CHAPTER -II

Review of Literature

In this section, review of some of the relevant studies has been carried out to highlight the connection between the household demand for children’s education and household’s socio-economic characteristics.

The numerous theoretical perspectives that guide the research on household demand for children’s education include the following two important theories. The economic theory (Becker, 1981) explains the allocation of resources within the family. In this theory, household’s decision regarding children’s schooling is viewed in the same frame work as other choices regarding the allocation of familial resources. Parents have a demand function for their children’s education that depends on the family’s income, the children’s endowments and market opportunities. The model was also extended to include parental fertility decisions and attempted to capture the trade-off between child quality and quantity. The other theory which guided the research in this field is popularly known as the Socialization theory. The theory stresses the possible effects of parental attainments and behaviours on their children’s aspirations and performance (Woelfel and Haller, 1971). Many studies have also pointed out that quantity and the quality of children would interact because parents desire almost equal levels of quality for each of their children. The studies hypothesized an inverse relationship between child quality and child quantity. (Behrman et al; 1989, Datcher-Loury; 1988, Polit; 1982, De Tray; 1973). Looking at the problem from another
dimension, Spaeth (1976) observed that once a child is born, he is provided with ‘environments or settings’; opportunity –specific changes, parental attention, interventions and teaching. In case of families having more children, these resources are divided, and more children means more division of these resources. As a result, the quality of the children would fall. This line of thinking is popularly known in the literature as ‘Dilution Model’.

Robert Houser and Thomas Daymont (1977) fitted an equation of years of schooling in the United States that included parent’s education, father’s occupation and a farm background dummies. They observed that each dollar of parental income (averaged over 1957 to 1960) had a coefficient of .0056 and a t-ratio of about 9. They also presented an equation in which they added the person’s score on the Henmon-Nelson mental ability test (as of the junior year of high school). Its inclusion reduced the parental income coefficient to .0042 with a t-statistic of about 7. They observed that a one standard deviation increase in parental income led to about a 2 percent rise in years of schooling and the elasticity with respect to parental income was about 3½ percent.

Shaw, Lois (1982) used the National Longitudinal Studies of young and middle-aged women to examine high school completion record of their daughters who were in the young women portion of the NLS. She found that being in a single-parent family and having low family income reduced the probability of a daughter completing high school.
Behrman and Wolf (1987) conducted a study to explore the roles of observed and unobserved family backgrounds as well as school supply on the determinants of schooling for two generations in pre-revolutionary Nicaragua. Generation 1 includes adults respondents, who are full or half sisters. Generation 2 refers to their offspring, who are first cousins. The data for this study was based on a unique sibling data for 702 women aged 15-45 and a subset of their children collected in Nicaragua in 1977-78.

The results of the study indicated that unobserved family background and school-supply factors have much important impacts on how much children are schooled than are recognized in most standard estimates of schooling decisions. The authors are of the opinion that the indication of a greater role of family background than is commonly recognized may mean less inter-generational socioeconomic mobility than is implied by conventional estimates. Children with the right family background are much likely to have more schooling and to receive the fruits of that schooling than the others. On the other hand, school supply factors may shape schooling much more than might be expected from the many standard estimates that consider demand factors alone.

Moreover, the failure to control for unobserved family background and school supply factors in standard estimates may cause considerable biases in estimated school determination relations, which may lead to misleading implication regarding how family background affects schooling and what is the productivity of schooling. To illustrate, their investigation suggests that the strong positive relation between
mothers’ and their children’s schooling in standard individual estimates and interfamilial mean estimates does not primarily reflect strong household productivity effects caused by female schooling, but points to an association of female schooling with unobserved family-background factors related to some unidentified mix of abilities and tastes.

Although the authors concentrate on relations that directly determine schooling, the implications of important unobserved family background characteristics may carry over to empirical relations in which schooling is presumed to be a causal determinant. For example, failure to control for the unobserved family background may cause substantial biases in the estimated impact of schooling on a range of outcomes if such background affects both schooling and other outcomes of interest.

In Pakistan, the empirical studies emphasize 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 of schooling. For example, Bilquees and Hamid (1989) found that in urban slums poverty is the main factor affecting 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.

Burney and Irfan (1991) conducted a study in Pakistan to investigate the family’s decision regarding child’s schooling through an assessment of the determinant of
child school enrolment, using choice theoretic framework. The data for this study were based on the household level micro data of 10,288 households from the Population, Labour force and Migration (PLM) survey undertaken by the Pakistan Institute of Development Economics (PIDE) in collaboration with the ILO and UNFPA in 1979. The study examined the impact of household income, household size, ownership of assets, parental education, father's employment status and occupation, availability of schools and labour force participation on schooling of a child.

The author used regression analysis in the study and the results are indicative of a positive association between household income, parental education, and tenurial status as land owner bears out the importance of these factors in shaping the household’s decision regarding the investment in human capital formation. The study also finds the traces of the quantity and quality Trade-off, in family’s preferences regarding the number of children and it is found to be male specific.

The most disturbing finding of the study appears to be the predominance of the influence originating from parental education. It is this intergenerational transfer of human capital which needs more attention, as it also implies that the literacy and, hence, the poverty of parents gets transmitted to the off-spring. The analysis also brings out the fact that labour market hiring practices serve as important feedback to the household’s human capital formation behavior.
Ilon and Mook (1991) presented a paper entitled “School Attributes, Household Characteristics and Demand for Schooling: A Case Study of Rural Peru”. This paper examined the case of rural Peru where rural areas have yet to attain the nearly universal enrolment of urban areas. The study examined 2500 rural households to explore reasons why children did not attend school, dropped out of school and began school at later stage.

The main findings of the study can be represented under five broad categories:

1. Individual characteristics.

No measures of individual characteristics proved significant in predicting schooling decision for any of the individual groups.

2. Opportunity cost

Measures of opportunity costs did not have much of an impact on schooling decision.

3. Socio-economic factors

Wealthier families, families with higher incomes (Expenditures) and families with higher parental education were more likely to enroll their children in school, enrolled them at a relatively young age, and kept them in school. Only half of the low income groups managed to get their children to school before the age of nine, whereas nearly 90 percent of children from high income groups were enrolled by this age.
Children from high socio economic households were virtually assured enrollment in school, whereas 16 percent of rural, low income children would never enroll in school. The coefficient of mother’s years of schooling was substantially larger than for father’s schooling indicating that schooling decisions were more sensitive to changes in the education of the mother than the education of the father.

4. Direct costs.

School costs were negatively associated with school participation. Households were more sensitive to changes in school fees than they were to changes in other costs of schooling.

5. Schooling and gender

Male and female were not treated equally when households made schooling decision. Females were less likely to enroll in school and for those who do, more likely to leave school before completion.

Hamid, S. (1993) conducted a study entitled “A micro analysis of demand-side determinants of schooling in urban Pakistan” to establish the importance of some factors that affected the decision of a household to send their children who were of school going age, between 5-14 years, to school in urban areas. The study was based on survey data collected for the project Food Security Management in 1986 by Pakistan Institute of Development Economics and International Food Policy Research Institute. The survey data included 792 households and 2333 children in the age
cohort 5-14 years. Four important variables: income of the household, occupation, education and gender of the household head and another variable, households at least not sending one of their children to school were included in the study. The study concluded that poverty is the key determinant of demand for child schooling. Various manifestations of poverty, such as low income of households, low occupational status of the household head, periodicity of household's earning, and low level of household's education, together with household economy dominated by a male, play an important role in constraining the demand for children's schooling.

Montgomery and Kouame (1993) draw conclusions about the potential of family support networks in rural Côte d'Ivoire indirectly from the absence of a negative association between children's years of educational attainment. A negative association in urban areas, on the other hand is taken as indirect evidence of the potential weakening of these networks in the process of urbanization, variables measuring polygyny, parental coresidence, or the extent of competition with other siblings were not explicitly tested for their effects on their children's education because of their endogeneity. Appleton (1991), using the same data set, explored the determinants of primary school enrollment, found that children's probability of enrollment in urban areas was negatively affected by living in a polygynous households, suggesting that the greater parental obligations of the urban household head have negative consequences for children; this again upholds the view that parental support plays a amore important role in urban areas.
Lloyd and Gage-Brandon (1994) used Ghana Living Standards Measurement Survey to explore the Separate roles of mothers and fathers in financing children’s education. They found that teenage children (particularly boys) are significantly more likely to have ever enrolled in school if their mother is the reported head of the household in which they reside, and less likely to be enrolled if they have younger siblings. Dropout rates are also significantly greater for girls, who have younger siblings, and their attainment levels were also lower than those of boys when they have younger siblings. This negative relationship between number of siblings and education for girls suggests that they may have fewer sources of support beyond their own parents than boys do. At the same time, however the important role of the mother as household head for both boys and girls suggests that children have something extra to gain when their mother has greater access to and command over resources within the child’s residential household.

Khandker and Samad (1995) conducted a study in Bangladesh to document the effects of different policy variables on educational outcomes in Bangladesh. The study was based on a multipurpose household survey conducted in Bangladesh during 1991-92. The survey consisted 1,798 households of which 1,538 were target and 260 non target households. A number of individual level, household level, community level and village level variables were included in the study. The individual level variables included schooling failure rate, drop out rate, age. Household level variables included father’s education, mother’s education, total household asset, sources of drinking water at home, proportion of male members in the household. Community level variables included school distance from Thana headquarters, how long the school has
been in operation, school type, government or otherwise, water supply at school; school has electricity, proportion of female teachers in school, regional dummies and village level variables comprised of village infrastructure, prices and wages.

The author applied regression analysis in the study. Results indicated that both father's and mother's education had a significant positive effect on the schooling attainment. But unlike its effects on school participation, mother's education played a weaker role than father's education in girls' education attainment. More household assets were associated with greater schooling attainment for both boys and girls, but the effects was more for girls. A better source of drinking water increased children's schooling attainment especially for boys.

Among village level variables, irrigation increased boys' failure rate and reduced their schooling attendance. This effect implied that irrigation increased the opportunity cost of boys' time in school (to that extent that boys were substitutes for hired labour). School distance from the Thana headquarters had the lower schooling attainment of children, especially that of boys. School electrification, which reflects an area's infrastructural development, increased schooling attainment for girls. The schooling attainment of both boys and girls were higher if teachers had college and education degrees.

Garasky (1995) conducted a study in the United States of America to examine how six different family structures of children over four separate periods of childhood were related to the likelihood of their graduating from high school. The data for this
study were taken from the 1979-1989 waves of the National Longitudinal Survey of Youths (NLSY) which contained 7658 men and women aged 14-21 years. Six family structures were considered based upon the relationship of the child to the adults in the household. The child could have lived: 1. with biological parents, 2. with mother only, 3. with father only, 4. with mother and stepfather 5. with father and stepmother, and 6. in some other type of arrangement that does not include either biological parent. The first 14 years of the child’s life were divided into four distinct periods:

1. 0-3 yrs.
2. 4-6yrs.
3. 7-10yrs
4. 11-14yrs.

A vector of demographic variables was included to capture the underlying effects not controlled for by other regressor. Indicators for race, ethnicity, gender, respondent’s age at the time of 1988 interview, total number of siblings, number of older siblings, poverty status of a child’s household at the age of 14 as a proxy for the economic resources available to the family, religion, religious service attended were included. Finally, indicators were also included for whether: (1) the child’s mother were graduated from high school, (2) the child lived in the south at the age 14, (3) the child lived in an urban area at age 14, and (4) The child was selected as part of NLSY over sample of poor whites.
The author used descriptive statistics and probit analysis in the study. Results indicated children that grew up with both biological parents had the highest likelihood of graduating from high school. Children from single parent families had a lower likelihood of being high school graduate. The model estimated that a child that grew up with both biological parents had a 71.7 percent probability of becoming a high school graduate. The next remaining probabilities in declining order applied to a child that grew up with his or her mother and step father, followed by mother only, neither parent, father and stepmother, and father only.

The impact of family structure on educational attainment was found to be varying by both the type of family structure that was experienced and the age at which the experience occurred. Spending the majority of time between birth and age three in a household headed by a single father or a father and stepmother was related to a reduced likelihood of graduating from high school. The effects from living in the other family structures during this part of childhood were not statistically different from living with both biological parents. Living in a single mother household between age 4 through 6 also showed a negative effect on educational attainment. As children grew older, however, it was found that the family structures in which they lived affected their educational attainment much less.

The effect of each of the family structure was not significantly different from the effects of living with both parents for ages 7 through 10 and 11 through 14.
Results indicated that changes in family structure that occurred early in childhood, before age four, actually had a positive effect on the likelihood of graduating from high school. Changes in family structure were detrimental to the educational attainment of the child after this period. This was consistent with Socialization theory that suggested that the negative effects of changing family structure dissipated over time.

Black and white females were found to have a higher likelihood of finishing their high school education than Hispanic females or males of any group, after controlling for other factors. The respondent’s age was found to be positively related to the likelihood of graduating from high school; older respondents were more likely to graduate.

The number of siblings a child had was found to be negatively related to the educational attainment of the child. The poverty status of the child’s family was found to be negatively related to educational attainment. The educational attainment of the child’s mother was positively related to the child’s likelihood of graduating from high school.

Being raised in a formal religion had no effect on educational attainment, but attending religious services was found to be positively related to educational attainment. Being raised in the south or in an urban area was found to be negatively related to the likelihood of becoming a high school graduate.
Lloyd and Blanc (1996) conducted a study to examine the familial determinants of children's enrollment and educational attainment in sub-Saharan Africa. The study was focused on the enrollment of children aged 6-14 and the probability that a child aged 10-14 has completed at least grade four within primary level—a function of age entry and rate of progress from grade to grade. The achievement of grade level four has been singled out by UNCEF (1993) as a critical marker of school progress of children. The study was based on the data from the second and third phases of Demographic and Health Surveys. The determinants of children's enrollment included in this study were age and sex, household composition (number of household members under age 6, 6 to 14, and 15+), education of the household head, household standard of living, survival status of the child's biological mother, survival status of the child's biological father, sex of the household head.

The authors used multivariate regression analysis in the study. The results revealed that resources of a child's residential household in particular the education of the household head and household standard of living were determining factors in explaining difference among children in these school outcomes. By contrast, a child's biological parents appeared to play a less critical role, as demonstrated by comparing the school outcomes of orphans with the outcomes of children whose parents were still living. Furthermore, both boys and girls living in female-headed households showed universally better school outcomes than children living in male-households when households with similar resources were compared. Finally, they found no evidence that family support system operated systematically to the benefit of boys.
relative to girls. Instead, girls were slightly favored in female-headed households, whereas boys were slightly better off in high-income households.

Handa (1996) conducted a study in Jamaica to examine who is schooled in developing countries by analyzing the household determinants of secondary education in Jamaica. The data used for this study were taken from the second round of 1989 Jamaica Survey of Living Condition (SLC), a nationally representative survey based on the Living Standard Measurement of the World Bank. The variables used in this study were parental education, gender of the household head, two regional dummies, miles to the nearest bus stop, total per capita household expenditure, number of children 5 years old or younger, number of teenagers residing in the household.

The author used probit analysis in the study. The results indicated that socioeconomic background was an important determinant of demand for secondary schooling in Jamaica, and an even more important determinant of enrollment in high school. School supply also played a role in influencing enrollment—Teenagers from rural regions or those who lived farther away from a bus stop were less likely to be enrolled.

There were important differences in the demand for schooling by gender. For enrollment, mother's education was important for females, but father's education was only significant for males, and the effect of father's education was enhanced the smaller the time cost of schooling. For high school enrollment on the other hand, father's education was significant for girls but only marginally for males, while
maternal education was insignificant for both, and parental education was an important complements for high school enrollment for both the sexes.

Household income had a much bigger impact on the probability of enrollment, especially high enrollment, for females than for males indicating that income constraints were more binding for males. However, the impact of income on secondary enrollment was significantly reduced when account was taken of community level heterogeneity, indicating that the effect of income partially captured variations in community services and facilities.

The multivariate analysis also showed income and parental education to be important determinants of teenage secondary school enrollment, while for the academically elite high schools; income was the single most influential household characteristic affecting enrollment.

The income effect on high school enrollment was also manifested indirectly through access to services and facilities at the community level. Hence the policy option was to not just expand the number of high school places, but to expand the number of high schools, especially in rural areas where access to a bus was especially difficult.

Lavy, V. (1996) presented a paper entitled “School supply constraints and children’s educational outcomes in rural Ghana”. The purpose of this paper was to test the hypothesis, focusing on enrollment of and level of schooling attained by children of primary school age, concentrating on the empirical implications of introducing schooling costs that increases with schooling level.
The data for this study were taken from Ghana 1987-1988 Living Standard Survey which provided information on household level and community level and school quality variables. The household level variables included in this study were household income, demographic structure, gender, number of siblings, father’s education, mother’s education, per capita household expenditure, household ownership of land and regional indicators. Community variables included in the study were information on distance to the nearest primary middle and secondary schools, their size (number of classes and age). The school quality variables included average years of teacher experience, schooling and training, proportion of schools with blackboard, number of books per class room, presence of library, number of desks, proportion of class room of simple construction (shade class room), completely usable or can not be used when it rains, number of schools with running water and / or, electrify; and number of schools with a selective admission policy.

The results show that the effect of the distance to middle school was the most precisely estimated coefficient (with t ratios over 4 equations for the whole sample). It was also the most important one in terms of its effects on the various schooling outcomes. For example, the effect of a 1-standard deviation change in middle-school distance on the probability of ever attending primary school was more than three times larger than the effect of a similar change in the distance to primary school. In terms of elasticities, the elasticity of the probability of ever attending primary school with respect to the distance to middle School was 0.30 while the elasticity with respect to the distance to primary school was 0.07.
One of the other variables included in the regressions was educational level attained by parents. If parents completed primary school, it was a significant determinant of children's school enrollment. The education of the mother was more important for children's enrollment than that of the father; the mother's coefficient was larger and more precisely estimated. This was remarkable, in that very few mothers in the sample had completed post-primary or even primary education. The effects of the gender and age variables were typical of developing countries, that is, enrollment increased with age and was lower for girls. Including interactions of parental education and the gender dummy suggested that the effect of mother's education on enrollment was greater on girls than on boys.

Acharia, S. (1996) conducted a study in Maharashtra to assess the access to education and benefits of education. The study explicitly identified demand and supply variables that determined access to literacy and education. The data used in the study were the NSS 43rd round data for the year 1987-88. The author used economic and non-economic variables in the study. The economic variables used to explain access to education / literacy were monthly per capita household expenditure (MPCE), landholdings and household type. The non-economic variables were caste, household size, religion and literacy of the household head. The author used logistic regression analysis and found that access to education was closely linked to complex web of social, economic and cultural factors in which caste, levels of living and the occupation / job status assumed an important position. The probability that a person attained literacy / education was also determined by one's gender and the head of the
household literacy status. It also revealed that the gender and location (rural / urban) disparities also were large.

Moreland, R. S. et al. (1996) conducted a study in Egypt to answer "(1) how much do Egyptian parents spend on their children? And how are parents' choices about expenditures on children related family size decisions?" Data was taken from the Expenditures on Egyptian Children Survey 1995 (EECS95). The EECS95 included cross-sectional data from 3,799 households, which were representative of all Egyptian households. The authors found that in Egypt, mothers who had greater roles in family decision making were more likely to have smaller families and to spend more money on their child's education. The effect was stronger than the effect of SES and was found in both rich and poor families.

Khan and Siddiqui (1997) conducted a study in rural Pakistan to investigate how did large landlords affect the demand and supply of rural schooling. The data used in this study were taken from Rural Income Distribution Survey (RIDS) conducted in Pakistan by Punjab Economic Research Institute with World Bank fundings in 1986. The variables included in the study were distance to high school for boys from village, distance to primary schools for boys from village, distance of Civil dispensary from village, household expenditure as a proxy of income, variable representing absolute landed power (ALP) and relative landed power (RLP), variables representing presence of electricity in the village, Dummy variables for Punjab, Sindh, NWFM and Baluchistan.
Combining a political economic perspective with the human capital schooling model, the authors used a simultaneous equation Tobit model to investigate the impact of landed power on schooling in rural Pakistan. Their findings supported anecdotal evidence of a negative association of landed power and rural schooling. Beyond a medium sized threshold, the large landlords in a village had an adverse impact on rural schooling. The same result holds true for land concentration measured by the gini coefficient. They expected that this occurred because big landlords were more likely to be interested in a readily available pool of a cheap docile labor force rather than the educated one that had other options. They might also be interested in confining education related opportunities to their own scions. The authors also found that the landlords had various reasons for lobbying for schools while opposing schooling. Distance of the village from a civil dispensary was inversely associated with school attainment. From a public policy perspective, this highlighted the complementarity of rural infrastructure.

Tansel, A. (1997) presented a paper entitled “Schooling Attainment, Parental Education and Gender in Côte d’Ivoire and Ghana”. The objective of this paper was to assess the importance of parents’ education in the schooling achievement of their children and to study the differences by gender. In this paper three levels of schooling-primary, middle and post-middle levels were examined separately in both the countries. The variables used in this study were parental education, total household expenditure per adult older than 15 as a proxy for household income, dummy variables such as, for various age groups, community child wage, dummy for rural and urban location.
The Probit and Tobit models were estimated on the sub samples of individuals 16 and older, 19 and older, and 25 and older for the primary, middle and post-middle school levels respectively. The main findings of the study were that parents' education had a significant influence on the educational achievement of children of both genders. In contrast to the evidence from developed countries, the effects of the father's education were found to be more important than the mother's education for both boys and girls in both countries. The impact of parents' education on the schooling of girls was larger than on the schooling of boys in Ghana while the reverse was true in Côte d'Ivoire. Further, in Ghana the mother's education had a larger effect on her daughter's schooling than on her son's schooling. The effect of household income indicated that households were credit constrained in their schooling investment decisions in both countries. The recent income decline in Ghana had a very large negative impact on educational achievements in Ghana. In both countries, secondary school distance costs reduced primary school enrollments and middle school attainments, which could have implications for the policies on the structure of school fees. In Côte d'Ivoire the costs effects of secondary school distances were about the same for boys and girls, while in Ghana the significant cost effects of the middle and post-middle school distances were somewhat larger for girls than for boys. The improvements in the supply of schooling over time benefited girls most at the middle level in Côte d'Ivoire and boys at the post-middle school level in Ghana.

Duraisamy, M. (1998) conducted a study in rural Tamil Nadu to examine the role of gender, parental education, household socio-economic characteristics, school access on child schooling in rural Tamil Nadu. The data used for the study were based on
primary data collected by the author himself. Based on the level of total literacy in 1981 and changes in the literacy level between 1981 and 1991, the Districts of Tamil Nadu were grouped into low, medium and high changes districts. From these categories, one district each from the medium and low change groups were selected. The North Arcot district belongs to the former and the Dharmapuri to later category. Based on a similar procedure, six villages from North Arcot and four villages from Dharmapuri were selected at random. A complete census of the sample villages was done and a total of 3868 households taken for the survey constituted the data base for the study. In all, there were 4607 children of which 2555 belonged to 5-10 age group and 2052 were in the 11-15 age interval. The variables used in the study were parental education, household income, household occupation, household caste, school distance, child age, birth order, sex, animals and assets.

The author used cross-classification and econometric analysis in the study. The results showed that the higher level of parental education (father’s and mother’s education) had a positive and significant effect on enrolment and attainment of children. A household’s economic status also positively influenced child schooling outcomes. However, parental education emerged as the most powerful force behind the improvement in child schooling outcomes. Parental education also turned out to be an important means of achieving gender equity in child schooling.

The demand for children’s time at home and school distance considerably worked against the schooling of children. Wage and salaried class parents not only invested more in child schooling in general but also allocated resources more equally between
boys and girls compared to other occupation groups. The increase in the distance to schools substantially reduced the schooling of girls in backward and schedule caste/tribe families.

The author suggested that reducing the distance to high schools would undoubtedly benefit the weaker section of the population. Reducing the indirect cost of schooling by compensatory means such as scholarships, operating the schools at evening hours, etc. would attract more children to schools. It was also suggested that increasing the literacy rate through adult education programmes such as total literacy Campaigns would certainly improve the schooling levels of their offspring.

Al - Samrrais and Peasgood (1998) conducted a study in Tanzania to examine which households and individual characteristics affected primary school enrollment, completion and secondary school attendance. The data was taken from a 1992 household survey done in a joint research project between TADREG (Tanzania Deployment Research Group) and the University of Dar es Salaam. The study included 16 non representative villages, 702 households were interviewed covering 3345 family members and detailed information on a variety of household variables including sex, age, education and occupation of the household head, age and education of the spouse, the number of children and dependants, ethnicity, religion and type of marital relationship were collected. The author used regression analysis which reflected the substantial intra household differences between the way in which household characteristics affected outcomes for boys and girls, and how mothers’ and fathers’ influence over resource decisions affected outcomes. The regressions also
showed that the gendered impact of household characteristics on schooling changed as children progressed through school. Socio-economic status measured in terms of occupation of the head, marital status and education tends to be more highly correlated with decisions in girl education than boys. For example, girls coming from polygamous households were significantly less likely to enroll in primary and secondary schools whereas the effect was insignificant for boys.

The regressions reflected a different demand for education within female headed households, boys being significantly more likely to complete primary school and girls being far more likely to attend secondary school if they were from female headed households. The greater the number of children within the household increased both boys and girls chances of attending and completing school. The effects of birth order were slightly less clear with younger daughters less likely to attend primary school but more likely to complete primary and attend secondary school (although the effect for secondary was not significant) if they do. Older brothers were more likely to have educational decisions made in their favour but results were not significant in general.

The regression gave weight to the notion that mother’s education had more influence on girls’ enrolment decision, while fathers’ education had more influence on son’s enrolment. Married mothers’ education strongly effected girls’ education but had no influence on boys’ education.

Hauser and Keo (1998) conducted a study to document the impact of siblings on education of women and men born in the United States between 1920 and 1965. Data
from the Panel Study of Income Dynamics (PSID), the November 1989 Current Population Survey (CPS) and the National Longitudinal Study of Women (NLSW) suggested that women with sisters might have completed less schooling than women with out sisters. There was relatively weak evidence for this hypothesis in the analysis on which the findings were based. Keo and Hauser tried to test the hypothesis using the 1973 Occupational Changes in a Generation Survey (OCG), the pooled 1986 - 1988 Surveys of Income and Programme Participation (SIPP) and the 1989 National Survey of Families and Household (NSFH) and they found no evidence that the presence of sisters or share of sisters in the sibship had affected women’s schooling in the United States during that century. Moreover, they found no evidence that the effects of the number of sisters on educational attainment differed systematically from the effects of the number of brothers. Regardless of gender and regardless of year of birth, each additional child in a family led to a modest reduction in educational attainment.

Taubman with Behrman and Pollak (1998) used the Panel Study of Income Dynamics of the United States and found that while controlling for father’s and mother’s education the ln (log) of years of school completed had an elasticity of about 0.8 with respect to the ln(log) of parental earnings.

Filmer and Pritchett (1999) conducted a study to estimate the determinants of child (aged 6 to 14) enrolment and attainment of a cohort (aged 15 to 19) in India. The authors used the data collected by the National Family Health Survey (NFHS) in 1992-93 from each state of India. Sample sizes for each state of the survey ranged
from 1000 in the small North Eastern States to almost 10000 in Uttar Pradesh. Over all the survey covered over 88000 households and 500000 individuals. The variables included in the study were wealth variables-household ownership of various assets, characteristics of household dwelling, land holdings, child variables in the form of a dummy variable for gender, child age, the household variables of age of the household head, whether the household head ever attended school, the highest grade completed by the household head, religion, caste and other variables included in the study were dummy variables in the rural area for the presence of (1) a primary school (2) a primary and a “middle” school and (3) a primary, “middle” and a secondary school. In addition a large set of other village level variables capturing village infrastructure was also included.

The author aggregated the wealth variables into an index to rank each of the households in India by their economic status. The statistical technique of principal component to derive weight was used and each household was assigned to an economic status group depending on the value of their asset index. The households were then classified in to three groups: (a) the bottom 40 percent, (b) the middle 40 percent and (c) the top 20 percent. For convenience, they referred to these groups as the poor, the middle and the rich.

The authors applied regression analysis in the study and produced five major results. First, using an index of assets as a proxy for household wealth showed enormous gap between the enrolment and attainment of children from rich and poor households. While 82 percent of the children from the richest 20 percent completed grade 8, only
20 percent of children from the poorest 40 percent of households could do that. Second, the wealth gaps varied widely across the states of India. Third, gender differences exacerbated these differences, so while 80 percent of girls from households in the top 20 percent completed grade 8, only 9.5 percent of girls from the poorest 40 percent could do so. Fourth, the physical presence or absence of school facilities in the rural villages explained only a very small part of enrolment differences. Fifth; there were huge gaps in the enrolment rates of equivalent households across states, especially among the poor. For instance, enrolment rates were 44 percentage points higher in Kerala than for an equivalent poor household in Bihar.

Kar and Kar (1999) conducted a study to examine female educational attainment and drop-outs in low income families in rural Orissa. The authors collected first hand information on the related matters from 3750 rural women of the state. The undivided 13 districts of the state was classified into three groups on the basis of female educational attainment. The lowest level of female literacy (5-10 percent) was prevalent in the district of Koraput, Kalahandi, Phulbari, Bolangir and Mayurbhanj, while Ganjam Keonjhar, Dhenkanal and Sambalpur were ranked second with (10-15 percent) female literacy level. The highest educational attainment of female (15-20 percent) was seen in the comparatively advanced districts of Cuttack, Puri, Balasore and Sundargarh.

The variables used in the study were education of female, age of the household head, educational attainment of the head of the household, monthly income of the family,
number of dependent in the family, numbers of earners in the family, number of family members, distance of work place of the household head, number of females in the family and dummy variable for caste.

The author used regression analysis in the study. Results revealed that the age of the household head was expected to be negatively related to the educational attainment of women. Aged people in rural Orissa were relatively conservative and hence at times, strictly opposed to girls going to school, for which education of girl child did not prosper adequately when the head of the family was more aged. Moreover, aged heads of the household tried to give the girls in marriage which brought about discontinuation in education. Higher education of the head of the household was supportive of female education and hence a positive correlation between the two was expected.

Women in the lower income group performed all the household chores and as such with increased number of dependent in the family they had less time to devote towards their studies. However, if the dependent were grown-up enough to take care of the family, then they acted as supportive factors in female educational attainment.

Considering the caste factor, general caste women went for higher educational attainment in comparison with their scheduled caste and scheduled tribe counterparts. The former group was enlightened enough to educate their girl child. However, various reservation schemes, enhancing job prospects for the scheduled caste and
scheduled tribe was expected to act as an inducive factor for women's education. Hence, caste did not seem to have definite correlation with educational attainment.

With increased monthly income, a family was capable of sparing its female members for studies, but the reverse was the case if the female members were contributor to the family income.

When the number of earners in the family increased, women had to spend longer hours at home and, as such, their education was hampered. Similar would be the case, if women themselves were earners. But it was also quite likely that the increased numbers of earners supported female education as they need not extend a helping hand to the family income. Therefore, the impact of the number of earners on female educational attainment was as indeterminate as that of the number of dependents.

Longer distance of work place of the earning members also worked as a deterrent for female education, as the heads of the households had to spend longer hours for their job, which demands longer time for women towards the family.

Increased numbers of family members forced women to divert more time for household chores which retarded educational attainment. But, if the family had a large number of female members to take care of the family, they could be spared for educational attainment.

The age of the head of the household had the expected impact on the level of female education only in the high literacy districts while in the second and lowest literacy
districts, the correlation was insignificant. Educational attainments of the heads of the households had the expected results in all the three categories.

The impact of monthly income on the level of female education was insignificant in all categories, but a negative co-efficient in the low literacy districts revealed that increased family income deterred female education. In these backward districts of the state, women worked as the chief earning members and as such they had less time for studies.

Filmer and Pritchett (1999) presented a paper entitled “The Effects of Household Wealth on Educational Attainment: Evidence from 35 Countries.” The purpose of this paper was to explore and emphasize how educational attainment within countries differed by household wealth. For example, how much schooling had children from poor households in Brazil, India or Kenya received both absolutely and relatively to the rich in the same country.

The data for this study were derived from the Demographic and Health Surveys (DHS) which had been carried out using a nearly identical survey instruments in over 35 developing countries. Many of the surveys, the 35 included here also recorded data on school enrollment for household members aged (6-25) and educational attainment (for household members aged 6 and above).

The DHS did not ask about household income or consumption expenditure, but the instruments for surveys carried out since 1990 included two sets of questions related to the economic status of the household. First, households were asked to report about
ownership of various assets, such as whether any member owned a radio, television, refrigerator, bicycle, motorcycle, or car. Second, Questions were asked about housing characteristics, whether electricity was used, the source of drinking water, the type of toilet facilities, how many rooms were there for sleeping, and the type of materials used in the construction of dwelling.

The authors aggregated these variables into an index to rank the households by their economic status. The statistical technique of principal components to derive weight was used and an asset index was calculated separately for each country. Within each country individuals were sorted by the asset index, and classified in to three groups : (a) the bottom 40 percent (b) the middle 40 percent, and (c) the top 20 percent. Households were then assigned to each of these groups on the basis of their value of the asset index. For convenience; they referred to these groups as the poor, the middle and the rich. The principal components method produced a good ranking of wealth across households for the purpose of predicting education outcomes.

The authors gave two important conclusions in this paper. First, in many, (if not most) countries the bulk of the deficit from universal primary (or basic) education comes from the poor. The achievement of higher levels of enrollment for this group is an exercise in social inclusion, reaching out and bringing the poorest in to what is already the norm for the rich and, in many cases, for those in the middle with respect to wealth status. Second, the evidence suggests that, except in the very poorest settings, the key to closing wealth gaps in school enrollment and educational attainments lies in actions that raise the demand for schooling of the poor. They
believe that raising the quality of schooling received at the primary level is likely to be a main ingredient needed to attract and retain poor children in school.

Glick and Sahn (2000) conducted a study in a poor urban environment in West Africa to examine the impact of parental education, income and household structure on the schooling of boys and girls. The data used in this study were taken from a survey of 1725 households conducted in Conakry in 1990. The household survey did not contain information on the characteristics of schools; the focus in this study was on the effects of households and individual factors on schooling. The sample for analysis of this study consisted of boys and girls aged 10-18 living with at least one parent, full siblings (sharing both parents), half siblings (having same father but different mother) father’s years of schooling, mother’s years of schooling, father missing, mother missing, household expenditure per adult as a proxy of income, number of siblings under 5 years age, no of brothers aged 5-12, sister aged 5-12, brother aged 13-20, sister aged 13-12, other children aged 5-12, other boys 13-12, other girls 13-20.

The authors used ordered and binary probit models in the study. The results indicated that education of parents was generally positively associated with child schooling, but these effects depended on the gender of the child, especially for mother’s education. Mother’s education had strong positive impact on girls’ grade attainment and current enrollment status but had no effects on boys’ education. While father’s education had effects on the schooling of both boys and girls though the effects on boys were smaller than for girls. Increase in household permanent income proxied by household expenditures per adult, had positive effects on grade attainment and current
enrollment of girls and also reduced the probability that teenage girls would leave. Like maternal schooling, however, expenditures did not have a significant impact on the schooling of boys. The presence of siblings under 5 had a strong negative impact on girls, grade attainment and current enrollment and also induced girls to leave school. No such impacts of siblings were found for boys.

Dutta, S. (2001) conducted a study on Tribals of Tripura to examine and identify the socio-economic factors that influenced children's educational attainment in tribal households of Tripura. The data for this study were generated in 1994-95 through household survey by administering pre structured questionnaires to 254 randomly selected Tripuri households residing in rural areas which lie within a radius of 14 kms of a town in the west Tripura district. A number of variables such as average years of schooling per child, household yearly gross earning, size of land holding, Education of mother, number of times of father moving out in a month, Father's age, father or mother or both employed in government sector (Dummy), distance of sample unit from the nearest town, yearly average per child expenditure, dummy for expectation to send children of both the sexes for college education, Dummy for Agartala region, average years of schooling per child, children below the age of five years.

The author applied regression analysis in the study and found that among the proximate socio-economic determinants of children's education, household's gross earning, expenditure on children's education currently incurred by households, absence of sex preference and agriculture as the main occupation had individual positive impacts on the schooling attainments of children. On the other hand, the size
of landholdings, education of the mother, labour force participation, joint family structure, and presence of young children below the age of five years in a household had individual negative impacts on the schooling attainments of children. Family size did not have any significant impact on children’s schooling. However, it appeared that an inadvertent dilution of familial resources in a joint family structure reduced the schooling attainments of children.

Hamid and Siddique (2001) presented a paper entitled “Gender Differences in Demand for schooling”. This paper was based on the survey data of 250 households of export oriented industries in the cities of Faisalabad, Sialkot and Karachi. This study examined the characteristics of households that affected the likelihood of sending or stop sending the child to school. The socio-economic indicators included in the study were household income, asset ownership, mother’s education, mother’s work status, household size/siblings, sex, and distance of school, dummy variables for cities of Faisalabad, Sialkot and Karachi. The authors used probit model in the study. The results showed that income was the main factor affecting positively the probability of sending a girl child to school. Surprisingly mother’s education was the main attribute affecting the probability of sending a child, both boy’s and girls to school. The distance to school had an unexpected effect. The increase in distance had a positive effect on demand for schooling for girls and boys but the effect was not statistically significant. Presence of siblings affected the probability of girls attending school negatively and the effect was statistically significant. The effect was negative and statistically insignificant for boys. City dummy had a mixed effect on demand for girls and boys schooling. Although the effect was statistically insignificant. But the
results suggested that the probability of a child going to school was higher if a child was 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 sent their children to school by a few industrial units in Sialkot which reduced the household cost of educating a child.

Dreze and kingdom (2001) found that household characteristics explained more of the variations in educational outcomes. The study revealed that household with many young children had significantly lower levels of girls’ education.

Ermisch and Francesconi (2001) conducted a study entitled “Family matters: Impact of family background on educational attainments” to estimate the impact of family background on educational attainments of more recent cohorts of British youth born (during 1974-81). The data for this study was taken from the first seven years (1991-97) of British Household Panel Study (BHPS). Seven important variables: mother’s education, father’s education, family income, family structure during the childhood, year of birth, current age of the child, ethnic group were included in the study. The authors applied ordered logit model in the study and concluded that parents’ educational attainments are found to be very strongly associated with their children’s educational attainments, and for an important part of the population, these associations can be given a causal interpretation.

Handa (2002) conducted a study in Mozambique to examine the relative importance of supply and demand side intervention on increasing enrollment in developing
countries with the intention of making policy recommendation to the Mozambique MOE. The household data used in this study came from the first post war national household survey of Mozambique undertaken in 1996/97 by the National Statistical Institute -the Inquerito Nacional AOS Agregado Familiares Sobre As Condições de Vida (IAF). In total, 42,000 individuals across 8,250 households were surveyed. Raw data from the 1995 and 1996 biannual MINED schools survey were also used. A number variables such as age, sex of the household head, whether the household head is literate, whether any adult household member has completed grade 7 (EP2), whether any adult female has completed grade 5 (EPI). Household resources measured with daily per capita expenditure on all goods and services including home production, total land holdings, access to irrigation, agricultural commercialization and provincial dummy variables were included.

Simulations based on a set of, plausible, demand and supply side intervention indicated that in rural Mozambique, building more schools or raising adult literacy would have a larger impact on enrollment rates than interventions that raised household income. Dimensions of school quality and access both worked to stimulate enrollment, although effects were small and differed somewhat by gender of child. School quality, measured by the number of trained teachers had a positive and significant impact on enrollment, but it was the gender composition of the trained teaching staff that was more important in determining the household decision to send children to school. School availability also had a significant impact on enrollment rates. Reducing the travel time to the nearest school would increase enrollment rates.
for both sexes by 17-20 percentage points and the impact of school availability was enhanced for girls if the school was built with cement.

Boyle, S. et al., (2002) conducted a study to create a comprehensive understanding of the burden of educational costs, both indirect and direct, on poor households. The study was conducted across four countries (Bangladesh, Nepal Uganda and Zambia) in four sites (3 urban and 1 rural selected using various poverty indexes). In each site, 75 semi-structured interview (SSI) questionnaires were administered to individuals, sometimes of the same household. Specific details of each site were provided, but typically 140-180 households were surveyed from each country. For purpose of comparison, approximately 75% of these were poor households while 25% were taken from a “slightly better off” households. Qualitative data were collected through group and individual interviews to triangulate data from the SSI and other sources, and depth to the information gathered. Participatory Approaches Groups were conducted with (1) boys and girls (2) primary and secondary teachers (3) parents and community leaders. Supplementary data was included from two countries (Kenya and Sri Lanka). Only Qualitative data through Participatory Appraisal (PA) methods was collected from these locations. The study found that poor households were extremely concerned with educational quality and made both economic and non-economic decisions accordingly. The poor were disproportionately vulnerable to economic shocks. Socio-cultural factors and gender played a role in deciding which children to educate. School characteristics such as safety and punishment also played role. Poor
households routinely listed cost as a prohibitive factor and often made sacrifices in consumption to meet school costs.

Srivastava and Srivastava (2002) conducted a study on Jaunsari Tribe which was found concentrated in the area of Jaunsar-Bawar of Chakrata tehsil of Deradun District. The objective of the study was to identify the role of human capital investment on human development in a particular tribal setting. For this study, necessary information was collected through primary household survey. 310 households were randomly selected and interviewed with the help of a pre-tested interview schedule. The selection of the sample for each region was made on the basis of socio-economic and demographic characteristics of both the southern and northern regions of the study area. A number of variables - mean education of children, father’s age in years, mother’s education in years, father’s education in years, age of head of the household’s spouse, family size excluding children, total female children survived, total male children survived, earning excluding children, non-farm earning excluding children, farm size, dummy variable for nuclear family, dummy variable for regions, dummy variables for upper caste, intermediate caste, dummy variable for outside contacts, dummy variable for polyandrous family, education of other father’s education in years, father’s age, numbers of children below five years of age were included.

The authors used regression analysis and found five major results. First; the father’s age and education had a positive and statistically significant influence on schooling of children. It was also indicative of the important role that father’s education could play
in improving the schooling of the children. Second, the schooling level of the children was basically governed by the presence of male children in the household. It implied that parents took little interest to educate female children. Third, nuclear family structure had been found to be positively influencing schooling of the children. It revealed that children belonging to the nuclear families received more opportunities of schooling in comparison to the joint families. Fourth, the positive and significant regression coefficient for the variable representing outside contacts indicated towards the favorable impact of this explanatory variable on the schooling of the children. It seemed that such contacts exerted powerful and positive influence on the attitude and outlook of a household towards schooling of the children. Finally, the variable representing the number of children below the age of five years had negative relationship with children's schooling.

Tansel, A. (2002) conducted a study to examine the determinants of educational attainments at primary, middle and high school levels in Turkey. A number of individual and household factors such as household income, parental education and occupation and a rich array of community characteristics were considered. The community characteristics considered included the rural/urban location, the level of urban development, distances to regional metro centers and Istanbul and the industrial composition of the local labour market. Ordered probit models were estimated for the primary, middle and high school levels for boys and girls separately. Schooling attainment was strongly related to household permanent income indicating that schooling was a normal good and that households were resource constrained in that
higher incomes led to higher schooling attainments. Effect of income on schooling of girls was larger than that of boys in all three schooling levels. This could be due to a taste effect as much as a more effective income constraint for girls than for boys. Both the boys' and girls' schooling were found to be strongly related to their parents' education which may mean less intergenerational socioeconomic mobility. Parental education effects were larger on girls' than on boys' schooling. This implied less social mobility for girls than for boys. The taste results indicated that the father's and mother's education coefficient estimates were not significantly different from each other in most samples. The effect of father being self employed was negative at above primary school levels implying that the work opportunity within the family business or the farm may be an alternative to schooling in particular for boys.

Urban location was associated with significantly higher schooling attainments. Within an urban location an undeveloped street or a squatter settlement which could be indicators of school availability were both associated with lower schooling attainments in several samples. They were in particular evident at the middle school level with larger effects for girls. The longer distances to regional metro centers were associated with lower school attainments for both the boys and girls at the middle and high school levels. Distance to Istanbul was also associated with lower schooling attainment at the primary school level for both boys and girls. These results suggested that easier migration possibilities or easier spread of modern attitudes about schooling as measured by the propinquity to the regional metro centers or to a mega centre like Istanbul increased the probability of school attainments. The greater the proportion of
local employment in industry the higher the probability of schooling at the primary level, but it was significant at higher levels. This suggested that households in the industrializing communities tend to better educate their children than households in the agricultural communities. The proportion of local employment in the service sector was negatively associated with the probability of school attainment in some of the sample particularly for women. This implied that schooling was not rewarded as highly in the service sector as compared to even agriculture.

Kingdom (2002) conducted a study to examine the extent to which differential treatment of sons and daughters can be explained in India. The data for this study came from a purpose designed stratified sample survey of 1000 households in 1995 in the urban Agglomeration of Lucknow district, Uttar Pradesh. The survey yielded data on 4560 individuals aged 6 years and above. A number of variables such as dummy for religion, dummy for low caste, number of siblings, parental wealth, index number of books in parents' household, whether either parents read a daily newspaper, father's education in years, mother's education in years, respondent's health when a child, parent's opinion about girl's education, father in white colour jobs, yes or no, did mother ever worked in an income generating activity, never married, marriage age less than or equal to 17 years, marriage between 18-20 years, age at marriage greater than 20 years, Raven's progressive matrices test of ability etc. were included.

The author applied ordinary least square in the study. Result indicated that being Muslim had a strong negative effect on years of education acquired by men. This
phenomenon reflected both lower taste for education, and employer discrimination against Muslims in India.

Conditional on enrollment, low and backward caste (LOWCASTE) men attained the same years of education as high caste men, ceteris paribus. However, low caste women lagged behind high caste women.

Parental wealth was a highly important determinant of educational attainment of both sexes though the effect was weaker for males, both quantitatively and qualitatively. Different measures of the home educational environment (BKHOME and PANNEWS) were significant for grade attainment of men and women. Parental education had different effects on girls and boys. Mother’s education was very important to girls’ schooling but not to boys’; father’s education was important to both boys’ and girls’ schooling.

Another parental variable which had a large impact on girls’ education but not on boys, was parents’ opinion about the importance of girls’ education (EDEQUAL). Girls whose parents believed in gender equality in education attained very significantly more education than other girls.

Father worked in a white-colour occupation (PAWHITE) had positive impact on children’s educational attainment in both male and female samples. However, a working mother exerted a strong negative effect on girls’ enrolment and boys’ on years of educational attainments.
The age at marriage variables were highly important in explaining years of education acquired for both sexes, though the effect was particularly powerful for females, in both quantitative and qualitative terms. The base category was ‘married at age 25 or above’. Those who married very young (at ≤ 17 years old) had, on average, about 2.3 years less education than those who married late. Persons who married between ages 18 and 20 years old likewise had significantly less education than those who married after 20.

Measures of ability categorized in to low, medium and high ability were very significant determinants of years educational attainments for males as well as females, although their quantitative effect was bigger in the male equation. Medium ability and high ability individuals had higher education than individuals with low measured ability, as might be expected a priori. After ‘age at marriage’, ability was the most important determinant of years of education in the female equation; in the male equation, it was the most important, with high ability men gaining, on average, nearly three years’ more schooling than low ability men, ceteris paribus.

Jayachandran (2002) investigated the socio economic determinants of school attendance in India, and the possible causes of disadvantage faced by the girl child. The results indicate that school attendance is negatively related with household size and positively associated to school accessibility and parental education. The gender bias in school attendance declines with school accessibility and parental education.
Connelly and Zheng (2003) conducted a study to analyze the educational enrollment and completion pattern (rates) of the cohort of youth born between 1972 and 1980 in China. The data for this study were taken from the 1990 Chinese Census which provided information on age and sex of the child, family size, parental education, household income, rural versus urban residence, ethnicity, proportion of children in the community who attend school, number of siblings, family composition, village in school rates, country income level, terrain and regional dummies.

They defined five progressive measures of educational attainment in the study for analysis: (1) having ever attended primary school (2) having graduated from primary school (3) having attended middle school (4) having graduated from middle school and (5) having attended high school.

For each of the five education status variables, the effects of individual, household and contextual variables were estimated using a logit model and analyzed separately for rural and urban youths. The analyses done at the individual level found consistent correlates with enrollment and graduation rates: Sex was shown to be an important predictor of difference in rural areas but not in urban areas. A common pattern of effects of parental education (positive) and the number of siblings (negative) emerged for all educational milestones in both rural and urban areas. Higher village in-school rates affected attendance and completion in both rural and urban areas except for middle school graduation. In rural areas, for the three earliest educational thresholds, girls were more positively affected than boys by higher village rates, leading to a finding of positive externalities especially to girls when a community raised its
enrolment rates or made middle school more accessible. Finally, country level wealth measures were consistently positive in their predictive power for rural areas but not in rural areas.

Their findings were not only consistent with other studies done in China but also with similar studies done in different parts of the world. For example, in every developing country where economists had applied these determinants of educational attainment models sex, rural versus urban residence, family size, and parental schooling had been found to be important determinants of youth enrollment. The transition points such as moving from primary to middle school and later from middle school to high school seemed to be moments when poor rural girls were particularly vulnerable to not continuing.

Deininger K. (2003) conducted a study in Uganda to evaluate the impact of Uganda’s Program of Universal Primary Education in Uganda. The data for this study were derived from the 1992 Uganda Integrated Household survey which included data on 10000 households and approximately 50,000 individuals of which 17,126 were children aged 6-18. The 1999/2000 Uganda National Household Survey was also used, which included 6,000 households, 30,000 individuals of which 14,868 were children aged 6-18. The author applied regression analysis to estimate the impact of household characteristics on the probability of attendance in 1992 and changes in impact between 1992 and 1999 not only for primary attendance in the 6-12 age groups as a whole but also separately for 6-8 and 9-12 years old children. Finally, regression analysis was also done for secondary school attendance in the group of 12-18 years
olds as a means to control for unobserved effects of the common economic environment.

The regressions confirmed that in 1992 primary schooling in Uganda showed many of the characteristics familiar with the literature for developing countries. There was a bias against females, a strong dependence of the probability of attendance on parental income as well as education and pronounced region-specific effects. Regression results indicated that males faced a probability of attendance of about 5% higher than that of females. Parental income significantly increased the probability of primary as well as secondary school attendance. Attendance was also strongly dependent on parents' education, a phenomenon that was generally interpreted as pointing to the importance of home-provided inputs, such as supervision and support, on educational participation. One additional year of education by the father and mother was estimated to, at the mean of all other variables; increased the probability of attendance by 3 and 4 percentage points respectively.

By 1999, they observed a significant expansion of primary schooling, a reduction in the role of income as a constraint on enrollment, and a complete elimination of the gender biased that had prevailed earlier. Finally, for secondary enrolment, they found that there was only a much weaker reduction of the impact of parental income than in the case of primary education, suggesting that even though there was a general increase in the households' ability to access education (for example due to publicity campaign and generalized increase in demand), the abolition of school fees at the primary level had a clear and positive impact on enrollment. The estimates also
suggested that regional differences have widened, singling this out as an area of future attention.

Holmes, J. (2003) conducted a study to estimate the determinants of school completion in Pakistan (accounting for censoring and selection bias), in order to aid in the design of programs that encourage higher enrollment and greater educational attainment in Pakistan, particularly among girls and children in rural areas. The data for this study was taken from the Pakistan Integrated Household Survey (PIHS), 1991 which contains information from individuals of approximately 4800 households residing in 150 rural and 150 urban about their household composition, employment, health, time use, etc. A number of child and household variables such as age, sex, education of all living children, currently enrolled in schools, children currently living in mother’s household, non-home resident children, mother’s education in years, father’s education in years, value of land and property as a proxy of income for education outlays were included in the study. Besides, community variables like rural residence, no sewage disposal in community, distance to primary, middle and secondary schools, average male wage in strata/regions, average female wage in province, provincial dummies for Punjab, Sind, Baluchistan and North West Frontier were also included in the study.

The author employed censored ordered probit estimates in the study for all 5-25 years old, home and non-home resident boys and girls. The study provided some insight into the demand for schooling in Pakistan. Parental education was positively associated with school attainment, although there was a differential impact by sex.
Mother's education had a greater impact on daughter's schooling, while father's schooling had a greater impact on son's schooling. Household wealth and average male wages also had a significant and positive effect on school attainment, although the education of daughters was much more responsive to wealth and male labour market changes than the education of sons. Lack of sewage disposal in the community had an adverse effect on schooling of both sexes. Although the effect was stronger for girls. Rural residence significantly decreased girls' attainment but it had no significant impact on boys' attainment. Distance to nearest primary school did not affect educational attainment of both the boys and girls whereas distances to middle and secondary schools significantly and negatively affected the educational attainment of both the sexes.

Srinivasn, J. (2004) conducted a study to analyze various deciding factors of demand for schooling at the secondary and higher secondary levels in both rural and urban areas of Tamil Nadu. The data for this study were taken from a primary survey of both rural and urban households conducted in 1989-90. The survey comprised of 300 households from Madras city i.e. urban sample and 300 households in six villages from Dharmpuri and Tirunelveli districts i.e. rural sample. Altogether, there were six hundred households for the primary level survey. The variables used in this study are father's educational level, mother's educational level, Father's age, mother's age, community facility available at home, family income, size of land holdings, monthly consumption expenditure, dummy variable for parental support, dummy variable for
parental attitude, dummy variable for BC/SC/ST, Dummy variable for skill occupation.

The author used regression analysis in the study. The main findings of the study were as follows:

1. In both rural and urban areas, the average amount spend on schooling was mostly decided by the Socio-economic factors such as mother's age, caste, monthly consumption expenditure and number of School going children in the family.

2. The most important determinant of demand for schooling was found to be the monthly consumption expenditure and that again depended only upon family income.

3. Mother's age effect on children's schooling was more decisive and concrete than father's age factor.

4. The deciding factors in case of rural and urban areas in explaining the demand for schooling were also different.

In rural areas, the average amount spent on their children's education was determined by factors such as mother's age, monthly consumption expenditure and number of school going children in the family. Boy's education was crucially determined by caste variable. Among girls, religious group significantly affected the average amount spent on education.
In urban areas the average amount spent on children’s education, was determined by the factors such as mother’s age and monthly consumption expenditures. In this case, the number of school going children in the family did not seem to be affected much the schooling of children.

Burke and Beegle (2004) presented a paper entitled “Why children aren’t attending school: The case of Northwestern Tanzania”. The purpose of this article was to explore child enrollment determinants from the household perspective considering the supply of educational services in the community. The Kangera Health and Development Survey, a longitudinal socio-economic survey of over 800 households in the Kangera Region of Tanzania, was used as the primary source of data for this study. Of all of those surveyed, these results reflected the findings from 628 households that had at least one child between the ages of 10 and 15. The authors found that demand for education within the household should be addressed, substitutes for child labor should be utilized to allow more children educational opportunity, and access to secondary school could increase girls’ attendance at the primary level.

Nauriyal and Dutta (2006) conducted a study to examine the impact of quantity-quality trade-offs, familial resource and some other variables denoting human capital attributes on the household demand for children and their schooling. The data for this study were collected through a household survey of 254 families of rural Tribes in Tripura in 1995. The variables employed in this study were number of children ever born in a given household, average years of schooling per child, household’s yearly
The main findings of the demand for children’s schooling were:

1. Higher average schooling of the children could be ascribed to the relatively higher age range of the children belonging to elderly parents. Therefore the study did not negate the existence of quantity-quality trade off considerations.

2. Among the variables that determined the level of familial resources, household’s gross earnings had been found to be suggestive of a positive impact on the demand for children’s education. If the size of land holdings (SL) was compared that of household’s main occupation in agriculture (OAGRI), the trend appeared to be similar giving rise to a definite inference that children belong to households who had a higher size of operational holdings received better education and vice-versa.

3. Given the low education of females and their employment in low paid jobs in Tripura, a negative association of the labour force participation of mothers with the ACEC seemed to be the natural outcomes.

4. The emergence of FMS as statically significant suggested that the dilution of resources per child in a joint family had cast an overbearing restrictive impact on the
educational attainments of children in such households. In nuclear families, on the other hand, certain constraints such as children sharing some of the responsibilities of parents did not seem to have exercised strong enough to have an adverse impact on the children’s schooling.

Levine, S. (2006) conducted a study to identify factors that determined school attendance among high caste, middle caste Nepali mothers of young children in Kathmandu valley of Nepal. The study was based on ethnographic research conducted in 1997-1998 in Kathmandu valley of Nepal. The data for this study was taken from a larger study focusing on a group of women from the city of Patan (N=86) and Godavari hill side (N=81) who completed a questionnaire on school attainment. The questionnaire included questions such as: “who paid your school expenses?”, and “who encouraged you to continue your schooling?”, “Why did you stop going to school when you did?” and “how far is the longest any of your brothers/sisters went to school?”. Twenty women were also selected for an open ended interview. Topics covered in interviews included, participants’ school experiences, their parents, and their siblings’ schooling, and their educational goals for their children.

The author found that gender, caste, poverty, cultural prejudice, and rural residence prevented a majority from going to school. Of those who went, most, regardless of academic talent, were pulled out in order to work at home, as wage laborers and domestic servants or to enter arrange marriages. Only a small majority made the decision to leave school themselves. The article contributes to the study of schooling and gender in South Asia.
Ahmed, S. (2007) conducted a study in Muslim families of Delhi and Aligarh (UP) to examine the relationship of family size and parental education, the effects of participation of parents in first, second and the third level of education on family size and the effects of sex composition, particularly son’s preference on family size. For this study, the author conducted a primary survey and collected sample of 490 Muslim households in the month of September, 2004. Half of the respondents to that survey were from Delhi and other half were from Aligarh. The respondents were married and cohabiting women aged 15-44 years and their husbands. A wide range of dummy variables such as family size, father’s Primary Education, father’s Secondary Education, father’s Tertiary Education, Mother’s Primary Education, mother’s Secondary Education, mother’s Tertiary Education were included.

The author applied regression analysis in the study and found that both education of male and female were negatively related to family size. In case of both educated parents, they had more preference for small family compared to single educated parents. Male dominance in choosing the family size had also been reflected. The study further revealed that the large families on an average found positively associated with favourable male sex ratio in the family.

The study suggested that there is need of special emphasis on education because it acts as the checks on population explosion. The education of male and female is essential of demographic transition to the third stage in Muslim families. Education in Muslim male is essential up to secondary to reduce the fertility. At the same time, higher the female education lowers fertility. It has also be suggested that the education
requires positive discrimination in favour of education of both girls and boys in Muslim families to break the vicious circle of low education, large family size, low per capita income and low education in next generation.

Ahmed, S. (2007) conducted a study to investigate the socioeconomic determinants of female education in a Muslim family. The data for this study was collected by the author himself from 274 households of Muslim majority areas in Delhi in the month of Sept-Oct. 2004. A number of socioeconomic variables such as years of schooling of children, family income, family size, education of parents, family’s attitude towards early marriage, cultural attitude towards institutional environment etc. The study was based on specifying and estimating the bivariate correlation, linear regression and logit model. Results indicated that father’s education had greater impact for girls’ education than of mothers. It reflected all the features of male dominance of Indian society.

The co-efficient of early marriage (dummy variable) was negative and significant implying that the mean education was less in the families who professed early marriage of girls. The co-efficient of socio cultural environment (CA) was negative and significant implying that the mean education was less in the families who believed that the social and cultural environment in schools, colleges and universities was not conforming to their perceived culture and therefore spoiled the girls.

Elasticity of girls’ education with respect to quantitative variable was estimated at mean level. The results indicated that one percent change in father’s education and
mother’s education increased girls’ education by 0.25 percent and 0.13 percent respectively. The elasticity of girls education with respect to parent’s education also revealed the fact that the cross, sex effect, (father’s education had greater impact for girls, education than of mothers), was stronger.

A logit model was applied to find out the probability of higher girl’s education (greater than 12th standard). It was estimated by taking the antilog of the value of regression coefficient. The co-efficient of mother’s and father’s education showed that higher the parents’ education, higher the probability of higher girls education in the family. The adverse cultural attitudes towards prevailing Socio-cultural environment in the institute of higher learning and preference of the family towards early marriage of the girls negatively affected the probability of higher education. Similarly, family size inversely affected the higher education. The household size exerted a negative influence on female higher education implying that as the family size increased, the proportion of girls going to take higher education decreased.

Hamnet et al., (2007) conducted a study to measure the differential impacts on educational attainment of social class and ethnic background. It began by examining the variations in school performance for London and especially east London. It showed how the disadvantaged nature of the area, as measured by such variables as Mosaic group and ethnic heritage, helped to explain the poor results at GCSE. The paper then changed the focus to schools with in a seven-borough area of east London. Using the Pupil Level Annual School Census (PLASC) linked to the Geo-demographic Mosaic codes based on pupils’ home postcode, the authors demonstrated
that although ethnicity accounted for some of the variation in performance, this was considerably less than that accounted for by pupil social background. In addition, they showed that it was not simply the social background of the individual pupil that affected school performance at GCSE. The proportion of pupils from a given social background played some role in boosting or diminishing the overall school performance and would influence the performance of individual pupils whatever their background. It was argued that these social background effects together with the school composition effects had a considerable impact on school performance.

Holloway et al., (2008) conducted a study in Japan to examine how demographic and psychological factors shaped the involvement of Japanese mothers in their children’s education. For this study the author obtained survey data from 97 mothers with a second grade child. Five demographic variables such as family income, maternal education, family size, mothers’ employment status and sex of the child were studied. Three forms of parental cognition were also studied: mothers’ aspiration for their child, parenting self efficacy and perceptions of the school. Multiple regression analysis indicated that mothers’ aspirations concerning their children’s occupational future were associated with monitoring homework and communicating with the teachers, as well as with financial investment in supplementary lessons. Parenting self-efficacy was negatively related to investment in supplementary lessons but positively related to engaging in cognitive stimulations at home. Mothers who perceived the school as supportive and open to communication were more likely to engage in all the three forms of parental involvement. More highly educated and
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wealthier mothers with fewer children reported investing to a greater extent in supplementary lessons. Mothers’ work status was not associated with any of the outcomes, nor was sex of the child.

Brown (2008) conducted a study in rural villages Ghanasu provinces of China. This study examined how parental education affected educational investment focusing on investment in goods in time. The data used in this study was taken from the Ghanasu Survey of Children and Families (GSCF) in 2000, a survey of 1970 children ages 9-12 and their families in a province located in North Western China. The detailed data used in this study worked afford several innovations. First, the data captured more complete measures of educational investments than those used elsewhere in the literature. For example, none required education-related expenditures, whether the household owned children’s reading materials, and whether the household had a designated study area for the sample child measured investments in goods used in children’s human capital production. The number of hours that parents spent helping their children with homework each week, whether parents read to the sample child, and whether parents discussed their children’s school performance with teachers measured parental investment in time used in children’s human capital production. Second, a comprehensive teacher ranking captured numerous aspects of teacher quality that were generally unavailable elsewhere. Moreover, teachers in Ghanasu generally followed a single cohort through primary school, suggesting that the teacher ranking was likely to measure both past and present teacher quality. Third, the relatively, large number of villages allowed for village fixed effects to control for
school quality, local socioeconomic conditions, labour market opportunities, and other forms of unobserved heterogeneity at the local level. Finally, a child cognitive development measure was employed to control both for innate ability and expected returns to child education, a key omitted variable in most studies.

It was found that more educated parents allocated higher levels of both goods and time to their children’s human capital production, even controlling for wealth, teacher quality, village fixed effects, and child cognitive development. Evidence suggested that more educated parents expected higher returns to education for their children. This offers one reason why parents in resource constrained households made greater investments in both goods and time. It was also found that the effects of mother’s and father’s education differed, with a marginal year of mother’s education having a larger impact on time investments than a marginal year of father’s education.

Mühlpachr, P. (2008) presented a paper entitled, “Social determinants of education in the post modern society”. In this paper the author expressed that the main problem of post modern society is how to deal with plurality, heterogeneity, and different life styles, values, experiences, specialization of sciences, and worldwide social developments, so that it would contribute to human dignity in society. It is necessary to innovate teacher training and teacher readiness to help the young generation to deal with the choices and current social problems.

The author further added that the following social changes must be considered as determinants of all educational activities.
(1) Freedom of speech, great possibilities to travel, enormous flow of information (sometimes antagonistic), mass advertising of all kinds of goods creates unrealistic vision of reality.

(2) Economic growth is seen as the main priority of present society, justifying all means of reaching prosperity.

(3) Parental care is reduced to ensuring satisfaction of material needs of the children, due to overwork and exhaustion.

(4) Atrophy of emotionality and repression of emotions in favour of desired performance. That is why only very strong events break in to ones mind and we need constantly stronger, more shocking experiences and stimuli.

(5) Pressure of the family budget rises, and the number of free time activities provided by schools and educational institutions free of charge decreases. This represents a great barrier for many children in participating in free time activities.

(6) New concepts of family coexistence, where parental roles constantly change lead to distorted socialization.

(7) Recent school systems concentrate on efficiency of educational processes, performance, and reaching the required level of knowledge, but do not effectively manage social deviations of an individual. The difficulty of the situation of a young individual is obvious and should be considered in all educational contexts.
Walque D. (2009) conducted a study in Rwanda to estimate the effects of the adoptive parents' education on the adoptive children's schooling outcomes. The author used data from the "Enquete integral sur les conditions de vie des managés au Rwanda, 1999-2001" (EICV; Rwanda Government 2001) which contained a very large proportion of children living in households from which their biological parents were absent because of the 1994 genocide and HIV/AIDS epidemic. The data also contained information about the type of relationship (living with relatives or not) between the adopted child and the head of the household.

The sample variables used in the study were:

1. Children living with both biological parents in their household.

2. Children with both biological parents absent but in a household with at least one adult male and one adult female.

3. Children with both biological parents absent but living in a household with a male head and a female spouse.

4. Years of education of: (a) Biological father  (b) Biological mother  (c) Most educated adult male  (d) Most educated adult female  (e) Head of household male  (f) Spouse female  (g) Logarithm of household expenditure per adult as a proxy of economic well-being.
The results of the regression analysis revealed that the education of the adopted parents, especially mothers' had a strong effect on the adopted children's schooling outcomes. In the preferred specification, even after controlling for nonrandom placement by including the schooling of the biological parents and the type of relationship linking the child and the head of his new household, the education of the most educated female adult in the new household had a positive and significant effect on the schooling of the child fostered in the household. The magnitude of the effect was similar to the effects in a biological mother-child relationship. The effect of the education of the most educated male in the relationship was smaller than in a biological father-child relationship but remained positive and significant. When the boys and girls were analyzed separately, it appeared that the mother's education were more significant for girls, while the father's education had a stronger effect on boys' educational achievement. The analysis of interaction terms indicated that the positive effects of the education of the adoptive parents were only present for children related to the head of their new household (grand children and other relatives).

The study suggests that placing orphans in households where they have relatives minimizes their educational losses and favors the intergenerational transmission of human capital.