

# Achievement and Personality Pattern of Secondary Level Scheduled Tribe Students in Relation to Gender and Type of Institutions

B.N.PANDA\*  
LAXMIDHAR BEHERA\*\*

## Abstract

*Scheduled Tribes (STs) are one of the recognised disadvantaged groups of the country. The present paper is an outcome of a research conducted with an objective to study the achievement and personality pattern of Scheduled Tribe students of six tribal concentrated districts of Odisha. The study reveals that (1) the residential secondary school students score better than non residential students in aggregate achievement (2) the non government secondary school students perform better than government school students. The non government secondary school students are found to have higher level of mean academic achievement than government secondary school students. The study also reports that achievement doesn't have significant relationship with the personality pattern as a whole. But achievement of total sample students has significant positive relationship with only two of the fourteen HSPQ (R.B.Cattel) factors, i.e. 'less intelligent vs. more intelligent' and 'phlegmatic vs. excitable'. Based on the findings the study suggests some realistic measures for education of Scheduled Tribe Students of the country.*

### Rationale of the Study

The National Policy on Education as revised in 1992 has asserted the quality in education which has been reiterated in the section-4.1 of the document. It

states: "the new policy will lay emphasis on the removal of disparities and to equalise educational opportunities by attending the specific needs of those who have been denied equality so far". Since,

\*Associate Professor, Regional Institute of Education, Bhubaneswar, Odisha-751 022.

\*\*Assistant Professor, Regional Institute of Education, Bhubaneswar, Odisha-751 022.

Scheduled tribe groups are one of the recognised disadvantaged groups of the society, special planning and efforts have been made after independence to achieve the equality in education for them. Various committees and commissions, working groups and study teams were constituted to formulate policies, programmes and promotion of education of tribal communities. As a result the programmes such as establishment of ashram schools, preparation of text books in tribal languages, free supply of uniform, residential facilities were taken up. As per the 2001 census 47.1 per cent of the ST population above the age seven is found to be literate, the literacy rate being 59.17 for males and 34.76 for females. More than 22 per cent of populations of Odisha are tribals. In Odisha the literacy rate of tribals is lagging behind the literacy of tribal at the national level (37.37 per cent against national tribal literacy of 47.10 per cent). The country is moving towards universalisation of secondary education. The Selected Educational Statistics of MHRD (2005) reveal low achievement of ST students at secondary stage.

The quality of education is also dependent upon the academic achievement. Studies conducted by NCERT (Ambasth and Rath-1995; and Shukla-1995) reported low achievement amongst tribal primary school students in Mathematics and languages. Moreover, studies by Chobey (1990), Beckford (1993), Taylor (1994) and NCERT (2005) report low achievement of tribal students than their non tribal counter parts. Even Shukla (1995) reported large differences of achievement of tribal boys and girls

across the states. However, Panda (1992) did not find any significant differences in achievement between male and male tribal adolescents. Diwedy (2005), Lawrence (2005) and Michel (2005) revealed the significance of management and school environment on academic achievement of high school students.

Patel (1984) studied the personality pattern of tribal and non-tribal secondary school students and found significant differences in personality pattern of both the groups. Similarly, Panda (1991), Patel (1987) and Patel (2001) found significant differences in personality pattern of tribal and non-tribal students. However, Chobey (1991), Patel (2001), Rogers (2005) did not find any differences in personality and academic achievement of ST students (disadvantaged in foreign context) within the group.

Secondary education is a link between the elementary education in one hand and tertiary education on the other. Improved enrolment at the elementary stage has led to increase access to secondary schools. Most of the studies cited above on achievement and personality pattern have predominantly been conducted at the elementary level in view especially of the constitutional commitment to the universalisation of elementary education. As there are different type of secondary schools i.e., residential/non residential, government and non government and tribal and general schools having different levels of facilities, it is pertinent to study the differences if any in the achievement and personality pattern of students studying in these schools of Odisha. The study of achievement of ashram schools,

schools run by SC/ST Welfare Department, and government and non government schools will help the state and central government to plan interventions to increase the enrolment and achievement of ST students. More ever, findings of David (2005) and Peter (2006) that socioeconomic status, parental background as contributory factors towards academic achievement needs further exploration and verification in the conditions of Odisha is inevitable. As there is no research evidence of studying the relationship between achievement and personality pattern of scheduled tribe students studying in secondary schools of Odisha, study on achievement and personality pattern of scheduled tribe students studying in secondary schools was conducted.

#### **Objectives of the Study**

1. To study the achievement of secondary school scheduled tribe students in relation to their gender.
2. To study the achievement of secondary school scheduled tribe students in relation to their types of school.
3. To compare the personality pattern of scheduled tribe students studying in different types of secondary school.
4. To study the personality pattern of scheduled tribe boys and scheduled tribe girls of secondary schools.
5. To find out the relationship between achievement and personality pattern of scheduled tribe boys and scheduled tribe girls studying in secondary schools.
6. To find out the relationship between achievement and personality pattern

of scheduled tribe students studying in residential and non residential secondary schools.

7. To find out the relationship between achievement and personality pattern of scheduled tribe students studying in government and non government secondary schools.

#### **Hypotheses of the Study**

1. There exist no significant differences in the achievement of scheduled tribe students in relation to their gender.
2. There exist no significant differences in the achievement of scheduled tribe students studying in different type of secondary schools.
3. There exist no significant differences in the personality pattern of scheduled tribe students studying in different type of secondary schools
4. There exist no significant differences in the personality pattern of scheduled tribe boys and scheduled tribe girls of secondary schools.
5. There exist no significant relationship between achievement and personality pattern of the scheduled tribe students studying in residential secondary schools and the scheduled tribe students studying in non residential schools.
6. There exist no significant relationship between achievement and personality pattern of the scheduled tribe students studying in government secondary schools and the scheduled tribe students studying in non government secondary schools.
7. There exist no significant relationship between achievement and personality pattern of the scheduled tribe boys

and scheduled tribe girls studying in secondary schools.

### Method and Procedure

The present research is a descriptive survey type of study which includes the enrolment, achievement and personality pattern of the scheduled tribe and non scheduled tribe secondary school students. Here enrolment, achievement and personality pattern are dependent variables where as gender and school type i.e., residential and non-residential and the nature of management of schools i.e., government and non-government are independent variables.

### Population and Sample

On the basis of serious considerations of facilities, situation and criticisms of various techniques and purpose of the study the cluster cum purposive sampling techniques has been adopted in the present investigation. A sample of 900 secondary school students (IX Graders) was selected for the study from six tribal concentrated districts i.e., Baragarh, Sundargarh, Kandhamal, Baudh, Kalahandi and Mayurbhanj of Odisha. School Type and gender- wise distribution of the sample is presented in the table-1.

Table 1  
Distribution of Sample

Type of School	Government			Non Government			Total
	Boys	Girls	Total	Boys	Girls	Total	
Residential	236	250	486	0	0	0	486
Non residential	100	144	244	114	56	170	414
Total	336	394	730	114	56	170	<b>900</b>

### Tools Used

The investigators selected the following tools for the present study.

1. The gender, category of students, and achievement in school subjects were collected through a school information schedule developed by the investigators (Annual examination scores of students are collected as an index of academic achievement)
2. High School Personality Questionnaire (HSPQ) of R.B. Cattell (14PF) was translated to Oriya version and standardised by investigators.

### Statistical Techniques Used

In order to analyse the data with suitable statistical techniques, the following statistical procedures have been used in the present study.

1. The statistical technique of 't' is applied to find out significant differences in achievement and personality of students from different types of secondary schools.
2. Correlational analysis has been used to find out the relationship between different sets of variables.

**Delimitations of the Study**

The data have been collected from six tribal concentrated districts i.e. Sudargarh, Baragarh, Kalahandi, Kandhamal, Boudh and Mayurbhanj of Odisha. Achievement is judged by the previous class final examination scores readily available in the school.

**Major Findings of the Study**

One of the objectives of the study is to find out the achievement of secondary

school students of Odisha in relation to their gender and type of schools. The 't' values are calculated and the results with reference to aggregate marks have been calculated and shown in Table-2.

It is found from the Table-2 that "t" value of residential vs. non residential (25.24), government vs. non government (11.46), government residential vs. government non residential (22.37),

Table 2  
"t" ratio for Achievement of ST Students

Sl. No	Group	N	M	SD	t value	Relationship
1	Residential	486	235.68	18.42	25.24**	S
	Non-residential	414	203.99	19.06		
2	Government	730	201.38	17.56	11.46**	S
	Non-government	170	220.66	20.23		
3	Govt-residential	486	235.68	18.42	22.37**	S
	Non-government residential	244	201.90	19.65		
4	Govt-non-residential	244	201.9	18.24	3.48**	S
	Non-govt. Non-residential	170	220.66	20.23		
5	Boys	450	209.5'	16.68	2.58*	S
	Girls	450	212.69	20.12		
6	Residential boys	236	217.84	19.64	0.29	NS
	Residential girls	250	218.34	18.00		
7	Non-residential boys	214	207.12	19.86	3.25 **	S
	Non-residential girls	200	200.86	19.24		
8	Govt. boys	336	198.86	16.08	3.94**	S
	Govt girls	394	203.90	18.46		
9	Non-government boys	114	220.06	14.82	0.55	NS
	Non-government girls	56	221.26	12.48		

\*\* Significant at 0.01 level \*Significant at 0.05 level NS=Not Significant

government non residential versus non government non residential (3.48), and non residential boys vs. non residential girls (3.25 ) are significant at 0.01 level in the mean achievement of ST students. The 't' value of boys vs. girls (2.58) is significant at 0.05 levels. The 't' value for residential boys versus residential girls (0.29) and non government boys vs. non government girls (0.55) are insignificant.

The comparison of mean achievement of ST students in aggregate scores of various groups reveal that the residential students (235.68) score the highest and the government boys (198.86) score the lowest. When the mean aggregate score of students in relation to the type of secondary schools are compared, it is found that residential students (235.68) score better than non residential (203.99) and the non government students (220.66) score more than government students (201.38). When the mean aggregate scores of boys and girls are compared, it is found that girls perform better (212.69) than boys. Thus, it can be concluded that there is a significant effect of type of institutions and gender in achievement of scheduled tribe students studying in secondary schools of Odisha.

#### **Personality Pattern of Scheduled Tribe Students Studying in Different Types of Secondary Schools**

One of the objectives of the study was to compare the personality pattern of scheduled tribe students studying in different type of secondary schools of Odisha. The 't' value of different group of

students are presented in Table-3. It is observed from Table 3 that achievement doesn't have significant relationship with the personality pattern as a whole. Achievement of total sample students has significant positive relationship with only two of the fourteen factors i.e. B 'less intelligent versus more intelligent' ( $r = 0.1077$ ) and D 'phlegmatic vs. excitable' ( $r = 0.1021$ ). However, achievement of total students is positively related with all the 14 personality factors.

#### **Discussion**

The present study reveals that the residential secondary school students score better than non-residential students in aggregate. While the government has been spending a lot on education of residential students, this shows a positive sign. Further the non-government secondary school students perform better than government school students. The non-government schools are either partially run by state fund or fully run by private fund. The ST girls performed better than the ST boys in aggregate. The better academic achievements of residential school students have been supported by studies of Orr (2003) and Kozol (2006) in foreign context and studies of Diwedy (2005). The differences in the academic achievement of ST girls and ST boys have been supported by studies of NCERT (2005).

The results given earlier on differentials between the achievement of residential—non-residential and government—non-government secondary school students reveal significant differences in both the groups.

Table 3  
**Coefficient of Correlation(r) between Achievement and Personality  
 Pattern of ST Students (N=900)**

Sl. No.	Personality factors		Coefficient of Correlation(r)	Relationship
1	Personality pattern		0.044	NS
2	A	Reserved vs. outgoing	0.0129	NS
3	B	Less intelligent vs. more intelligent	0.1077*	S (0.05 level)
4	C	Affected by feeling vs. emotionally stable	0.0227	NS
5	D	Phlegmatic vs. excitable	0.1021*	S (0.05 level)
6	E	Obedient vs. assertive	0.0093	NS
7	F	Serious vs. happy go lucky	0.0229	NS
8	G	Expedient vs. assertive	0.063	NS
9	H	Shy vs. venturesome	0.034	NS
10	I	Tough Minded vs. tender Minded	0.058	NS
11	J	Vigorous vs. doubting	0.0126	NS
12	Q1	Placid vs. apprehensive	0.051	NS
13	Q2	Group dependent vs. self sufficient	0.018	NS
14	Q3	Undisciplined vs. controlled	0.027	NS
15	Q4	Relaxed vs. tense	.0127	NS

\* Significant at 0.05 level \*\* Significant at 0.01 level NS not significant

The non residential students are found to have lower academic achievement in aggregate. The non-government secondary school students are found to have higher level of mean academic achievement than government secondary school students of Odisha. This has been supported by the studies of Diwedy (2005), and Kozol (2006).

The results presented earlier on personality pattern of ST students of different schools reveal that in all

personality factors there exist positive correlation. Only in some factors it is significant. The findings of the present study seems to be in the direction of results obtained in some similar studies by Chobey (1990), Mavi and Patel (1997) and Patel (2001) in Indian context and studies by David (2005) in foreign context. The results presented earlier on the relationship of academic achievement and personality pattern reveal a positive but insignificant

relationship between academic achievement and personality pattern. This finding is also been supported by the studies of Sutradhar (1982), Mavi and Patel (1997) and Patel (2001).

### **Education Implications**

Proper study atmosphere, recruitment of dedicated teachers may be done in both residential and non residential secondary schools. Schools run by SC, ST Welfare department, and School and Mass Education Department of Government of Odisha need to take steps for recruitment and training/orientation of teachers.

The home and the early environment of the tribal children make them deficient in cognitive abilities. So by the time they reach the school, they lag behind their non-tribal counterparts and the gap unless checked early goes on widening in what is known as cumulative deficits. Thus, preschools should cater to the improvement of the child's physical and mental health, emotional and social development, conceptual and verbal skills and motivation to learn.

Language and text books should be written in bilingual mode at least at elementary stage. In the local school (primary) local tribal people should be appointed as teachers. It will reduce the gap between the school and the home environment of tribal learners as it will be based on the tribal cultures. Multilingualism should be encouraged.

In devising and selecting methods of teaching for tribal children, there learning styles viz. learning by doing, learning by memory, story telling, oral reading, recitation, repetition, group method and role playing may be

profitably be applied to teach tribal children. Besides the self esteem, self discovery, introspection and self identity may also be effective for ST children.

A general orientation of teachers in having an insight in to the problems of ST children and their specific difficulties, and the ways to take them may also serve useful purpose. The orientation of teachers with regard to developing an awareness of enrolment status, relationship of achievement and personality pattern achievement of different group of students are very important. The heart of the educational process is the interaction between the teacher and students. It is through this interaction that school makes the positive impact upon the child. So teacher should provide affirming attitude and positive expectations from the ST children.

As ST at the primary lack test taking skills, it has a cumulative effect on performance at secondary stage. The instructions for test/evaluation at primary stage should be made clear and content should not create cultural problems for them. More practice in taking tests should be given to them. Adequate infrastructure facilities viz. school building, hostels, electricity, portable water supply, girls' toilet and road communication should be provided in secondary schools in tribal concentrated districts. The non residential schools should be taken care of in terms of adequate provision of infrastructure.

The role of the state and the central government seems to be crucial in helping ST children to get equal benefits from the educational provisions. The first requirement of such an educational

strategy for education of ST students is a proper survey of needs and problems of these children and their community. Only on such a sound survey the educational facilities and status can be judged.

### REFERENCES

- AMBAST, N.K and RATH. K.B. 1995. *Effect of household, community and school factors on the enrolment, retention and achievement of Scheduled Tribe students at primary level. In School effectiveness and learning achievement at primary stage: International perspective*, New Delhi, NCERT
- BECKFORD, I. 1993. "Variation in achievement between blacks and whites in Pennsylvania elementary school", *Dissertation Abstract International*, Vol-54, No-9, p-3320A.
- CHOBAY, M. 1990. *A comparative study of personality factors, academic adjustment and scholastic achievement of socially high and low deprived tribal youths in Rajasthan*. Unpublished PhD Thesis University of Rajasthan.
- DAVID, E. 2005. "An investigation into the relation between the five factor model of personality and academic achievement among children", *Dissertation Abstract International*, Vol-66, No-3, p-89A.
- GOVERNMENT OF INDIA. 2001. *Union Primary Census abstract of Scheduled Castes and Scheduled Tribes*, New Delhi
- GOVERNMENT OF INDIA. 2002. *Report of the Working group on Education of Socially disadvantaged sections*, Planning Commission, New Delhi
- Kozol, J. 2006. *The shame of the nation: The restoration of apartheid in schooling in America*, Random house, New York
- LAWRENCE. 2005. "Academic achievement of Hispanic students in Orange country public high school", *Dissertation Abstract International*, Vol-66, No-8, p-2883A
- MAVI, N.S and PATEL, I. 1997. "A study of the academic achievement in relation to selected personality variables of tribal adolescents", *Indian Educational Abstract*, Issue-4, p. 73-81
- MHRD. 2005. *Selected Educational Statistics 2005-06*, Department of Higher Education, New Delhi
- MICHELLE, A. 2005. "The connection between social skills and academic achievement among Latino and Caucasian elementary school children", *Dissertation Abstract International*, Vol-66, No-5, p-2639A.
- NCERT. 1995. "School effectiveness and learning achievement at primary stage", *International Seminar Compendium*, New Delhi.
- NCERT. 2005. *National Curriculum Framework*, New Delhi.
- ORR, A.J. 2006. "Black white differences in achievement, the importance of wealth", *Sociology of Education*, Vol-76(4), pp.281-304.
- PANDA, B.N. 1991. "Self concept and academic achievement of tribal adolescents", *New frontiers in education*, Vol-xxi No-3, pp-404-407.
- PANDA, B.N. 1992. Study habit of disadvantaged and non disadvantaged adolescents in relation to sex and academic performance, *Indian journal of psychometric and education*, Patna.
- PATEL, D. 2001. *Effects of acculturation and sex on cognitive and non cognitive structures of the scholastic achievement of Kharia and Munda tribe adolescents of Orissa*, Unpublished Ph.D Thesis, Utkal University, Bhubaneswar

- PETER, R. 2006. "Effects of rural high school size and socio-economic status on achievement of tenth graders", *Dissertation Abstract International*, Vol-67, No-3, p-1689A
- REDDY, P.K. 1989. *A comparative study of some social facets of personality of Khari children between the age of four and ten years in families of working and non working mothers*, Unpublished PhD Thesis, NEHU University
- SHUKLA, N. 1995. *Effectiveness of various interventions for improving tribal education, In-School effectiveness and learning achievement at primary stage; International perspective*, NCERT, New Delhi
- SUTRADHAR, P.K. 1982. *Socially disadvantaged and advantaged children: Psychological study of their relative academic achievement*, Unpublished PhD Thesis, Calcutta University
- TAYLOR, J. 1994. "A study of selected factors affecting drop out status among students in grade eighth through tenth", *Dissertation Abstract International*, Vol-55, No-5, p-1236A