

STATUS OF HOUSEHOLD BACKGROUND CHARACTERISTICS AND THEIR IMPACTS ON EDUCATIONAL ATTAINMENTS OF CHILDREN: AN EMPIRICAL STUDY ON MUSLIMS

Dr. Sumanash Dutta,
 Professor
 Department of Economic, &
 Dean, SVS of Library Sciences, Assam
 University, Silchar, Assam, India.

Dr. Isla Uddin Choudhury,
 Ex-Research Scholar
 Department of Economics,
 Assam University, Silchar, Assam, India.

ABSTRACT

The study focuses on identification of socioeconomic variables that determine the schooling achievements of children in Muslim households. The base of the study is a household survey-2009 of 354 Muslim households comprising of 1325 children residing in the three districts of Barak Valley of south Assam. The years of schooling completed by 159 Muslim children of age 19- 25 years in 159 households is the empirical base for the children's educational attainment variable and is taken as the dependent one in the OLS regression model. The set of explanatory variables are selected carefully in conformity with the design of the study. The study finds higher schooling achievements of Muslim children in cases where father's education level is high, household has higher level of assets and parents expect to continue to live with their male children after they marry in future. The study could not establish any gender link to educational attainments of children although gender bias appears to be there as latent in the mind of the parents since they are found to discriminate easily in favour of male children, be it in case of their desire to live in future with their married male children or in case of getting short run benefits from children in the form of help in farm/domestic work.

Keywords: Household Background Characteristics, educational attainments, multicollinearity, sib size effect, gender effect.

JEL Specification: I21

Introduction:

The last two decades and the new millennium have witnessed an unprecedented surge in empirical works on the determinants of educational attainment of children almost all over the world. This is propelled by the growing realization of the practical importance of education as a tool for increasing the productivity of the labour force, improving health, enhancing the quality of life, achieving social justice through better income distribution, and for advancing the development potentials of the economy. Accordingly, a major goal of the governments of many developing countries of recent

times has been to increase the population's educational level (Tansel, Aysit; 1997). In achieving higher levels of education for the population, both the supply side considerations- such as the provision of school facilities- and the demand side considerations- such as the household background characteristics, are thoroughly examined with heterogeneous data set representing different countries, communities and, genders. The findings of important studies indicate that gender, caste, poverty, cultural prejudice, and rural residence prevent a majority from going to school. Of those who went, most, regardless of academic talent, are pulled out in order to work at home, as wage

labourers and domestic servants, or to enter arranged marriages.

The 1991 Census of India brought out the shameful reality that even after more than four decades of independence, half of the population above 7 years of age in the country still remained illiterate. Half of the 6-14 years old children were either not enrolled in school or were drop-outs there from. The failure of the state to educate the country's children was more glaring among the poor and the backward castes, among women, and in regions that were geographically disadvantaged or difficult to access. Female are found trailing behind conspicuously in respect of schooling and fall behind males in schooling up to various stages. There is also geography based inequality in schooling attainments; the proximity to an urban centre improves schooling reflecting adversely on the balanced development aims of the country. Minority religion Muslims and SC population are disadvantaged in conformity with traditional concerns while the general or the majority caste leads for all schooling categories. (Sharma, Suresh and Nilabja Ghosh, 2007). Despite of the facts that the Indian society is by and large tolerant and accommodative in nature, and the governmental policies are not only non-discriminatory but at times and places found to be introducing protective discrimination in favour of religious minorities, scheduled castes and scheduled tribes; the Muslims and SCs in particular, are still substantially backward in educational attainments. The prevailing inclusive democratic environment in the country has so far failed to enthuse these communities to make satisfactory advancement in education. This is evident from different reports published time to time on the educational status of the Muslims, SCs and STs. (Sachar Committee Report, 2006, Report of 55th Round of NSS, 1999-2000, Gopal Singh Report, 1983). So far as educational backwardness of Muslims is concerned different empirical studies have identified various reasons such as economic backwardness of the community (Ahmed, Shahid, 2007), parents' education (Kingdom, Gita, G, 2002), for the educational backwardness of the community.

The present study contributes to existing knowledge about the schooling attainments of children in Muslim households by analyzing the household determinants of their educational attainments in an extremely backward area of the northeast region of the country. The paper is organized as follows. The next section presents a theoretical framework that is used to structure and interpret the empirical analysis. Section III describes the data and statistical methods used in the analysis, and section IV examines the estimated effects of household background characteristics on children's educational attainments with particular emphasis on the impacts of parents'

education, family structure, and family assets. The last section summarizes our main findings.

Theoretical Background:

If schooling is as critical in the developing world as is often claimed, the question of what determines how much schooling each child obtains is an important one. The economic framework for analysing this question is generally provided by standard demand and supply considerations. There is a large literature on education in less developed countries which seeks to quantify the rate of return to an individual's investment in education. This human capital approach to studying education focuses on the market determined value of education as the principle regulator of individual demand for education. However, there is an equally important non-market component to the demand for education, especially for children and young adults. These non-market factors manifest themselves through household characteristics that affect the time and opportunity cost of schooling for household members (Deolalikar, 1993; Tansel, 1993; Singh, 1992). Theoretical analyses of the determinations of schooling highlight how individuals or households make maximizing decisions about schooling in light of overall resource constraints and opportunity costs for alternative uses of their resources (Backer, 1967, 1981; Mincer, 1974). These approaches have led to considerable insight into demands for schooling. According to this framework, parents as initiators of demand for schooling are the key players in determining schooling outcomes of their children, and therefore, parental income, education, age etc. matter most. Coleman Report (1966) stresses that family characteristics are more important determinants of educational achievements than school quality or teachers' experience. A prominent line of enquiry that sprang from Coleman Report (1966) seeks to promote social policies that foster students' achievement by studying why family background has such a pronounced effect on children's acquisition of human capital (Berhman et al, 1997; Case and Deaton, 1999; Strauss and Thomas, 1995; Glewwe and Jacoby, 1994 and many others).

Among the household characteristics, variables describing parental characteristics or choices are the most commonly used variables in studies of children's educational attainments. Among these, perhaps the most fundamental economic factor is the human capital of parents, typically measured by the number of years of schooling attained. The human capital of mother is usually more closely related to the educational attainments of the child than is that of the father. Parental completion of high school and one or two years of post-secondary

schooling are typically found to have a larger effect on children's schooling than years of parental schooling beyond that level (Haveman , Robert and Barbara Wolfe, 1995). The literature suggests that the parental education and the children's educational attainments have the following connections: (1) more educated parents make greater investment in children's human capital. (2) More educated parents in poor households without access to credit may face a trade-off between providing more goods and allocating more time to interacting with their children. (3) More educated parents may receive higher wages and thus may have a higher opportunity cost of time spent outside the work place. (4) Alternatively, parental education may increase the efficiency or effectiveness of the time spent interacting with children (Brown, Philip. H, 2008).

Overbearing poverty is also a major cause of withdrawal of children from schools. In the presence of an extensive child labour market, sending children to work fetches the family some additional income. Thus going to school has an opportunity cost which the parents are unwilling to bear. This is true for the poor families for whom the marginal value of this additional income is very high. As a result, even if the children start going to school, they do not continue for long. It is observed in the study that incidence of poverty in the states of India has significant positive association with Drop-out Rates and significant negative association with Completion Rates(Mukherjee, Dipa,2005 Bilquees and Hamid 1989). The income level of the family in which a child grows up is, therefore, perhaps the best measure of household poverty and the level of economic resources devoted to the child by the parents, and is often included in the studies of children's educational attainment. However, the family income variable may be rather a crude proxy of the economic resources available to a child. Often family income is recorded only in a single year, and hence it cannot be considered as a correct measure of permanent income. Moreover, it may convey little about family allocation of income to children and fail to capture other economic resources devoted to the child (e.g. parental time allocation). The measurement of this variable varies widely across the studies. A few studies employ either a single year of family income or an average of income over a limited number of years; most employ the ratio of the income level of the family to the income needs of the family, reflecting its size and structure. Some studies used an indicator of family SES(Socio Economic Status) which attempts to summarize the combined effects of a variety of economic resource factors. Education itself can be interpreted as a measure of permanent income, a point that suggests

that the full effect of income (education) would, to some extent, include the effects of education (income) (Haveman, Robert and Barbara Wolfe, 1995).

Several additional parental investment factors have been found to have statistically significant and quantitatively large effects on children's educational attainment, including family structure(e.g., living in a one-vs. two-parent family or whether the family is joint or nuclear in nature) and the extent of mother's work, the number of geographic moves during childhood, the number of siblings, religiousness, school related parental practices, and the presence of reading materials in the home. Most of the studies find that race is not associated significantly with educational attainment when family income and other background characteristics are included in the models.

The schooling attainment of children is also found to be strongly related to household permanent income indicating that schooling is a normal good and that household are resource constrained in that higher incomes lead to higher schooling attainments (Tansel, Aysit; 2002). A crude measure of the household's standard of living is also used using information on household amenities and the possession of modern goods. These are used to create an index for representing household's standard of living. The index from a set of such asset variables is a good proxy for a household's wealth. It works as well as, or better than consumption expenditure as a proxy for long run household wealth in predicting children's school enrollment (Filmer, Deon and Lant Pritchett; 1999; Lioud, Cynthia, B and Ann K Blanc; 1996).

The problem of educational attainment of children has gender dimension. In the economics of education literature, there are two frequently cited explanations of the gender gap in education. First, that gap is due to labour market discrimination against women: if the labour market rewards women's education less well than men's (that is, the rate of return to women's schooling is lower than to men's), then girls will face poorer economic incentives to invest in schooling than boys. A second major explanation for the gap is that parents treat sons and daughters differentially. The differential treatment may arise either because of son preference, which causes parents to give a greater weight to the welfare of sons, or it may arise because parents value only that part of the return to a child's schooling which accrues to them personally- and the returns to the daughter's education are reaped largely by her in-laws' family. This is compounded by the fact that societal norms in some countries require parents to accumulate a dowry for daughters but not for sons. Thus, girls may lose out in the intra-household allocation of education

because of a potentially strong asymmetry in parental incentives to educate sons and daughters. As a result, daughters will receive less education than sons. However, a decrease in costs of education for reasons such as nearness of schools, other things held constant, will increase parents' investment in both their daughters' and sons' education. The size and the speed of response to such market changes will depend on price and income elasticities of schooling demand (Tansel, Aysit, 1997; Kingdom, Gandhi G; 2002, Hamid, Shahnaz and Rehana Siddiqui; 2001).

The indirect cost of sending children to school is forgoing children's inputs to household production and to the labour market. In particular, in rural areas time spent in school may be at the expense of housework, or other learning activities such as working at the family farm or business (Tansel, Aysit; 1997). Therefore, the children's active participation in domestic work and / or work in family farm and also expectation of parents about help in domestic and family farm work from children may have significant impact on the schooling attainments of children.

Another important household factor that is often discussed in the literature of household demand for schooling is the sib size effect. Butcher and Case (1994) documented the impact of siblings on the education of women and men born in the United States between 1920 and 1965. They found that throughout the century women's educational choices have been systematically affected by the sex composition of her siblings, and that men's choices have not. Women raised only with brothers have received on average significantly more education than women raised with any sisters, controlling for household size. Hauser and Daphne Kuo (1998) found almost no evidence that the presence of sisters or the share of sisters in the sib ship has affected women's schooling in the US during the century. Moreover, they found no evidence that the effects of the number of sisters on educational attainment differs systematically from the effect of the number of brothers. However they observed that regardless of gender and regardless of year of birth, each additional child in a family leads to a modest reduction in educational attainment.

Data and Methodology:

The data used in this study are taken from a survey of 354 Muslim households residing in the three districts of Barak Valley of south Assam. The household survey was conducted in 2009. The three districts covered are Cachar, Hailakandi and Karimganj. As per Population Census report, 2001, Muslim are simple majority in Hailakandi and Karimganj districts and marginally less than 50 percent of the total population of Cachar district of

the valley. There are in total 1325 number of children in 354 sampled Muslim households, the average number of children per household is 3.74. The survey contains detail information about the schooling attainments and status of 1325 Muslim children along with a wide range of socioeconomic factors such as household current income, assets, parents' education, amenities available to the households etc. The data pertaining to the schooling attainments and status of 1325 Muslim children reveal very interesting picture about their schooling attainments. The enrollment rate at the primary level of schooling of children of 6-10 age groups is 98.06 percent implying almost a universal pattern of schooling of children in this socioeconomically backward region of the country. At the upper primary stage of education, the dropout rate of children belonging to age group of 11-14 years has increased to 7.39 percent. The dropout rate has steeply increased to 37.56 percent at secondary and higher secondary level of schooling among children of 15-19 years age group.

Going to school does not 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. Hence the possibility that a child may discontinue his/ her study at any particular level looms large particularly in poor households. Since dropout rate of children is alarmingly high at secondary and higher secondary level of study in the present case, it is important to have a deeper understanding of the socio-economic factors that prevent or facilitate schooling at higher levels. A sub-sample of children is therefore, drawn from the original sample of children who are in the age group of 19-25 years. This older cohort of children was born around 1983-84 and presumably started their schooling in 1988-90 to complete 12th grade by around 2008. Therefore, the children who are at present in the age group of 19-25 are supposed to have completed higher secondary level of schooling (12th Grade) allowing for retention and repetition of the same grade by them for 2/3 years. The size of the sub-sample such drawn is 159 Muslim children one from each of 159 Muslim households. Out of 159 children of the sub-sample, 58 students are found to be continuing with their study at the time of survey, some still at 10th, 11th and 12th grade (at 20 or above age which obviously are cases of educational retardation) and many at college and university level implying 13 to 17 years of schooling. Among the drop outs, the majority are in the age group of 15-19 years. We consider that children in the age group of 19-25 years should have at least 12 years of schooling each to their credit, but the average years of schooling attained by 159 children in our sample is only 9.82 years in the three

districts of Barak Valley. This is a clear indication of the fact that many students in our sample have dropped out before attaining 12 years of schooling (i.e., completion of Higher Secondary level of education) and the discontinuation of study has occurred roughly in the last 5-6 years' time period. In order to minimize the wastage of resources, and social cost of discontinuing schooling, the present study focuses on this particular area of the problem and attempts to identify the factors which influence schooling attainments at levels explained above.

In the data set, the years of schooling completed by the Muslim children of age 19- 25 years in a household is the empirical base for our children's educational attainment variable and is taken as the dependent one in our OLS regression model. The set of explanatory variables are selected carefully in conformity with the theoretical background of the study outlined above. The main focus of the study is on the household characteristics which, as Coleman (1966) pointed out, are the most important determinants of schooling achievements of children. Since, children below school going ages are omitted from the study and a small percentage of children included in the study are found to be continuing schooling, many of whom at a very advanced stage, the data censoring problem is avoided and OLS estimates are likely to be reliable and consistent. Only those variables are selected as explanatory variables the values or magnitudes of which are likely to have remained the same over the last 5-6 years. This is not a very wild assumption since in an extremely socio-economically backward region like the present one where the study is located, 5-6 years' time period is a small one for experiencing a very remarkable change in the socio-economic status of the households. This is necessary since many students in our sub-sample set might have discontinued their study 2 to 6 years back (since drop out is larger at higher level of study) being subjected to household socioeconomic condition that prevailed at that time. For example, we have not taken Household current yearly income although the information on that was collected at the time of survey, since it has changed over time. In lieu of that, we have considered the assets (ASSET) of the household as a proxy for long run household wealth, and have taken it as an explanatory variable to indicate the economic status of the household. The variables selected as explanatory variables for the study are on the basis of theoretical framework outlined above. These are: (i) Education found completed by sample child at the time of survey, in years (ECC) (ii) Education of Father in years (FEDN), (iii) Education of mother in years (MEDN), (iv) Education of Grand Father in years (GFEDN), (v) Education of Grand Mother in years (GMEDN) (vi) Family Structure (FST; dummy, 1 if joint, 0 otherwise), (vii) Number of Children Ever Born

(CEB), (viii) Family asset in Rs (ASSET), (ix) Sex of the Child (dummy, 1 if Male, 0 otherwise), (x) Parent's expectation regarding help in domestic/ farm work from male child in the household (EHDWMC, dummy, 1 if yes, 0 otherwise). (xi) Parent's expectation regarding help in domestic/farm work from female child in the household (EHDWFC, dummy, 1 if yes; 0 other wise), (xii) Parent's expectation to live with male child after he marries (ELWMCM, dummy, 1 if yes; 0 otherwise), (xiii) Distance of nearest educational institution in km (DNEI), (xiv) Sample child found continuing with his/her study at the time of survey (SC, dummy, 1 if yes; 0 other wise), (xv) Distance of Household from the nearest town in km (DHNT), (xvi) Earning members in the Family (EMF), (xvii) Sex of the child (MF, Dummy, 1 if Male; 0 other wise) and (xviii) Place of Residence (UR, dummy, 1 if Urban; 0 other wise). We, at first stage, included both father's education, mother's education, grandfather's education and grandmother's education in our model since the impact of these variables, particularly of parent's education, on educational attainments of children are found to be almost robust in large number of empirical studies. However, in the final model we have retained only father's education and grandfather's education as explanatory variables in the study. This is because the correlation coefficient of the variables father's education and mother's education and also that of grandfather's education and grandmother's education are found to be exceedingly high indicating the existence of severe multicollinearity and secondly, there is observable male dominance in Muslim society (Hamid, 1993, Shahnaz and Rehana ; Ahmed, Shadid; 2007) and as such, father's education and grandfather's education are likely to have more determining impact on the schooling attainments of the children. To avoid multicollinearity in the data set, the variables Earning Members in the Family (EMF), Distance of Household from Nearest Town (DHNT) are also omitted from the final model since the variables have strong multicollinearity with variables Number of Children Ever Born (CEB) and Place of Residence (UR) respectively. The Place of Residence (UR) is retained in the model as an explanatory variable to measure the price of schooling. The higher educational institutes are, by and large, urban centered. Therefore, sending children for higher education may prove expensive for the households and hypothetically, further the township from the household; less will be household demand for children's education at higher level of study. The greater the number of children within the household increases the overall cost of education for the parents. Therefore, parents may consciously trade-off between child quality and child quantity leading to low level of education for a child who have larger number of

siblings. The sib size impact on educational attainments of children has been studied extensively under Quality-Quantity trade-off hypothesis (Becker and Lewis, 1973, Becker and Tomes, 1976, Singh et al 1978) and Dilution model (Spaeth, 1976, Blake, 1981) also. On the other hand, having more children in the household is likely to lower the effective opportunity cost of each child's schooling and may explain the positive effects of sib size on schooling attainments (Samer. AL – Samarrai and Tessa Peasgood, 1998). The variable CEB is taken to measure the sibsize effect on children education. Since the study is on identifying the proximate determinants of education years completed by child of 19-25 years of age in Muslim household, the dependent variable is Education found completed by sample child at the time of survey, in years (ECC). The final set of explanatory variables comprises of Number of Children Ever Born (CEB), Family asset in Rs (ASSET), Education of Father in years(FEDN), Education of Grand Father in years (GFEDN), Family Structure (FST; dummy, 1 if joint, 0 otherwise), Parent's expectation regarding help in domestic/ farm work from male child in the household(EHDWMC, dummy, 1 if yes, 0 otherwise), Parent's expectation regarding help in domestic/farm work from female child in the household (EHDWFC, dummy, 1 if yes; 0 other wise), Parent's expectation to live with male child after he marries (ELWMCM, dummy, 1 if yes; 0 otherwise), Distance of nearest educational institution in km (DNEI), Sample child found continuing with his/her study at the time of survey (SC, dummy, 1 if yes; 0 other wise), Sex of the child (MF, Dummy, 1 if Male; 0 other wise) and Place of Residence (UR, dummy, 1 if Urban; 0 other wise).

Results and Findings:

The mean and Standard Deviation (SD) values of the selected variables are presented in Table-1 which is estimated based on sample observations. These throw significant light on the important household characteristics of the study area.

Table-1: Mean and SD of Selected Variables

Variables	Mean	Std. Deviation	N
ECC	9.82	3.50	159
CEB	4.33	1.60	159
ASSET	37361.01	83532.27	159
FEDN	8.61	4.80	159
GFEDN	3.96	4.51	159
FST	0.16	0.37	159
EHDWMC	0.69	0.47	159
EHDWFC	0.47	0.50	159
ELWMCM	0.97	0.18	159
DNEI	1.94	1.97	159
SC	0.36	0.48	159
MF	0.62	0.49	159
UR	0.52	0.50	159

As mentioned earlier the average education years completed by the children in the sample is only 9.82 years whereas it was expected that the same would be at least 12 years as the sample children are all in the age group of 19-25 years. It is evident that large number of children has discontinued their study before reaching the 12 grade of education. The average number of children born to a household is 4.33 indicating large family size of Muslim households in study area which is socioeconomically a backward one. The poor socioeconomic condition of Muslim households in the study area is in evidence in the low mean asset value at Rs.37361.01 with very high SD value of Rs.83532.27 and very low average education of fathers and grandfathers. The high degree of inequality in these areas, however, is a pointer towards the presence of relatively well to do families. The joint families in the study area are also very few in number. Variables representing parents' expectation from their children indirectly speak about prevalence of gender bias in the locality. Near about 69 percent parents expect help from male children in their domestic/farm house works whereas 47 percent of them expect similar help from female children. The gender discrimination is more evident in case of parents' expectation to live with their married children, one kind of expectation regarding old age security. Almost all the parents (97 percent) have such expectation from only the male children. The average distance of the nearest educational institute is found to be less than 2 km and 36 percent children are continuing with their study mostly in those schools which are nearest to their houses. The sample comprises of 62 percent male children and 52 percent of the sample households are in the urban areas.

Table-2: Regression Result Dependent Variable = ECC

Variables	Coefficients	SE	t values	Sig.	Tolerance	VIF
(Constant)	5.043	1.565	3.222	0.002		
CEB	-0.139	0.152	-0.914	0.362	0.830	1.205
ASSET	7.180E-06	0.000	2.389	0.018	0.780	1.282
FEDN	0.193	0.053	3.603	0.000	0.745	1.341
GFEDN	9.279E-03	0.058	0.159	0.874	0.708	1.413
FST	-0.119	0.648	-0.183	0.855	0.850	1.176
EHDWMC	-0.908	0.541	-1.679	0.095	0.776	1.289
EHDWFC	-0.590	0.484	-1.219	0.225	0.839	1.192
ELWMCM	4.444	1.349	3.294	0.001	0.882	1.134
DNEI	-3.856E-02	0.121	-0.319	0.750	0.869	1.151
SC	2.331	0.515	4.523	0.000	0.794	1.259
MF	-0.296	0.484	-0.613	0.541	0.884	1.132
UR	-1.086	0.499	-2.177	0.031	0.788	1.269

$R^2=0.414$, Adjusted $R^2=0.366$, d-w= 1.771, F-Value= 8.586

The regression result of the study is presented in Table-2. The variable ASSET has turned up

statistically significant at below 5 percent level of significance and it is found to be exerting a positive impact on years of schooling completed by child. Children of households having larger size of assets are expected to complete higher grades of education. This is quite in the line of our expectation since higher assets means higher economic condition of the household and hence higher education of the child of that household. The father's education (FEDN) is also found to be exerting a statistically significant (at 1 percent level) positive impact on the dependent variable, the schooling years completed by child. The importance of human capital of parents (generally measured in terms of education level completed by them) in determining schooling attainments of children has already been discussed in the proceeding sections of the paper. The positive impact of the variable on the schooling attainments of child is found almost universally true across the countries of the world. This is true in the present case also. In this interior backward Muslim society as well, the child's schooling grade completed improves in households where father has higher level of education. Parents' expectation regarding help from children in farm/domestic work and their expectation that children can provide old age security to them may also have strong connection with schooling attainments of children. It can be hypothesized that children's schooling achievements would be low in households where parents expect help from them in farm/domestic work. This is particularly so in a backward agricultural set up/society where family labour plays important role in household management. In the present study, the variable EHDWMC representing expectation regarding help in farm/domestic work from male children has turned up statistically significant at less than 10 percent level bearing negative causation with child's schooling level completed. As hypothesized, the result indicates that the child's schooling level completed would be adversely affected in cases where parents have a desire to engage male children in farm/domestic works. Such expectation from female children would also have negative impact on child's education level although the impact in this case is found to be statistically insignificant in the result. On the hand, the impact of parents' expectation to live with male children after they marry on child's educational attainments is found to be exceedingly high and statistically significant below 1 percent level. The result suggest that such expectation plays deterministic role in schooling achievements of child irrespective of sex, the statistically insignificant impact of variable MF, although negative, vindicates this situation. Surprisingly, the variable UR representing rural urban place of residence, is seen to be affecting negatively the schooling attainments of child and the

variable has turned up statistically significant at less than 5 percent level of significance implying that the schooling attainments of child would be low if the household is in an urban area. One possible explanation is that since job opportunities are higher, particularly in informal sector, in urban areas, the children of poor Muslim households find joining workforce as a better option than to continue study. However, this needs deeper proving with large data set to identify the causes of such phenomenon. Finally, the variable SC (whether the child is found to be continuing with study at the time of survey) which was included in the model as a control variable, has turned up statistically significant with positive algebraic sign in expected line implying that the schooling attainments would be higher in cases where the child belonging to age group 19-25 years is found to be continuing with study at the time of survey.

The model fit is good as evident from significant F-value and the explanatory variables explain near about 37 percent variation in dependent variable. The existence of severe multicollinearity has successfully been controlled by dropping collinear variable from the model. This also is evident from low values of Tolerance and VIF in the result lending reliability to the observed result of the study.

Conclusion:

The study does not find any significant impact of sibsize on schooling attainments of children in Muslim household. Similarly, grandfather's education level, family structure, distance of nearest educational institution from household, gender of the child has no significant impact on the schooling attainments of children belonging to 19-25 age group in Muslim households. Higher achievements, on the other hand, are evident in cases where father's education level is high, household has higher level of assets and parents expect to continue to live with their male children after they marry in future. The study could not establish any gender link to educational attainments of children although gender bias is there in the mind of the parents since they are found to discriminate easily in favour of male children, be it in case of their desire to live in future with their married male children or in case of getting short run benefits from children in the form of help in farm/domestic work. Although the implicit gender preference has not found to have pronounced gender based impact on the schooling attainments of a child in the present study since the variable MF has turned up statistically insignificant albeit with negative sign, this may have strong impact once the average level of schooling completed rises considerably in future from its present low value of only 9.82 years. The overall results suggest that many children of 19-25 age

groups have discontinued with their study in households which are socio-economically poor.

References:

- [1] Ahmed, Shahid (2007). Socioeconomic Determinants of Female Education in Muslim Family- An Econometric Analysis, the Indian Economic Journal, Vol. 54(4), January-March.
- [2] Becker, G. S. (1960). An Economic Analysis of Fertility in Universities National Bureau Committee for Economic Research(ed), Demographic and Economic Change in Developed Countries, Princeton, N. J, Princeton University Press.
- [3] Becker, G. S. (1981). A Treatise on the Family, Cambridge, Harvard University Press.
- [4] Becker, G.S and H.G. Lewis (1973). On the Interaction between the Quantity and Quality of Children, Journal of Political Economy, 81, No.2, pp: S279-S288.
- [5] Becker, G.S and N. Tomes (1976). Child Endowments and the Quantity and Quality of Children, Journal of Political Economy, 84, S143-S162.
- [6] Berhman, Jere R., Shaharukh Khan, David Ross, and Richard Sabor (1997). School Quality and Cognitive Achievement Production: A Case Study for Rural Pakistan, Economics of Education Review 16, No.2, pp: 127-42.
- [7] Bilquees, F and S. Hamid (1989). A Socioeconomic Profile of Poor Women in Katchi Abadia- Report of a Survey in Rawalpindi, Pakistan Institute of Development Economics and Fredrich Ebert Stitung, Islamabad.
- [8] Blake, Judith (1981). The Only Child in America: Prejudice vs Performance, Population and Development Review, 7: 43-54.
- [9] Brown, Philip. H (2008). Parental Education and Investment in Children's Human Capital in Rural China, Economic Development and Cultural Change, Vol.54, No.3-4, 2008, pp: 759-789.
- [10] Butcher, Kristin, and Anne Case (1994). The Effects of Sibling Sex Composition on Women's Education and Earnings, Quarterly Journal of Economics, 109(August), pp: 531-63.
- [11] Case, Anne, and Angus, Deaton(1999). School Inputs and Educational Outcomes in South Africa, Quarterly Journal of Economics, 114, No.3, pp:1047-87
- [12] Coleman Report (1966). Coleman, James S., Ernest Q.Cambell, Carol J. Hobson, James McPartland, Alexander M.Mood, Frederrick D.Weinfeld, and Robert L.York. 1966. 'Equality of Educational Opportunity. Washington, DC: Office of Education, U.S Department of Health, Education, and Welfare.
- [13] Deolalikar, A (1993). Gender Differences in the Returns to Schooling and School Enrollment Rates in Indonesia, Journal of Human Resources, Vol.28, No.4, pp. 899-932
- [14] Filmer, Deon and Lant Pritchett (1999). The Effect of Household Wealth on Educational Attainment: Evidence from 35 Countries, Popualtion and Development Review, Vol. 25, No.1, (March), pp:85-120.
- [15] Glewwe, Paul, and Hanan Jacoby(1994). Student Achievement and Schooling Choice in Low Income Countries: Evidence from Ghana, Journal of Human Resources 29, No.3, pp: 841-64
- [16] Gopal Singh Report (1983). Gopal Singh Report on Minorities, Govt of India
- [17] Hamid, Shahnaz and Rehana Siddiqui (2001). Gender Differences in Demand for Schooling, The Pakistan Development Review, 40: 4 Part-II (Winter) pp. 1077-1092.
- [18] Hauser, M, Robert and Hsiang-Hui Daphne Kuo (1998). Does the Gender Composition of Sibships affect women's Educational Attainment, The Journal of Human Resources, Vol. XXXIII, No.3-4, pp: 644-657.
- [19] Hamid,S (1993). A Micro Analysis of Demand Side Determinants of Schooling in Urban Pakistan, The Pakistan Development Review 32:4, 713-723
- [20] Haveman, Robert and Barbara Wolfe (1995). The Determinants of Children's Attainments: A Review of Methods and Findings, Journal of Economic Literature, Vol. XXXIII (December), pp: 1829-1878
- [21] Kingdom, Gandhi G (2002). The Gender Gap in Educational Attainment in India: How much can be Explained?, The Journal of Development Studies, Vol. 39, No.2, December, 2002 pp:25-53.
- [22] Lloyd, Cynthia, B and Ann K Blanc (1996). Children's Schooling in sub-Saharan Africa: The Role of Fathers, Mothers, and Others, Population and Development Review, 22(2), June, pp: 265-298.
- [23] Mincer, J (1974). Schooling Experience and Earnings, New York, NBER.
- [24] Mukherjee, Dipa (2005). Educational Attainment in India, Trends, Patterns and Policy Issues, Journal of Educational Planning and Administration, Vol. XIX, No.4, Oct.,pp: 523-541.
- [25] Report of 55th Round of NSS (1999-2000). Employment and Unemployment Situation among Religious Groups in India, NSS Report No.468, 55th Round, July 1999- June 2000, Govt of India.
- [26] Sharma, Suresh and Nilabja Ghosh (2007). Progress of Education, Gender and Imbalances: The Case of Uttarakhand State in India, Demography India, Vol.36, No.2.
- [27] Sachar Committee Report (2006). Govt of India.
- [28] Samer. AL-Samarrai and Tessa Peasgood (1998). Educational Attainments and Household

- Characteristics in Tanzania, *Economics of Education Review*, Vol.17, No.4, pp.395-417.
- [29] Singh, R.D, G.E Schultz and E.W. Kenrberg (1978). Economic Analysis of Fertility Behaviour and the Demand for Schooling Among Poor Households in Rural Brazil, Department of Agricultural Economics, Purdue University, West Lafaette, Indiana-47907.
- [30] Singh, R. D (1992). Underinvestment, Low Economic Returns to Education, and the Schooling of Rural children: Evidence from Brazil, *Economic Development and Cultural Change*, Vol.40, No.3, pp. 645-64
- [31] Spaeth, J.L (1976). Cognitive Complexity: A Dimension Underlying the Socioeconomic Achievements Process, William Sewel et al (eds) *Schooling and Achievements in American Society*, New York, Academic Press.
- [32] Strauss, J and D. Thomas (1995). Human Resources: Empirical Modeling of Household and Family Decisions, J. Behrman and T. N. Srinivasan (eds), *Handbook of Development Economics*, Vol. III
- [33] Tansel, A (1993). School Attainment, Parental Education and Gender in Cote d'Ivoire and Ghana, New Haven, CT: Yale University Economic Growth Centre, Discussion Paper No.692
- [34] Tansel, Aysit (1997). Schooling Attainment, Parental Education, and Gender in Cote d'Ivoire and Ghana, *Economic Development and Cultural Change*, Vol.45, No.4, 1997, pp- 823-856.
- [35] Tansel, Aysit (2002). Determinants of School attainment of boys and girls in Turkey: individual, household and community factors, *Economics of Education Review*, 21, pp: 455-470.
