

Factors Affecting Enrolment and Educational Achievements of Boys: Case Study of a Backward Indian District

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Abstract

This paper is an attempt to deny the findings of several studies that, income and assets enhancement at household level affects significantly the enrolment and educational achievements of female students but not of male students. Based on primary data collected from the district Hailakandi of Southern Assam in India, the enrolment status, educational achievements and factors affecting the issues for male students in Lower primary to higher secondary level of education has been investigated. The findings of the research reveals that, propensity to enrolment of male students increases from lower primary to Upper primary but gradually declines thereafter with an average educational achievement of class 6th standard. The empirical findings suggests that, reduction in family size along with gain in maturity of parents and enhancement in income and assets leads to favourable impact on the enrolment and educational achievements of male students.

Keywords: Multiple Regressions, Household Assets, Parents' outside Mobility, Economic Conditions

Introduction

Education is considered as the vital source of human capital formation throughout the globe. It is the driving force to enlarge and expand the human potentialities in a diversified context. Enhancement in efficiency, skill, workability, adjustment and several other issues are directly related to the opportunities of accessing education in a wide range of disciplines. Economic growth is dependent on productive capacities of an economy which in turn depends on the workforce participation of male and female in an economy. In fact it can be said that, education is not only beneficial to the individual level rather it is widely beneficial at the societal level to by providing positive spillover effects (Schultz, 1961). During the present time, education is considered as a fundamental right of children across the world and

especially in India with the implementation of Right to Education Act (Bruce, 2006). Parents living in rural area generally do not allocate educational expenditure equally for their son and daughters. Indian constitution has given the provision of equal rights in education for both boys and girls with a special focus on education of girls. Moreover, the Right to Education Act is a revolutionary attempt on the part of government to guarantee the educational rights of children especially in the age group of 6 to 14 years of age.

Enrollment in schools and colleges and the resultant achievements of children depends on several issues comprising of both demand side and supply side aspects. However, this study is limited to analyze the demand side aspects only. At the household level, income of households, economic conditions, family size, age of parents and other crucial factors affects the enrolment decision of children. The main concern of the study is to analyze the affects of said factors on enrolment and educational achievements of male students. However, studies reveals that, increase in household income leads to greater investment in girl's schooling but no significant impact on schooling of boys (Deon, 1999). Improvement in father's education raises schooling of both sons and daughters but mother's education has significant impact on daughter's schooling (Glick & Sahn, 2000). Increase in household income has effects on girl's enrolment but does not affect enrollment of boys (Filho, 2012). In general context, economic condition of households exerts crucial and significant impact on not only of girl's enrollment but also enrolment of boys in any socio cultural set up. The study has the objectives to investigate the enrolment status of male students from lower primary to higher secondary level and to examine the educational achievements with empirical investigation of factors affecting such issues in the study area. A part from these, the research questions to be answered are-

In which level, enrollment of male student is highest and whether male enrolment from lower primary to higher secondary levels followed increasing trend in the study area? What is the average educational attainment of male students? Did they achieve 10th standard level of education? What factors positively affects the educational attainments and what factors negatively affects the same for male students?

Previous Studies- An Overview

Goods inputs and time inputs significantly affects educational achievements. Mothers who had completed high schools are more successful in helping to children to acquire cognitive skills than mothers who have not completed high schools. (Richard & James, 1981). When an

additional child enters the household, it brings additional needs so that, expenditure on all adult goods can be expected to fall. There is no evidence of favouring the boys in the expenditure allocation on any goods when an additional child is present (Angus, 1989). If males have higher pecuniary returns to schooling than females, the greater schooling attainment among males may reflect an efficient household allocative response to scarce resources (Deolalikar, 1993). The basic decision relating to children's school enrolment and completion of the primary level are largely determined by parents' education and household income. The prospects of education and schooling are likely to be strongly influenced by the parent's socio-economic status and level of education, not only because better educated parents have the greater appreciation for the value of education (Zeba & Cynthia, 1994). Parents generally give a greater weight to the welfare of sons, or it may arise because parents value only that part of the return to a child schooling which accrues them personally-and the returns to a daughter education are replaced by her in laws family (Kingdon, 2001). Pupils from poor background may have a lower probability of enrolling in school because of high opportunity cost of enrolling. It is more profitable, if children are working to supplement family income (Kingdon, 2001). Family background characteristics particularly parents level of education have a significant effect on education of children but different for both boys and girls (Mehtap, 2002). School going boys are not involved in house hold works, the main reason is that, parents are willing to provide more for boys and less for girls (Hamid & Siddiqui, 2002). The influence of parental literacy is more pronounced for girls than boys, and the influence of mother literacy is particularly strong (Haque, 2003). Age of the child has a negative impact on school enrolment of children. However, sex of the child as boy or girl influence educational enrolment and educational attainment (Mohanty, 2006). Household's economic status has a modest influence on children's schooling (Masako & Peter, 2007). The costs associated with primary education combined with the opportunity cost of having children's participation in household labour, place a substantial burden on families living in extreme poverty. In many cases poor families poor families can only afford to educate a few of their children (Allison and Randell, 2007). Income growth and improvements in parents' education contribute positively to children schooling attainment and parents predict that, the expected benefit of educating their sons is higher than daughters, as sons are more likely to provide money and other supports for parents in old age. Due to income constraint, parents prefer to send their sons to school instead of daughter (Goksel, 2009). Large family size exerts a negative influence on education of children. High educational expenditure has

negatively influenced the school enrolment of girls but not for boys (Lincove, 2009) &(Nathalie & Francois, 2010). As income increases, parents become more likely to invest in the education of their children (Ghose, 2011). Income and assets have not been found significant for boy's school enrolment (Deng & others, 2012). The poor families could not prepare their children well equipped with all necessary ideas to enroll them in school. In this context, educational attainment of poor households has been found to be low (Autor et al., 2015) &(Zheng, 2015).

Methodology

In order to make the sample a representative of the population, the purposive random sampling method has been used to collect data from targeted households having children of the age group 5 years to 18 years. Data has been collected from 383 households in Hailakandi district comprising of 283 numbers of households from rural area and 100 numbers of households from town area.

Techniques of Data analysis

For sample data analysis in the study, statistical methods like tabular presentation have been used. However, in order to identify the factors affecting enrollment and educational achievements of male students in the study area, a multiple regression model has been estimated with the following specifications-

Dependent Variable: BAE= Boy's Average Education (in years): This variable is denoted as BAE and is estimated by taking the average education attained by Boys belonging to age group 5-18 years of the households.

The set of **explanatory variables** used in the model are-

SEXC= Sex of the Child, dummy 1=male child, 0 otherwise, FE=Father's Education ME= Mother's Education, HHI= Household's Income (in Rs. Annual), HHA= Household's Assets (in numbers), FS= Family Size (in numbers), RESI= Residence dummy 1=rural area, 0 otherwise, FA= Father's Age, MA= Mother's Age, EL= Electricity dummy 1=availability of electricity; 0 otherwise, NR= Number of Rooms, POM= Parent's Outside Mobility Score (in numbers), AD= Average Distance from school (in km), SOG= Social Group dummy 1General category, 0 otherwise, ECC= Economic Condition dummy 1 Above Poverty Line, 0

otherwise, LS= Live Stock dummy 1=availability of live stock; 0 otherwise, OCHH= Occupation of Head of Household dummy 1=regular salaried; 0 otherwise.

Based on the model specification, the multiple regression model is constructed as-

$$BAE = \alpha + \beta_{1i}FE + \beta_{2i}ME + \beta_{3i}HHI + \beta_{4i}HHA + \beta_{5i}FS + \beta_{6i}FT + \beta_{7i}RESI + \beta_{8i}FA + \beta_{9i}MA + \beta_{10i}EL + \beta_{11i}NR + \beta_{12i}POM + \beta_{13i}AD + \beta_{14i}SOG + \beta_{15i}ECC + \beta_{16i}LS + \beta_{17i}OCHH + U_i .$$

Findings of the Study

One of the important objectives of the study is to investigate the enrolment status of male students from lower primary to higher secondary level of education. Increasing tendency of enrollment of male students in the primary level has observed which gradually decreases at secondary and higher secondary level of education. The result is reported in table 1.

Table 1. Enrollment status of Boys

Classes	Boy’s Enrolment
Lower Primary(I-V)	124 (24.60)
Upper Primary(VI-VIII)	161 (31.94)
Secondary (IX-X)	126 (25)
Higher Secondary(XI-XII)	93 (18.45)

Source: Field Survey; figure in the parenthesis indicate percentage

As seen from table 1, boy’s enrolment has been increased from 24.60 percent in lower primary level to 31.94 percent in upper primary level of education. However, in the secondary level, enrolment has been decreased to 25 percent which further declined to 18.45 percent in the higher secondary level of education. The educational expenditure incurred by parents apart from other factors responsible for this. Though empirically not tested but the respondents said that, elementary level of education is accessible by all children at free of cost as per the Right to Education (RTE) Act, 2009. In this context, parents need not spend extensively for the enrollment and access of education by children. From secondary level onwards, this scenario is different as parents need to spend money for enrollment and access of education by their children.

Empirical Findings- Multiple Regression model

The study intends to identify the factors affecting the enrolment and educational achievement of male students in the study area. The result of regression model is reported in table 2.

Table.2 Results of Multiple Regression Model

Dependent Variable: BAE

Variables	Coefficients			
	B	Std. Error	t	Sig.
Constant	-2.452	1.313	-1.868	.063
FE	.039	.045	.864	.388
ME	-.012	.049	-.246	.806
HHI	3.764E-06	.000	2.242	.026
HHA	.348	.117	2.986	.003
FS	-.344	.116	-2.956	.003
RESI	-.480	.529	-.907	.365
FA	.096	.040	2.426	.016
MA	.183	.041	4.421	.000
EL	.074	.292	.252	.801
NR	.076	.170	.445	.657
POM	-.015	.092	-.161	.872
AD	-.083	.197	-.422	.674
SOG	.323	.265	1.217	.225
ECC	.282	.440	.640	.522
LS	.029	.297	.096	.924
OCHH	-.444	.391	-1.135	.257

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wn calculation based on primary data

R Square Value: 0.456; R Square Adjusted: 0.432; F Value: 19.10 (Significant at 1% level)

As seen from table 2, the dependent variable of the model is BAE which can be defined as the Boy's Average Education at the family level and the rest all variables are independent or explanatory variable of the model. From table, it can be said that, different variables have impact on educational attainment of boys in the family. However, in this study the variable HHI i.e Household's Income has been found statistically significant in a positive way. It implies that, as the income of household from all sources increases, boy's educational attainment increases. In fact it is evident that, household income directly supports the educational expenditure of the children in the family for payment of books, copies, tuition fee, uniform and related expenses. The variable HHA i.e, Household Assets is also found statistically and positively significant. It implies that, as number of assets like T.V, Refrigerator, Radio, Two Wheeler, Four Wheeler etc increases, educational opportunities and necessarily the educational attainment of children increases. Household assets directly and indirectly support the educational process of children. Father's and Mother's age has been found to exert positive significant impact on boy's educational attainment in the family. It implies that, as the age of parents increases, boy's educational attainment also increases. This necessarily indicates the rise in the maturity level of parents to educate their children and especially the boys. However, it is found that FS i.e Family size is negatively significant. It implies that, as the family size increases, educational attainment of boys goes on diminishing. This result is quite logical and evident in the sense that, as the size of family i.e, number of family members increases, boy's educational attainment falls. This may be due to the reason that boys instead of receiving educational support both in monetary and non monetary aspects, they need to earn money to bear the additional familial expenditure for the survival of large number of family members. As evident from the table, besides the five significant variables, other variables have no statistical significant impact on the dependent variable Boy's Average Education (BAE). However, all explanatory variables together explain near about 45% variation in BAE and F value of the model is also found to be statistically significant at 1% level. Hence the model so far explained is found to be a good fit model.

Conclusion and Policy Suggestions

From the study based on the research questions and specified objectives, some important direction and influential factors has been analyzed in the study. It is observable that, percentage of male student's enrollment is highest in the upper primary section. Though

RTE act is in force throughout the country but the resultant enrollment is not up to the expected level in India. Surprisingly, enrollment of the same group of students has been found to be in a falling trend from upper primary level to higher secondary level of education. The lowest percentage of male student's enrollment in the higher secondary level of education is a reflection of discouragement in study at this level on account of several socio economic barriers. The average educational achievement of male student's is only 6th standard passed which is far below the achievement of 10th standard level of education in the study area. This low educational achievement of male students is not a good symptom of socio economic development of the district Hailakandi as well as of the state and the nation India. So far as the empirical findings reveals, poor economic conditions and assets ownership are the major factors responsible this educational achievement. Factors positively influencing enrollment and achievements in education are household's economic conditions, assets ownership of households and age of fathers and mothers in the study area. However, one most important factor which negatively affects the same is family size. Income of household is the vital source of educational decision regarding enrollment and resulting outcomes in terms of educational attainments. In the counterpart, it is also evident that, households having low income and living Below Poverty Line (BPL) gets discouraged and reluctant to enroll and attain education by their sons. Assets ownership by household is also positively significant factor determine the enrolment and educational attainments of the same group of students. Parental age is also a positively significant factor to encourage enrolment of their sons in schools and colleges on account of understanding the reality of external world. Matured parents are in fact either formally or informally educated to induce children's level of education which cannot be ensured from those parents who get married before legal age of marriage or at an early age. The significant negative factor determining educational enrollment and achievement is the size of family.

Thus, to conclude the discussion, it is recommended that, both demand side and supply side factors must work simultaneously for expanding educational opportunities. Government must emphasize on the income creating opportunities of households in order to strengthen them to take educational decision in favour of bright future of their children. In this context, panchayati raj system in India must be strengthened to implement the scheme Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) to provide wage employment to rural people. Since, age parents has been

found to be a significant factor, proper enactment of law must be ensured to protect child marriage to prevent immaturity of parents and resultant educational backwardness of their children. The further research in this area can be extended to examine the supply side factors affecting educational achievements also in broader context. This can lead to policy formulation in the national level in India.

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