

# An Assessment of Dropout among Tribal Children of Dooars Region of India

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**Abstract:** Education is the process of living through a continuous reconstruction of experiences. It is the development of all those capacities in the individual which will enable him to control his society and fulfill his possibilities. This article emphasizes the drainage of human resources among Tribal Community of Dooars Region of West Bengal in the light of Sarva Shiksha Avijaan (SSA). To identify the effects, we use structured schedule containing seventeen independent variables viz. Age of respondent ( $X_1$ ), Composition of food at school hour ( $X_2$ ), Health status( $X_3$ ), Body Mass Index ( $X_4$ ), Use of teaching learning material at school ( $X_5$ ), Communication to school ( $X_6$ ), Attitude of teacher on student ( $X_7$ ), Role of school teacher in understanding text book ( $X_8$ ), Role of father in understanding text book ( $X_9$ ), Role of mother in understanding text books ( $X_{10}$ ), Encouragement of mother towards education ( $X_{11}$ ), Adequate dress during school hour ( $X_{12}$ ), Access to text ( $X_{13}$ ), Home environment ( $X_{14}$ ), Socio taboo ( $X_{15}$ ), Climate factor ( $X_{16}$ ), Financial condition( $X_{17}$ ), House hold activity( $X_{18}$ ), and Engagement in productive activity ( $X_{19}$ ) against dependent variable Level of Dropout (Y). The findings are: (1) Age of respondent ( $X_1$ ), Health status( $X_3$ ), Body Mass Index ( $X_4$ ), and Role of father in understanding text book ( $X_9$ ) had significant bearing on echelon of Dropout and (2) the only variable Age of respondent ( $X_1$ ) has been found to exercise significant regressional effect on the wastage of human resources.

**Keywords:** Drop-out, Socio taboo, regressional effect, BMI, cohort, agglomerated effect, etc.

## 1. Introduction

The Sarva Shiksha Abhiyan was launched towards the end of the Ninth Plan to achieve the goal of UEE through a time-bound integrated approach, in partnership with states. The medium-term goals for the scheme are the following: i) All children in school by 2003; ii) All children complete five years of primary schooling by 2007; iii) Focus on elementary education of satisfactory quality; iv) Bridge all gender and social category gaps; and v) Universal retention by 2010. The main aim of S.S.A. is to reduce the existing rate of dropout as well as to enhance the quality of education. Several researches have been taken place in different area of school administration.

One of the important works done by Naidu (2000) problems of dropout children and future perspectives of tribal education in south India published in (Journal of educational research and extension vide Vol-39, No.-2, pp 36-46). He finds out that dropouts are very high in number in the interior and distant tribal villages, Female dropouts are more in number than the male dropouts, and in Tamilnadu, female dropouts are high compared to other states. In Kerala, percentages of rural dropout children are more than the Kurumbar and Mudugar areas. In Andhra Pradesh, majority of dropout children belong to Kondora, Bagatha and Porangi Praja. In Karnataka, the female dropout is less than male dropout. The percentage of dropout is more in the age group of 10-15 years. Economic necessity and parent's compulsion, absence of Mid-day Meals schemes, improper provision of uniforms and textbooks lead to large scale dropouts in all the states. In the study of Pande (2005) on Influence of Gender differences in perception of parental behaviour, he found that parental behavior changes with respect to the gender of a child. Boys perceived their parents as more dominating in comparison to girls, while perception on loving variable is nearly the same and both boys and girls

perceived their fathers as more disciplining than mothers. On the other hand girls perceived mothers as more loving and less dominating. It is evident from District Education Report Card of NUEPA for the year 2011-14 that drop-out at the primary level (20.20 per cent) in the adjacent district of Jalpaiguri is still prominent, In the study of Ghosh and Deb (2014) it is found that the wastage of human resources among tribal children has strong bearing with variables like composition of food at school hour, mode of communication to able to school, home environment and social taboo.

## 2. Objective of the study

- 1) To assess the variables affecting the causes behind the dropout among the SC & ST children of Nagrakata Block of Japaiguri district of state of West Bengal.
- 2) To examine the nature and extent of causal variables upon the predictor variable.
- 3) To find the extent of dependency of echelon of Dropout (Y) from different educational, social, economic, environmental and academic variables viz. Age of respondent ( $X_1$ ), Composition of food at school hour ( $X_2$ ), Health status( $X_3$ ), Body Mass Index ( $X_4$ ), Use of teaching learning material at school ( $X_5$ ), Communication to school ( $X_6$ ), Attitude of teacher on student ( $X_7$ ), Role of school teacher in understanding text book ( $X_8$ ), Role of father in understanding text book ( $X_9$ ), Role of mother in understanding text books ( $X_{10}$ ), Encouragement of mother towards education ( $X_{11}$ ), Adequate dress during school hour ( $X_{12}$ ), Access to text ( $X_{13}$ ), Home environment ( $X_{14}$ ), Socio taboo ( $X_{15}$ ), Climate factor ( $X_{16}$ ), Financial condition( $X_{17}$ ), House hold activity( $X_{18}$ ), and Engagement in productive activity ( $X_{19}$ ).

### 3. The Study area and Methodology

The present study is based on intensive house hold survey conducted during August,13 – January, 2014 in one block of the district of Jalpaiguri of the State of West Bengal. The block (Panchayat Samiti), namely Nagrakata was selected at random, out of 13 blocks in the district. With the help of random sampling method 100 dropouts children of 6 to 14 years of age were selected from 5 Gram Panchayat (GP) viz. Sulkapara, Champaguri, Looksan, Angrabhasa – I, Angrabhasa - II of the Nagrakata block. A structure schedule containing 49 different questions / statement / views were placed before each respondent student separately to measure educational activity, health status, etc. Here, in order to explore the problem, different statistical methods like correlation, regression, and step down regression have been adopted.

The term body mass index (BMI), or Quetelet index, is a measure of relative weight based on an individual's mass and height. The BMI is used in a wide variety of contexts as a simple method to assess how much an individual's body weight departs from what is normal or desirable for a person of his or her height. BMI is used differently for children. It is calculated the same way as for adults, but then compared to typical values for other children of the same age. Therefore,  $B.M.I. = \text{Mass (in Kg)} / \text{height}^2 \text{ (in m}^2\text{)}$

### 4. Result and Discussion

**Table1:** Coefficient of correlation between Echelon of Dropout (Y) and other seventeen (19) casual factors.

S. No.	Variables	"r" value
1.	Age of respondent ( $X_1$ )	-.6918**
2.	Composition of food at school hour ( $X_2$ )	-.0827
3.	Health status( $X_3$ )	0.2849**
4.	Body Mass Index ( $X_4$ )	-.6164**
5.	Use of teaching learning material at school ( $X_5$ )	-.0460
6.	Communication to school ( $X_6$ )	-.0631
7.	Attitude of teacher on student ( $X_7$ )	0.0138
8.	Role of school teacher in understanding text book ( $X_8$ )	0.1546
9.	Role of father in understanding text book ( $X_9$ )	-.2316**
10.	Role of mother in understanding text books ( $X_{10}$ )	-.1824
11.	Encouragement of mother towards education ( $X_{11}$ )	-.0707
12.	Adequate dress during school hour ( $X_{12}$ )	0.0493
13.	Access to text ( $X_{13}$ )	-.1071
14.	Home environment ( $X_{14}$ )	0.0198
15.	Socio taboo ( $X_{15}$ )	-.1133
16.	Climate factor ( $X_{16}$ )	0.1683
17.	Financial condition( $X_{17}$ )	0.0507
18.	House hold activity( $X_{18}$ )	0.0591
19.	Engagement in productive activity ( $X_{19}$ )	-.0859

Critical value (1-Tail, .05) = +or- .183

\*Significant at 5% level

Critical value (2-Tail, .01) = +or- .217

\*\* Significant at 1% level

Table 1 presents the correlation studies between the dependent variable i.e. Echelon of Dropout (Y) and other seventeen (19) independent variables viz. Age of respondent ( $X_1$ ), Composition of food at school hour ( $X_2$ ), Health status( $X_3$ ), Body Mass Index ( $X_4$ ), Use of teaching learning material at school ( $X_5$ ), Communication to school ( $X_6$ ), Attitude of teacher on student ( $X_7$ ), Role of school teacher in understanding text book ( $X_8$ ), Role of father in understanding text book ( $X_9$ ), Role of mother in understanding text books ( $X_{10}$ ), Encouragement of mother towards education ( $X_{11}$ ), Adequate dress during school hour ( $X_{12}$ ), Access to text ( $X_{13}$ ), Home environment ( $X_{14}$ ), Socio taboo ( $X_{15}$ ), Climate factor ( $X_{16}$ ), Financial condition( $X_{17}$ ), House hold activity( $X_{18}$ ), and Engagement in productive activity ( $X_{19}$ ). It is found that variables like Age of respondent ( $X_1$ ), Health status( $X_3$ ), Body Mass Index ( $X_4$ ), and Role of father in understanding text book ( $X_9$ ) had

wielded a substantial influence on the dependent variable i.e., the echelon of Dropout.

The age of the children in the block like Nagrakata of Dooars region has an exceptional significance on dropout from their study. Lower the age, higher is the chances of dropout. Thus, the rate of dropout at lower classes is higher than the higher classes.

The health of the children has great importance in case of retentivity of the children. Here, the health status is measured as the summation of the food intake value in terms of calorie intake per day along with the general condition of health. The children of age group 6-14 years has the minimum intake food value in a day is 947 calorie and maximum 1810 calorie. During the survey, the average intake food value in a day was found 1446 calorie which indicated the motive why the variable  $X_3$  had extensive attitude on the echelon of dropout.

Again, body mass index has the intense relation with the intake food value in terms of intake calorie per day. Out of 100 respondents, the minimum calculated body mass index

was found 13.61 kg/m<sup>2</sup> and maximum B.M.I. found was 19.55 kg/m<sup>2</sup> and average 16.75 kg/m<sup>2</sup>. The following table indicates that 82 per cent of the respondents are underweight and 18 per cent are within the limit of the normal weight. So, the body mass index (X<sub>4</sub>) has a negative effect on the echelon of dropout.

**BMI Categories**

Underweight	= < 18.5
Normal weight	= 18.5 – 24.9
Overweight	= 25 – 29.9
Obesity	= BMI of 30 or greater

In the tribal region where the Scheduled Tribe and Scheduled Caste are the majority inhabitants and the female literacy is marginal, there the role of father in understanding text books plays a prominent responsibility. As the father of the child is the key person of the family in terms of earning, hence the child did not get support from home in understanding text books and the role of father had shown the negative impact on the dropout.

**Table 2: The Multiple Regression Analysis**

Sl.No.	Variables	"β" value	"t" value
1.	Age of respondent (X <sub>1</sub> )	-.658510	-3.841**
2.	Composition of food at school hour (X <sub>2</sub> )	0.037791	0.239
3.	Health status(X <sub>3</sub> )	0.092044	0.687
4.	Body Mass Index (X <sub>4</sub> )	0.006016	0.034
5.	Use of teaching learning material at school (X <sub>5</sub> )	-.026560	-.240
6.	Communication to school (X <sub>6</sub> )	-.080788	-.745
7.	Attitude of teacher on student (X <sub>7</sub> )	-.125503	-1.109
8.	Role of school teacher in understanding text book (X <sub>8</sub> )	0.168392	1.276
9.	Role of father in understanding text book (X <sub>9</sub> )	-.171693	-1.626
10.	Role of mother in understanding text books (X <sub>10</sub> )	0.039443	0.365
11.	Encouragement of mother towards education (X <sub>11</sub> )	0.014057	0.113
12.	Adequate dress during school hour (X <sub>12</sub> )	-.008873	-.062
13.	Access to text (X <sub>13</sub> )	-.082083	-.733
14.	Home environment (X <sub>14</sub> )	-.108791	-.786
15.	Socio taboo (X <sub>15</sub> )	-.030190	-.290
16.	Climate factor (X <sub>16</sub> )	0.078148	0.945
17.	Financial condition(X <sub>17</sub> )	0.033390	0.347
18.	House hold activity(X <sub>18</sub> )	0.058348	0.519
19.	Engagement in productive activity (X <sub>19</sub> )	0.115600	0.921

Multiple R = 0.74548  
R Square = 0.55574  
Adjusted R<sup>2</sup> = 0.44752  
Standard Error = 1.72212

**Analysis of Variance**

	DF	Sum of Squares	Mean Square
Regression	19	289.37006	15.23000
Residual	78	231.32381	2.96569

F = 5.13540 Signif F = .0000

From table 2, it is found that all these 19 variables had shown their regressional effect on the echelon of dropout and they explain 55.57 per cent of the total agglomerated effect. In the step down regression analysis, it is interestingly found that the age at dropout of the children alone can explain 47.83 per cent of the total effect and rest 18 variables can only explain 7.74 per cent of the total effect. This would explore the possibilities of considering more variables to be considered as consequent variables and at the same time haul out the number of variables from the existing independent variables.

**Table 3: Step down regression Analysis**

Variable(s) Entered on Step Number  
1. X<sub>1</sub>

Multiple R = 0.69162  
R Square = 0.47834  
Adjusted R<sup>2</sup> = 0.47290  
Standard Error = 1.68209

**Analysis of Variance**

	DF	Sum of Squares	Mean Square
Regression	1	249.06751	249.06751
Residual	96	271.62637	2.82944

F = 88.02710 Signif F = .0000

-----Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
X <sub>1</sub>	-.585535	0.062409	-.691620	-9.382	.0000
(Const)	13.343742	0.678195	19.675		

## 5. Conclusion

State report card of different States and DISE data principally for the district Jalpaiguri during the year 2011-12, as collected by NUEPA, showed that still 148 number of schools were there in the Jalpaiguri district of the State of West Bengal having single teacher schools and 763 schools were there having single classroom with total students strength 66,179 from class I to VIII. 82 schools were found where class-pupil ratio was more than 100. The facility of drinking water was not accessible in 264 Schools where the number of students from class I-VIII enrolled was 20,090. Even the facility of common toilet was not available in 1752 schools with student enrolment 3,75,333 out of which girls' students was 19,4744. 748 Schools found where girls toilets were not available and 31401 girls' students were enrolled there. The programme of mid day meal was not implemented in 905 schools at the elementary level. One optimistic obsession is that the district Jalpaiguri is one of the few districts of India where girl's student (3,79,760) ratio is more than its male counterpart (3,76,904). So the district's educational profile along with the research findings would encourage going in-depth study for the root cause at the back of the dropout.

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