

# PARENTAL BEHAVIOR AND CHILD SCHOOLING A MICRO LEVEL STUDY IN RURAL WEST BENGAL, INDIA

Prasanta Basak, Chopra High School

## ABSTRACT

*The paper analyses the parental view on the question that why they get their children admitted to school. The reasons that are considered by the parents in this respect are collected from a primary household sample survey conducted in four selected villages of Uttar Dinajpur district, West Bengal, India. The qualitative analysis shows that most of the children are getting enrolled in school considering their better future employment prospect. The second major reason that has been considered by the rural parents is that education will raise social status of the family. This social aspect is mostly associated with girls' children. All the cited reasons when classified into economic and non-economic categories, produces an interesting result. Among the enrolled girl children (252 in total), 34.68% have been enrolled in school for the reasons associated with non-economic purpose. By using the Multinomial logit regression, the likelihood ratio test indicates that out of the seven independent variables- father educational level, Household dependency, Opportunity cost of schooling and Mothers' empowerment have statistically significant relationship with the dependent variable, i.e., reason for enrollment decision. It is suggested that family planning, abolition of child labour and women empowerment may have positive result in enrolling the children in school.*

**Keywords:** Parental Behaviour, Multinomial Logit Regression, Employment Prospect, Likelihood Ratio Test and Economic and Non-Economic Factor.

## INTRODUCTION

Elementary education has to be made free and compulsory and it has to be available for all the children in all nations. This was affirmed in 1948 after the Universal Declaration of Human Rights (United Nation, 1948). This basic right of the children as well as the critical social need has also been reiterated several times at different platforms and conferences at international level. The World Declaration on Education for All (EFA) adopted at the World Conference on Education for All held in Jomtien, Thailand, 1990, and the six Education for All (EFA) goals as set out in the 2000 Dakar Framework for Action in September 2000, encapsulated the commitment to achieve universal provision and access to primary schooling. These included the World Declaration on Education for All (EFA) adopted at the World Conference on Education for All held in Jomtien, Thailand in 1990 and the Dakar Millennium Declarations in September 2000 (UNESCO, 2008). In the latter, over 160 countries adopted the six goals aimed at providing quality basic education to all children, youth, and adults by 2015. The "Education for All" movement gained particular prominence in the same year when world leaders of nearly every country, unanimously adopted the Millennium Development Goals (MDG) set out in 2000. To address the issues of abject poverty and hunger and to realize human life with dignity while

ensuring human rights to all sections of the people, political commitments were made by world leaders from the forum of United Nations in the form of Millennium Declarations in September 2000. The 2<sup>nd</sup> and 3<sup>rd</sup> goal of the Millennium Development Goals (MDGs) is to achieve Universal Primary Education (UPE) and promote Gender Equality and Empowering Women by 2015. So, how far the international community has come in meeting these two goals is a relevant international agenda and a quick look of India's position in this respect will be very much important. Various research studies have noted that many countries of the world such as China, Sri Lanka, Japan, South Korea and Indonesia which had a similar educational record as India had in 1950, have already achieved universal elementary education. But, India is still missing the goal to even achieve universal primary education.

Educational attainment begins with the enrolment of children in school. Enrolment of a child in school is again mostly a parental decision in the process of which the parents are guided by some socio-economic correlates. Several facts and factors are there which are usually considered by the parents in taking decision regarding child schooling. It is thus interesting to know the parental view on the question that why they get their children admitted to school. The reasons that are considered by the parents in this respect are collected from a primary household sample survey conducted in four selected villages of Uttar Dinajpur district, West Bengal, India.

Literature on economics of education has established that there is a positive association between educational backwardness and level of poverty. The explanation offered is that the opportunity cost of sending the children to school, instead of using them as household help or wage earner, is not an economically feasible option (Bhatty, 1998). This positive association is emerged in different studies (Chakraborty & Kundu, 1986; Duraisamy, 2004; Dholakia, 2003; Nambissan & Sedwal, 2002; Devi, 2001; Krishanji, 2001).

An interesting result has been found in Reddy and Rao's household level survey, while analyzing the reasons for dropout/non-enrolment in Tamil Nadu. They found that poverty appears to have greater influence in the backward areas; economic activities seem to play a greater role in the developed regions. Other studies also suggest that household income is a significant determinant of enrolment where higher levels of income being associated with higher demand for schooling (Lave, 1981; Psacharopoulos & Arriagada, 1989; King & Lillard, 1987; Knodel & Wongsith, 1991; Tansel, 1997).

Studies from other countries also suggest more or less similar results. Most studies analyzing the determinants of enrollment (especially girls' enrollment) have found the association between household income and enrollment in school to be positive and statistically significant, whether income is measured directly using a household consumption module or indirectly through some household asset index (Hazarika, 2001; Sathar & Lloyd & Gage-Brandon, 1994; World Bank, 2002). Both, the size and significance of income effects are typically larger for girls than boys when results for boys and girls are compared.

While studying the determinants of schooling for boys and girls in Nigeria under a policy of free primary education it has been found (Lincove, 2009;2012) that controlling for costs, household wealth bears a positive relation with primary school attendance. Interestingly, it has greater income elasticity for girls than boys. Girls' attendance also depends on opportunity costs generated by providing child care for younger siblings and living on a family farm.

In analyzing the causal relationship between parental employment and children's educational attainment Hannah (2011) it is found little support that parental employment affects children's educational attainment. Controlling for household income, it is ruled out that having a

mother who works one hour more per week lowers the probability of high secondary track attendance by more than 0.1%.

An estimate Jane Arnold Lincove in connection with the obstacles to schooling under a free primary education policy shows that Enrollment for boys and girls is influenced by price. It also established that Price and wealth elasticities of schooling vary by wealth level. It suggests conditional cash transfer for the purpose.

A multivariate analysis of Iraqi school enrollment shows that boys and rural children are far more likely to be enrolled. Household opinions suggest that the main reason for non-enrollment is lack of child or parent interest. A labor force analysis suggests that lack of interest may be explained by weak employment prospects for educated youth.

A study in Vietnam Nguyen (2006) using logistic regression and ordered logistic regression reveals significant differences in educational enrollment and outcomes by level of household expenditures and parental education, especially mother's education. Mother's status has been accounted for more important in determining school enrollment than educational outcome. In contrast, father's education increases the probability of learning. Girls still do not have equal access to education, since girls doing badly in school dropout, while their male counterparts remain in school. The presence of a school in poor village does not supersede the effects of family background on educational enrollment. School fees do not determine school enrollment, because many of the poor already receive exemption from or reduction in these fees.

Considering the current trends in the literature on economic returns to education, it is argued Matt Dickson, Colm Harmon that the concept of the return to education should include non-monetary returns.

Addressing the issue of raising school expenditure improves on educational outcomes in England, it is found Helena in 2010 that the increase in school expenditure over recent years has had a consistently positive effect on outcomes at the end of primary school. There is also some evidence of heterogeneity in the effect of expenditure, with higher effects for students who come from economically disadvantaged backgrounds.

Applying micro level data of five countries Sulayman S AL-Qudsi (2003) and capturing the considerable variations in the pattern of school enrolment and school wastage according to rural-urban locations and family background variables, it is found that income gaps are powerful and interact with gender gap to produce differential school enrollment and wastage patterns. Access to credit restores the adverse effects on school enrolment of negative household economic shocks. It is suggested that intensive government efforts to increase School enrollment and retention and to improve rural education particularly for females and the underprivileged.

While examining the public infrastructure, location of private schools and primary school attainment in an emerging economy (India), it is found Pal (2010) that after controlling for all other factors, access to village infrastructural facilities is associated with a higher likelihood of having a private school in the community. The paper concludes by examining the effect of private school presence on year 5 pass rates: while all-school pass rates are significantly higher in villages with a private school, private school presence fails to have significant effect on local state school pass rates.

Taking the information on decisions of the entire population of high school graduates between 2002 and 2008 in seven of the sixteen German states Malte Hubner, 2012, it is found a negative effect of tuition fees on enrolment behavior. The effect is larger than in existing studies for European countries, but of a similar magnitude as effects identified with U.S. data. A

potential spill-over effect of the policy intervention to the comparison group is accounted for by using the estimation results to calibrate a structural model of the enrolment decision.

Analyzing the five stages of education in China, one study Rachel Connelly & Zheng (2003) trying to establish the location of residence and sex are to be highly correlated with enrolment and graduation. It also finds that it is the rural girls who especially disadvantaged in terms of both enrolment and graduation rates. Parental education, the presence of siblings, county level income and village level in-school rates also have consistent effects on enrolment and graduation milestones

In a study in rural Maharashtra & Jejeebhoy (1993) it is found that an older girl child with many younger siblings has a corresponding lower chance of her schooling. The same results were found in the study of Psacharopoulos et al. (1989) and Pandey (1990). In Bangladesh, it was also found that 89 percent of working children had no education suggesting that work and education were seen to be antithetical options.

In a village level survey-based study in Orissa, Sailabala Devi 2001 observed that both father and mothers' education have a positive significant influence on the probability of enrolment in primary and upper-primary levels for boys and girls. But mothers' education has a strong influence than that of fathers on girls' enrolment. An analysis in Tamilnadu Duraisamy, (2004) has found that the educational level of both parents exerts a positive effect on the probability of enrolment of child. But the results do not show any evidence of sex preference by the parents in this respect. However, father's education has a much higher effect than mother's education on grade attainment of their sons and daughters.

Public programmes and policies affect child schooling by reducing the direct and indirect cost of schooling. NCAER 2003 noted that geographical proximity of primary schools and enrolment ratio together explains more than 60 per cent variation in literacy rates (North India Human Development Report 2003, NCAER, New Delhi). The lack of access to '*relevant and quality*' education is one of the factors causing prevalence of child labour (Canagarajah & Coulombe, 1997a). In analyzing the attitude of rural parents of Punjab, Thind & Jaswal (2004) reported the non-availability of school as an important cause for not sending the girl child to school. Moreover, the parents believed that status of the family was judged by the area of land a family possesses, not by the level of education of the family members. Similar result has been found in several studies (Canagarajah & Coulombe, 1997b; Duraisamy, 2001; Probe, 1999).

The studies of Psacharopoulos et al. (1989) and Tansel (1997) also note that the positive effect of addition to resources from mothers' earnings can overshadow the negative impact of mothers' absence from home. Similarly, Dreze & Sen (2002), while discussing the schooling revolution in Himachal Pradesh, opined that a high level of female Labour force participation raises the economic returns to female education and it is also revealed that status of women, including their educational status, will improve as a consequence of their increasing participation in Labour market and development process (Wazir, 2000). A Study Reddy and Rao in this area also does not find any significant impact of female work participation on the enrolment ratio of both male and female. The impact of Female Labour Force Participation Rate (FLFPR) on child schooling is still a matter of debate. From the studies of Pandey (1990); Mukhopadhyaya (1994), it is found that in general, FLFPR has a depressing effect on child schooling. An important result has been found in the village level study of Sengupta & Guha (2002) for West Bengal. While they find mothers' work participation has a significant negative effect on daughters' school enrolment, negative but not significant impact on grade completion.

Parental education emerges as a significant determinant in household education decisions. All the field studies done under the UNDP programme confirm this result (Thind & Jaswal, 2004; Sengupta & Guha, 2002; Bhatta, 1998). The study of Llyod & Brandon (1994) in Ghana has emphasized that mother's favour the education of sons over daughters because of their greater dependence on children in their old age and their expectation of greater monetary returns from investment in sons.

### **Data, Methodology and Sample Frame**

For the purpose of the study, one specific question was framed where the respondents were asked to cite three reasons for enrolment of their children to school, among which the first one is recorded as the answer of the question. This question was built-in with some ready responses broadly categorized as economic, non-economic reasons and no reason given or reason not specified. Among the economic reasons, the responses were incorporated with the following alternatives - education increases employment prospects, enhances earnings, raises productivity and school incentives generates indirect monetary benefits etc. The non-economic social response categories with predetermined alternatives are – education raises social status, improves marriage prospects, develops good manners, ensures family planning, enhances the feeling of security, education helps to communicate with the modern world and others. If a respondent fails to cite any answer, his/her response was recorded as no reasons given. Thus when a child gets enrolled and continued with the schooling, the parental decision is governed either by economic factors or by non-economic social factors or by no specific reason.

Multinomial logit regression as the econometric tool has been used because it is appropriate in cases where the response is not ordinal in nature (as in the present case). In other words, MNL regression is used when the dependent variable in question is nominal, unordered (a set of categories which cannot be ordered in any meaningful way, also known as categorical) and consists of more than two categories. As such MNL regression technique is applied for data analysis.

For the village level study, a multi-staged stratified, purposive random sampling procedure has been applied to collect the data. The primary survey was carried out in Uttar Dinajpur district (the least literate district in West Bengal of India) in order to have a better understanding of the problem of educational poverty in the district. Administrative frame of Uttar Dinajpur district comprises of two subdivisions - Islampur subdivision with five CD blocks and Raiganj subdivision with four CD blocks. In order to locate the educational deprivation within the district, literacy rates (as per census 2001) of the district at various disaggregated level has been calculated. Subdivision wise literacy comparison reflects that Islampur subdivision (38.5%) lie well below the Raiganj subdivision (58.1%). Moreover, from the block level literacy rate, it is found that Goalpukur-I with 31.6% literacy rate and Chopra with 43.29% literacy rate has been ranked as the least and highest literate blocks of the Islampur subdivision. So it is expected that the selection of the above mentioned two blocks would rightly represent the diverse level of educational development. Thus, in view of the objective these two blocks have been selected for the final survey.

After the selection of two blocks, two villages (mouzas) from each of the blocks have been chosen. For this, the villages as per the literacy rate of 2001 have been taken into account, of which one low literate village and another comparatively high literate village has been

purposively selected from each block with a view to capture the regional variation in educational development. The stratified, purposive sampling design of the survey is sketched as follows.

### Sketch of the Survey

For the detailed survey, a complete enumeration (household census) of each and every household in the villages was first conducted. From the household census, the data on school-going age (5-14) children was primarily collected. The procedure facilitated in distinguishing the households categorically into two groups - households with school-going age (5-14 years) children and households that do not having any children belonging to this category. As such 135 households in Kantigach, 81 in Juropani, 122 in Dangipara and 139 in Uttar Bhagalpur were found to have children in the schooling age group Table 1.

<b>Indicators</b>	<b>Kantigach</b>	<b>Juropani</b>	<b>Dangipara</b>	<b>Uttar Bhagalpur</b>	<b>Total</b>
Total No. of Households	169	106	149	172	596
No of Households with some Schooling age (5-14 years) Children	135	81	122	139	477
No of Households with no Schooling age (5-14 years) Children	34	25	27	33	119
Size of the Sample Households (60% of total households)	81	49	73	83	286
Total No. of 5-14 years age group children in the villages	297	211	289	299	1081
Children covered in the Survey	198	101	119	96	514
% of children Surveyed	66.67	47.87	41.18	32.11	47.55

Source: - Field Survey

From the listing of these households, 60% of households with some Schooling age (5-14 yrs) Children from each village have been chosen by random sampling method for a detail household survey. It has been calculated that out of total 1081 children in 477 households of 4 villages, 514 were covered under the detail survey thereby covering 47.55% of the total children in this respect. Again, out of total 477 households of 4 villages with some schooling age children, 286 households have been surveyed and as such a 60% of the total households comprise the total surveyed households. A detail picture has been depicted in Table 1.

A prior information on socio-demographic characteristics of the study villages are analysed from the secondary data Table 2 for a better understanding of the nature of the problem.

The literacy rate of Kantigach was found to be only 2.2% (Census, 2001), while the same was as high as 72.5 % in Dangipara village followed by Uttar Bhagalpur and Juropani. As per Census 2001, it is observed that the composition of workers in the four villages is of a diverse nature. In Kantigach, there is an absolute dependency on agriculture, while in Juropani and Uttar Bhagalpur, three-fourth of the workers work as Other Workers (OW). The proliferation of tea gardens in Chopra block has been the reason behind this concentration of OW in this block. So far the proportion of non-worker is concerned; Kantigach has the lowest proportion of population

as non-worker. Only 38.4% of total population is non-worker out of which 26.5% is child population (Table 2).

Block	Goalpukhar- I		Chopra	
Village/Indicators	Kantigach [LL]	Dangipara [HL]	Juropani [LH]	Uttar Bhagalpur [HH]
Population (Person)	555	721	598	826
No. of households	111	121	122	143
% of child (0-6)	26.5	18.3	27.3	15.6
Literacy rate, male	3.5	83.9	41.4	78.6
Literacy rate, female	1.0	58.8	17.8	54.2
Literacy rate, person	2.2	72.5	29.2	67.3
% of SC	0.0	99.6	1.2	0.6
% of ST	0.0	0.0	98.8	25.4
% of Non-worker	38.4	64.8	57.9	54.6
% of Agricultural Worker	10.8	57.5	0.4	3.5
% of cultivators	89.2	25.6	24.6	19.7
% of other worker	0.0	16.9	75.0	76.3

Source: - Calculated from 'Census View, Directorate of Census Operation, GOWB, 2004.

### **A Qualitative Analysis of Survey Data: Reasons for Enrolment**

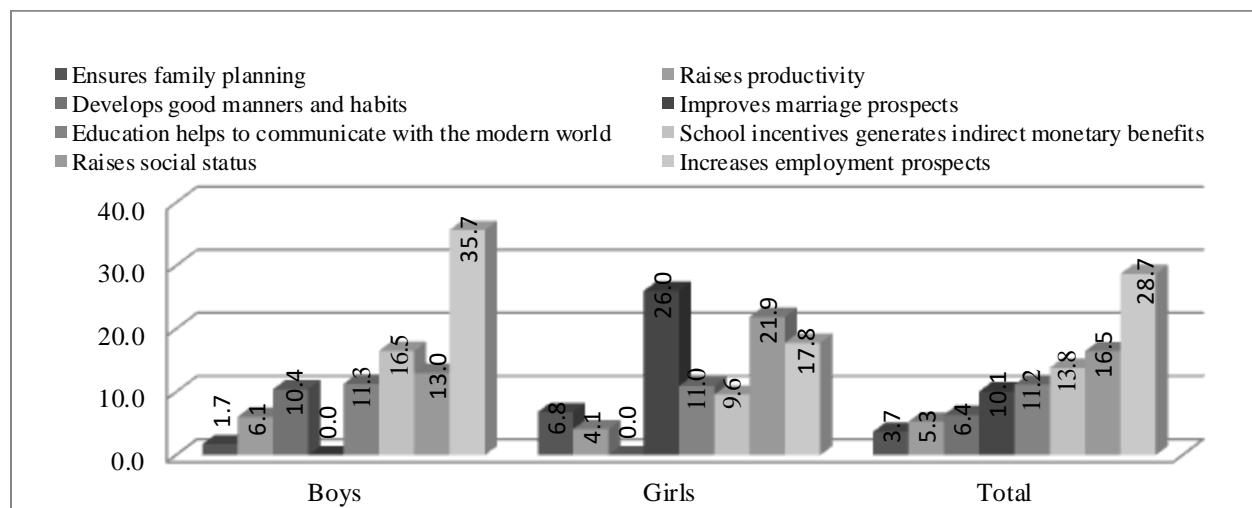
The present paper is primarily concerned with the question "Why" a child is being enrolled by the parents. In order to investigate this particular parental behavior, it is our special interest to review the response of the guardian on the reasons for enrolling children to school, based on the interviews with the respondents (parents). This qualitative analysis may provide some additional information on parental behavior for the education of their children. This also may convey some of the parental consciousness on the direct and indirect benefits of education.

It is earlier stated that the prime objective of the paper is to investigate the socio-economic correlates for enrolment of a child in school. The reasons that a particular respondent cited have been ordered and the first one for each of the child is collected. As such, information collected for this purpose for 514 children in total who are currently attending school from the sample villages. Out of this, 262 children are boys and 252 are girls. The information collected in this respect has been shown in Figure 1.

It is seen from this figure that there are several socio-economic issues that have been considered by the parents in sending their children to school. In total, most of the children (around 28.7%) are getting enrolled considering their better future employment prospect. This particular reason appears to be more important for the boys' education (35.7%). The second major reason (for 16.5% children) that has mostly been considered by the rural parents is that education will raise social status of the family. This social aspect is mostly associated with girls' education (21.9%).

In the recent period, especially after the introduction of DPEP, school incentives for the children in the form of free text-book, uniform, mid-day-meal etc. have been introduced in the government run schools with the objective that these will create an indirect economic benefit for the parents in terms of opportunity cost of schooling and accordingly it will also enhance the school enrollment and retention rate. As such it is considered as an economic reason, rather than an institutional one. Our objective is also to have an idea about the explanatory power of this issue.

It has been observed that out of total 514 enrolled children, 13.8% were enrolled and continued with education with the consideration of this reason. Again education as a social variable that helps to communicate with the modern world is also taken to be an important consideration (for 11.2%) on the part of the parents in enrolling their children in school. A major reason cited by the parents (for 9.5%) for the education of their girl children. These four major reasons together have been considered as the basic reasons (for around 70% of the total children) for the enrolment of children in school. Apart from these, four other socio-economic issues are also being considered in this respect. The detail has been shown in Figure 1.



**FIGURE 1**  
**SOCIO-ECONOMIC REASONS FOR SCHOOL ENROLMENT**

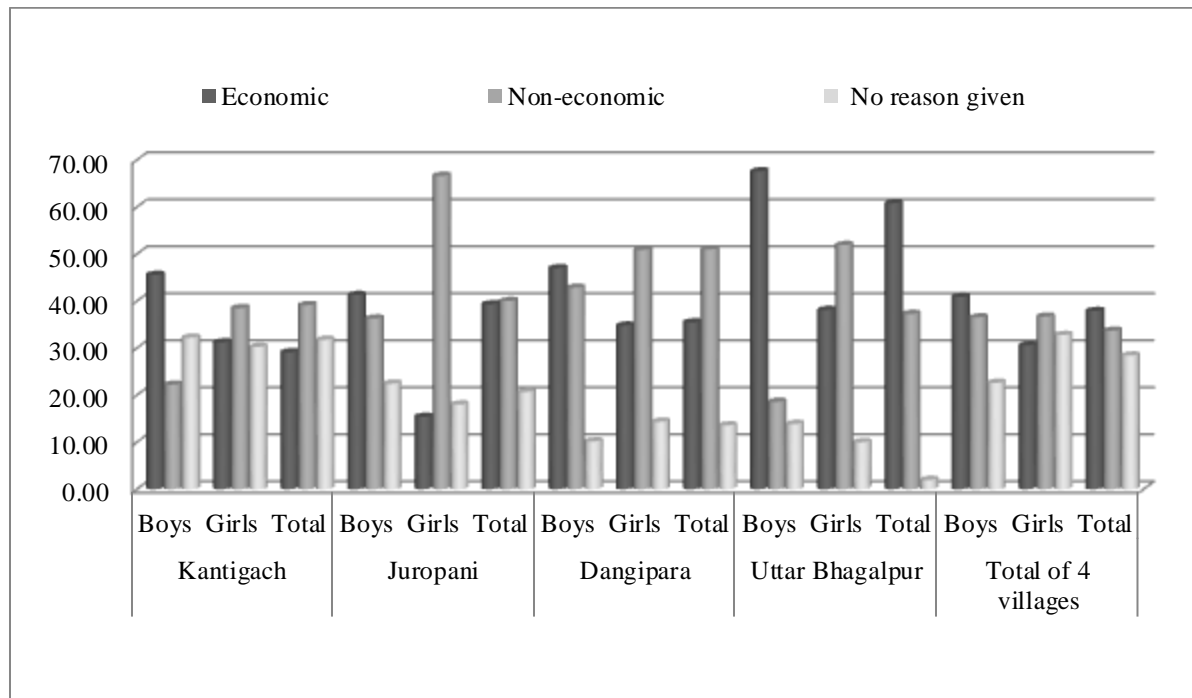
Source: - calculated from Field Survey; N= No. of responses = 514

All the cited reasons when classified into economic and non-economic categories, produces an interesting result. Among the enrolled girl children (252 in total), 34.68% have been enrolled in school for the reasons associated with non-economic purpose. It may however be noted here that the non-economic reasons are being considered with a view to comprehending the future benefits of education. These are, in a sense, indirect benefit accruing from educating a child. This consideration is more important for bringing a sound educational development in an area. However, this consideration varies from village to village and of course from household to household. A village level data on the reasons cited by the parents broadly categorized into economic and non-economic reasons and are shown in Figure 2.

It is seen from the village level data that in all the villages, boys' education is mostly



connected with economic reasons, while the girls are enrolled with the consideration of non-economic benefits from education. Girls' education is also viewed for economic reasons too. But its intensity is smaller than the boys. Summarily, in all the study villages (irrespective of the sex of the children), however, the non-economic reasons are being given equal importance while getting the children admitted in school except in Uttar Bhagalpur village.



Source: - calculated from Field Survey; N= No. of responses = 514

**FIGURE 2**  
**REASONS FOR SCHOOL ENROLMENT- ECONOMIC & NON-ECONOMIC (IN%)**

### Econometric Analysis

In the present model, the dependent variable, the parental decision in enrolling their ward to school is governed either by economic factors (coded by- 1) or by non-economic social factors (coded by- 2) or by something else (coded by- 0).

It is earlier stated that in the present model, the dependent variable (reason for enrolment) does not have a natural ordering. In such case, Multinomial Logit (MNL) model is appropriate rather than order logit. Multinomial Logit (MNL) model is a straightforward extension of logistic models (Aldrich & Nelson, 1984). It is a model for nominal responses that uses separate binary logit model for each pair of response category (Argesti, 2002).

In SPSS, non-metric independent variables are included as "factors". Here, the categorically distributed dependent variable has '3' different possible outcomes coded by 0, 1 and 2. In such a case, one value (typically first, the last or the highest numeric score) will be used as the reference category (Cramer, 2003). The probability of membership in other categories is

compared to the probability of membership in the reference category. As such a DV with 3 categories, this requires the calculation of (3-1) equation, one for each category relative to the reference category to describe the relationship between DV and the IV.

It may be noted here that instead of taking households as unit of analysis, the children in the family is considered as unit of analysis. This is because, when the head of the family is asked to cite reason for enrolment, they respond different reasons for enrolment of their different children. This difference is seen for gender variation as well as order of the children.

**The description of variables with their notation is presented in a tabular form below**

Variables	Notation	Description
<b>Dependent</b>		
Reason for Enrollment	enrlmnt	1= if decision is governed by economic factor 2= if decision is governed by non-economic social factor 0= if decision is governed by something else
<b>Independent</b>		
Household dependency	hhdep	Ratio between the total number of siblings and old age members to total number of schooling age children
Economic dependency ratio	econdep	Ratio of non-earners to earners at household level
Proportion of educational expenditure	edntotex	Educational expenditure as a % of total expenditure
Father's education level	fthedn	education in completed number of years
Mother's education level	mthedn	education in completed number of years
Mothers' empowerment	mempnt	1= if mothers' empowerment index is greater than or equal to that of father's, 0 = less than that of father's
Opportunity cost of schooling	optntcost	1= if there is any children in the age group below 18 years and working, 0= if there is no children in the age group below 18 years and working

## RESULT AND DISCUSSION

SPSS identifies the comparisons it makes for groups defined by the dependent variable in the table 3 of 'Parameter Estimates'. In this analysis, two comparisons will be made. The unspecified reason for enrolment group (coded 0) will be compared to the social reason group (coded 2) and the economic reason group (coded 1) will be compared to the social reason group (coded 2).

In multinomial logistic regression there are two types of tests for individual independent variables. The Likelihood Ratio Tests indicate the contribution of the variable to the overall relationship between the dependent variable and the individual independent variables. On the other hand, the Parameter Estimates focuses on the role of each independent variable in differentiating between the groups specified by the dependent variable, i.e., the Wald test evaluates whether or not the independent variable is statistically significant in differentiating between the two groups in each of the embedded binary logistic comparisons. If an independent variable has an overall relationship to the dependent variable, it might or might not be statistically significant in differentiating between pairs of groups defined by the dependent variable. We should not interpret the significance of an independent variable's role in distinguishing between pairs of groups unless the independent variable also has an overall relationship to the dependent variable in the likelihood ratio test. The interpretation of an independent variable's role in differentiating dependent variable groups is the same as we used in binary logistic regression. The difference in multinomial logistic regression is that we can have multiple interpretations for an independent variable in relation to different pairs of groups.

In present model, the likelihood ratio test indicates that out of the seven independent variables- father educational level (fthedn) Household dependency (hhdep), Opportunity cost of schooling (optncst) and Mothers' empowerment (mempw) have statistically significant relationship with the dependent variable, i.e., reason for enrollment decision.

The result of Wald test is given in Tables 4 & 5. By its nature, it calculates two separate equations for the purpose. The first equation where the unspecified reason for enrolment group (coded 0) has been compared to the social reason group (coded 2) is shown in Table 4 and the second equation where the economic reason group (coded 1) has been compared to the social reason group (coded 2) is shown in Table 4.

<b>Table 4</b>				
<b>PARAMETER ESTIMATES</b>				
<b>enrlmnt(a)</b>		<b>B</b>	<b>Sig.</b>	<b>Exp(B)/Odd Ratio</b>
0	Intercept	-0.769	0.042	
	fthedn	-0.093	0.034	0.911
	mtheden	-0.07	0.155	0.933
	ednexp	-0.015	0.405	0.985
	hhdep	0.41	0.013	1.507
	ecodep	-0.099	0.251	0.906
	[optncost=.00]	0.58	0.069	1.786
	[optncost=1.00]	0	-	-
	[mempw=.00]	0.573	0.047	1.773
	[mempw=1.00]	0	-	-

<b>enrlmnt(a)</b>		<b>B</b>	<b>Sig.</b>	<b>Exp(B)/Odd Ratio</b>
1	Intercept	-0.441	0.108	-
	fthedn	0.026	0.349	1.027
	mtheden	-0.035	0.298	0.966
	ednexp	0.006	0.599	1.006
	hhdep	0.4	0.002	1.492
	ecodep	-0.013	0.756	0.987
	[optncost=0.00]	0.582	0.012	1.789
	[optncost=1.00]	0	-	-
	[mempw=0.00]	0.363	0.089	1.438
	[mempw=1.00]	0	-	-

The reference category is: 2.00.

This parameter is set to zero because it is redundant.

Diagnostic information for multicollinearity\* (tolerance statistics, VIFs and also eigen values) for the predictors has already been calculated and shown in Appendix-I & II and no serious concern of collinearity found so far. In addition to this, the standard errors associated with the logistic coefficients both for the two models are not very large (ranging from a lowest of 0.006 to a highest of 1.346; Tables 4&2). It is thus expected that we have got statistically fair estimates in our prescribed model. Sometimes, presence of collinearity tends to produce the  $\beta$  coefficients unreasonably high. It is suggested that Menard 2002 that an un-standardized logistic coefficient greater than 2 or a standardized logistic coefficient greater than 1 is a caution for the presence of collinearity among the regressors. This criterion is also almost satisfied (Tables 4&5) in connection with the present models.

## CONCLUSION

This section brings the present Article to a logical conclusion while outlining certain policy prescriptions towards universalisation of primary or elementary education. The study has attempted to investigate the reasons that govern the Parental Behavior in sending their children to school. The study has been carried out in an educationally backward area in West Bengal, India. Some of the significant variables affecting enrolment decision taken by the parents is difficult to be captured within the policy frame at national or state level and even at a district level too. Considering such typicality, household level survey based data has been used for the purpose.

Our result shows that larger the dependency of a family, lower will be the chance of a child to be enrolled. It is thus suggested to aware the people about family planning which is already a government policy in existence in India. Effective implementation of this policy may bring the children to be enrolled in school so that the target of Universalisation of Primary or Elementary Education (UPE/UEE) may come into reality.

The result also finds that if there is opportunity of children to be engaged in labour market, the likelihood that the parents will not consider the indirect benefit of education. Rather they will govern either by economic reasons of enrolling the children or by unspecified reasons. In both the case, the parents find it favourable to send their children to labour market. It appears that acute poverty of the parents is the reason for choosing the option of sending their children to

labour market. Poverty eradication as a measure of policy may be fruitful in this case.

Empowerment of mother appears as a significant positive factor in governing the parental behavior in enrolling their children in school. An educated mother is likely to be empowered in the family and as such female education may be given special attention to achieve the target of UPE/UEE.

Finally, it may be noted here that in an educationally backward area, (as in the present study), poverty stands a barrier to educational development. Government in such area will have to ensure universal access so that each and every child can get at least the feasible schooling facilities. But, financial assistance to education was a subject of neglect both in British and post independent era and still remains the same. Per capita spending on education in India is significantly low even when it is compared with the countries like Bangladesh, Korea, Thailand and Sri Lanka. Actually we are spending more or less half what we need for UEE. During the entire post-independence period, government expenditure on education has been remaining well below the 6% of GDP (Kothari Commission's recommendation), thereby witnessing the government's apathy to reach the goal of UEE.

### NOTE

Presence of collinearity causes similar problems in logistic regression as it causes in linear regression model. The maximum-likelihood estimation is not too accurate in the case of multicollinearity and the logistic model becomes unstable when there exists strong dependence among the predictors. But no such standard statistics for logistic regression is available in the popular statistical packages so far. However, Menard Scott has suggested to run an OLS regression model using the same dependent and independent variables that have been used in logistic regression model as because the concern is with the relationship among the independent variables, the functional form of the model for the dependent variable is irrelevant to the estimation of collinearity.

### Appendix-I

Coefficients(a)									
Model		Unstandardized		Standardized	t	Sig.	Collinearity		
		B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	0.985	0.079		12.537	0.000			
	fthedn	0.012	0.008	0.067	1.371	0.171	0.812	1.232	
	mthedn	0.013	0.010	0.066	1.339	0.181	0.793	1.261	
	edntote	0.002	0.004	0.023	0.487	0.626	0.884	1.131	
	hhdep	-0.091	0.034	-0.125	-2.687	0.007	0.887	1.127	
	econdep	0.011	0.014	0.039	0.836	0.403	0.897	1.114	
	opptcost	0.154	0.070	0.104	2.204	0.028	0.865	1.157	
	mempw	0.132	0.064	0.092	2.054	0.041	0.952	1.050	
a	Dependent Variable: enrlnmt								

## Appendix-II

Collinearity Diagnostics(a)			
Model	Dimension	Eigenvalue	Condition Index
1	1	4.4918	1
	2	0.80547	2.361487
	3	0.764222	2.424379
	4	0.671678	2.586007
	5	0.439869	3.195572
	6	0.373174	3.469403
	7	0.344306	3.611917
	8	0.109482	6.405283
a	Dependent Variable: enrlnmt		

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