	GP activism in education	GP activism in health	GP activism in roads	GP activism in transport	GP activism in sanitation	GP activism in electricity	GP activism in irrigation	Met higher Panchayat	Faced Problems
Andhra Pradesh	-0.275	0.234	0.181	0.245	0.054	0.335	0.315	0.447	-0.067	0.366	-0.998	0.506
	(0.657)	(0.640)	(1.116)	(1.114)	(0.995)	(1.130)	(1.351)	(1.336)	(0.824)	(1.430)	(0.477)	(1.113)
N	70	70	70	70	70	70	70	70	70	70	68	68
Karnataka	-0.251	0.087	0.106	0.055	-0.183	0.241	0.066	0.242	0.245	-0.076	0.251	-0.190
	(0.836)	(0.594)	(1.068)	(1.016)	(0.988)	(1.059)	(1.119)	(1.104)	(1.280)	(0.884)	(0.940)	(0.887)
N	182	182	182	182	182	182	182	182	182	182	175	175
Kerala	1.096	0.002	-0.182	-0.088	0.320	0.143	-0.069	-0.151	-0.017	0.058	0.365	0.067
	(1.054)	(0.489)	(0.849)	(0.915)	(1.109)	(0.824)	(0.856)	(0.827)	(0.814)	(1.064)	(0.889)	(1.032)
N	126	126	126	126	126	126	126	126	126	126	114	114
Tamil Nadu	-0.508	-0.218	-0.039	-0.124	-0.057	-0.587	-0.186	-0.392	-0.241	-0.122	-0.126	-0.063
	(0.380)	(0.421)	(0.962)	(0.977)	(0.861)	(0.735)	(0.652)	(0.553)	(0.734)	(0.787)	(1.009)	(0.970)
N	144	144	144	144	144	144	144	144	144	144	140	140
All states	0.000	0.002	0.007	-0.004	0.005	0.001	-0.003	-0.001	0.006	0.003	0.000	0.000
	(1.000)	(0.553)	(1.002)	(1.001)	(1.003)	(1.003)	(0.997)	(1.002)	(1.002)	(1.004)	(1.000)	(1.000)
N	522	522	522	522	522	522	522	522	522	522	497	497

Notes: 1)standard deviations in parentheses
2)All measures are standardized across all villages

Table 3: Men and women preferences

3a: Preferences, 2 years ago, as expressed in the answers to the **PRA** questionnaire

Preference category	Proportion villages with women expressing preference	Proportion villages with men expressing preference	Difference: women - men	Nr. Obs
Drinking water	0.278	0.244	0.035	1036
			(0.032)	
Health	0.058	0.058	0.000	1036
			(0.019)	
Education	0.027	0.035	-0.008	1036
			(0.013)	
Sanitation	0.111	0.046	0.064	1036
			(0.021)***	
Roads	0.097	0.175	-0.076	1036
			(0.025)***	
Transport	0.041	0.038	0.002	1036
			(0.013)	
Electricity	0.043	0.029	0.014	1036
			(0.015)	

Notes:
1) Preferences of women derived from women's PRA, preferences of men - from general PRA
2) Village fixed effects included in regression
3) Standard errors clustered by village, in parenthesis
4) *** significant at 1 percent

3b: Preferences, 2 years ago, as expressed in the answers to the **household** questionnaire

Preference category	Proportion women expressing preference	Proportion men expressing preference	Difference: women - men	Nr. Obs
Water	0.357	0.350	0.005	5268
			(0.014)	
Health	0.038	0.041	-0.001	5268
			(0.006)	
Education	0.013	0.022	-0.006	5268
			(0.004)	
Infrastructure	0.283	0.303	-0.020	5268
			(0.013)	
Transport	0.052	0.053	-0.002	5268
			(0.005)	
Electricity	0.068	0.052	0.016	5268
			(0.007)**	
Housing	0.067	0.052	0.014	5268
			(0.006)***	

Notes:
1)Village fixed effects included in regression
2) Standard errors clustered by village, in parenthesis
3)** significant at 5 percent; *** significant at 1 percent

Table 4: Preferences, 2 years ago, among pradhans

Preference category	Proportion women in reserved seats expressing preference	Proportion unreserved pradhans expressing preference	Difference	Nr. Obs
Water	0.370	0.425	-0.052	194
			(0.105)	
Health	0.000	0.055	-0.061	194
			(0.028)	
Education	0.074	0.039	0.043	194
			(0.057)	
Infrastructure	0.296	0.276	0.053	194
			(0.101)	
Transport	0.037	0.031	0.001	194
			(0.041)	
Electricity	0.074	0.024	0.039	194
			(0.056)	
Housing	0.000	0.047	-0.047	194
			(0.038)	

Notes:
1) Block fixed effects included in comparison
2) Controls for SC/ST reserved seats included in comparison
3) The unreserved category includes reserved for OBC
4) Standard errors clustered by block, in parenthesis

Table 5: Simple means comparisons

Activity	Mean reserved	Mean unreserved	Difference
From facilities questionaire			
Nr days w/ medical practitioner	0.312	0.020	-0.029
	(1.186)	(0.993)	(0.288)
From PRA questionaire			
Overall GP Activity	-0.095	-0.045	0.010
	(0.491)	(0.510)	(0.216)
Gp activity in water	-0.183	-0.033	-0.034
	(0.875)	(0.931)	(0.357)
GP activity in education	0.033	-0.034	0.178
	(0.979)	(0.986)	**(1.949)**
GP activity in health	0.068	0.057	0.087
	(1.016)	(1.055)	(0.832)
GP activity in roads	-0.122	-0.107	-0.019
	(0.895)	(0.959)	(0.233)
GP activity in transport	-0.204	-0.079	-0.023
	(0.613)	(0.885)	(0.250)
GP activity in sanitation	-0.228	-0.097	-0.002
	(0.779)	(0.881)	(0.022)
GP activity in electricity	-0.113	-0.045	-0.097
	(0.778)	(0.948)	(0.872)
GP activity in irrigation	-0.012	-0.022	-0.010
	(0.958)	(0.959)	(0.087)
From Pradhan Interview			
Met higher panchayat (dummy)	-0.230	0.218	-0.456
	(1.004)	(0.952)	**(2.613)**
Faced problems (dummy)	0.010	-0.061	0.115
	(1.009)	(0.970)	(0.670)

Notes:
1) block fixed effects included in regression estimating difference
2) standard deviations for reserved and unreserved in parenthesis
3) absolute value of t-statistic for difference clustered by GP in parenthesis
4) all measures of activism are standardized across all villages
5) overall GP activity from PRA is the average of standardized measures from PRA
6) significant differences in **bold**

Table 6: Summary of individual characteristics, by class

Variable	Eligible population	Eligible women	Pradhan in Seats Reserved for Women	Pradhan in Unreserved Seats
Age	39.362	37.063	39.148	43.610
	(11.906)	(10.926)	(10.862)	(11.420)
	5267	2495	27	82
Education	4.433	3.422	6.074	8.390
	(4.556)	(4.203)	(4.287)	(3.409)
	5266	2495	27	82
Landholding	2.388	2.022	7.909	9.199
	(5.037)	(4.547)	(9.597)	(9.524)
	5268	2496	27	82
Wealthy	0.298	0.286	0.778	0.720
	(0.458)	(0.452)	(0.424)	(0.452)
	5268	2496	27	82
Knowledge score	3.049	1.965	3.185	4.622
	(2.254)	(1.860)	(1.642)	(0.898)
	5268	2496	27	82
Political experience			1.444	1.744
			(0.506)	(0.927)
			27	82

Notes:
1) The seats reserved for women do not include double reservations for SC or ST women
2) Literate individuals aged 21 and above are eligible to contest pradhan elections

Figure 1: The Distributions of Individual Characteristics
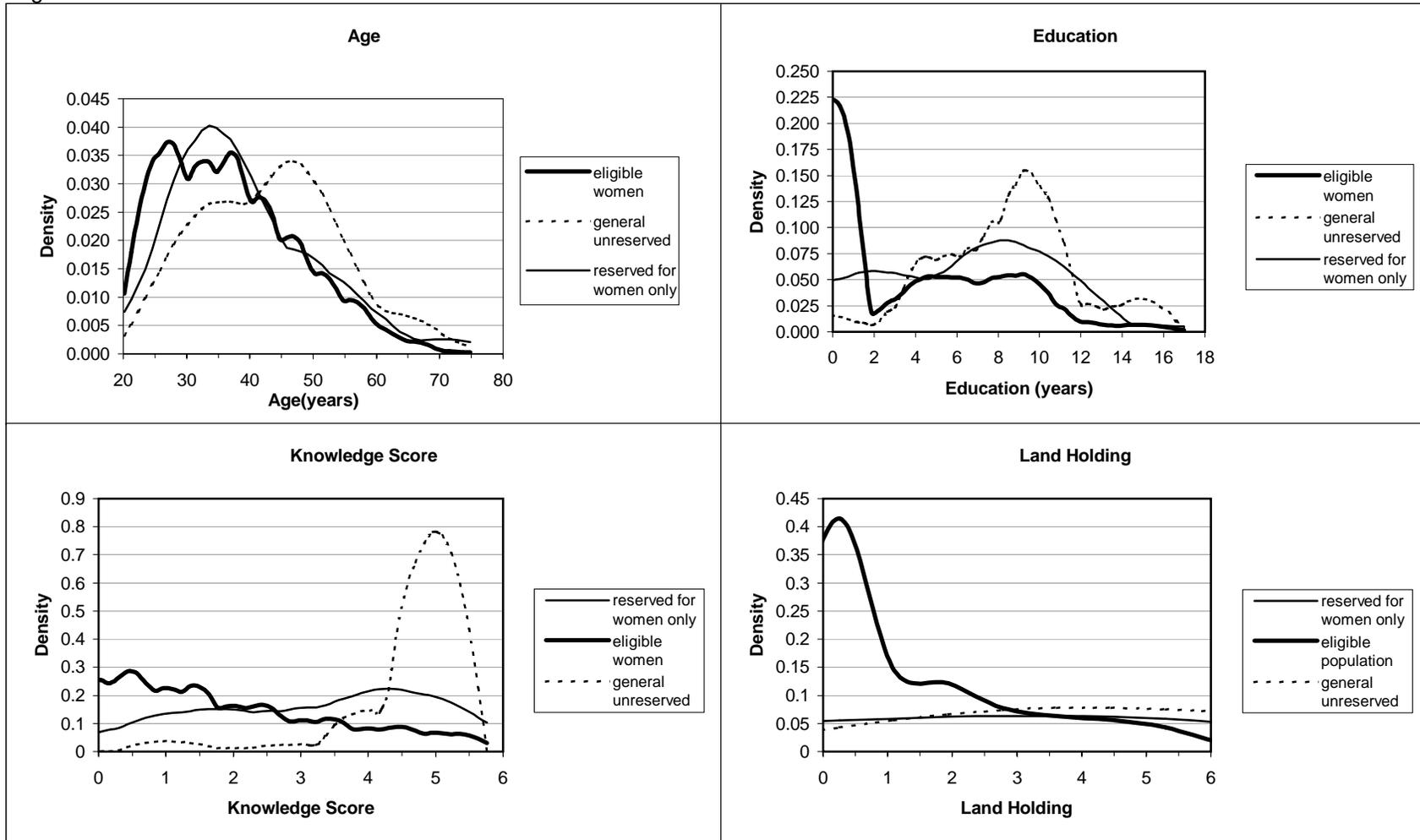
Table 7: Pradhan Characteristics in seats reserved for women

Individual Characteristic	Compared with eligible population	Compared with eligible women	Compared with unreserved pradhans
Nr. Obs.	5266	2496	184
Age	2.445	2.244	-6.226
	(2.138)	(2.029)	(2.686)***
Education	2.599	2.682	-1.957
	(0.737)***	(0.722)***	(0.984)**
Land owned	5.607	5.526	-0.072
	(1.615)***	(1.604)***	(2.086)
Wealthy (dummy)	0.489	0.491	0.046
	(0.085)***	(0.087)***	(0.128)
Knowledge score	1.269	1.268	-1.252
	(0.275)***	(0.273)***	(0.337)***
Political experience			-0.422
			(0.209)**

Notes

1) Literate individuals, aged 21 and above are the eligible population

2) The coefficient reported is that of the dummy for being elected in a seat reserved for women

3) Block fixed effects included in all comparisons

4) Controls for gender, SC/ST, elected in a seat reserved for SC/ST, elected in an unreserved seat
 included in comparison with eligible population

5) Controls for SC/ST, elected in seat reserved for SC/ST, included in comparison with eligible women

6) Controls for elected in a seat reserved for SC/ST, household characteristics (size, religion, occupation of
head, literacy of head), village characteristics (inequality and oligarchy measures), included in comparison with pradhans

7) Standard errors, clustered at GP level in parentheses

8) * significant at 10 percent; ** significant at 5 percent; *** significant at 1 percent

Table 8: Caste status of women elected pradhans in reserved seats vs. unreserved pradhans

Caste status	Unreserved pradhans	Reserved women
BC	16	7
	20.78%	23.33%
OBC	23	13
	29.87%	43.33%
SC	3	1
	3.90%	3.33%
Forward	35	9
	45.45%	30.00%
Total	77	30

Notes:

1)Percentages out of total category

2)The seats reserved for OBC are considered to be unreserved seats

Table 9: Persuasion

Person who persuaded to contest election	Reservation status		
	women only	scst only	unreserved
Self initiated	2	2	17
	(7.41)	(6.90)	(21.52)
Political Elites	5	9	14
	(18.51)	(31.03)	(17.72)
Spouse	5	2	1
	(18.52)	(6.90)	(1.27)
Relative and neighbors	4	4	13
	(14.81)	(15.19)	(15.06)
Caste and other groups	6	11	24
	(22.22)	(37.93)	(30.38)
Other	5	1	10
	(18.52)	(3.45)	(12.66)

Notes:1)Percentages out of total reservation category size in parentheses

2) Political category includes: MP/MLA/party official, previous pradhan, important leader in community, other ward members

3)Other includes: NGO and other unspecified categories

Table 10: Summary of explanatory variables

	Mean	SD
Pradhan Young	0.107	0.310
Pradhan Prime	0.636	0.482
Pradhan 5-9 edu yrs	0.354	0.479
Pradhan 10-14 edu yrs	0.318	0.466
Pradan 15plus edu yrs	0.113	0.317
Pradhan Wealthy	0.624	0.485
Pradhan Landholding	6.254	7.452
Pradhan Political Experience	0.610	0.488
Upper caste land proportion	0.270	0.284
Gini low	0.251	0.434
Gini high	0.251	0.434
Literacy rate	0.412	0.176
Fraction landless	0.336	0.253

Table 11.1: Effect of women's reservation, no interactions

	Days with medical practitioner	Overall GP activism	GP activism in water	GP activism in education	GP activism in health	GP activism in roads	GP activism in transport	GP activism in sanitation	GP activism in electricity	GP activism in irrigation	Met higher Panchayat	Faced Problems
Reservation for SCST	-0.016	0.027	0.055	-0.118	-0.130	-0.131	0.014	0.130	0.507	-0.115	0.177	0.301
	(0.148)	(0.297)	(0.331)	(0.753)	(0.990)	(1.012)	(0.087)	(0.598)	**(2.704)**	(0.680)	(0.819)	(1.472)
Fraction SCST	-0.385	-0.003	0.035	-0.122	-0.189	0.048	-0.004	0.070	0.079	0.055	-0.455	0.136
	(3.242)	(0.032)	(0.178)	(0.545)	(0.991)	(0.291)	(0.019)	(0.355)	(0.451)	(0.232)	**(2.425)**	(0.717)
Reservation for Women	-0.044	-0.010	-0.078	0.237	0.039	-0.083	-0.094	-0.066	0.032	-0.065	-0.287	-0.159
	(0.454)	(0.174)	(0.698)	**(2.051)**	(0.299)	(0.813)	(0.910)	(0.542)	(0.311)	(0.406)	(1.583)	(0.986)
Res. for SCST Women	-0.103	-0.061	0.176	-0.209	-0.184	0.218	0.095	-0.332	0.106	-0.362	-0.228	0.125
	(0.669)	(0.509)	(0.663)	(0.914)	(0.883)	(1.070)	(0.430)	(1.098)	(0.494)	**(1.848)**	(0.690)	(0.482)
Pradhan Young	0.105	0.157	0.292	-0.125	0.138	0.417	0.020	0.082	0.137	0.291	-0.037	0.612
	(0.778)	(1.519)	(1.425)	(0.693)	(0.798)	**(2.552)**	(0.093)	(0.410)	(0.664)	(1.623)	(0.131)	**(2.261)**
Pradhan Prime	-0.005	0.174	0.424	0.132	-0.036	0.274	-0.007	0.151	0.166	0.292	0.067	0.495
	(0.048)	**(2.206)**	**(3.204)**	(1.010)	(0.245)	**(2.519)**	(0.055)	(1.056)	(1.172)	**(1.803)**	(0.379)	**(3.011)**
Pradhan 5-10 edu yrs	0.102	0.006	0.083	0.065	0.027	-0.030	0.095	-0.162	0.121	-0.152	0.226	-0.599
	(1.230)	(0.075)	(0.606)	(0.450)	(0.246)	(0.225)	(0.560)	(0.924)	(0.762)	(1.111)	(1.102)	**(2.816)**
Pradhan 10-15 edu yrs	-0.009	0.075	0.186	0.263	0.149	-0.049	0.019	-0.144	0.306	-0.129	0.270	-0.618
	(0.084)	(0.862)	(1.036)	(1.635)	(0.989)	(0.316)	(0.109)	(0.701)	**(1.843)**	(0.745)	(1.245)	**(2.396)**
Pradhan 15+ edu yrs	-0.324	-0.126	0.250	0.156	-0.076	-0.261	-0.356	-0.650	0.309	-0.380	0.218	-0.546
	(1.333)	(0.733)	(0.883)	(0.515)	(0.221)	(1.263)	(1.575)	**(2.175)**	(1.225)	(1.220)	(0.951)	**(1.950)**
Pradhan wealthy	0.098	-0.043	-0.018	-0.279	-0.236	0.070	-0.088	0.196	-0.012	0.025	0.039	0.273
	(1.236)	(0.588)	(0.144)	**(2.420)**	**(2.023)**	(0.678)	(0.575)	(1.327)	(0.077)	(0.192)	(0.232)	**(1.651)**
Pradhan Landholding	-0.005	0.005	0.014	0.009	0.013	-0.002	-0.007	0.007	0.007	-0.004	-0.006	0.018
	(1.076)	(1.071)	**(1.883)**	(0.832)	**(1.858)**	(0.297)	(0.664)	(0.858)	(0.737)	(0.391)	(0.668)	**(1.806)**
Pradhan Political Exp	0.154	0.047	-0.225	-0.003	0.229	0.197	0.061	0.093	-0.017	0.043	0.238	-0.429
	(1.640)	(0.502)	(1.126)	(0.015)	(1.610)	(1.130)	(0.448)	(0.412)	(0.113)	(0.209)	(1.105)	**(1.727)**
Upper caste land prop	-0.360	-0.003	0.063	-0.115	0.008	-0.075	0.233	-0.017	0.039	-0.156	0.301	0.084
	(3.177)	(0.029)	(0.351)	(0.746)	(0.060)	(0.498)	(1.031)	(0.107)	(0.201)	(0.699)	**(1.755)**	(0.526)
Low Gini	-0.104	-0.042	0.143	-0.138	0.098	-0.160	-0.084	0.014	-0.238	0.034	0.075	-0.068
	(1.369)	(0.663)	(1.025)	(0.974)	(0.838)	(1.456)	(0.631)	(0.108)	**(2.086)**	(0.225)	(0.815)	(0.579)
High Gini	0.315	-0.041	-0.342	0.222	-0.117	0.002	-0.085	-0.107	-0.023	0.124	0.103	0.069
	(2.458)	(0.470)	**(1.735)**	(1.179)	(0.837)	(0.010)	(0.533)	(0.586)	(0.138)	(0.710)	(0.779)	(0.444)
Literacy rate	1.901	0.719	-0.044	0.594	0.470	1.459	1.627	0.180	1.045	0.419	-0.352	-1.208
	(4.426)	**(2.892)**	(0.081)	(1.119)	(1.001)	**(3.054)**	**(2.880)**	(0.330)	(1.868)	(0.797)	(0.556)	(1.661)
Pradhan's Village	0.146	0.166	0.204	0.195	0.137	0.317	0.184	0.181	0.144	-0.037	0.017	0.063
	(1.946)	**(3.442)**	**(1.957)**	**(2.036)**	**(1.696)**	**(3.465)**	**(1.838)**	**(1.858)**	**(1.652)**	(0.355)	(0.569)	**(2.162)**
Fraction landless hhs	-0.001	0.024	0.779	-0.526	0.249	-0.177	-0.100	0.202	0.100	-0.337	-0.154	-0.291
	(0.005)	(0.131)	**(1.963)**	(1.426)	(0.751)	(0.542)	(0.271)	(0.524)	(0.286)	(0.903)	(0.516)	(0.922)
N	482	482	482	482	482	482	482	482	482	482	482	482
Adj R-sq	0.579	0.343	0.145	0.199	0.267	0.339	0.113	0.181	0.271	0.095	0.429	0.399

Notes: 1) t-statistics clustered at GP level in parenthesis
2) Block fixed effects included in regression
3) Days with medical practitioner variable from facilities questionnaire, all other variables from PRA questionaire
4) All measures of GP activism are standardized across all villages, less the Overall measure, which is an average of standardized measures from PRA
5) Significant coefficients in **bold**

Table 11.2 Effect of women's reservation: Interaction with age

	Days with medical practitioner	Overall GP activism	GP activism in water	GP activism in education	GP activism in health	GP activism in roads	GP activism in transport	GP activism in sanitation	GP activism in electricity	GP activism in irrigation	Met higher Panchayat	Faced Problems
Reservation for Women	0.474	0.009	0.103	0.842	-0.345	0.143	-0.097	-0.255	0.222	-0.538	-0.893	-0.312
	(2.504)	(0.086)	(0.445)	**(5.712)**	(1.212)	(0.651)	(0.448)	(1.229)	(1.354)	**(2.172)**	**(2.330)**	(1.147)
Pradhan Young	0.365	0.146	0.345	-0.059	0.147	0.458	-0.024	0.029	0.109	0.161	-0.195	0.454
	(2.662)	(1.238)	(1.461)	(0.315)	(0.813)	**(2.413)**	(0.092)	(0.131)	(0.469)	(0.852)	(0.642)	(1.619)
Pradhan Prime	0.059	0.183	0.459	0.283	-0.148	0.325	0.006	0.114	0.229	0.198	-0.055	0.502
	(0.505)	**(2.097)**	**(3.158)**	**(2.080)**	(0.958)	**(2.650)**	(0.039)	(0.712)	(1.432)	(1.210)	(0.295)	**(2.875)**
Women Res * Yound	-1.172	0.043	-0.247	-0.358	0.012	-0.207	0.188	0.247	0.097	0.615	0.751	0.687
	(4.791)	(0.293)	(0.803)	(1.309)	(0.029)	(0.716)	(0.529)	(0.806)	(0.277)	**(1.954)**	(1.214)	(1.389)
Women Res * Prime	-0.507	-0.044	-0.225	-0.883	0.621	-0.309	-0.050	0.236	-0.337	0.594	0.770	0.051
	(2.418)	(0.338)	(0.833)	**(4.668)**	**(1.875)**	(1.360)	(0.222)	(0.953)	(1.641)	**(2.020)**	**(1.744)**	(0.151)
N	482	482	482	482	482	482	482	482	482	482	482	482
Adj R-sq	0.594	0.340	0.142	0.213	0.275	0.338	0.109	0.178	0.271	0.099	0.441	0.403

Notes: 1)t-statistics clustered at GP level in parenthesis

2) Block fixed effects included in regression

3) Days with medical practitioner variable from facilities questionnaire, all other variables from PRA questionaire

4) All measures of GP activism are standardized across all villages, less the Overall measure, which is an average of standardized measures from PRA

5) Variables included in regression but not reported: reservation for SCST, double reservation women/SCST, fraction SCST, pradhan education, pradhan political experience, pradhan landholding, pradhan wealthy, fraction upper caste land in village, fraction landless households in village, pradhan's village, literacy rate, gini coefficient

6) Significant coefficients in **bold**

Table 11.3 Effect of women's reservation: Interaction with education

	Days with medical practitioner	Overall GP activism	GP activism in water	GP activism in education	GP activism in health	GP activism in roads	GP activism in transport	GP activism in sanitation	GP activism in electricity	GP activism in irrigation	Met higher Panchayat	Faced Problems
Reservation for Women	-0.031	0.015	0.139	-0.097	0.377	-0.221	-0.314	0.114	-0.253	0.371	0.352	-0.051
	(0.220)	(0.106)	(0.618)	(0.531)	(1.589)	(1.102)	(1.180)	(0.403)	(1.232)	(0.859)	(0.971)	(0.137)
Pradhan 5-10 edu yrs	0.102	0.006	0.121	-0.067	0.101	-0.038	0.043	-0.100	-0.002	-0.013	0.470	-0.533
	(1.010)	(0.057)	(0.695)	(0.401)	(0.841)	(0.231)	(0.200)	(0.469)	(0.011)	(0.083)	**(1.975)**	**(2.066)**
Pradhan 10-15 edu yrs	0.025	0.097	0.314	0.144	0.309	-0.099	-0.057	-0.070	0.241	-0.004	0.462	-0.576
	(0.226)	(1.013)	(1.638)	(0.852)	**(2.069)**	(0.583)	(0.286)	(0.305)	(1.349)	(0.022)	**(2.003)**	**(2.111)**
Pradhan 15+ edu yrs	-0.372	-0.140	0.220	0.120	-0.063	-0.312	-0.413	-0.640	0.217	-0.246	0.363	-0.558
	(1.521)	(0.774)	(0.785)	(0.372)	(0.188)	(1.457)	**(1.679)**	**(1.977)**	(0.804)	(0.763)	(1.497)	**(1.878)**
Women res. * 5-10 edu yrs	-0.043	-0.024	-0.266	0.569	-0.415	0.070	0.246	-0.287	0.472	-0.580	-1.010	-0.269
	(0.221)	(0.144)	(0.954)	**(2.040)**	(1.599)	(0.266)	(0.801)	(0.875)	**(1.711)**	(1.238)	**(1.950)**	(0.582)
Women res. * 10-15 edu yrs	-0.130	-0.112	-0.636	0.459	-0.810	0.362	0.425	-0.311	0.236	-0.625	-0.794	-0.078
	(0.478)	(0.712)	**(2.395)**	**(1.851)**	**(2.216)**	(1.501)	(1.380)	(1.008)	(0.845)	(1.421)	(1.561)	(0.161)
Women res * 15+ edu yrs	0.689	0.262	1.040	-0.376	0.791	0.253	0.139	0.348	0.508	-0.605	-0.276	0.402
	(3.437)	(1.156)	**(2.282)**	(1.217)	**(2.517)**	(0.791)	(0.445)	(0.963)	(1.304)	(1.153)	(0.622)	(0.892)
N	482	482	482	482	482	482	482	482	482	482	482	482
Adj R-sq	0.581	0.342	0.161	0.203	0.286	0.338	0.109	0.180	0.270	0.096	0.445	0.398

Notes: 1)t-statistics clustered at GP level in parenthesis

2) Block fixed effects included in regression

3) Days with medical practitioner variable from facilities questionnaire, all other variables from PRA questionaire

4) All measures of GP activism are standardized across all villages, less the Overall measure, which is an average of standardized measures from PRA

5) Variables included in regression but not reported: reservation for SCST, double reservation women/SCST, fraction SCST, pradhan age, pradhan political experience,

pradhan landholding, pradhan wealthy, fraction upper caste land in village, fraction landless households in village, pradhan's village, literacy rate, gini coefficient

6) Significant coefficients in **bold**

Table 11.4 Effect of women's reservation: Interaction with political experience

	Days with medical practitioner	Overall GP activism	GP activism in water	GP activism in education	GP activism in health	GP activism in roads	GP activism in transport	GP activism in sanitation	GP activism in electricity	GP activism in irrigation	Met higher Panchayat	Faced Problems
Reservation for Women	-0.073	-0.148	-0.312	0.337	-0.043	-0.205	-0.268	-0.444	0.059	-0.310	-0.547	-0.296
	(0.637)	**(2.094)**	**(1.890)**	**(2.577)**	(0.352)	(1.346)	**(1.933)**	**(2.815)**	(0.535)	(1.716)	**(2.153)**	(1.282)
Pradhan Political Exp	0.141	-0.016	-0.332	0.043	0.192	0.141	-0.018	-0.079	-0.004	-0.069	0.119	-0.492
	(1.352)	(0.160)	(1.510)	(0.239)	(1.329)	(0.731)	(0.118)	(0.323)	(0.028)	(0.339)	(0.495)	**(1.777)**
Women res. * Political Exp	0.052	0.250	0.423	-0.180	0.148	0.221	0.314	0.683	-0.050	0.443	0.471	0.248
	(0.264)	**(2.279)**	**(1.719)**	(0.860)	(0.574)	(1.147)	(1.516)	**(2.877)**	(0.256)	(1.583)	(1.179)	(0.704)
N	482	482	482	482	482	482	482	482	482	482	482	482
Adj R-sq	0.578	0.347	0.148	0.198	0.266	0.339	0.113	0.192	0.269	0.098	0.434	0.399

Notes: 1)t-statistics clustered at GP level in parenthesis

2) Block fixed effects included in regression

3) Days with medical practitioner variable from facilities questionnaire, all other variables from PRA questionaire

4) All measures of GP activism are standardized across all villages, less the Overall measure, which is an average of standardized measures from PRA

5) Variables included in regression but not reported: reservation for SCST, double reservation women/SCST, fraction SCST, pradhan age, pradhan education, pradhan landholding, pradhan wealthy, fraction upper caste land in village, fraction landless households in village, pradhan's village, literacy rate, gini coefficient

6) Significant coefficients in **bold**

Table 11.5 Effect of Women's Reservation: Interaction with Upper Caste Land Proportion

	Days with medical practitioner	Overall GP activism	GP activism in water	GP activism in education	GP activism in health	GP activism in roads	GP activism in transport	GP activism in sanitation	GP activism in electricity	GP activism in irrigation	Met higher Panchayat	Faced Problems
Reservation for Women	-0.065	0.059	0.065	0.279	0.108	-0.078	-0.037	-0.002	0.192	-0.058	-0.227	-0.140
	(0.606)	(0.816)	(0.447)	**(1.997)**	(0.740)	(0.552)	(0.256)	(0.016)	(1.469)	(0.310)	(1.218)	(0.780)
Upper Caste Land Prop.	-0.375	0.047	0.166	-0.084	0.057	-0.071	0.274	0.029	0.154	-0.152	0.344	0.098
	(3.167)	(0.485)	(0.861)	(0.519)	(0.422)	(0.446)	(1.059)	(0.168)	(0.707)	(0.628)	**(1.728)**	(0.514)
Women res. * Upper Prop.	0.088	-0.285	-0.596	-0.175	-0.286	-0.024	-0.239	-0.265	-0.669	-0.026	-0.250	-0.082
	(0.385)	**(1.947)**	**(1.678)**	(0.487)	(0.752)	(0.064)	(0.781)	(0.832)	**(2.246)**	(0.085)	(0.630)	(0.223)
N	482	482	482	482	482	482	482	482	482	482	482	482
Adj R-sq	0.578	0.344	0.147	0.197	0.266	0.338	0.111	0.180	0.274	0.093	0.429	0.397

Notes: 1)t-statistics clustered at GP level in parenthesis

2) Block fixed effects included in regression

3) Days with medical practitioner variable from facilities questionnaire, all other variables from PRA questionaire

4) All measures of GP activism are standardized across all villages, less the Overall measure, which is an average of standardized measures from PRA

5) Variables included in regression but not reported: reservation for SCST, double reservation women/SCST, fraction SCST, pradhan age, pradhan education, pradhan landholding, pradhan wealthy, pradhan political experience, fraction landless households in village, pradhan's village, literacy rate, gini coefficient

6) Significant coefficients in **bold**

Table 12.1 Effect of women's reservation: State effects

	Days with medical practitioner	Overall GP activism	GP activism in water	GP activism in education	GP activism in health	GP activism in roads	GP activism in transport	GP activism in sanitation	GP activism in electricity	GP activism in irrigation	Met higher Panchayat	Faced Problems
Andhra Pradesh	-1.336	0.389	0.291	0.470	-0.120	1.081	0.398	0.382	0.187	0.427	-1.317	-0.431
	(6.351)	**(1.654)**	(0.780)	(0.962)	(0.429)	**(3.132)**	(1.116)	(1.072)	(0.690)	(1.210)	**(4.350)**	(1.020)
Karnataka	-1.249	0.117	0.424	0.147	-0.558	0.558	0.064	0.202	0.324	-0.222	-0.225	-0.856
	(6.493)	(0.746)	**(1.740)**	(0.473)	**(3.876)**	**(2.329)**	(0.409)	(1.009)	(1.491)	(1.101)	(1.069)	**(3.281)**
Tamil Nadu	-1.439	-0.054	-0.007	0.105	-0.195	-0.170	-0.015	-0.407	0.155	0.105	-0.477	-0.845
	(7.578)	(0.305)	(0.023)	(0.292)	(0.942)	(0.643)	(0.075)	(1.512)	(0.679)	(0.366)	**(2.141)**	**(2.384)**
Reservation for SCST	0.059	0.019	0.040	-0.247	-0.086	-0.069	-0.022	0.171	0.457	-0.095	0.221	0.172
	(0.523)	(0.194)	(0.238)	(1.483)	(0.629)	(0.466)	(0.146)	(0.856)	**(2.253)**	(0.579)	(0.820)	(0.684)
Fraction SCST	-0.306	0.064	0.052	0.025	-0.127	0.040	0.119	0.189	0.110	0.103	-0.493	0.196
	(2.177)	(0.523)	(0.274)	(0.111)	(0.699)	(0.237)	(0.600)	(1.206)	(0.630)	(0.344)	**(2.844)**	(0.872)
Reservation for Women	-0.038	-0.065	-0.195	0.103	0.016	-0.062	-0.150	-0.118	-0.010	-0.102	-0.363	-0.098
	(0.308)	(1.395)	**(1.829)**	(0.806)	(0.117)	(0.595)	(1.590)	(0.977)	(0.090)	(0.590)	(1.612)	(0.646)
Res. for SCST Women	-0.026	-0.115	0.097	-0.313	-0.169	0.147	0.078	-0.381	-0.028	-0.349	-0.233	0.043
	(0.137)	(0.952)	(0.367)	(1.091)	(0.810)	(0.869)	(0.299)	(1.160)	(0.169)	**(2.156)**	(0.732)	(0.144)
Pradhan Young	0.279	0.139	0.273	0.010	0.211	0.203	0.203	0.013	-0.065	0.268	0.273	0.771
	(2.383)	(1.352)	(1.774)	(0.051)	**(1.669)**	(1.074)	(0.886)	(0.082)	(0.400)	(1.614)	(1.014)	**(3.184)**
Pradhan Prime	0.086	0.176	0.403	0.062	0.075	0.244	0.113	0.066	0.118	0.331	0.196	0.507
	(1.196)	**(2.383)**	**(2.875)**	(0.410)	(0.819)	**(2.037)**	(0.832)	(0.522)	(1.306)	**(2.212)**	(0.998)	**(2.969)**
Pradhan 5-10 edu yrs	0.044	-0.009	0.010	-0.077	0.055	0.008	0.105	-0.197	0.151	-0.128	0.100	-0.684
	(0.533)	(0.135)	(0.080)	(0.471)	(0.620)	(0.068)	(0.601)	(1.623)	(1.106)	(1.013)	(0.486)	**(3.520)**
Pradhan 10-15 edu yrs	-0.151	0.102	0.154	0.211	0.172	0.059	0.054	-0.018	0.309	-0.123	0.100	-0.729
	(1.434)	(1.268)	(0.889)	(1.184)	(1.439)	(0.406)	(0.322)	(0.145)	**(1.844)**	(1.127)	(0.555)	**(3.324)**
Pradhan 15+ edu yrs	-0.173	-0.060	0.418	-0.149	0.127	-0.091	-0.316	-0.367	0.213	-0.312	0.337	-0.992
	(1.507)	(0.381)	(1.219)	(0.377)	(0.554)	(0.424)	(1.330)	(1.260)	(0.763)	(1.427)	(1.353)	**(3.038)**
Pradhan wealthy	0.167	-0.064	-0.042	-0.299	-0.227	-0.010	-0.106	0.069	0.048	0.051	0.058	0.342
	(2.262)	(0.888)	(0.310)	**(2.708)**	**(2.158)**	(0.104)	(0.775)	(0.444)	(0.274)	(0.487)	(0.403)	**(1.755)**
Pradhan Landholding	-0.002	0.002	0.007	0.006	0.013	-0.004	-0.003	0.004	0.001	-0.004	-0.001	0.013
	(0.646)	(0.398)	(0.830)	(0.445)	(1.371)	(0.646)	(0.330)	(0.325)	(0.142)	(0.388)	(0.107)	**(1.675)**
Pradhan Political Exp	-0.015	0.091	-0.242	0.118	0.362	0.193	0.125	0.052	-0.039	0.161	0.024	-0.243
	(0.159)	(0.892)	(1.011)	(0.651)	**(2.494)**	(1.270)	(0.793)	(0.171)	(0.246)	(0.682)	(0.126)	(0.824)
Upper caste land prop	-0.453	0.087	0.048	0.053	0.063	0.122	0.244	0.086	0.125	-0.043	0.246	-0.011
	(3.726)	(1.096)	(0.301)	(0.368)	(0.493)	(0.724)	(1.051)	(0.535)	(0.656)	(0.207)	(1.207)	(0.074)
Low Gini	-0.167	-0.008	0.252	-0.114	0.133	-0.134	-0.090	0.032	-0.198	0.058	0.086	-0.105
	(2.437)	(0.122)	(1.891)	(0.815)	(1.272)	(1.164)	(0.583)	(0.254)	(1.524)	(0.385)	(1.140)	(0.775)
High Gini	0.287	-0.061	-0.298	0.200	-0.307	-0.016	-0.087	-0.057	0.076	0.002	0.120	-0.033
	(2.186)	(0.884)	(1.462)	(0.969)	**(2.462)**	(0.097)	(0.470)	(0.333)	(0.412)	(0.012)	(0.809)	(0.175)
Literacy rate	1.050	0.443	-0.055	0.120	0.096	1.527	0.872	-0.476	1.345	0.116	-0.285	-1.295
	(2.853)	**(1.822)**	(0.093)	(0.188)	(0.243)	**(3.600)**	**(1.948)**	(1.035)	**(1.719)**	(0.260)	(0.487)	**(1.791)**
Pradhan's Village	0.191	0.169	0.206	0.138	0.160	0.292	0.223	0.201	0.122	0.006	0.036	0.038
	(2.213)	**(3.835)**	**(2.057)**	(1.251)	**(1.895)**	**(3.751)**	**(1.914)**	**(2.079)**	**(1.724)**	(0.060)	(1.078)	(1.104)
Fraction landless hhs	-0.189	0.298	1.161	-0.099	0.585	0.102	0.047	0.367	0.276	-0.058	-0.156	-0.416
	(0.804)	**(1.808)**	**(3.293)**	(0.269)	**(1.699)**	(0.301)	(0.108)	(1.343)	(0.704)	(0.151)	(0.466)	(1.067)
N	464	464	464	464	464	464	464	464	464	464	464	464
Adj R-sq	0.549	0.204	0.073	0.027	0.232	0.276	0.052	0.125	0.206	0.048	0.361	0.288

Notes: 1)t-statistics clustered at block level in parenthesis
2) Block pair fixed effects included in regression
3) Days with medical practitioner variable from facilities questionnaire, all other variables from PRA questionaire
4) All measures of GP activism are standardized across all villages, less the Overall measure, which is an average of standardized measures from PRA
5) Significant coefficients in **bold**

Table 12.2 Effect of women's reservation: State Interactions

	Days with medical practitioner	Overall GP activism	GP activism in water	GP activism in education	GP activism in health	GP activism in roads	GP activism in transport	GP activism in sanitation	GP activism in electricity	GP activism in irrigation	Met higher Panchayat	Faced Problems
Andhra Pradesh	-1.324	0.442	0.260	0.559	-0.050	1.196	0.445	0.479	0.271	0.373	-1.462	-0.377
	(5.186)	**(1.805)**	(0.640)	(1.120)	(0.165)	(3.619)	(1.190)	(1.291)	(0.972)	(1.055)	**(4.877)**	(0.871)
Karnataka	-1.187	0.095	0.388	0.170	-0.577	0.592	0.037	0.173	0.393	-0.414	-0.375	-0.750
	(4.956)	(0.544)	(1.404)	(0.541)	**(3.055)**	**(2.412)**	(0.214)	(0.730)	**(1.732)**	**(2.039)**	**(1.903)**	**(2.745)**
Tamil Nadu	-1.349	-0.043	0.011	0.137	-0.197	-0.063	-0.005	-0.402	0.224	-0.050	-0.541	-0.754
	(5.283)	(0.216)	(0.034)	(0.373)	(0.744)	(0.229)	(0.024)	(1.397)	(0.885)	(0.167)	**(2.510)**	**(1.963)**
Reservation for Women	0.130	-0.028	-0.195	0.208	0.043	0.178	-0.120	-0.068	0.169	-0.442	-0.595	0.110
	(0.376)	(0.301)	(0.798)	(0.791)	(0.137)	(1.134)	(0.752)	(0.304)	(0.854)	**(3.010)**	**(2.406)**	(0.464)
Women res. * AP	0.293	-0.615	0.098	-0.701	-0.779	-0.827	-0.590	-1.083	-0.367	-0.673	0.494	0.140
	(0.765)	**(2.331)**	(0.183)	(1.171)	**(1.835)**	**(3.242)**	**(2.130)**	**(2.016)**	(1.240)	(1.546)	(1.544)	(0.305)
Women res. * KA	-0.284	0.185	0.256	-0.069	0.158	-0.028	0.211	0.240	-0.324	1.036	0.844	-0.550
	(0.701)	(1.073)	(0.778)	(0.205)	(0.309)	(0.112)	(0.737)	(0.679)	(1.079)	**(2.162)**	**(1.559)**	(1.342)
Women res. * TN	-0.342	-0.077	-0.200	-0.069	0.007	-0.439	-0.085	-0.036	-0.178	0.383	-0.069	-0.229
	(0.917)	(0.637)	(0.707)	(0.222)	(0.022)	**(2.221)**	(0.446)	(0.143)	(0.726)	**(1.892)**	(0.165)	(0.580)
N	464	464	464	464	464	464	464	464	464	464	464	464
Adj R-sq	0.552	0.215	0.070	0.024	0.234	0.280	0.050	0.132	0.203	0.072	0.377	0.290

Notes: 1)t-statistics clustered at block level in parenthesis

2) Block pair fixed effects included in regression

3) Days with medical practitioner variable from facilities questionnaire, all other variables from PRA questionaire

4) All measures of GP activism are standardized across all villages, less the Overall measure, which is an average of standardized measures from PRA

5) Variables included in regression but not reported: reservation for SCST, double reservation women/SCST, fraction SCST, pradhan age, pradhan education,

pradhan landholding, pradhan wealthy, pradhan political experience, fraction upper caste land, fraction landless households in village, pradhan's village, literacy rate, gini coefficient

6) Significant coefficients in **bold**