Supporting Online Material for

Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India

Lori Beaman, Esther Duflo, Rohini Pande and Petia Topalova

correspondence to: : l-beaman@northwestern.edu (L.B.); eduflo@mit.edu (E.D.); Rohini_Pande@ksg.harvard.edu (R.P.); PTopalova@imf.org (P.T.)

This PDF file includes:

Materials and methods
SOM Text
Tables S1 to S6
Reference 35 to 37

Material and Methods

Data collection

From June 2006 to November 2007 we surveyed a random sample of 495 villages throughout the 165 village councils in Birbhum district in West Bengal as part of a large-scale study of the effects of political reservation on various outcomes (see (*33*) for a detailed description of the data). Fifteen households in each village were randomly selected to take the survey, which included components for a prime-aged male and female respondent (typically the youngest married couple) and all adolescents (11-15 years old) in the household.

The survey included numerous modules. The one conducted specifically for this study is the module on aspirations. Parents were asked about their aspirations for each of their teenage children along four

dimensions: educational attainment, future occupation, age of marriage, and leadership potential (the wish for the child to become the village Pradhan). The adolescents themselves were asked to respond to a comparable questionnaire, reporting their own aspirations in the same four areas. Below we describe each area in more detail:

Education: Respondents were asked to indicate the highest level of education they wanted (their adolescent child) to complete. A dummy variable is constructed if the response is graduation from secondary school (grade 12) or above.

Occupation: Respondents were asked an open-ended question as to what occupation they would like (their adolescent child) to have at the age of 25. Two indicator variables are constructed from the answers to this question: a dummy variable equal to 1 if the answer is any occupation other than housewife or what the in-laws prefer, and a dummy variable equal to 1 if the desired occupation is doctor, engineer, scientist, teacher or a legal career (lawyer, judge, etc.).

Age of marriage: Respondents were asked about the age at which they wished (their adolescent child) to get married. A dummy variable equal to 1 was constructed if the indicated age was above 18 years.

Leadership: Respondents were asked if they wished (their adolescent child) to become a Pradhan. An indicator variable equal to 1 is constructed if the answer is in the affirmative.

These variables are chosen as measures of aspirations, because they capture what parents (and adolescents) hope to achieve for the future. The first four (though not the leadership question) are also predictive of the current behavior of the adolescents (the correlation of each variable with being enrolled in schools is respectively 0.20, 0.17,0.35, 0.15, and 0.02 for the five variables, in the order they were described).

The primary respondents and adolescents were also administered a detailed questionnaire on their time use. Respondents were asked about the time spent in the last 24 hours on 16 activities covering agricultural and household work. We classify the following activities—cooking, cleaning, fetching water, doing laundry, collecting fuel, and providing child care—as domestic or household chores. The household roster provided us information on the educational and occupational outcomes for all members of the household, as well as the household's participation in Employment Guarantee Schemes. For young adult (ages 16-30), using data from the household roster, we construct educational variables identical to those for adolescents, and two indicator variables for occupation: 1 if not a housewife and 1 if has a high-education job.

Finally, during our evaluation of the schooling facilities, we administered short math and reading tests to 5 randomly selected school-enrolled 9-year-old children. The tests are short oral tests, developed by the organization Pratham, and used yearly to evaluate school performance across India and have been validated in (.

Statistical Methodology

Creation of indices and normalization of dependent variables

For each family of outcomes (parents' aspirations, aspirations and educational outcomes of adolescents, young adult education, young adult life and career outcomes), there are more than one variables. These variables are included in the study because of an a priori belief that they should be similarly affected by the presence of a female leader: there is no presumption that the effect should be of the same magnitude for all variables within a family, but the direction of the effect should be the same. To avoid drawing misleading inferences by discussing individual variables for which there is no ex-ante prediction, following the practice in the economics literature (30, 31) we construct a standardized index for each family of outcomes. This index is computed by taking the average of the variables within the family, which are first normalized by subtracting the mean for the never-reserved village councils and dividing by the standard deviation in the never-reserved sample.

The construction of the aspiration index deserves more discussion. In particular, we examine various spheres of aspirations, which may not be internally consistent and thus might be differentially affected by the presence of female leaders. If that is the case, aggregating them into one index may not be legitimate and may confound the effects of reservation onto the various spheres of aspirations. Validation tests suggest that the first four aspiration variables are correlated: the cronbach's alpha statistic is 0.6 for the parents, and 0.55 for the adolescents. The variable "wishes to be Pradhan" has a much lower correlation, both with actual outcomes and with the other aspiration variables. Thus, we construct an index for the first four variables, and we analyze leadership aspirations (as captured in "wishes to be Pradhan" variable) separately.

Specification

The random assignment of reserved seats allows us to study the effect of reservation by comparing the means of outcomes of interest across village councils with different reservation status. This provides a

reduced form effect of the impact of female leadership since very few women are elected for Pradhan in non-reserved village councils, (see (*34*), Figure I). As discussed above, during the time of the survey, each village council could be assigned to one of the following three categories: never reserved, reserved only once (in the 1998 or 2003 elections) or reserved twice (both in the 1998 and 2003 elections). We estimate:

$$y_{ig} = \beta F_{ig} + \gamma_1 R_{g1} + \gamma_2 R_{g2} + \mu_1 (F_{ig} \times R_{g1}) + \mu_2 (F_{ig} \times R_{g2}) + X_{ig}\pi + \alpha_b + \epsilon_{ig}$$

Where F_{ig} is a dummy variable equal to 1 if the teenage child *i* in village council g is female, R_{g1} is an indicator variable equal to 1 if the village council was reserved for a female Pradhan once (i.e. either in the 1998 or 2003 election cycle), and R_{g2} is an indicator equal to 1 if the village council was reserved in both the 1998 and 2003 election cycles. $F_{ig} \times R_{g1}$ is the interaction (product) of the teenage gender indicator, and the reserved once indicator and $F_{ig} \times R_{g2}$ is constructed analogously. X_{ig} is a set of village-level controls which include all village characteristics from table S1. When the equation above is estimated with data on the aspirations of parents for their children, we also include an indicator for the gender of the respondent. α_b denotes block fixed effects. The standard errors, ϵ_{ig}, are clustered by village council to account for possible correlation of the error term across respondents within the same village council.

Tables 1, 2 and 3 (as well as S3, S4 and S5) show the results of the above specification in panel B. Table S6 shows a similar specification, but we separate the effect of 1998 reservation, 2003 reservation, and 1998 and 2003 consecutive reservations. The rows labeled Boys (Men) shows the estimated coefficients γ_1 in the Reserved once panel and γ_2 in the Reserved twice panel, representing the difference in aspirations for boys in once-reserved and twice-reserved village councils relative to the never reserved sample. The Girls (Women) row is the sum of γ_1 and μ_1 in the Reserved once panel and γ_2 and μ_2 in the Reserved twice panel and demonstrates the difference in aspirations for girls in once-reserved and twice-reserved village councils relative to never-reserved village councils. The Difference row displays μ_1 and μ_2 in the Reserved once and Reserved twice panels respectively. This captures the difference in the gap between boys and girls relative to the never-reserved sample.

Text

Reservation policy in India

Following a 1993 constitutional amendment, Indian states must devolve a significant amount of political power to a three-tier system of local government, called the Panchayat. Our analysis focuses on the lowest tier of this system, the village council or Gram Panchayat. The village council gets its principal financing from the State government, and its responsibilities include providing village infrastructure and identifying government program beneficiaries. In our study location, the state of West Bengal, an average village council has 10,000 voters spanning multiple villages. The village council comprises several electoral wards, each of which elect a councilor by plurality rule. The chief village councilor, the Pradhan, is elected among the councilors by the councilors and, as the only full-time council member, has considerable control over council decisions (*S1*). Elections occur every five years.

To increase the representation of political minorities, the 1993 amendment also stipulated a reservation for women of at least one-third of ward councilor positions in each council and one-third of Pradhan positions within a district at each election. Men may not contend for these reserved positions. Two disadvantaged minorities (Scheduled Castes (SC) and Scheduled Tribes (ST)) also have reserved seats in the council and for Pradhan positions, proportional to their respective populations in the village council. Pradhan reservation rotates between elections: i.e. in each election cycle, one-third of the village councils have the Pradhan position reserved for women.

The West Bengal Panchayat Constitution Rule (*S2*) was modified in 1998, introducing Pradhan reservation for women, SC and ST in compliance with the constitutional amendment. The rule requires that preceding every election, village councils in a district be randomly reassigned serial numbers across three lists: reserved for SC, reserved for ST, and unreserved. The village councils corresponding to every third serial number on each list, starting with number one in 1998 and number two in 2003, were required to be reserved for a woman. Thus, the Pradhan reservation for women is effectively random with implicit stratification by SC/ST and administrative block (since village council serial numbers start with a block identifier). Furthermore, it is possible for a village council to be reserved for women twice in a row; for instance, if it was ranked first on a list in 1998 and second in 2003.

In tables S1 and S2 we confirm that the randomization procedure resulted in a balanced sample. We designate villages with one of three labels: never reserved, reserved only once, and reserved twice. Using 1991 census data (i.e. before reservation was implemented) for the 495 villages for which we collected survey data, table S1 shows that village characteristics as of 1991 are not correlated with the reservation status of village councils ($P>0.5$ for Wald tests comparing never-reserved village councils to

reserved-once and reserved-twice village councils). Of the fifteen variables, there is only one statistically significant difference by reservation status: whether the village has a bus or train stop (see also (*28*)). Household characteristics such as number of adolescents and adult literacy rates should not be affected by reservation within the sample of surveyed respondents; table S2 confirms that these characteristics do not differ across the three types of village councils (P>0.15 for Wald tests comparing never-reserved village councils to reserved once and reserved twice village councils). In sum, both tables show balance on covariates, demonstrating that reservation was effectively randomized across village councils.

Additional Results

Tables S3 and S4 look at the impact of reservation on men and women (i.e. fathers and mothers) separately. Mothers' aspirations for their girls are altered more broadly, with an effect on both educational and occupational aspirations. The average gender aspirations gap of mothers declines by 0.19 of a standard deviation (P<0.01, *t* test). Fathers, on the other hand, mostly increase their desire for their daughters to become Pradhan, with the gender gap for that variable declining by 0.15 of a standard deviation (P<0.01, *t* test). This is broadly consistent with women altering their aspirations for women (in this case their daughters, not themselves) based on same-sex role models, as we see mothers being more responsive than fathers in village councils with female leaders.

Table S5 investigates whether female leaders, through their policy actions, might have affected the gender gap in aspirations and educational attainment. Columns (1)-(3) examine whether female leadership was associated with changes in the labor market and time use for young women relative to young men (aged 16-30). The educational variable is the normalized mean of the following variables: 1 if can read and write, 1 if ever attended school, and the highest grade completed. The occupational variable reflects the standardized average of the variables: 1 if not a housewife, and 1 if has a high education job. Time use is the number of minutes per day spent on household chores. In columns (4), we include all primary respondents, without restricting the sample to those aged 16-30. Column (5) studies the number of days that men and women in the household had work through Employment Guarantee Schemes (EGS). The smaller number of observations is due to the fact that this question was asked at the household (rather than individual) level. Finally, columns (6) and (7) investigate the learning outcomes of younger children by comparing math and reading test scores of nine-year-old school-

enrolled children across villages with different reservation status. Across all measures of educational and labor market outcomes, availability of work through EGS and quality of schooling, we find no evidence that female reservation led to significant changes.

Table S6 examines whether it is the amount of exposure to a female leader rather than the length since first exposure that matters for changing the aspirations of the girls and their parents and girls' educational outcomes. The table presents the change in the gap between boys and girls for the standardized average within each family of outcomes (parents' aspirations, adolescents' own aspirations and adolescents' educational outcomes) in village councils that were reserved for a female leader once in 2003, once in 2008, and in both election cycles. The reduction in the gap relative to never-reserved villages is significant only in villages reserved for a woman leader in both election cycles.

Tables and legends

Table S1.

Village-level Randomization Check. The census variables are from the 1991 Census of India. N refers to the maximum number of observations. Infrastructure variables have between 454 and 478 total observations across village councils. Columns (1)-(4) report means with standard deviations in parentheses of the variable denoted in the row heading for the reservation type denoted in the column heading. "Reserved once," "Reserved twice," and "Never reserved" are indicator variables for village councils reserved for a female Pradhan once in either 1998 or 2003, in both 1998 and 2003, and not reserved in either election, respectively. Columns (5)-(6) report tests of differences of means across columns (1) and (2) and columns (3) and (4), respectively. Standard errors are in parentheses. Tests are based on regressions with block fixed effects and standard errors are corrected for heteroskedasticity and clustered at the village council level.

	Reserved once	Reserved twice	Never reserved	Diff: (1) and (3)	Diff: (2) and (3)
	(1)	(2)	(3)	(4)	(5)
Total population	1,292	1,197	1,362	-80.106	-90.363
	(1367)	(1295)	(1555)	(147.334)	(176.052)
Fraction SC / ST population	0.441	0.502	0.471	-0.007	0.014
	(0.258)	(0.256)	(0.265)	(0.028)	(0.043)
Average household size	5.398	5.222	5.497	-0.047	-0.329
	(0.592)	(0.449)	(2.454)	(0.125)	(0.284)
Sex ratio under 6	1.069	1.034	1.036	0.061	-0.030
	(0.442)	(0.276)	(0.226)	(0.044)	(0.041)
Literacy	0.389	0.351	0.373	0.014	-0.006
	(0.120)	(0.129)	(0.137)	(0.013)	(0.026)
Fraction women literate	0.291	0.265	0.275	0.013	0.007
	(0.119)	(0.123)	(0.134)	(0.013)	(0.025)
Fraction irrigated land	0.603	0.485	0.500	0.040	0.027
	(0.321)	(0.349)	(0.352)	(0.039)	(0.055)
Village has a bus or train stop	0.285	0.433	0.259	0.046	0.163
	(0.453)	(0.500)	(0.439)	(0.046)	(0.081)
Village has permanent approach road	0.144	0.300	0.194	-0.045	0.094
	(0.352)	(0.462)	(0.397)	(0.043)	(0.081)
Village has tube well	0.911	0.933	0.977	-0.018	-0.020
	(0.286)	(0.252)	(0.151)	(0.024)	(0.019)
Village has hand pump	0.112	0.000	0.057	0.006	0.001
	(0.316)	(0.000)	(0.233)	(0.006)	(0.002)
Village has well	0.421	0.533	0.528	-0.034	-0.042
	(0.495)	(0.503)	(0.500)	(0.055)	(0.085)
Village has community tap	0.053	0.050	0.010	-0.006	0.005
	(0.226)	(0.220)	(0.098)	(0.016)	(0.012)
Number of schools	1.228	1.233	1.160	0.073	0.117
	(0.891)	(0.810)	(0.910)	(0.090)	(0.126)
Number of health facilities	0.144	0.217	0.218	-0.008	-0.031
	(0.365)	(0.490)	(0.809)	(0.052)	(0.105)
Overall Effect: F stat				0.289	0.292
Overall Effect: p value				*0.591*	*0.589*
N	213	60	222		

Table S2.

Household-level Randomization Check. The variables are from the Birbhum household survey. N refers to the maximum number of observations. Columns (1)-(4) report means with standard deviations in parentheses of the variable denoted in the row heading for the reservation type denoted in the column heading. "Reserved once," "Reserved twice," and "Never reserved" are indicator variables for village councils reserved for a female Pradhan once in either 1998 or 2003, in both 1998 and 2003, and not reserved in either election, respectively. Columns (5)-(6) report tests of differences of means across columns (1) and (2) and columns (3) and (4), respectively. Standard errors are in parentheses. Tests are based on regressions with block fixed effects and standard errors are corrected for heteroskedasticity and clustered at the village council level.

	Reserved once	Reserved twice	Never reserved	Diff: (1) and (3)	Diff: (2) and (3)
	(1)	(2)	(3)	(4)	(5)
Number of adolescents in household	1.417	1.451	1.464	-0.035	-0.023
	(0.613)	(0.678)	(0.612)	(0.030)	(0.051)
Number of adult women in household	1.469	1.474	1.507	-0.054	-0.014
	(0.767)	(0.728)	(0.802)	(0.037)	(0.053)
Number of adult men in household	1.507	1.534	1.578	-0.070	-0.022
	(0.881)	(0.936)	(0.908)	(0.043)	(0.058)
Fraction of adult women who are literate	0.501	0.495	0.516	0.000	-0.056
	(0.462)	(0.461)	(0.455)	(0.023)	(0.046)
Fraction of adult men who are literate	0.326	0.335	0.329	0.006	-0.029
	(0.441)	(0.438)	(0.429)	(0.024)	(0.038)
Household is Scheduled Caste (SC)	0.345	0.350	0.351	0.008	-0.009
	(0.476)	(0.478)	(0.478)	(0.038)	(0.059)
Household is Scheduled Tribe (ST)	0.064	0.098	0.066	0.005	0.011
	(0.245)	(0.298)	(0.248)	(0.025)	(0.037)
Household is Other Backward Class (OBC)	0.048	0.026	0.039	0.005	-0.004
	(0.213)	(0.160)	(0.194)	(0.010)	(0.011)
Household is Muslim	0.324	0.297	0.354	-0.035	-0.050
	(0.468)	(0.458)	(0.478)	(0.049)	(0.064)
Overall Effect: F stat				1.941	1.043
Overall Effect: p value				*0.164*	*0.307*
N	1,093	266	1,181		

Table S3.

Mothers' Aspirations for their Children. Panel A shows the means and standard deviations (denoted in brackets) in never reserved village councils of the variable in the column heading. The coefficients in panel B are OLS results for the dependent variable denoted in the column heading and measure the difference in aspirations for boys and girls relative to the never reserved sample. The row denoted Gap for never reserved village councils shows the gap in aspirations between boys and girls. The subsequent "Difference in Gap" rows show the gap in the aspirations for boys and girls relative to the gap in the never reserved sample. Standard errors corrected for heteroskedasticity and clustering at the village council level are shown below the coefficients in parentheses. The sample size is 3146. The normalized average is the average across the four outcomes (columns 1-4), which are first normalized by subtracting the mean for never reserved village councils and dividing by the standard deviation in the never reserved sample. All estimates control for village characteristics described in table S1.

	Does not wish child to be housewife or whatever in-laws prefer	Wishes child to have a high education job	Wishes child to marry after age 18	Wishes child to graduate or get higher education	Normalized average	Wishes child to be Pradhan
A. Means and SD in never reserved						
Boys	0.993	0.057	0.992	0.310	0.314	0.737
	[0.080]	[0.233]	[0.088]	[0.463]	[0.434]	[0.440]
Girls	0.234	0.034	0.697	0.170	-0.415	0.628
	[0.424]	[0.181]	[0.460]	[0.376]	[0.669]	[0.484]
B. Coefficients						
Never Reserved						
Gap	-0.756	-0.021	-0.298	-0.142	-0.728	-0.101
	(0.019)	(0.010)	(0.023)	(0.023)	(0.031)	(0.026)
Reserved Once						
Boys	0.000	0.019	-0.007	0.008	0.018	-0.031
	(0.011)	(0.017)	(0.011)	(0.029)	(0.032)	(0.030)
Girls	-0.006	0.027	-0.062	-0.008	-0.025	-0.011
	(0.025)	(0.013)	(0.030)	(0.024)	(0.043)	(0.036)
Difference in Gap	-0.005	0.008	-0.055	-0.016	-0.043	0.020
	(0.028)	(0.020)	(0.032)	(0.032)	(0.046)	(0.036)
Reserved Twice						
Boys	-0.039	-0.005	-0.032	-0.028	-0.067	0.000
	(0.022)	(0.022)	(0.018)	(0.041)	(0.038)	(0.049)
Girls	0.088	0.035	0.014	0.042	0.119	0.045
	(0.041)	(0.020)	(0.041)	(0.040)	(0.067)	(0.053)
Difference in Gap	0.127	0.040	0.046	0.070	0.186	0.045
	(0.050)	(0.030)	(0.043)	(0.048)	(0.072)	(0.067)

Table S4.

Fathers' Aspirations for their Children. Panel A shows the means and standard deviations (denoted in brackets) in never reserved village councils of the variable in the column heading. The coefficients in panel B are OLS results for the dependent variable denoted in the column heading and measure the difference in aspirations for boys and girls relative to the never reserved sample. The row denoted Gap for never reserved village councils shows the gap in aspirations between boys and girls. The subsequent "Difference in Gap" rows show the gap in the aspirations for boys and girls relative to the gap in the never reserved sample. Standard errors corrected for heteroskedasticity and clustering at the village council level are shown below the coefficients in parentheses. The sample size is 2994. The normalized average is the average across the four outcomes (columns 1-4), which are first normalized by subtracting the mean for never reserved village councils and dividing by the standard deviation in the never reserved sample. All estimates control for the village characteristics described in table S1.

	Does not wish child to be housewife or whatever in-laws prefer	Wishes child to have a high education job	Wishes child to marry after age 18	Wishes child to graduate or get higher education	Normalized average	Wishes child to be Pradhan
A. Means and SD in never reserved						
Boys	0.989	0.079	0.992	0.326	0.344	0.638
	[0.103]	[0.270]	[0.089]	[0.469]	[0.457]	[0.481]
Girls	0.251	0.044	0.816	0.182	-0.297	0.547
	[0.434]	[0.204]	[0.388]	[0.386]	[0.634]	[0.498]
B. Coefficients						
Never Reserved						
Gap	-0.738	-0.036	-0.177	-0.139	-0.639	-0.086
	(0.024)	(0.014)	(0.019)	(0.021)	(0.036)	(0.026)
Reserved Once						
Boys	-0.011	0.013	-0.003	-0.003	0.006	-0.053
	(0.011)	(0.017)	(0.008)	(0.029)	(0.033)	(0.033)
Girls	-0.023	0.012	0.022	-0.024	0.005	0.010
	(0.030)	(0.013)	(0.025)	(0.024)	(0.040)	(0.041)
Difference in Gap	-0.012	-0.002	0.025	-0.021	-0.001	0.063
	(0.033)	(0.021)	(0.025)	(0.032)	(0.049)	(0.041)
Reserved Twice						
Boys	-0.028	-0.020	-0.005	0.039	-0.018	0.017
	(0.021)	(0.018)	(0.011)	(0.058)	(0.051)	(0.049)
Girls	0.039	-0.012	0.030	0.060	0.065	0.164
	(0.045)	(0.018)	(0.030)	(0.042)	(0.062)	(0.049)
Difference in Gap	0.067	0.008	0.035	0.021	0.083	0.147
	(0.052)	(0.023)	(0.032)	(0.067)	(0.078)	(0.047)

Table S5.

Potential Channels for Female Leaders' Effect: Education and Labor Market Outcomes of Young Adults, Public Services, and Schooling Quality. Panel A shows the means and standard deviations (denoted in brackets) in never reserved village councils of the variable in the column heading. The coefficients in panel B are OLS results for the dependent variable denoted in the column heading and measure the difference in outcomes for men and women relative to the never reserved sample. The row denoted Gap for never reserved village councils shows the gap in aspirations between boys and girls. The subsequent "Difference in Gap" rows show the gap in the outcomes for men and women relative to the gap in the never reserved sample. Standard errors corrected for heteroskedasticity and clustering at the village council level are shown below the coefficients in parentheses. The normalized education average is the average across the three outcomes listed in Table 3. The normalized labor market average is the average across the variables: 1 if not a housewife; and 1 if has a high education job. Normalized averages are constructed from the individual variables which are first normalized by subtracting the mean for never reserved village councils and dividing by the standard deviation in the never reserved sample. Domestic chores include fetching water, cooking, cleaning, doing laundry, providing child care, and collecting fuel. All estimates control for the village characteristics described in table S1.

	Young Adults (age 16-30)			All household members		School-Enrolled Kids (9 year old)	
	Education Normalized Average	Labor Market Normalized Average	Total time on Domestic Chores	Total time on Domestic Chores	Number of days worked in EGS	Math Score	Reading Score
A. Means and SD in never reserved							
Men	0.512	0.328	73.73	58.33	3.009	0.018	2.000
	[0.770]	[0.627]	[97.89]	[84.73]	[5.304]	[0.707]	[0.846]
Women	0.121	-0.619	380.34	334.04	0.261	-0.019	1.948
	[0.928]	[0.600]	[168.10]	[158.06]	[1.576]	[0.738]	[0.829]
B. Coefficients							
	Never Reserved						
Gap	-0.393	-0.945	306.058	276.198	-2.749	-0.048	-0.054
	(0.027)	(0.022)	(8.850)	(5.571)	(0.259)	(0.032)	(0.050)
	Reserved Once						
Men	0.035	0.021	-10.240	-2.976	0.168	-0.108	-0.011
	(0.032)	(0.023)	(8.319)	(4.824)	(0.337)	(0.057)	(0.067)
Women	0.068	-0.010	-7.497	-3.272	0.070	-0.144	-0.042
	(0.038)	(0.023)	(8.605)	(6.385)	(0.156)	(0.071)	(0.074)
Difference	0.032	-0.031	2.743	-0.296	-0.098	-0.036	-0.031
in Gap	(0.037)	(0.032)	(11.541)	(7.112)	(0.376)	(0.053)	(0.065)
	Reserved Twice						
Men	0.072	-0.025	-13.193	-6.954	0.023	-0.042	0.032
	(0.050)	(0.022)	(11.016)	(5.540)	(0.489)	(0.091)	(0.063)
Women	0.100	0.012	-3.756	2.396	-0.299	-0.126	0.113
	(0.062)	(0.036)	(12.141)	(9.641)	(0.217)	(0.085)	(0.080)
Difference	0.028	0.037	9.437	9.350	-0.321	-0.084	0.080
in Gap	(0.063)	(0.039)	(16.214)	(11.495)	(0.566)	(0.104)	(0.086)
N	10704	10704	3956	13067	14815	3166	3184

Table S6.

Dose vs. Length since Exposure. The table shows the gap in the aspirations for boys and girls relative to the gap in the never reserved sample. Standard errors corrected for heteroskedasticity and clustering at the village council level are shown below the coefficients in parentheses. The normalized average for parents' aspirations, teenagers' aspirations and teenagers' educational outcomes are described in Tables 1, 2 and 3 respectively. All estimates control for the village characteristics described in table S1 and for the gender of the respondent in column (2).

	Teenagers' Aspirations	Parents' Aspirations	Teenagers' Educational Outcomes	Teenagers' Time Spent on Domestic Chores
	Normalized Average			
Difference in Gap: 1998 Only	-0.046	-0.030	0.016	-0.734
	(0.068)	(0.039)	(0.074)	(7.507)
Difference in Gap: 2003 Only	0.037	-0.017	0.032	-2.764
	(0.059)	(0.045)	(0.064)	(8.130)
Difference in Gap: Both 1998 and 2003 (Reserved Twice)	0.166	0.136	0.248	-17.630
	(0.057)	(0.059)	(0.102)	(8.975)
N	3680	6140	3680	3679
Test: 1998 Diff in Gap = 2003 Diff in Gap	0.279	0.789	0.841	0.818

References

35. T. Besley, R. Pande, V. Rao, Just rewards? Local politics and public resource allocation in South India, *World Bank Econ. Rev.* (2011), Advance Access published online doi: 10.1093/wber/lhr039.

36. Government of West Bengal, *The West Bengal Panchayat (Constitution) Rules, 1975* (Department of Panchayats & Rural Development, 1998).

37. Vagh, S. B. (2009). "Evaluating the Reliability and Validity of the ASER Testing Tools," working paper, ASER Centre: www.asercentre.org.