Gender Differences in Demand for Schooling

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The comparison of human development indicators in Table 1 shows that Pakistan's performance is below the average for South Asian countries and below the average for the developing countries. Furthermore, gender differences in human development are also significant within country and across countries. For example, in 1999, differences in male and female literacy rate was 24 points in Pakistan, higher then the difference in less developed countries (equalling 15 points). [See HDC (2001)]. Similarly, within Pakistan, male literacy rate increased from 35 percent in 1980-81 to 56.6 percent in 1998-99 whereas female literacy rate increased from 16 percent in 1980-81 to 32.6 percent in 1998-99. This shows that despite doubling of female literacy rate, the gap between male and female literacy rate widened from 19 percent in 1980-81 to 24 percent in 1998-99. Similarly, another indicator of human capital, i.e., the net enrolment rates at primary level exhibited a declining trend in 1990s, particularly among males. An important reason for the decline could be rise in poverty. Table 2 shows a sustained increase in net enrolment ratio with income, and the positive income effect is higher in urban areas. In rural areas, the enrolment rate increases with income but there is slight decline in female enrolment rate at the highest income level. Thus, despite rapid rise in female enrolment the gender, differences persist and income is the main factor affecting demand for education.

The findings of earlier empirical studies, based on primary and secondary data, indicate that there is a vicious circle, where poverty or low income causing lower human capital accumulation, which in tern results in persistence of poverty.[1] These studies show that poverty in different forms such as poverty of income and assets, lower human capability, particularly education, and poverty of opportunity to

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[1]See Siddiqui, *et al.* (2001); Glick, *et al.* (2000); Arif and Zahid (1999); Khan and Siddiqui (1997); Hamid (1991); Sabot (1992); Sathar and Lloyd (1994) and others.

Table 1

Human Development Indicators in Selected South Asian Countries

Indicators	India	Pakistan	Bangla-desh	Nepal	Sri Lanka	South Asia	Developing Countries
Male Literacy Rate 1999	56.5	54	40.8	40.4	91.4	53.9	72.9
Female Literacy Rate 1999	44.5	30	29.3	22.8	88.6	42	65
Life Expectancy at Birth 1999	63	65	59	58	74	63	63
Infant Mortality Rate 1999	70	84	58	75	17	70	63
Human Development Index 1999	0.571	0.498	0.470	0.480	0.735	0.554	0.647
Gender Related Development Index 1999	0.553	0.466	0.459	0.461	0.732	0.535	0.634
Real GDP Per Capita (PPP $) 1999	2248	1834	1483	1237	3279	1997.4	3530

Source: "Human Development in South Asia-2001".

Table 2

Net Primary Enrolment Rate by Income Quintiles (Excluding Katchi Class)

Income Quintile	Urban Areas		Rural Areas	
	Males	Females	Males	Females
Pakistan	58	56	30	37
1st Quintile	40	41	16	22
2nd Quintile	52	50	27	33
3rd Quintile	64	53	32	39
4th Quintile	74	70	41	47
5th Quintile	78	82	45	43

Source: Pakistan Integrated Household Survey, 1998-99.

work intensifies this vicious circle. The studies also indicate that human capital formation, i.e., particularly investment in education, is an important channel to reduce poverty. In Pakistan, the empirical studies emphasise the role of demand and supply side determinants in household decision about children's education. The demand side studies highlight household poverty as the main cause of lower demand for schooling. For example, Bilquees and Hamid (1989) found that in urban slums poverty is the main factor affecting the demand for schooling. Other studies also confirm these findings. However, the literature also shows that in addition to poverty, parental education, lower expected return on female education and higher opportunity cost, attitude and social bias against females also affects the females demand for schooling. Hamid (1993), based on survey data collected for the Project Food Security Management, shows that low household income, low occupational status and lower education of head of household, and male dominance in household decision-making play important role in constraining the demand for children's education. Interestingly the study by Khan and Siddiqui (1997) finds nonlinear relationship between landed power and educational attainment in rural areas of Pakistan. Glick and Sahn (2000), for West Africa, found that rise in household

income leads to greater rise in investment in girls' education but has no significant impact on schooling for boys. Rise in father's education raises the schooling of both sons and daughters but mother's education has significant impact only on daughters' schooling. Thus, the studies reveal a causal relationship between demand for education and indicators of poverty (i.e., income and assets), and parental education.

In this study, based on primary household survey data, we examine the perception of respondents about the household demand for education in Section 2. We concentrate on the evidence collected from the survey of formal/informal workers in industrial units in three major cities of Pakistan, i.e., Faisalabad, Sialkot and Karachi. Main characteristics of the respondent households are discussed briefly in this section. A simple Qualitative Response Model is specified in Section 3. We examine the role of socio economic factors affecting the demand for education for males and females, separately, in Section 4. Since, entering school does not guarantee that child will complete schooling, this study, unlike earlier studies which deal with either demand for education or examine the drop out rates, also examines the role of socio-economic factors in household decision to continue/discontinue child's schooling (see Section 5). Conclusions and brief policy implications are discussed in the final section.

2. CHARACTERISTICS OF SAMPLED HOUSEHOLDS

As mentioned earlier, the survey was conducted in the three major cities of Pakistan, viz., Faisalabad, Sialkot and Karachi. The time period of the survey was April-June 2000. A sample of 250 households of industrial workers in formal and informal industrial units was selected. The workers from fisheries were also selected. Among the total 250 households surveyed, 42.8 percent are from Karachi, 35.6 percent from Sialkot and 21.6 percent are from Faisalabad. The selected enterprises produce cotton textile, readymade garments, sports goods, surgical goods and fisheries. These three products are major exports items from Pakistan to the rest of the world.

In almost all the industrial groups, percentage of female workers is low. One interesting finding is that all the temporary workers are females and they are mainly concentrated in the garment industry. Furthermore, the firms, including the sub-contracting firms, producing for export, employ majority of the females as temporary workers. This shows that employment status may be a good indicator of gender discrimination in the Pakistani labour market, particularly in the post economic reforms era. Since in this study, we are dealing with education, we discuss the perceptions/attitudes of households regarding the demand for boys' and girls' education.

In order to bring out the gender differences with references to human capital formation, more clearly, we emphasise city-wise distribution of households by head of household. The data show that 75–83 percent of household heads are males. In

the sample, about 43 households (17 percent of 250 households surveyed) are female-headed households, and majority of these females are either widowed, divorced or separated. In this section, we also discuss the access and availability of schooling infrastructure near the house of the respondent, e.g.; the distance to school. We discuss the characteristics of households (members and respondents), based on household and individual questionnaires.

Furthermore, as expected, educational attainment in Table 3 shows that female literacy rate is lower than male literacy rate. In the sample, among the total population above age 5 years, 19 percent of total sample reported no education, 19 percent reported less than primary, i.e., five years of schooling. Only 12 percent reported completing primary education and 17 percent have completed 10 years of schooling. In the selected sample, about 24 percent females and 14 percent males are illiterate which is below the national average. Consequently, the literacy rate is higher then the national average for males and females both.[2] The reason is the urban sample selection as educational attainment in the urban areas is higher. The Census-1998 data show that male literacy rate is above 70 percent and for females it is above 50 percent in Urban Punjab and Sindh. Table 3 also shows that for education level until matric, we have a higher percentage of females, but a higher fraction of males has college education. In addition, a higher fraction of females report only Quranic education, i.e., 0.67 percent as compared to only 0.3 percent males. This shows that gender gap widens at higher levels of education.

Household demand for education depends not only on the economic factors but also on attitude or the desire to be educated by the individual and the household. In order to examine whether the perception of individual at the household level creates gender differences in demand for education, a section on perception of respondents about education was added in the questionnaire. The response shows that more than 90 percent respondents feel that boys and girls should be given the same opportunity for education (see Table 4). Surprisingly, a higher fraction of females (i.e., 5.7 percent) feel there is no need to give same educational opportunities to boys and girls. Furthermore, the percentage is higher in Karachi, a developed city in Pakistan.

Interestingly the perception of equality differs between male and female respondents. For majority of male respondents equality in education means equality in terms of educational expenditures, where as for females it means equality in levels of education (see Table 5). Furthermore the gender differences are prevalent in attitude towards school going children based on their sex as the school going boys are not involved in the household work whereas the girls even if they are going to school not exempted from the responsibility of household work (see Table 6). The main reason is that parents are willing to provide more for boys than for girls.

[2]According to Population Census—1998, the male literacy rate is 57 percent and female literacy rate is 35 percent for all Pakistan.

Table 3

Educational Attainment of the Respondents (Percentage)

	Faisalabad		Sialkot		Karachi		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
(a) Literacy Status								
Yes	82.4	73.2	79.6	67.5	87.6	79.9	83.6	74.1
No	17.6	26.8	20.4	32.5	12.4	20.1	16.4	25.9
(b) Educational Attainment								
(number of years of schooling)								
1–5	21.5	19.4	32.5	32.2	25.2	25.8	27.1	26.8
6–8	27.5	19.3	22.4	17.9	17.0	17.7	21.1	18.1
9–10	22.9	20.6	20.7	15.5	25.9	26.3	23.3	21.2
11–14	6.9	12.6	7.2	5.4	20.6	13.9	12.7	10.5
15–16	5.3	2.7	0.0	0.4	2.6	1.9	2.2	1.5
Professional Degree	0.8	0.0	0.4	0.0	0.7	0.0	0.7	0.0
Hafiz Quran	0.0	0.0	0.0	0.4	0.7	1.0	0.3	0.6

Table 4

Perceptions about Education of Boys and Girls

	Faisalabad		Sialkot		Karachi		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
(a) Do you Think that Boys and Girls should be Given the Same Educational Opportunities?								
Yes	96.7	97.9	97.6	96.1	100.0	90.0	98.3	94.3
No	3.3	2.1	0.0	3.9	0.0	10.0	.8	5.7
(b) Are Same Educational Opportunities Offered?								
Yes	83.3	85.4	88.1	60.8	87.2	70.0	86.6	71.7
No	16.7	12.5	9.5	29.4	12.8	15.0	12.6	18.9

Table 5

Similarity in Providing Education to Boys and Girls

	Faisalabad		Sialkot		Karachi		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
Same Amount of Money	92.0	92.7	94.6	80.6	80.5	78.6	88.3	84.2
No Household Work	12.0	9.8	5.4	6.5	17.1	9.5	11.7	8.8
Both can Study up to Any Level	16.0	22.0	13.5	54.8	14.6	40.5	14.6	37.7
Transport Facilities	32.0	4.9	16.2	6.5	19.5	0.0	21.4	3.5
Others	0.0	0.0	2.7	3.2	0.0	2.4	1.0	1.8

Table 6

Differences in Attitude to Educate Boys and Girls

	Faisalabad		Sialkot		Karachi		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
More Money is Spent on Boys Education	40.0	0.0	0.0	13.3	50.0	33.3	33.3	16.7
Boys don't have to Attend any Other Work at Home	20.0	0.0	0.0	40.0	0.0	22.2	6.7	26.7
Boys can Study up to any Educational Level	0.0	0.0	0.0	33.3	0.0	22.2	0.0	23.3
Boys are Allowed to Go to a Distant School but Girls are not	20.0	16.7	25.0	0.0	33.3	0.0	26.7	3.3
Girls are not Allowed to go to a School with no Females Staff	20.0	0.0	0.0	6.7	0.0	11.1	6.7	6.7
More Encouragement to Boys than Girls	40.0	0.0	0.0	26.7	0.0	11.1	13.3	16.7
Others	0.0	33.3	50.0	6.7	0.0	11.1	13.3	10.0

In response to a question that in case of financial difficulties, who will be picked up from school? Females' responded that either the girl child (as expected) or the child who is not doing well in the school would be withdrawn from school. But majority of males report that it will depend on the performance of the child (see Table 7). However, contrary to expectations, about 14 percent females and 9 percent males reported that they will pick up the male child from school for the following reasons:

(1) In case of economic hardship the boy can work even as a labourer on street and bring some money;

(2) The girls cannot work on street. If they have to work the educated girl can find job in a decent and protected environment.

Distance to school is also another important supply side variable affecting the education of children. It reflects that increase in distance to school also adds to the cost of education. This supply side and cost constraint is significantly higher for girls. However, in our sample, majority of the respondents have easy access to school (see Table 8).

3. MODEL

In order to estimate the relationship between households decisions for educate, and set determines we specify two qualitative response models. The first model deals with the likelihood of boys and girls attending school. In the second model, the determinants of probability of discontinuing school are discussed. The models are specified as:

$$Y_m = \alpha + \Sigma\beta_i X_{1i} + \Sigma\delta_j X_{2j} + \Sigma \gamma_k X_{3k} + \Sigma\eta_l X_{4l} + \mu_m$$

Where

$Y_m = [\ Y_1\ Y_2\ ]$

$Y_1 =$ if the child goes to school
    $= 0$ otherwise, and
$Y_2 =$ if the child discontinues schooling
    $= 0$ otherwise.

The two models are estimated separately. The set of characteristics include:

$X_{1i} =$ set of economic variables like income and assets (owning a house);
$X_{2j} =$ set of parental characteristics, like education and labour market participation of mother and father;
$X_{3k} =$ set of family characteristics, like family type, i.e., nuclear or joint; household size, presence of siblings, and domestic work;
$X_{4l} =$ set of variables representing community characteristics; and
$\mu_m =$ random error term $[\mu_1\ ,\mu_2]$.

Table 7

Who Will Be Picked Up from School

	Faisalabad		Sialkot		Karachi		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
Female Child	33.3	35.4	9.5	27.5	25.5	36.7	21.8	33.3
Male Child	10.0	16.7	11.9	13.7	6.4	11.7	9.2	13.8
Child who is not Doing Well in School	33.3	29.2	54.8	54.9	36.2	46.7	42.0	44.0
Oldest Child	10.0	4.2	19.0	3.9	4.3	–	10.9	2.5
Others	10.0	12.5	11.9	2.0	29.8	6.7	18.5	6.9

Table 8

Distance to the Educational Facilities of Boys and Girls

Facility	Faisalabad		Sialkot		Karachi		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
Educational Facility								
< 1 km	46.2	23.1	26.3	0.0	30.4	33.3	32.0	19.0
1-2 km	23.0	23.1	38.1	35.7	51.2	46.6	41.0	35.7
3-4 km	5.2	53.8	22.4	42.9	12.0	6.7	12.0	23.8
5–8 km	18.0	0.0	10.5	7.1	5.5	0.0	9.7	11.9
9–15 km	7.6	0.0	1.3	14.2	6.5	6.7	5.4	7.2
> 16 km	0.0	0.0	1.3	0.0	0.0	6.7	0.5	2.4

All these explanatory variables are assumed to be non stochastic. We include these in each probit model. However, the justification of each variable is discussed separately in each relevant section.

4. DEMAND FOR EDUCATION[3]

All the X_{ij} are included to examine the likelihood of children attending school. But only a few give us robust results. Therefore, we will discuss only the selected equation in detail below.

The need for raising education is desirable particularly due to its positive affect on productivity and intergenerational socio-economic mobility of the recipients. We have seen above that current education level is low particularly among females. The main reason for leaving school is economic. Now the question is whether the demand for education can be motivated through some economic and non-economic policy variables. To answer this, we have tested if there is a causal relationship between current demand for education and socio-economic indicator. Presence of such a relationship will determine the choice of policies to raise the education of the population in the school going age group. In order to determine a causal relationship between demand for schooling and socio-economic indicators we have estimated a qualitative response model, where dependent variable is a categorical variable, taking value $Y_1 = 1$ if a child, in the age group 5–18 years, reports going to school and $Y_1 = 0$ if the child is not going to school.[4] Following set of X of following socio-economic indicators is included:

(1) Household income, $(=X_{11})$.
(2) Asset ownership (own a house or not) $(= X_{12})$.
(3) Mother's education, $(=X_{21})$.
(4) Mothers' work status, $(=X_{22})$.
(5) Household size/Siblings $(=X_{31})$.
(6) Sex $(=X_{32})$.
(7) Distance to school, $(=X_{41})$.
(8) Dummy variables for cities of Faisalabad and Sialkot. Karachi is the base category $(=X_{42}, X_{43})$.

As mentioned in earlier studies, that poverty and asset ownership are important determinants of schooling. These variables are expected to have positive effect on probability of sending a child to school. Mothers' education is expected to have a positive effect on child's schooling. However, her work status may have positive effect if income effect dominates and negative (particularly for girls) if substitution effect dominates, i.e., if the girl child is picked up from school so that

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[3]The sub sample of household members in the age group 5–18 years is selected for this section.
[4]We are restricting the model to basic education only.

mother can go to work. Increase in siblings is expected to have a negative effect. In order to capture the effect of differences in socio-cultural factors across cities dummy variable for city of Faisalabad and Sialkot are also included. Distance to school is expected to be negatively related to probability of sending child to school, as longer distance reduces accessibility and probability of sending a child to school. It is also included as price variable because increase in distance adds transport cost. To the cost of schooling. Thus, rise in distance is expected to have a negative effect on probability of a child going to school. This effect is expected to be stronger for girl child. It also reflects the role of government efforts to increase the supply of schools to improve access particularly for females.

The results of the estimated Probit model are reported in Table 9. The results show that income is the main factor affecting the probability of sending a girl child to school positively. Surprisingly mother's education is the main attribute affecting the probability of sending a child, both boys and girls, to school. The distance to school has an unexpected effect. The increase in distance has a positive effect on demand for schooling for girls and boys but the effect is not statistically significant. As expected presence of sibling affects the probability of girls attending school negatively and effect is statistically significant. The effect is negative and statistically in significant for boys. City dummy has a mixed effect on demand for girls and boys schooling. Although the effect is statistically insignificant. But the result suggests that probability of a child going to school is higher if a child is from Sialkot. The main reason for this result could be provision of either the schooling facility by the factory owners or providing cash benefits to those households who send their children to school by a few industrial units in Sialkot, which reduces the household cost of educating a child.[5] Furthermore, the recent implementation of policy measures to eliminate child labour may have discouraged children working in sport goods industry and consequently the parents decide to send their children to school. Thus, we can say that if employers provide for child's education, the parents will have less reason to discriminate as it reduces the cost of education.[6]

Thus, the results confirm, that probability of sending a child to school increases significantly as the economic condition like family income rises. A decline in economic activity even if Social Action Plan (SAP) is implemented to ensure supply of funds for social sectors, is expected to have a negative effect on demand for education.[7] This, supports the trend shown in Table 2, that income (poverty) is an important factor influencing the households' decision to send child to school. Furthermore, improving the girls education is expected to have significant impact

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[5]The strict implementation of laws against child labour has motivated employers to provide for child schooling.

[6]Sathar and Lloyd (1992) developed this argument that if government does not discriminate, parents will have less reason to discriminate against the girl child.

[7]The implementation of SAP is under criticism for corruption and below target achievement.

Table 9

Demand of Education

Variable	Both Sex		Male		Female	
	Coefficient	*t*-value	Coefficient	*t*-value	Coefficient	*t*-value
Constant	0.58646	2.34144	0.69918	2.14984	0.21551	0.57730
Mother's Education	0.08085	3.47693	0.06461	2.11475	0.10175	2.75220
Mother's Work Status	0.22228	1.36963	0.11260	0.50346	0.35856	1.45136
Distance School	0.03031	1.28941	0.04722	1.40289	0.1148	0.32091
Siblings	−0.47809	−3.34055	−0.46532	−1.87701	−0.48383	−2.61772
Income	0.0007	2.79029	0.0004	1.28205	0.00011	2.79318
Sex Male=1, Female=0	−0.15736	−1.00405	–	–	–	–
City Dummies						
Faisalabad	−0.16012	−0.73758	−0.25193	−0.86808	0.07172	0.20773
Sialkot	0.11100	0.61906	0.07726	0.30720	0.18855	0.71054
χ^2	605.295		267.143		353.845	
DF	547		257		283	

on educational attainment of future generations, as mothers' education affects the likelihood of a child going to school positively and the impact is statistically significant.

5. REASONS FOR LEAVING SCHOOL

In the previous section, we examined the households' decision to educate children. However, going to school does not necessarily mean completing school. Since educating a child is a long-term investment the household may decide to withdraw a child from school without completing education due to changing socio-economic conditions. This will, in turn, cause wastage of scarce resources and loss to household and society. In order to examine this issue in detail, a section asking for reasons of dropping out of school was added in the questionnaire. We asked respondents if they left the school either before completing their desired level of schooling or before completing a certain level of schooling like primary, middle, matric (high school) or higher education. Since majority of our respondents, in the relevant sub sample, discontinued schooling before or after completing high school, we restrict our analysis to the sample of population with less than 10 years of schooling. Table 10 reports the percentage of total sample reported leaving school. The respondents outline various reasons for leaving school. For males, work (42 percent), lack of interest (20.3 percent), and higher cost of education (18.5 percent) are the main reasons for leaving school. For females, cost of education (26.9 percent), work (20.3 percent) and marriage (15.1 percent) are main reasons to leave school. The comparison reveals gender differences in reason for leaving school but poverty seems

Table 10

Reasons for Leaving School, by Education and Gender

	Male										
	Years of Education when Discontinued School										
Reason for Leaving School	1	2	3	4	5	6	7	8	9	10	
Expensive		50.0			30.5	30.0	22.2	12.3	13.3	16.2	18.5
Too Far Away		50.0			1.7		11.1			0.9	1.4
Had to Help at Home					5.1	10.0	11.1	16.9	6.7	13.5	11.4
Help Business					1.7					1.8	1.1
Elder Parents										0.9	0.4
Marriage					1.7						0.4
Education not Useful								3.1		2.7	1.8
No Interest	100.0		50.0	50.0	25.4	20.0	33.3	21.5	20.0	12.6	20.3
Started Work			25.0	50.0	32.2	40.0	22.2	41.5	60.0	48.6	42.0
Other			25.0					1.5		2.7	1.8
Illness					1.7			3.1			1.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2	2	4	4	59	10	9	65	15	111	281
	Female										
Expensive	100.0			33.3	27.8	27.3	33.3	27.3	33.3	24.0	26.9
Too Far Away					5.6	9.1	16.7	5.5		5.2	5.5
Had to Help at Home				16.7	13.9	18.2	8.3	21.8		13.5	14.4
Help Business					2.8			1.8			1.1
Marriage					16.7	9.1	16.7	14.5	20.0	15.6	15.1
Education not Useful						9.1				3.1	1.5
No Interest			100.0	50.0	12.5	9.1	16.7	9.1	20.0	6.3	11.8
Started Work					15.3	9.1		18.2	26.7	30.2	20.3
Other					5.6		8.3	1.8		2.1	3.0
Illness						9.1					0.4
	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1		3	6	72	11	12	55	15	96	271

to be the main cause of discontinuing schooling. For a higher fraction of males leaving school means involvement in labour market, but most of the females leave school due to cost considerations. An alarming issue is that 20.3 percent males and 11.8 percent females left school because they are not interested. It may affect the efficiency of government efforts to raise human capital and future upward mobility of households if the trend prevails at national level. However, "no interest" response could be a result of lack of motivation and dismal employment prospects.

In order to minimise the wastage of resources, and social cost of discontinuing schooling it is important to identify the factors affecting the probability of leaving school. Again we specify a qualitative response model, i.e.; probit model. The dependent variable is specified as $Y_2 = 1$ if a student leaves school and '0' if he/she does not leave school. *X* is the vector of attributes/characteristics mentioned above, affecting the probability of discontinuing school. The socio-economic factors include education of mother and father, labour market participation of mother and father, household income, family size. Participation in domestic work and city dummies for Faisalabad and Sialkot. The gender differences in probability of leaving school are expected to be significant as females are more likely to leave school than male as reflected by responses reported in Table 7. The attributes like education of father and mother are expected to influence likelihood of discounting school negatively. Similarly father work participation will have negative impact through income effect. However, the impact of mother work may increase the probability of girls leaving school, if they substitute for mother's work in the household. Rise in family size is also expected to increases the likelihood of leaving school particularly for girls. The impact of involvement in domestic work is also expected to be positive. The effect of dummy variables for city may be positive or negative.

The result of estimated probit model are reported in Table 11. The results for both sexes combined shows, as expected, that the probability of females leaving school is significantly higher than for male. The results of the equation for males and females reveal significant differences between the two groups. For male's mother's education and father's works status reduce the likelihood of leaving schools. However, the impact of father's education is not significant. Surprisingly increase in family size and domestic work participation increases the likelihood of male leaving school. However, this could be a result of rising economic needs of families resulting into male leaving school and joining labour market. For males, the differences across cities are not statistically significant implying that likelihood of male leaving school doesn't vary across cities.

For female mother's education affects the probability of leaving school negatively, however its coefficient is much lower as compared to for males. The impact of father's work is the same. Unlike males, females likelihood of leaving school doesn't increase significantly with rise in family size. As expected, the participation in domestic work increase the likelihood of girls leaving school.

Table 11

Determinants of Discontinuity Education

Variable	Both Sex Coefficient	Both Sex t-value	Male Coefficient	Male t-value	Female Coefficient	Female t-value
Constant	–0.77634	–2.63333	–0.55526	–1.36546	–0.65372	–1.65858
Mother's Education (X 21)	–0.07431	–3.97875	–0.11042	–3.61324	–0.04445	–1.80681
Mother's Work Status (X 22)	–0.16328	–1.14395	–0.05749	–0.26830	–0.27481	–1.38994
Father's Education (X 23)	–0.03612	–2.21515	–0.04801	–1.83896	–0.03321	–1.48783
Father's Work Status (X 24)	–0.77760	–4.49115	–0.85480	–3.29946	–0.70014	–2.89540
Family Size (X 31)	0.08919	2.71028	0.10270	1.98771	0.06822	1.53205
Participation in Domestic Work (X32)	0.48773	7.57630	0.81739	4.64542	0.41781	5.7192
City Dummies						
Faisalabad (X42)	0.12318	0.63375	0.42350	1.44314	–0.02863	–0.10492
Sialkot (X43)	–0.10085	–0.64296	–0.08961	–0.37577	–0.04015	–0.18614
Sex (X33)	0.33813	2.30919	–	–	–	–
χ^2	540.149		227.453		563.315	
DF	491		227		256	

Interestingly, the girls in Sialkot and Faisalabad continue schooling as compared to girls in Karachi. Thus, the results show significant gender differences in likelihood of leaving schools. Furthermore the influence of socio-economic attributes affecting the likelihood of a child leaving school also varies by gender.

The socio-economic indicators include standard human capital variables, i.e., particularly mother's education, father's work status and domestic work are important in determining the likelihood of boys and girls leaving school. However, for girls differences across cities are also important. Thus, we can say that gender differences in attributes affecting the probability of leaving school exists but income is the main contributing factor.

6. CONCLUSIONS

The discussion in this paper is based on the survey data of export-oriented industries in the cities of Faisalabad, Sialkot and Karachi. The survey included the workers in the formal and informal industrial units. Most of the females in these industrial units are working as temporary/casual workers and they are concentrated in stitching activities. The study analysis the behaviour of household decision-making of these workers for either sending a child to school, or not sending the child. We are concerned with the decision to send or stop sending the child to school. The study examines the characteristics of households that affect the likelihood of sending or stop sending the child to school.

The result of the study show that in addition to income demand for schooling is positively affected by the mothers' education. Furthermore, the likelihood of leaving school declines with rise in mothers' education. Fathers' work status also affects the household decision regarding education of a child. These results show that reducing poverty, i.e., increasing income and employment opportunities, will have a positive effect on demand for schooling and reduces the wastage of resources due to children leaving school. Furthermore, the impact of mother's education is more important as it reflects that rise in girls education not only increases the productivity and human capital of present generations but also of future generations.

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