

Determinants of Absenteeism and Chronic Absenteeism Among Primary School Children in the EAG States of India

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Abstract

Introduction: Enrolment in school in India does not necessarily translate into attendance, and absenteeism is an early indicator of lower levels of academic performance and school dropout and has its origins in early life. EAG states of India already have some of the lowest school enrolment rates; therefore, it becomes necessary to keep the children in school by curtailing absenteeism to reduce the dropout rates. **Objective:** This study attempts to understand the factors which affect absenteeism and chronic absenteeism in EAG states. **Data and Analysis:** This study uses IHDS-II (2012) data for children 8-11 years of age currently enrolled in primary school. Bivariate analysis and logistic regression analysis are done. **Results:** The results show that children were more likely to be absent when experiencing morbidity (OR:1.9, 95% CI 1.6-2.3) got a beating in school (OR:1.3, 95% CI 1.0-1.6) and repeating grade morbidity (OR:1.5, 95% CI 1.1-2.1). Children were more likely to be chronically absent due to morbidity (OR:1.6, 95% CI 1.3-1.8) and getting beating (OR:1.3, 95% CI 1.0-1.6) in school. Fathers schooling of more than five years and the increased time spent by the children in doing homework, parents' involvement in school and performance in Maths reduced their odds of absenteeism and chronic absenteeism. **Conclusions:** The increased involvement of parents and conducive school learning environment in school could encourage children to take an interest in school activities, prevent the children from being absent which can have curtail dropping out of primary school to some extent.

Keywords: School, Absenteeism, EAG.

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1. Introduction

"Education is the right of every child and promotes their right to dignity and optimum development; however achieving this goal is, extremely complex" (*A Human Rights-Based Approach to EDUCATION FOR ALL*, n.d.). Globally according to UIS in 2018, about 258 million children and youth are out of school, which including 59 million children of primary school age ("Out-of-School Children and Youth | UNESCO UIS," n.d.). Countries like the Democratic Republic of the Congo, India, Nigeria, Pakistan and Sudan accounting for about 38 per cent of the total out of school children (Nations & Unicef, 2018). In India alone, only 69 per cent females and 85 per cent of males above six years of age have ever attended school (Indian Institute for Population Sciences (IIPS) and ICF, 2017). The net enrolment has risen in the past few years, global in 2019 the total net enrolment rate in Primary school was 92 per cent, but the completion of the primary level was only 84 per cent. In central and south Asia in 2019, the total net enrolment in primary school is 93 per cent, but again the completion of the primary level was only 85 per cent (UIS, 2019).

In India, only Seventy-seven per cent of girls and 78 per cent of boys age 6-10 attend primary school (Indian Institute for Population Sciences (IIPS) and ICF, 2017). Twenty-five per cent of children in classes I to VIII were absent on the day AESR survey team visited the rural schools in India (Pratham, 2016). Enrolment in school in India does not necessarily decipher into attendance and absenteeism is an early indicator of school dropout and has its origins in early life (Allison & Attisha, 2019), especially in developing countries. U.S. Department of Education report identifies "chronic absenteeism" which is a child being absent for more than three days in a month as a hidden educational crisis. Evidence also suggests that higher levels of absenteeism are associated with lower levels of student performance (García & Weiss, 2018).

Absenteeism result as an intersection of child personal issues, household disadvantage and unfriendly learning school environment. Some of the primary reasons for absenteeism are the child's health status due to illness like influenza and diarrhoea related diseases (Hemson, 2007; Pehlivan, 2011). Child's personal issues such as lack of self-confidence, lack of social skills, limited academic skills and unable to do homework, lack of pocket money, distance and cost of travelling to school can also encourage absenteeism (Şahin, Arseven, Kılıç, & Kiliç, 2016). The chances for absenteeism and dropout increases as the student graduates from primary school to higher stage of school (Choudhury, 2006). Absenteeism can affect the learning ability of the child (Kingdon, 2007; Pehlivan, 2011). Therefore these children are at high risk of poor performance, repetition in grades leading to poor self-esteem and social stigma associated with failure (Lewin, 2007). School factors such as teacher's behaviour, getting punishment (Şahin et al., 2016), negative behaviours and extremely oppressive attitudes of school administrator towards students (Şahin et al., 2016) also discourage children from attending school.

Children from chronically disadvantaged families are not able to access education (Pehlivan, 2011) as they do not have the economic resource to compensate for the opportunity cost of schooling (FREEMAN et al., 2014; Joshi, 2010) and have to engage in household activities such as farm and domestic work (Rana & Das, 2004). Dropout rates are lower among children where fathers occupation is non-agricultural (Farah & Upadhyay, 2017). Studies suggest that household-level factors (Dreibelbis et al., 2013) and neighbourhood factors

(Galloway et al., 1985) may also influence absenteeism. Childs' performance in school also depends on parents' education. Parents' giving importance and value to education (Foley, Gallipoli, & Green, 2014; Pehlivan, 2011) plays a very vital role in child's school attendance, especially for the female child (Sengupta & Guha, 2002). Parents' lack of education may lead to their disregard for education (Şahin et al., 2016), and they may be unable to support learning at home (Banerji, 2014) actively. Other social factors which can influence access to education are child belonging to a particular caste or tribe (Joshi, 2010) and religion (Choudhury, 2006).

Absenteeism and chronic absenteeism still largely remain a subject which is underexplored in the Indian context as an essential determinant of educational quality and attainment. There are numerous studies relating to school dropout (Gouda M & Sekher, 2014), but there are limited studies understand school absenteeism. (Lewin, 2007) (Nair, 2010) Currently, the studies related to school absenteeism are in the context of female children (Chanana, 1990) and specifically on menstruation hygiene at school (Vashisht, Pathak, Agarwalla, Patavegar, & Panda, 2018), and most studies are at regional level (Prakash et al., 2017; Prakash, Bhattacharjee, Thalinja, & Isac, 2016) which present the regional correlates of primary school absenteeism. In India, the state of education is in deplorable condition, primarily in the EAG (Empowered Action Group) states with states like Bihar having 22.5 per cent people with no schooling and 4.6 median years of schooling completed (Indian Institute for Population Sciences (IIPS) and ICF, 2017). These states already have some of the lowest school enrolment rates; therefore, it becomes necessary to keep the children in school by curtailing absenteeism to reduce the dropout rates. It, therefore, becomes essential to understand the factors which determine absenteeism in these states, so this study attempts to bring about an understanding about the various factors which might result in school absenteeism in EAG states of India.

2. Data and Methods

The study uses the individual and household level data of the Indian Human Development Survey 2012 (IHDS II) (Desai & Vanneman, 2018) for the analysis. The data used for this study included children of the age group eight to eleven belonging to the EAG States. The study is restricted to the age group of only eight to eleven because only for this group of children, additional school information and information on learning level was collected apart from the socio-demographic factors. The observations with missing data were dropped, and 3243 cases are used for this study. This study purposely analyses data for absenteeism and chronic absenteeism groups separately to identify their distinct characteristics and the influence of independent variables on each of them.

2.1. Dependent variable

Absenteeism and Chronic Absenteeism are the dependent variables used in this study. Absenteeism data is collected as the number of days a child remained absent from the school in the last month before the date of interview. The response recorded in the survey ranges between zero to 30 days, where zero stands for not a single day absent and 30 for all school days absent. If the data collection was during vacation time, the response was recorded for the school going month before vacation. The variable absenteeism is coded as zero for zero-

days absenteeism and one for one or more days of absenteeism. The variable chronic absenteeism is coded 0 for 0-3 days of absenteeism and coded one for more than one day of absenteeism. Chronic absenteeism has no precise official definition, and it has been defined in various ways. According to the Department of Education USA, missing 15 days of school in a year is defined as chronically absent (U.S. Department of Education, 2016). Others define chronic absenteeism as children missing 10 per cent of school in a year or month (Ehrlich et al., 2013) (Balfanz & Byrnes, 2012). In some studies, students as being chronically absent if they have missed three or more days of school in the last month (García & Weiss, 2018). Since the IHDS data have absenteeism information for the month before the survey date, it is similar to that of Grace and Weiss; therefore, absenteeism of 10% per month, which is of about three days per month, is considered chronic absenteeism for this study.

2.2. *Independent Variables*

Based on the review of literature, the factors which are most likely to impact school absenteeism have been used for the study. Child Related factors include three variables 1) Age of the child in completed years 2) The Gender of the child coded one for male and two for female 3) Morbidity: The variable records the number of days child was sick in the month before the date of the survey. Coding 0 is given for zero days of morbidity, and code one is provided for one and more than one day of morbidity.

Nine variables explain the school-level factors included in the study. 1) Maths level: Maths level is based on the result from the test which was administered directly to the children. Maths level has four levels, and the children were categorised in different levels based on their performance. The child was classified in the first level if the child was not able to recognise the number and coded as one; the child was categorised in the second level if they could identify the number and coded as two; the child was classified into the third level if they could do subtraction and coded as three while the child was categorised in the fourth level if the child could divide and coded as four. 2) Time spent on doing homework: this variable records the number of hours the child spends on doing homework in a week. This variable is coded as zero if the child does not spend any time to do homework and one if the child spends even one hour to do homework in a week. 3) Child Beaten: This variable record if the child is beaten in the school, they are coded one if beaten and zero if not beaten. 4) Child Scolded: This variable record if the child is scolded in the school, they are coded one if scolded and zero if not scolded. 5) Repeating Grade: This variable record if the child repeats grade in the school, it is coded one if the child repeats any grade and zero if the child does not repeat any grade. 6) School Distance is recoded in km, it is coded into one for distance within one km, coded two for distance within five km and coded three for a distance of more than five km. 7) Type of school is coded one for government school and two for private school. 8) Season: This variable is created based on the time of the interview for data collection. If the data is collected in the month of April and July, it is coded one for Summer; for December and March, it is coded two for Winter, and If the information is collected in August and November, it is coded three for Monsoon. 9) Parents in School committee: coded one if parents are in any type of school committee such as parents' teachers' committee and coded zero if parents are not in any such committee.

The third group of variables are household related variables. 1) Households primary source of income is taken since literature shows impacts of father's occupation on the child's absenteeism and dropout more prominently than the household wealth index. It is categorised into three groups; it is coded one when agriculture is the primary source of income. It is coded two when labour is the primary source of income and coded three like others. Others included households which had their primary source of income from salary and small businesses. 2) Religion: Religion is coded as one for Hindu and two for others. Other religion included Muslim, Christian, Sikh and Jainism; it also contains other religion which is listed as others and not explicitly defined. 3) Caste: This variable is categorised into three categories. Code one is given to General caste, code two for OBC caste and code three for SC/ST caste category. 4) Household size: It is a continuous variable which has been categorised into binary. Code zero is given to the household size of five and less, and code one is given to the household size of more than five. 5) Mothers Education: Mothers education is categorised into three categories. Code zero is given to mother with 0-4 years of education, and code one is given to mother with five years of education and code two is given to mother with more than five years of education. 6) Fathers education is categorised into three categories. Code zero is given to father with 0-4 years of schooling; code one is given to father with five years of education, and code two is given to father with more than five years of schooling. 7) Residence: Residence is coded as zero for Rural and one for Urban.

Quantitative analysis was carried out to fulfil the objective of the study. Bivariate *Chi-square* and *t*-test were carried out to check the associations between the dependent and independent variables. The variables in the data were checked for outliers and potential multi-collinearity before carrying out multivariate analysis. For regression analysis, variables that were found to be significantly associated (with $p < 0.10$) were retained. All of the analysis was performed on STATA 14.

2.3. Binary Logistic Regression

Since the dependent variables Absenteeism and Chronic Absenteeism is coded binary, we employed Logistic Regression to investigate the association between the dependent and independent variables. The logistic regression used maximum likelihood to intercept and structured as follows:

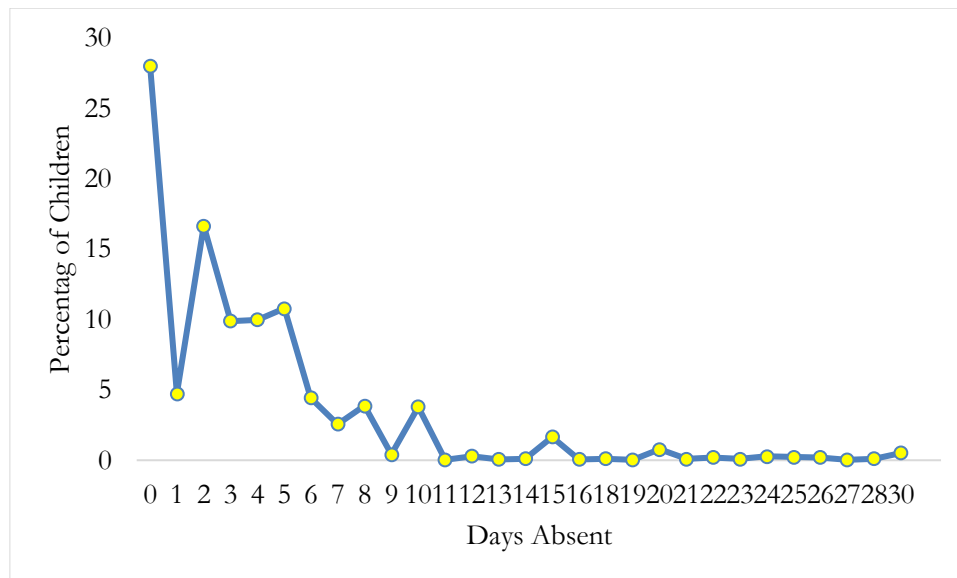
$$\log\left(\frac{Y_i}{1 - Y_i}\right) = a + bX_i$$

where, Y_i is the log-likelihood of an individual child i to be in one of two categories of the absenteeism groups, a is the bias or intercept, and b is the coefficient for single independent variable X .

3. Results

This section presents statistics about the trend of absenteeism of school children aged 8-11 years of age in India's EAG states. The distinction between absentees and non-absentees cannot be oversimplified as the IHDS survey does not provide the actual reasons for staying out of the school. Most of the children in our study are absentees with a wide range of possible causes which includes both school and household level factors.

Figure 1: Percentage of children absent for various days



(Source: Author's computation)

The result from Figure 1 shows that about 28 per cent of children are not absent for even a single day in a month. About four per cent children are absent for one day, about 17 per cent children are absent for two days, and about 10 per cent children are absent for 3, 4 and 5 days after which we see a decline in the percentage of children absent.

Table 1: Percentage distribution of absent and chronic absent children and their mean days of absenteeism according to the child characteristics

Child Characteristics	Absent (%)	Chronic Absent (%)	Mean days Absent
Age			
8	80.80	55.60	5.6
9	76.00	43.50	5.3
10	77.00	48.60	5.3
11	73.50	43.70	5.3
Gender			
Male	76.90	46.60	5.3
Female	77.10	50.10	5.5
Experienced Morbidity			
No	73.40	44.20	5.1
Yes	85.80	58.20	6

(Source: Author's computation)

The result from Table 1 shows that with the increase in age, the percentage of absent children reduce from 80 per cent among eight years old children to 73.3 per cent among 11-year-old children. Chronic absenteeism also shows a similar pattern. The mean number of days children are absent remains around between 5.6 to 5.3.

According to the gender of the child, 77.10 per cent female children are absent, and 50.1 per cent female children are chronically absent, which is slightly more than the male children. A higher percentage of children who have experienced morbidity are absent (85.8 per cent) and chronically absent (58.2 per cent) as compared to children who have not experienced any type of morbidity.

Table 2: Percentage distribution of absent and chronic absent children and their mean days of absenteeism according to the school-related factors

School-related factors	Absent (%)	Chronic Absent (%)	Mean days Absent
Math level			
Cannot recognise Number	87.50	65.50	6.3
Can Recognise Numbers	79.20	48.50	5.3
Can do Subtraction	72.30	41.10	5
Can do division	66.70	37.20	4.8
Spend time on doing homework			
No	81.80	61.60	7.5
Yes	76.70	47.20	5.2
Beaten in School			
No	72.40	43.80	5.3
Yes	83.10	54.10	5.4
Scolded in School			
No	71.00	42.40	5.2
Yes	81.50	52.60	5.5
Repeating Grade			
No	76.20	48.00	5.3
At least once	86.20	51.60	5.6
School Distance			
Within 1 Km	78.00	49.60	5.4
Within 5 Km	73.30	43.80	5
More than 5 km	68.90	33.40	5.9
Type of School			
Government	77.60	52.10	5.7
Private	76.20	42.90	4.9
Season			
Summer	65.90	32.10	5.1
Monsoon	79.30	51.00	5.8
Winter	80.30	53.40	5.3
Parents in the School Committee			
No	79.40	53.00	5.6
Yes	73.60	41.40	5.0

(Source: Author's computation)

According to the school characteristics presented in Table 2, considerable variation in absenteeism is seen. The increase in maths level shows a consistent decrease in absenteeism percentage and chronic absenteeism among children, 65.5 per cent children who cannot recognise number are chronically absent which reduces to 37.2 per cent among children who can carry out more complex maths like division. The mean number of absent days also reduces from 6.3 days among children who cannot recognise number to 4.8 days among children who can carry out the division. Children who do not spend any time doing homework are absent for a mean of 7.5 days as compared to only 5.2 mean days of absenteeism among children who spend time doing homework. Getting beating in school increases the absenteeism among children, nearly 83.10 per cent children who got beaten in school are absent for a mean of 5.4 days. The children who have repeated grades are absent for a mean of 5.6 days, and 51.6 per cent of them are chronically absent as compared to children studying in private school about 10 per cent more absenteeism among children studying in a government school. A higher percentage of children are absent in Monsoon (79.3 per cent) and Winter (80.3 per cent). Children whose parents are involved in school committee are absent for slightly lesser mean days as compared to other children.

Table 3: Percentage distribution of absent and chronic absent children and their mean days of absenteeism according to the household characteristics

Household Characteristics	Absent (%)	Chronic Absent (%)	Mean days Absent
Households Main Source of Income			
Agriculture	77.20	50.40	5.2
Labour	82.00	54.90	5.8
Others	72.40	40.40	5.2
Religion			
Hindu	77.20	48.70	5.3
Others	75.80	45.50	5.7
Caste			
General	72.10	42.80	5.3
OBC	78.10	50.20	5.3
SC/ST	78.90	49.10	5.4
Household Size			
≤5	76.80	48.30	5.6
<5	77.20	48.20	5.3
Mothers years of education			
0	80.30	53.40	5.6
1-5	71.30	43.60	5.0
>5	73.90	40.70	5.0
Fathers years of education			

0	81.30	56.50	5.9
1-5	80.40	54.50	5.0
>5	72.90	40.40	5.1
Residence			
Rural	79.10	52.20	5.4
Urban	69.60	34.30	5.1

(Source: Author's computation)

According to the result in Table 3, the households' primary source of income 82.0 per cent children whose families a primary source of income is labour is absent and for mean days of 5.8 days. Children belonging to a religion other than Hindu are absent for a mean of 5.7 days. Children belonging to SC/ST caste category are absent for 5.5 days as compared to 5.3 mean days absenteeism among children belonging to general caste. Children living in households of size five and less are absent for longer mean days as compared to children in households of size more than five. The mean day's absenteeism shows a decline with the increase in both mothers and fathers' education. Children in rural areas are absent for a mean of 5.5 days, and about 52.2 per cent of them are chronically absent, which is much more than children belonging to urban areas.

Table 4: Logistic Regression coefficient on determinants of absenteeism among children in the age group 8-11

Predictors		Odds Ratio	95% Confidence Interval
Child-related Factors			
Age		0.953	[0.881,1.031]
Gender	Male (<i>Ref</i>)		
	Female	0.956	[0.811,1.126]
Experienced Morbidity	No (<i>Ref</i>)		
	Yes	1.963 ^{***}	[1.609,2.394]
School-Related Factors			
Math level	Cannot recognise Number (<i>Ref</i>)		
	Can Recognise Numbers	0.706 ^{***}	[0.545,0.914]
	Can do Subtraction	0.660 ^{***}	[0.497,0.876]
	Can do division	0.457 ^{***}	[0.336,0.623]
Spent time on doing homework	No (<i>Ref</i>)		
	Yes	0.712	[0.501,1.010]
Child Punished	No (<i>Ref</i>)		
	Yes	1.326 ^{**}	[1.044,1.684]
Child Scolded	No (<i>Ref</i>)		
	Yes	1.072	[0.854,1.347]
Repeating Grade	No (<i>Ref</i>)		
	At least once	1.523 ^{**}	[1.101,2.105]

School Distance	Within 1 KM (<i>Ref</i>)		
	Within 5 KM	0.852	[0.680,1.067]
	More than 5 km	1.033	[0.673,1.585]
Type of School	Government (<i>Ref</i>)		
	Private	1.229**	[1.017,1.486]
Season	Summer (<i>Ref</i>)		
	Monsoon	1.490***	[1.194,1.860]
	Winter	1.384***	[1.135,1.686]
Parents in the School Committee	No (<i>Ref</i>)		
	Yes	0.739***	[0.622,0.879]
<hr/>			
Household Factors			
Source of Income	Agriculture (<i>Ref</i>)		
	Labour	1.155	[0.924,1.445]
	Others	0.981	[0.789,1.220]
Religion	Hindu (<i>Ref</i>)		
	Others	1.251*	[0.971,1.612]
Caste	General (<i>Ref</i>)		
	OBC	1.027	[0.832,1.267]
	SC/ST	1.152	[0.897,1.480]
Household Size	≤ 5 (<i>Ref</i>)		
	< 5	0.844*	[0.711,1.001]
Mothers years of Education	0 (<i>Ref</i>)		
	1-5	0.913	[0.727,1.147]
	> 5	1.084	[0.869,1.351]
Fathers years of Education	0 (<i>Ref</i>)		
	1-5	1.095	[0.843,1.422]
	> 5	0.795**	[0.648,0.975]
Residence	Rural (<i>Ref</i>)		
	Urban	0.890	[0.720,1.102]
<hr/>			
Pseudo R2	=	0.0604	
Significance * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$			
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(Source: Author's computation)			

Table 4 shows that different factors affecting absenteeism. The result from the table shows that the children who suffered from any type of morbidity their odds of being absent are 1.9 times more than children who did not suffer from any morbidity. Children who got a beating in school their odds of being absent is 1.3 times more than children who did not get beating in school. Children who repeat a grade at least once have 1.5 times higher odds of absenteeism as compared to children who have not repeated any grades. During Monsoon, the odds of chronic absenteeism increase 1.4 times, and during Winter, the odds of absenteeism increases 1.3

times as compared to summer. The children studying in private school have 1.2 times higher odds of being absent as compared to children studying in a government school. Children belonging to other religion have 1.2 higher odds of being absent as compared to belonging to Hindu religion.

In the school-related factors, the children who can only recognise a number in Maths level had 30 per cent lower odds of being absent as compared to children who could not even recognise the number. Children who can solve division have 55 per cent lower chances of being absent. Children who spend at least an hour per week in doing homework their chances of being absent reduces by 29 per cent as compared to children who do not spend any time doing homework. The children whose parents have involved in any school committee their odds of being absent reduce by 27 per cent. Children who reside in households with more than five members their chances of being absent reduce by 16 per cent. Children whose father has more than five years of education their odds of being absent reduces by 11 per cent as compared to children whose fathers have zero years of education.

Table 5: Logistic Regression coefficient on determinants of chronic absenteeism among children in the age group 8-11

Predictors		Odds Ratio	95% Confidence Interval
Child-related Factors			
Age		0.979	[0.912,1.052]
Gender	Male (<i>Ref</i>)		
	Female	0.983	[0.846,1.141]
Experienced Morbidity	No (<i>Ref</i>)		
	Yes	1.609***	[1.365,1.896]
School-Related Factors			
Math level	Cannot recognise Number (<i>Ref</i>)		
	Can Recognise Numbers	0.784**	[0.636,0.966]
	Can do Subtraction	0.750**	[0.590,0.952]
	Can do division	0.543***	[0.412,0.717]
Spending time doing homework	No (<i>Ref</i>)		
	Yes	0.499***	[0.377,0.660]
Child Beaten	No (<i>Ref</i>)		
	Yes	1.350***	[1.084,1.680]
Child Scolded	No (<i>Ref</i>)		
	Yes	0.993	[0.800,1.234]
Repeating Grade	No (<i>Ref</i>)		
	At least once	1.134	[0.873,1.472]
School Distance	Within 1 KM (<i>Ref</i>)		
	Within 5 KM	0.880	[0.707,1.096]
	More than 5 km	0.921	[0.596,1.422]
Type of School	Government (<i>Ref</i>)		

Season	Private	0.889	[0.748,1.057]
	Summer (<i>Ref</i>)		
	Monsoon	1.499***	[1.218,1.844]
Parents in the School Committee	Winter	1.665***	[1.375,2.016]
	No (<i>Ref</i>)		
	Yes	0.822**	[0.702,0.964]
Household Factors			
Source of Income	Agriculture (<i>Ref</i>)		
	Labour	1.113	[0.914,1.354]
	Others	1.074	[0.878,1.315]
Religion	Hindu (<i>Ref</i>)		
	Others	1.025	[0.818,1.284]
Caste	General (<i>Ref</i>)		
	OBC	1.005	[0.823,1.227]
	SC/ST	1.007	[0.797,1.272]
Household Size	≤5 (<i>Ref</i>)		
	<5	0.896	[0.766,1.047]
Mothers years of Education	0 (<i>Ref</i>)		
	1-5	0.847	[0.684,1.048]
	>5	0.957	[0.778,1.176]
Fathers years of Education	0 (<i>Ref</i>)		
	1-5	0.869	[0.695,1.088]
	>5	0.801**	[0.668,0.961]
Residence	Rural		
	Urban	0.794**	[0.650,0.970]

Pseudo R2 = 0.0557

Significance * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

(Source: Author's computation)

Table 5 the factors influencing chronic absenteeism. The result from the table shows that the children who experience morbidity their odds of being chronically absent increases by 1.6 times compared to children who have not experienced morbidity. Children who got a beating in school their odds of being chronic absent increases by 1.3 times as compared to children who did not get beating. During Monsoon, the odds of chronic absenteeism increase 1.4 times, and during Winter, the odds of chronic absenteeism increases 1.6 times as compared to summer.

Children who could do subtraction have 25 per cent fewer chances of being chronically absent as compared to children who cannot recognise the number. Children who could solve division have 46 per cent fewer chances of being chronically absent as compared to children who cannot recognise the number. Children who spend at least an hour per week in doing homework their chances of being chronically absent reduces by 51

per cent as compared to children who do not spend any time doing homework. The children whose parents have involved in any school committee their odds of being absent reduce by 18 per cent. Children whose father has more than five years of education their chances of being chronic absent reduces by 20 per cent as compared to children whose father has less than primary education. The children who reside in Urban areas their odds of being chronically absent reduce by 21 per cent as compared to children residing in rural areas.

4. Discussion

School-related factors in EAG states turn out to be the most crucial factors in determining absenteeism and chronic absenteeism. Academic performance of the child, engagement in a school-related activity like doing homework, parents' involvement, getting a beating in school, Season of attending school, and repeating grades show a significant effect on absenteeism and chronic absenteeism. In the child-related factor number of days of morbidity is essential predictors of absenteeism and chronic absenteeism. Household factors like religion, father's education and household size show impact on absenteeism and household factors like fathers' education, household size and place of residence shows a significant impact on chronic absenteeism.

Child's health directly affects absenteeism; children who are ill for more days are more likely to be absent and chronically absent. Morbidity could be related to poor hygiene and sanitation, resulting in recurring bouts of dysentery, diarrhoea, and parasitic infections (Dreibelbis et al., 2013) (Hemson, 2007) (Pehlivan, 2011). Seasonal flu and fever could also cause absenteeism among children (McLean, Peterson, King, Meece, & Belongia, 2017). Monsoon and Winter season shows significant association with absenteeism and chronic absenteeism; this may be closely related to the occurrence of morbidities such as cold, cough and fever, which can occur during Winter and Monsoon. Age of the child (Choudhury, 2006) and gender (Sengupta & Guha, 2002) of the child does not show any significant impact on absenteeism and chronic absenteeism.

The educational performance of the children depends on the conducive learning environment provided in the school (Şahin et al., 2016), and the involvement of the child in school-related activities. The results show that children who spend more time on homework are less likely to be chronically absent. As the level of maths became better among children, the chances of their absenteeism and chronic absenteeism also reduced. Studies show that absenteeism can affect the learning ability of the child in subjects like maths which require cumulative knowledge (Kingdon, 2007; Pehlivan, 2011). Results show that in the study area, children who receive corporal punishment in school like beating are more likely to be chronically absent as seen in a study by Gershoff (Gershoff, 2017). Getting punished in school creates phobia that leads to severe academic and psychological implications like grade repetition, low self-esteem among peers and social stigma associated with failure deters the child from going to school (Tyrrell, 2005)(Lewin, 2007)(Portela & Pells, 2015).

Studies show that Parents education and involvement in children's education reduces absenteeism (Farah & Upadhyay, 2017; Foley et al., 2014; Pehlivan, 2011; Şahin et al., 2016) Parents with poor education may not be able to assess the reason for the child's non-performance in academics or discussing it with their teacher because of the lack of confidence (Banerji, 2014). The result of the study shows that children who have fathers

with more than five years of education are less likely to be absent or chronically absent. Further, the children whose parents are involved in school committee are also less likely to be absent or chronically absent. In the case of absenteeism, the result shows that children belonging to other religion, i.e. Muslim, Christianity, Sikhism children are more likely to be absent (Bowen et al., 2007). Place of residence shows an impact on chronic absenteeism but does not explain any effect on absenteeism. Children living in rural areas may experience resource constraints and may have to engage in household work (FREEMAN et al., 2014; Joshi, 2010; Rana & Das, 2004). The children studying in private school are more likely to be absent for as compared to children studying in a government school. Still, the type of school does not show any significant relation with chronic absenteeism. From the crosstabulation, the mean duration of absenteeism is less for children studying in a private school. Therefore, it may be possible that a higher number of children studying in private school are absent from one or two days in a month as compared to children studying in a government school. The study more or less encompasses most of the aspects of child, school and household factors that impact school attendance. However, the inclusion of teacher-related elements can put more light on the role of the teacher in absenteeism and giving a better understanding of the school environment for the child. The study has tried to assess chronic absenteeism based on available literature (García & Weiss, 2018), which had similar absenteeism data to achieve the best result possible but the result may vary with the change in the definition of chronic absenteeism. Further, the study only tries to understand the factors responsible for absenteeism and chronic absenteeism at the primary level of schooling and cannot be generalised for secondary or higher secondary levels. Never the less the study is crucial in helping to understand what transpires between enrolment and dropping out of children from school in the EAG states and give a more holistic understanding of household and school-level factors affecting absenteeism.

5. Conclusion

Learning is critical to social life and development of the society. Despite massive governmental impetus, the education situation in India is unstable, especially in the EAG states. It is evident from low and middle-income countries that right educational policies by the government in the right conditions, smart strategies can make rapid, lasting inroads on poverty and inequality. This study is useful in providing an insight into the combined effect of household and school factors which have to be dealt with holistically. Already the government of India in the Union Budget, 2018-19, has proposed to treat school education holistically by launching Samagra Shiksha (Ministry of Human Resource Development, n.d.) to improve school effectiveness. The cumulative impact of this programme is too early to predict on the EAG states. Apart from that, the EAG states have always been part of the government's educational initiatives, even though they have not been able to perform with some of India's best-performing states in terms of education. Hence, it may be crucial to understand the factors leading to absenteeism among the EAG states that can direct a more comprehensive policy approach, which may be beneficial in reducing school dropouts.

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7. Conflict of Interest

The authors declare no conflict of interest.

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