

## Effects of Development on Gender Inequality in School Enrollment in India

Sonya Rastogi  
Aparna Sundaram  
Reeve Vanneman

University of Maryland

Contact Person: Reeve Vanneman, reeve@cwmills.umd.edu

This paper is a first draft, somewhere between a “completed paper” and an extended abstract. It gives the best idea of where we are now in the analysis of these data. We plan to do the following before April:

Develop instruments for the district level school availability effect.

Merge village level data on school availability and wealth levels to explore a three level model.

Identify a family level effect to estimate the correlated errors among children within the same family. This first pass now treats children as if they were independent observations. These revisions should also permit us to control for the effects of having older and younger siblings.

Include the (non-significant) urbanization variable in the reported tables which is discussed in the text, but is not in the current tables..

Expand the literature review to include additional relevant sources.

Revise the methods section to reflect the models and variable that are reported (or will be reported) in the results section

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### Abstract

We examine the relationship between economic development and gender differences in school enrollments as a joint function of household (e.g., wealth) and district-level (e.g., school availability) characteristics. Using household level data for 52,439 children ages 7 to 18 in rural India and district level measures of development for 195 districts, we find evidence for most of the expected household and district-level relationships that explain the development - gender equality relationship. More surprisingly, we find little evidence of the development - equality relationship itself. The separate development processes do not add up to a development effect because each beneficial process is counteracted by other processes, less often recognized, that retard gender equality. For example, district wealth is associated with more household landownership which, in India, exacerbates gender inequalities. And more women's labor force participation is associated with more girls' labor force participation which also widens gender gaps in education. The results demonstrate the advantages of investigating development outcomes in a more explicitly multilevel framework, a common strategy for developed country analyses of educational outcomes, but less common for developing countries.

Contact Person: Reeve Vanneman, [reeve@cwmills.umd.edu](mailto:reeve@cwmills.umd.edu)

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### **INTRODUCTION**

Development may sometimes be the best equalizer of gender disparities in schooling in developing countries. Higher household incomes increase girls' enrollments even more than boys' since poor families who must ration their educational expenditures usually favor sons' education.

Household decision-making about girls' schooling changes during development as much because of changes in the circumstances surrounding households as changes within the household itself. First, development increases the supply and quality of schools, and girls' attendance is more responsive to school availability than boys'. Second, as employment shifts from agriculture to manufacturing and the service sector, income returns to education increase; especially if more of these new jobs are open to women or expand women's traditional roles, women's labor force participation will increase thus raising the returns to girls' schooling even faster than the returns to boys' schooling. Third, development usually brings closer incorporation into global institutions; global interactions bring expectations that "modern" school systems include equal enrollment of girls and boys. Finally, as all these processes work to increase girls' schooling, the change can begin to feed on itself as popular expectations about girls schooling will change because of what households see happening around them.

These two types of processes, one household level, one contextual, lead to an optimistic scenario for development effects on gender inequality. In fact, some observers of recent changes suggest that the gender difference in access to schools has narrowed greatly in East Asia, Sub-

Saharan Africa, South America, and the Caribbean (Knodel and Jones 1996). Gender gaps remain primarily in South Asia and Arabic countries.

In these two areas however, the development effect on reducing gender inequalities is more uncertain. In India in particular, despite slow but steady economic growth since Independence, gender gaps in literacy and enrollment have closed little if at all (King and Hill 1993:6).<sup>1</sup> We suspect that Arab and South Asian “exceptionalism” can be traced to different contextual effects on school enrollments. In these places, cultural patterns have long favored men’s public ascendancy. Increased resources from development can reinforce traditional institutions that maintain that male ascendancy and inhibit girls’ schooling. If development strengthens patriarchal institutions, the linkages between economic growth and a more favorable environment for girls’ enrollments are broken. While increased *household level* income may still help close educational gender gaps, *contextual* changes may counteract these egalitarian effects.

A contextual framework for understanding gender equality requires a more multilevel statistical design to separate household from area-level influences. In this research, we use data from a household survey in India together with official statistics from Indian districts to disentangle how development influences gender equality in the schools through changes in the home and changes in the contexts surrounding home. We replicate past results that greater household income reduces gender gaps in school enrollments but find weaker support for the accompanying contextual influences. In fact, once household level incomes are controlled, there is no district level wealth effect on increasing girls’ enrollments or decreasing the gender gap.

## LITERATURE REVIEW

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<sup>1</sup> As the proportion enrolled (or literate) passes the 50% mark and becomes more universal, the gender gap as expressed in percentage point differences necessarily closes. But, if the gender gap is defined in the ratio of boys’ and girls’ odds of enrollments, then little closing of the gender gap is observed.

The most apparent evidence for a development impact on lower gender differentials in schooling is the fact that gender gaps in education tend to be largest among the poorest countries (Hill and King 1993, World Bank 2001). But gender differences in education vary more by region than by economic level suggesting cultural rather than economic differences may better explain national variation. Poor countries have large gender gaps in part because South Asia is poor. Better evidence for development effects on gender equality can be found in comparing within countries changes over time. Using a multi-dimensional indicator of gender inequality that included educational differences, Forsythe, Korzeniewicz and Durrant found that development reduced gender inequalities only among rich countries.

There is also some evidence within developing countries that the poorest areas have larger gender gaps in education. Using 1981 Indian district data, Sundaram (2000) found that districts with low levels of agricultural development, as measured by crop value per agricultural worker, had more gender inequality in rural literacy rates.

At the household level, the evidence that rich households have smaller gender gaps than poor households is well established. In studies of India, Peru, Vietnam, Turkey, Tanzania, and Malaysia, increases in household income increase the probability that girls will be enrolled in school more than the probability that boys will be enrolled in school (World Bank 2001). For example, in India, Sipahimalani (1999) found that a 1 percent increase in household income, increases the probability of girls being enrolled by 9 to 13 percent, while the probability of boys being enrolled in school increases by 7 percent. Knodel and Jones (19xx) also found gender gaps greatest among low income households in both Thailand and Vietnam.

Among contextual factors that affect gender differences in enrollment, the best evidence is for the differential impact of school availability. "Household demand for girls education is

more sensitive than boys' to distance to school (World Bank 2001: 167).” Knodel's (1997) Thai focus groups confirm that parents themselves are aware that the close proximity of schools is more important for sending their daughters to school than for sending their sons. Alderman et al. (1996) used the separate sex nature of Pakistani schools to demonstrate that lower availability of girls' schools accounted for a substantial portion of the gender gaps in literacy and numeracy. Lloyd and her co-workers have found that school quality affects girls' school attendance more than boys' in Kenya (Lloyd, Mensch and Clark 2000) and Egypt (Lloyd, El Tawila, Clark and Mensch 2001). Sundaram's study of 1981 Indian districts (2000) also found that the greater the availability of education as measured by teachers per child, the smaller the gender gap in literacy among children aged 10 to 14. In studies of India, Ghana, Peru, Malaysia, and the Philippines, girls' enrollments have been shown to be more responsive than boys' to distances to school (World Bank 2001).

There is less empirical evidence on whether increasing income returns to education explain much of a development effect on declining gender differentials... [Deolalikar 1994]

On the other hand, in early stages of development, families may make the rational calculation to send their daughters to work in order to help pay for their son's education. Greenhalgh (1985) finds that after World War II, gender inequality *increased* in Taiwan because girls were taken out of school early to work so they could aid in investing in their brother's education. Parish and Willis (1993) found that this pattern declined with the increased economic development of Taiwan.

One of the difficulties with evaluating the importance of women's labor force participation in affecting parents' calculations of income returns to educating their daughters is that women's labor force participation is sometimes associated with girls' labor force

participation or at least girls' increased family responsibilities when their mothers are employed outside the household. There is substantial disagreement over whether children's work necessarily reduces their educational attainment. Sundaram and Vanneman (2003) find that adult women's labor force participation rates appears to *increase* gender gaps in literacy unless girls' labor force participation is held constant.

Meyer has championed the idea that national incorporation into the global system implies conformity to certain expectations about how "modern" institutions such as school systems are structured (Meyer, Ramirez, and Soysal 1992).

Urban centers are more quickly incorporated into global networks than are rural areas. This may help explain why gender equalities in education tend to be smaller in urban areas than in rural areas. Moreover, households in rural areas that are in close proximity to urban areas are influenced by modernizing ideas and norms in urban areas (Jejeeboy 1993). The urban effects could also be a function of greater school availability in urban areas or in rural areas closer to towns and cities.

In contrast, the strength of traditional institutions has sometimes been shown to be associated with greater gender inequalities in education, especially in South and West Asia. The Taliban domination of Afghanistan demonstrated this association in a most dramatic way. In India, Sundaram (2000) found that areas with stronger patterns of exogamy – marrying daughters out of their natal villages – was associated with greater gender differentials in children's literacy. The marriage traditions could lead directly to reductions in daughter's schooling as parents calculate that they will get less from educating daughters who will marry away from their homes than from sons who are likely to stay close to home or even within an extended family household. However, the exogamy pattern may also be a proxy for the strength of traditional

patriarchal systems which value sons public roles and favor seclusion of women within the household.

These considerations lead to our evaluation of the following hypotheses that assert and explain development effects on gender equality in schooling:

**Hypothesis 1:** The wealthier the district the more gender equality in school enrollments.

This relationship is explained in part by household level wealth effects:

**Hypothesis 2:** Wealthier households will have more gender equality in school enrollments.

We have three principal contextual level hypotheses:

**Hypothesis 3:** The higher the level of school availability in a district, the less gender inequality in education.

**Hypothesis 4:** The more urban the district the less gender inequality in education.

**Hypothesis 5:** The stronger the patterns of marital exogamy, the greater the gender inequality in education.

## METHODS

### Data.

Household data are from the Human Development Profile Index (HDPI), a large national survey of 33,000 rural households in 195 districts in India in 1994. We look at all children between age 7 and 18 in these households, a total of 52,439 children. The district-level data come from the 1991 Census.

### Model.

We use a hierarchical model to test the effects of household and district variables on the chances of a child's current enrollment in school. At the individual level:

$$Y_{ij} = \beta_{0j} + \beta_{1j}(\text{Gender}_{ij}) + \sum \beta_{kj}(X_{ikj} - \bar{X}_{k..}) + r_{ij}$$

where:  $Y_{ij}$  = the log odds of enrollment for individual  $i$  in district  $j$ ;

$\beta_{oj}$  = the intercept for district  $j$ , which is enrollment in district  $j$  for the average female;

$\beta_{ij}$  = the gender difference in enrollment in district  $j$ ;

$(\text{Gender}_{ij})$  = the gender of the individual  $i$  in district  $j$ , coded 1 for male;

$\beta_{kj}$  = the slopes for individual control variables,  $X_{ikj}$ , for district  $j$ ;

$(X_{ikj} - \bar{X}_{k..})$  = individual level control variables (e.g., age) centered at their means;

$r_{ij}$  = error term for the individual-level.

At the district level, two of the coefficients are modeled according to various development characteristics in the district:

$$\beta_{oj} = \gamma_{00} + \gamma_{01}(\text{Wealth Index}_j) + \gamma_{02}(\text{School Quality}_j) + \gamma_{03}(\text{Proportion Urban}_j) + \sum \gamma_{0m}(Z_{jm} - \bar{Z}_j) + u_{0j}$$

$$\beta_{ij} = \gamma_{i0} + \gamma_{i1}(\text{Wealth Index}_j) + \gamma_{i2}(\text{School Quality}_j) + \gamma_{i3}(\text{Proportion Urban}_j) + \sum \gamma_{im}(Z_{jm} - \bar{Z}_j) + u_{ij}$$

where:  $\gamma_{00}$  = model intercept;

$\gamma_{01}$  = the effect of development as measured by the wealth index on  $\beta_{oj}$ ;

$(\text{Wealth Index}_j)$  = the wealth index in district  $j$ ;

$\gamma_{02}$  = the effect of development as measured by school availability on  $\beta_{oj}$ ;

$(\text{School Quality}_j)$  = availability of schooling in district  $j$ ;

$\gamma_{03}$  = the effect of development as measured by urbanization on  $\beta_{oj}$ ;

$(\text{Proportion Urban}_j)$  = proportion urban in district  $j$ ;

$\gamma_{0m}$  = the slope of  $m$  macro coefficients for the effects of  $Z_{jm}$  on the micro-level coefficients;

$(Z_{jm} - \bar{Z}_j) = Z_{jm}$ ,  $m$  district level variables at their grand means;

$u_{0j}$  = error term for the district-level for coefficient  $\beta_{0j}$  in district  $j$ .

The model for  $\beta_{0j}$  is the same model for  $\beta_{ij}$ .

## **Measurement of Variables**

### ***Dependent Variable: Enrolled at the Individual Level.***

The dependent variable is a binary variable whether the child is currently enrolled in school or not. The age and gender patterns of enrollments are shown in Figure 1.

### ***Contextual Variables***

The wealth index for each district is constructed from census housing data. It averages the proportion of houses in the district with higher quality roofing materials, wall materials, floor materials, toilets, electricity, water, and clean cooking fuels. School availability is measured by the number of teachers in a district and divided by the number of children aged 5 to 14.

### ***Control Variables: Structural-Level***

The female share of the labor force, proportion scheduled caste, proportion scheduled tribe, proportion Muslim, and village exogamy are control variables at the structural level. Some literature suggests that female labor force participation gives females more empowerment and bargaining power in the household, which results in more equal gender outcomes. Also, the literature indicates that female employment raises the returns to investments on girls, resulting in more gender equality in enrollment. It is necessary to control for female share of the labor force so that development effects can be fully captured. Scheduled caste, scheduled tribe, and proportion Muslim are controlled for since these three groups tend to be disadvantaged in Indian society. Village exogamy is where girls move away from their natal to kin to the groom's village

(Desai 1994). This often results in less empowerment for the bride. This is prominent in northern India. In southern India, village endogamy is prevalent, where females marry within their own village and have close contact with natal kin and have stronger social networks, resulting in more empowerment (Desai 1994). This control captures an important regional variation in gender inequality in India.

***Control Variables: Individual-Level***

The compositional controls in this analysis are: social background – dummy variables for scheduled caste and scheduled tribe (other is omitted); religion – dummy variables for Muslim and Other (Hindu is omitted); female mobility – dummy variable for female visits the nearest town often and occasionally (rarely is omitted); female employment – females working in the household coded 1, else=0; landowner – landowner=1, else=0; household size – dummy variables for 0 to 4 and 8 to 32 (omitted category 5 to 7); log income – log of household per capita income; female education – female with the highest education in the household, dummy variables for primary and middle school, and matriculation and above (below primary is omitted); male education - male with the highest education in the household, dummy variables for primary and middle school, and matriculation and above (below primary is omitted); wealth index – average of several housing variables; productive economic asset index; unproductive asset index; and age. All of these variables are mean centered. The mean centered variables were then interacted with gender. Gender interaction terms for each of the above variables are included in the analysis to control for gender inequality at the micro level.

## RESULTS

### *No controls*

Table 4 reports the results of the stepwise multilevel models. The second model reports only the overall association between district wealth and enrollments for girls and boys (controlling for age). District wealth has a strong positive relationship with the main intercept, indicating that girls are much likelier to be enrolled in wealthier districts. We are especially interested in the relationship of district-level wealth with the gender coefficient since that coefficient represents the extent of gender inequality in enrollments. That relationship is negative, as expected, but surprisingly weak. The intercept for the gender coefficient indicates that, on average, the odds of boys' enrollment is xx times the odds of girls' enrollment. Wealthier districts show somewhat less of an advantage for boys ( $\gamma_{11} = xx$ ), but the relationship does not reach conventional levels of statistical significance. These regional comparisons mirror a similar relationship over time in India when, despite modest economic growth in the previous decades, gender inequalities in enrollments have not declined much.

### *District level model*

The third model adds district-level factors usually associated with economic development. In particular, it adds a parameter for school availability. The number of teachers in the district has strong relationships with both overall enrollment rates and the gender gap in enrollments. The positive coefficient for school availability on the intercept indicates that the higher the level of school availability in a district, the more likely girls will be enrolled in school. The negative and significant relationship of school availability with gender differences suggests that the advantage that boys have in enrollment diminishes in districts that have higher levels of school availability. However, boys also benefit from more school availability: the sum of the two district wealth coefficients equals the estimated effect for boys. This is still positive ( $\gamma_{11}$

= xx), although smaller than the estimated effect for girls ( $\gamma_{01} = xx$ ). Thus, increasing the supply of education in Indian villages increases enrollments for both boys and girls, but the gender gap in enrollments is reduced because the effects on girls is larger than the effect on boys.

With the controls for school availability, the negative association of district wealth with gender gaps in enrollments reverses and becomes slightly positive, although not statistically significant. Whatever impact development has on reducing gender differences in enrollments is captured by the effect of the greater availability of schools in wealthier districts.

#### ***Multilevel model with household characteristics***

Household level characteristics are included in the final model of Table 4. While the micro-level estimates are themselves very interesting, the first point to note is their effects on the macro-level estimates of district characteristics. The district wealth effect on the intercept in the previous model is eliminated by the household controls. Wealthy districts have higher school enrollments because they have more wealthy households. Because wealthy households are more likely to send their children to school ( $\beta_{xx} = xx$ ), and wealthy households are more likely to live in wealthy districts, school enrollment is associated with district wealth. But there is no additional benefit to families from living with wealthy neighbors (who are more likely to send their children to school). Neither a positive normative modeling effect nor a negative social comparison effect is apparent in these data.

Similarly, the negative, district-level percent tribal effect on school enrollments is greatly reduced and not significant after controlling for household level characteristics, especially the tribal status of the household itself. Tribal areas have low enrollments primarily because they

have many tribal households, and tribal households tend to have low enrollment rates wherever they live.

In contrast, the school availability effect on enrollments, while slightly reduced, remains statistically significant after household level controls. That result strengthens our interpretation that the district-level school availability coefficient reflects a supply-side contextual effect and is not simply a reflection of household level characteristics that have created a greater demand for schooling within the district. At least, the school availability estimate is not a consequence of the characteristics of households that have been measured in the HDPI.

Exogamy, also, has the same effect on enrollments after household level controls as before controls; in fact the coefficient is somewhat larger after the household controls. This result is consistent with our interpretation that exogamy indexes a broad cultural influence on family choices that affects all families in a cultural region. Unfortunately, the HDPI does not include many household-level measures of gender empowerment so this is not a very effective test of whether these marriage patterns have a contextual, area effect or a micro-level, household effect.

The district-level coefficients for the gender gaps in enrollments are not affected much by the household level controls. In fact, most coefficients are larger than in the model without household controls. Girls go to school less often in areas where they will marry outside their villages but more often where schools are more available. Although gender differences in enrollments are affected by various household level factors (see below), these household determinants of gender inequalities do not explain much of the district-level differences.

The household level controls increase the estimate of the effect of district rates of women's labor force participation on reducing gender disparities in schooling; that estimate is

now significantly negative as theory would predict. Women's labor force participation has complex effects on gender differences in children's enrollments. At the household level (see below) a working mother exacerbates gender differentials in schooling: girls enroll less often relative to boys when their own mothers are working, probably because they are needed to do more household work or perhaps even paid labor. However holding constant the mother's own labor force status, girls benefit from having *other* adult women in the district in the labor force – probably because families better recognize the economic payoffs for educating girls.

Three other household level factors affect gender differences in school enrollments. A mother's own education benefits girls more than boys consistent with other evidence about the gender differential effects of mothers' education (Thomas 1994). (However, we find no differential benefit of fathers' education for sons – both boys and girls benefit equally from having more educated fathers).

Household economic status has contradictory effects on gender inequalities. On the one hand, landownership widens gender differentials – households who own land are more likely to send sons further in school than their daughters, consistent with traditional cultural patterns. But economic wealth itself has the opposite effect. As households acquire more resources, they are *more* likely to send their daughters to school, as conventional economic models predict since budget constraints are usually thought to be more severe for daughters' education. So while there is a household level wealth effect on reducing gender differentials, that does not translate into a district-level wealth effect because wealthy districts have both wealthier households and more landowning families and the two household level factors tend to cancel each other.

## DISCUSSION

This analysis finds little support that development levels in India lead to increased gender equality in education. Although the overall district-level relationship is weak, paradoxically there is evidence for several of the presumed pathways by which development is supposed to lead to more equal enrollments. Wealthier households do send their daughters to school more often than poor households. Areas with greater school availability do have more gender balanced enrollments. And once child labor is held constant, higher rates of female labor force participation do encourage more households to send their daughters to school. The only hypothesized path that lacks any support in these data is the failure of more urbanized districts to have more gender equal enrollment rates among these rural households – admittedly not a strong test of the urbanization hypothesis.

These development effects do not translate into a substantial district-level relationship between development and gender equal enrollments because each is counteracted by opposing processes. While household wealth is associated with more gender equality, landownership is associated with less equality and wealthy areas have both wealthier households and more landownership. School availability does benefit girls' enrollments even more than boys', as is found in other developing countries; but there is only a weak association between district wealth and school availability so that pathway does not contribute much to an egalitarian development effect. Higher rates of women's labor force participation can encourage more school enrollment for girls but they also enable more labor force participation for girls so the net effect is actually negative.

Independent of any development effects, there is continued evidence that well-rooted cultural patterns of male dominance continue to affect girls' enrollment rates regardless of the

characteristics of individual households. Where marriage preferences dictate daughters marrying outside the natal village, investments in their education lag behind investments in their brothers' education. The importance of village exogamy for educational decisions may rest on its direct role in parents' expectations of future benefits, but it is likely that exogamy is also a proxy for a range of cultural expectations that favor male preference.

Conclusion...

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**Table 1 Educational Attainment Ages 15-19 1999**

Grade	Rich		Diff	Middle		Diff	Poor M		Diff
	M	F		M	F		M	F	
1	0.977	0.967	0.03	0.920	0.794	0.126	0.745	0.432	0.313
2	0.976	0.967	0.009	0.916	0.788	0.128	0.735	0.421	0.314
3	0.973	0.965	0.008	0.902	0.770	0.132	0.700	0.393	0.307
4	0.968	0.960	0.008	0.878	0.744	0.134	0.656	0.356	0.3
5	0.958	0.950	0.008	0.846	0.707	0.139	0.597	0.308	0.289
6	0.935	0.920	0.015	0.774	0.618	0.156	0.498	0.234	0.264
7	0.912	0.898	0.014	0.715	0.564	0.151	0.428	0.195	0.233
8	0.857	0.841	0.016	0.610	0.475	0.135	0.338	0.143	0.195
9	0.757	0.744	0.013	0.479	0.352	0.127	0.230	0.086	0.144

Source: Filmer, Deon. 2002 "Educational Attainment and Enrollment Profiles: A Resource Book based on an Analysis of Demographic and Health Survey Data," Development Research Group, World Bank, online on India's Department of Education website.

**Table 2 District-level Variables: Means, Standard Deviations, and Correlations.**

Variable	Mean	Standard Deviation
Development		
Wealth Index	30.56	12.56
School availability	2.69	1.07
Urbanization	0.21	0.11
Controls		
Female Share of Labor Force	0.22	0.11
Proportion Muslim	0.10	0.12
Proportion Scheduled Caste	0.17	0.07
Proportion Scheduled Tribe	0.10	0.16
Exogamy	0.74	0.10
Number of districts	195	

Correlations:

**Table 3 Micro-Level Variables Means and Standard Deviations**

Variable	Mean	Standard Deviation
Dependent Variable		
Enrolled	0.69	0.46
Independent Variables		
Gender	0.53	0.50
Scheduled Caste	0.23	0.42
Scheduled Tribe	0.11	0.32
Muslim	0.12	0.32
Other Religion	0.05	0.23
Female Mobility: Often	0.11	0.31
Female Mobility: Occasionally	0.29	0.45
Female Employment	0.55	0.50
Land Owner	0.70	0.46
Household Size: 0 to 4	0.11	0.31
Household Size: 8 to 32	0.35	0.48
Log Income	8.00	0.81
HH Female Education: Primary and Middle School	0.36	0.48
HH Female Education: Matriculation and Above	0.10	0.30
HH Male Education: Primary and Middle School	0.44	0.50
Wealth Index	0.43	0.09
Productive Economic Assets		5.30
Unproductive Economic Assets		2.84
Age		1.45

Table 4 Multilevel Models of School Enrollment

	Model 1	Model 2	Model 3	Model 4
<b>"MAIN" EFFECTS ON GIRLS' ENROLLMENTS</b>				
	0.0832	0.0897	0.1212 **	0.1524 **
district wealth		0.0422 ***	0.0206 ***	0.0073
exogamy			-0.2802 ***	-0.3173 ***
school quality			0.0538 ***	0.0474 ***
% tribal			-0.0064 *	-0.0030
women's share of labor force			0.0386	0.0426
child work female			-0.1035	-0.0273
child work male			-0.0309	-0.0692
<b>GENDER DIFFERENCE</b>				
	0.8110 ***	0.8343 ***	0.8411 ***	0.9838 ***
district wealth		-0.0050	-0.0017	-0.0015
exogamy			0.2442 ***	0.3219 ***
school quality			-0.0196 **	-0.0227 **
% tribal			0.0029	0.0028
women's share of labor force			-0.1658	-0.2512 +
child work female			0.3243 *	0.4211 **
child work male			-0.3392 *	-0.3910 *
<b>Age effects</b>				
8 years old	0.1601 **	0.1631 **	0.1809 **	0.2842 ***
9 years old	0.4547 ***	0.4693 ***	0.4922 ***	0.5565 ***
10 years old	0.1263 *	0.1284 *	0.1378 *	0.2214 **
11 years old	0.2741 ***	0.2866 ***	0.3088 ***	0.2566 **
12 years old	-0.0645	-0.0650	-0.0650	-0.0657
13 years old	-0.2777 ***	-0.2845 ***	-0.3020 ***	-0.4012 ***
14 years old	-0.5482 ***	-0.5653 ***	-0.6042 ***	-0.8859 ***
15 years old	-0.9504 ***	-0.9854 ***	-1.0630 ***	-1.4417 ***
16 years old	-1.4804 ***	-1.5415 ***	-1.6651 ***	-2.2075 ***
17 years old	-1.7788 ***	-1.8851 ***	-2.0734 ***	-2.7896 ***
18 years old	-2.3605 ***	-2.4671 ***	-2.6889 ***	-3.3983 ***
<b>Gender differences by age:</b>				
8 years old	0.0300	0.0295	0.0147	-0.0193
9 years old	0.0441	0.0339	0.0253	0.0433
10 years old	0.2209 **	0.2234 **	0.2183 **	0.2424 **
11 years old	0.2985 **	0.2951 **	0.2896 **	0.3645 **
12 years old	0.2412 **	0.2436 **	0.2426 **	0.2904 **
13 years old	0.3456 ***	0.3537 ***	0.3733 ***	0.4745 ***
14 years old	0.2511 **	0.2633 **	0.2919 **	0.5236 ***
15 years old	0.4462 ***	0.4696 ***	0.5304 ***	0.8081 ***
16 years old	0.5799 ***	0.6225 ***	0.7170 ***	1.0529 ***
17 years old	0.6404 ***	0.7119 ***	0.8643 ***	1.2437 ***
18 years old	0.7557 ***	0.8183 ***	0.9880 ***	1.3672 ***

"MAIN" EFFECTS ON GIRLS' ENROLLMENTS

Wealth scale	0.2081	***
Landowner	0.0008	
Mother in labor force	-0.2632	***
Father's education:		
some primary	0.5188	***
finished primary	0.6829	***
finished middle school	0.9764	***
matriculate +	1.4555	***
Mother's education:		
some primary	0.6310	***
finished primary	0.7723	***
finished middle school	1.2132	***
matriculate +	1.0364	***
Women travel to town:		
occasionally	0.2966	***
often	0.1093	*
Household size		
0 - 4	0.1115	+
8 - 32	-0.2044	***
Community:		
Scheduled caste	-0.1267	*
Scheduled tribe	-0.3673	***
Muslim	-0.5615	***

GENDER DIFFERENCES

Wealth scale	-0.0409	**
Landowner	0.1980	**
Mother in labor force	0.1901	***
Father's education:		
some primary	0.0528	
finished primary	0.0742	
finished middle school	0.1251	
matriculate +	-0.0189	
Mother's education:		
some primary	-0.0809	
finished primary	-0.1974	*
finished middle school	-0.4001	*
matriculate +	-0.4892	*
Women travel to town:		
occasionally	-0.1233	
often	-0.0224	
Household size		
0 - 4	-0.0290	
8 - 32	0.0550	
Community:		
Scheduled caste	-0.0087	
Scheduled tribe	-0.0656	
Muslim	-0.0503	

^p<.10 \*p<.05 \*\*p<.01 \*\*\*p<.001

