

G. D, Pandey

Some Correlates of Literacy and Educational Attainment among Tribal Children in Rural Madhya Pradesh

Introduction

A PROMINENT goal of India's Plan Documents is the achievement of universal availability and equality of opportunity for education as a basic means of promoting the general welfare. But attainment of this goal is still a long way from being accomplished. Projections of trends in literacy rates between 1971 and 1981 indicate that, for all India, it will take another 7 decades or so for the goal of complete literacy to be achieved if current trends continue (Sharma and Retherford 1987). Though this high rate of illiteracy (63.7 per cent) is a matter of concern, still more is the fact that education has hardly touched the lower socio-economic strata.

The educational development of the scheduled castes and scheduled tribes has been lower than that of the general population (Singh 1985). The literacy rate in general population is 36.2 per cent whereas among the scheduled tribes, it is 16.4 per cent as per 1981 census. Further, in Madhya Pradesh, where about one fourth of India's tribal population inhabitates, the literacy rate among the tribals is only 10.7 per cent. Still more worrying is the illiteracy among the tribal women (96.4 per cent). Since these tribals, unlike others, for centuries lived in isolation and thus could preserve their social customs and beliefs to a large extent, schooling and educational attainments of their children are likely to be affected by their primitiveness, perceptions and beliefs besides high poverty prevailing among them (90 per cent tribals of the state are below poverty line) (Srivastava 1987). This paper attempts to study the pattern of educational attainment among tribal children and to identify correlates of their literacy and educational attainment in rural areas of Madhya Pradesh. Attempts have been also made to locate points of differences with non-tribal population living in the same area. More specifically, the objectives of this paper are:

1. to study the educational profile of tribal children,
2. to study how far parity and sex of tribal children are associated with their literacy and educational attainment,
3. to study association between parent's characteristics and the children's educational achievement in a tribal society,
4. to study the working status of children who do not go to school.

* Senior Research Officer, Division of Statistics & Demography, Regional Medical Research (I.C.M.R.), Jahalpur-482003.

5. to compare the above observations with the characteristics of the non-tribal children living in the same area.

Data and Methodology

A project "Collection of Vital Events through Village Health Guides" in 10 VHG areas of Kundam tribal block of Jabalpur district was introduced in August 1986 under the auspices of RMRC (ICMR), Jabalpur, to study whether Village Health Guides (VHG) could effectively be used to collect information related to vital events. Initially, a baseline survey of households was carried out and basic information on several socio-economic and demographic characteristics of the households was collected. The analysis presented here is an outcome of this baseline data.

The total number of households covered in this study was 2261 comprising 12011 individuals. The sample population consisted of 57.5 per cent tribals (Gonds, 51.7 per cent and Baigas, 5.8 per cent) and 42.5 per cent non-tribals (scheduled castes 15.1 per cent, Muslims 2.1 per cent and other castes 25.3 per cent). Details of survey are given elsewhere (Singh and Pandey 1987). The present study is based on data collected from 2824 children of school going age (5-14 years) of which 1631 were tribal children. Some characteristics of the surveyed population are given in Table 1.

It is clear from Table 1 that as compared to the non-tribal population living in the same administrative block, the tribal population differs significantly with respect to general literacy level both among males and females, literacy of the head of the household and percentage of population engaged in agriculture. However, compared to the corresponding population characteristics of rural Madhya Pradesh as a whole, literacy rate and percent cultivators were higher for the tribal population under study.

Results

For convenience the results have been discussed in eight sections. The first section discusses the general literacy levels and trend over time among tribal and non-tribal populations. Sections second, third and fourth are devoted to demographic background and educational attainment of the tribal and non-tribal children. Sections fifth and sixth test association between schooling status of children and their demographic and parental characteristics and the last two sections deal with work status of children who do not go to school and reasons for non-schooling.

I. Level of Literacy and Trend Over Time

The definition of literacy in this paper is similar to the usual census definition where a literate person is one who can read and write. The literacy rate among the recently born, cohort (1960-70) of the tribes is 30 per cent (50 per cent males and 10 per cent females). It is quite high compared to those born earlier (13 per cent males and 7 per cent females among born before 1940). Table 2 shows that over time literacy has increased both among the tribal and non-tribal population. However, the increase was higher among the non-tribal. As a

result, the gap in literacy level between tribal and non-tribal has increased. For example, the difference in literacy levels was only 6.3 per cent points in the cohort of pre 1940, while it increased to three times (17.4 per cent points) in the cohort of 1960-70. It is more so, for females where the tribal-non-tribal gap has increased seven fold over the last 40 years.

TABLE 1 : CHARACTERISTICS OF THE POPULATION UNDER STUDY

<i>Characteristics</i>	<i>Type of Population</i>		<i>Rural M.P</i>
	<i>Tribal</i>	<i>Non-tribal</i>	
Type of Household (in percent)			
Nuclear	48.6	40.1	N.A.
Joint	51.4	59.9	N.A.
Education of Head of Household (in percent)			
Illiterate	74.9	54.6*	N.A.
Primary	15.3	26.5	N.A.
Middle	6.3	11.5	N.A.
High School and Above	3.5	7.4	N.A.
Age Composition (in percent)			
0-14	38.4	39.2	41.9
15-59	55.4	54.9	51.3
60+	6.2	5.9	6.8
Masculinity Proportion	50.3	52.1	51.1
Mean age at Marriage			
Male	18.3	18.8	20.6**
Female	15.5	15.7	16.5**
Literacy Rate (in percent)			
Total	26.4	41.8*	21.2
Male	40.7	59.9*	32.9
Female	12.1	26.8*	8.9
Main Occupation (in percent)			
Agriculture	44.4	29.6*	35.8
Non Agriculture	7.4	14.2	10.3
Non-workers	43.2	56.2	53.9
Eligible Couples (15-44)			
(per 1000 Population)	178.1	173.6	178.1**

* Difference is significant at 5% level.

** Figures are combined for rural and urban.

TABLE 2 : PERCENTAGE OF LITERACY AMONG TRIBAL AND NON-TRIBAL POPULATION ACCORDING TO BIRTH COHORT

<i>Birth Cohort</i>	<i>Literacy (percent)</i>	<i>Literacy (percent)</i>		<i>Difference (percent points)</i>
		<i>Tribal</i>	<i>Non-Tribal</i>	
Pre 1940	M	12.8	24.9	12.1
	F	0.5	3.0	2.5
	T	6.6	12.9	6.3
1950-60	M	37.0	64.9	27.9
	F	5.9	20.2	14.3
	T	21.4	42.0	20.6
1960-70	M	49.7	68.0	18.3
	F	10.1	27.4	17.3
	T	29.9	47.7	17.8
1970-80	M	58.7	87.2	28.5
	F	31.1	49.2	18.1
	T	44.9	68.2	23.4

The children born after 1970 may still join school sometimes in future and literacy levels calculated for this cohort may give under estimates but for the sake of comparison the 1970-80 cohort has been included. It may be noticed that the literacy has considerably improved among the tribals. While among the males it increased from 12.8 in pre-1940 birth cohort to 58.7 per cent in 1970-80 cohort, among females it increased from 0.5 per cent to 31.1 per cent. In other words, literacy among the tribal females has increased 62 times as compared to 16 times among the non-tribal females over last four decades. Progress in literacy over different cohorts has shown a relatively higher and consistent achievement for the females (both among tribals and non-tribals) than males.

The ratios of literacy rates in a cohort to the same for previous cohorts, i.e. from 1940-50 to pre-1940, 1950-60 to (1940-50) and so on, for tribal females are 2.3, 1.4, 1.4, 1.4 as compared to the males 2.2, 1.3, 1.0 and 1.0. The corresponding figures for non-tribal females are 2.2, 1.5, 1.1, 1.2 and for males are 1.9, 1.4, 1.0, 1.0.

The analysis thus shows that, though the progress in literacy both among the tribals and non-tribals was found to be very encouraging, the tribal/non-tribal differences in magnitudes of literacy rates have increased by three times over the last forty years. The differences have increased significantly particularly for the females where difference in literacy rates which was 2.5 percent points in pre-1940 cohort, increased to 18.1 in 1970-80 cohort. This shows that the non-tribal population has been benefitted more by the increasing educational facilities. As a result, the gap between tribal/non-tribal population has increased to seven times over last forty years. These observations suggest that more efforts are needed to provide infrastructure and other facilities alongwith motivation and increasing awareness for need of education for children, particularly for female children.

II. Social and Demographic Characteristics of Children (5-14 Years)

The social and demographic profile of children aged 5-14 years is given in Table 3. This table presents a cross cultural and cross sectional distribution of children according to different demographic characteristics. About one per cent male and 5 per cent female children were found married. Among the tribal children, 45 per cent and among the non-tribal children, 70 per cent were literate of which 32 per cent and 60 per cent were currently in school. Among the children, who were not going to school, majority of them (44 per cent among the tribals and 29 per cent among the non-tribals) were reported as non-workers.

TABLE 3 : PERCENT DISTRIBUTION OF CHILDREN (5-14) ACCORDING TO THEIR SOCIO-DEMOGRAPHIC CHARACTERISTICS

<i>Characteristics</i>		<i>Tribal</i> (i = 1631)		(in percent)	
				<i>Non-Tribal (n = 1193)</i>	
Married					
	M	0.63		1.43	
	F	5.60		5.17	
Educational Level					
	Illiterate	55.1		29.8	
	Primary	37.5		55.6	
	Primary above	7.4		14.6	
Occupational Status					
Student	M	} 45.3 18.7	32.0	69.6	} 60.2
	F			50.8	
Own agriculture	M	} 14.6 18.6	16.6	4.1	} 5.8
	F			7.5	
Labourer	M	} 8.2 6.5	7.35	5.6	} 5.4
	F			5.1	
Non-worker	M	} 31.9 56.2	44.0	20.7	} 28.6
	F			36.6	

III. Literacy among Children by their Sotio-demographic Background

Table 4 presents socio-demographic profile of tribal and non-tribal children by their educational attainments and suggests its correlates. It may be noticed that the education of child is considerably affected by the social, economic and demographic profile of the child. As is evident, 45 per cent tribal children are found literate as compared to 70 per cent among the non-tribal children. Further, it appears that the sex bias in literacy or schooling is not

different in the tribal and the non-tribal population. The analysis shows that, for every 100 male children, only fifty-three tribal female children and fifty six non-tribal female children were literate. Patterns of literacy among children in regard to type of household, parity of the child, main occupation of the household did not differ between tribal and non-tribal population. The mean age at the entry in the school also did not differ considerably and it was estimated to be about seven years in both the communities.

TABLE 4: PERCENT DISTRIBUTION OF CHILDREN (5-14) ACCORDING TO THEIR LITERACY LEVEL AND SOCIO-DEMOGRAPHIC CHARACTERISTICS

<i>Socio-demographic characteristics</i>	<i>Percentage of literate children</i>	
	<i>Tribal (N=1631)</i>	<i>Non tribal (N=1193)</i>
Sex		
Male	58.7	87.2
Female	31.1	49.2
Ratio of female literate to male literate children	52.9	56.4
(per cent)		
Type of Household		
Joint	52.6	79.9
Nuclear	37.2	56.4
Parity		
First	46.7	70.9
Second	43.7	71.8
Third	45.5	76.5
Fourth and more	50.5	72.0
Main Occupation of Household		
Cultivation	44.6	69.2
Labour	36.9	59.8
Others	52.1	71.2
Mean Age at the Entry in the School	6.9	6.6

IV. Educational Attainment of Children (5-14 Year)

Percent distribution of children according to the class in which they are studying/received education have been given in Table 5. It may be noticed that about 11 per cent tribal children and 14 percent non-tribal children were in class-I. The percentage for tribal children decreased to 8 in class II, to 5 in class V, to 2 in class VIII and above, while the corresponding percentages for the non-tribal children were 11,9, 3. Thus, the difference of 3 to 4 per cent points in educational attainment was found in each class from I to V indicating a higher drop out rate among tribal children. For instance, the percentage of tribal children in class V is about half of the same in class I and one sixth in class VIII. The corresponding figures among the non-tribal children are two-third and one-fourth respectively. It may also be pointed out that compared to the male children, the drop-out was more among the female children particularly so among the tribals.

TABLE 5 : PERCENT DISTRIBUTION OF CHILDREN (5-14) ACCORDING TO STANDARD OH EDUCATION

<i>School class Standard</i>	<i>Tribal</i>			<i>Non-Tribal</i>		
	<i>M</i>	<i>F</i>	<i>T</i>	<i>M</i>	<i>F</i>	<i>T</i>
Non-Schooling	43.7	68.4	55.1	24.8	36.0	29.8
I	13.6	7.6	10.8	14.5	12.7	13.7
II	8.9	6.5	7.8	11.7	10.9	11.3
III	7.4	6.0	6.7	11.4	9.4	10.5
IV	7.7	5.9	6.9	11.7	9.4	10.7
V	7.2	2.8	5.2	9.8	8.7	9.4
VI	4.7	1.7	3.3	8.0	7.6	7.8
VII	3.7	0.9	2.4	4.3	3.0	3.7
VIII and above	3.1	0.2	1.8	3.8	2.3	3.1
Total	830	709	1,539	687	570	1,257

V. Differential in Education of Tribal Children by Parity and Sex

The educational attainment of children (5-14) by parity and sex was studied in order to assess whether the parity of children is correlated with the educational status. Table 6 gives this distribution. Among the tribals, the low parity male child is less likely to go to school as compared to the female child. The observations are reversed in case of female non-tribal child, where low parity children are more likely to go to school. This observation among the tribals, that the oldest male child is more likely to stay at home may be due to their poor economic status, they are required to help their parents in their economic activities. Among the non-tribals, it appears that there is no effect of parity on the schooling of male children, but the chance of schooling is lower for a female non-tribal child of lower parity. Similar situation is observed by Pandey and Talwar (1980) in rural areas of Uttar Pradesh. Another observation which emerges from Table 6 is that the difference between the male and female tribal children who go to school keeps on increasing with parity. That is, higher the parity, higher the differential between male and female children who go to school. No such pattern is observed among the non-tribal children. It is also interesting to note that among the tribal male children having education upto primary level, only 24 per cent of parity I, 31 per cent of parity II, 30 per cent of parity III and 26 per cent of parity IV continued their studies beyond the primary level, while the corresponding figures for the non-tribal children are 31, 18, 12, 30 which shows the tribals are aware of importance of educational attainment. The situation in regard to tribal female children is not much encouraging. Among the tribal female children with primary level education only 6-11 per cent (depending on parity) continued their education beyond primary level while percentage in their non-tribal counterparts ranges from 18 to 21 depending on different parities.

TABLE 6 : PERCENT DISTRIBUTION OF CHILDREN (5-14) ACCORDING TO PARITY AND EDUCATIONAL ATTAINMENT

Educational attainment	Ethnic group	Parity of child							
		I		II		III		IV	
		M	F	M	F	M	F	M	F
Illiterate	T	47.4	60.0	46.3	66.2	42.6	66.4	39.2	59.8
	NT	25.9	32.3	27.8	28.6	22.4	24.5	39.9	25.2
Primary	T	42.3	37.7	41.0	32.4	44.1	31.0	48.3	36.2
	NT	56.5	56.9	61.1	58.9	69.0	69.8	53.3	63.1
Above Primary	T	10.3	2.3	12.7	1.5	13.2	2.6	12.5	3.9
	NT	17.6	10.8	11.1	12.5	8.6	5.7	15.8	11.7

T: Tribal; M: Male; NT: Non-Tribal; F: Female.

VI. Association between Parental Characteristics and Educational Attainment of Children (5-14 Years)

Education of Father. The mothers in the study area were usually illiterate and worked as house-wives. Therefore, father's literacy level and his occupational status was considered as a potential factor, influencing educational status of their children. An analysis of the educational status of children by literacy status of the father revealed that the schooling of a child is highly associated with literacy of his father ($\chi^2 = 136$, d.f. = 1). Among the tribal children, only 39 per cent children of illiterate fathers were going to school as compared to 57 per cent children of literate fathers. The corresponding figures for non-tribal children were 48 and 68 respectively. It is true both for male and female children. Among tribals, the percentage of female children going to school was twice in case of literate father as compared to illiterate father. However, the increase was not so high in case of non-tribal female children.

Occupation of Father. An analysis of educational status of children by occupation of their father revealed that, among the tribals, occupation of father had no significant effect on the the schooling of children. The only exception was the occupation 'service', where seventy per cent children were attending school. However, in case of the non-tribals, the fathers working as agricultural labourers had the largest (50 per cent) percentage of illiterate children and the fathers engaged in service had the lowest (15 per cent). Also, those who went to school in their early ages, had to discontinue their schooling to undertake some job. This fact is more clear from Table 7. since only 6-11 per cent tribal children continued their education beyond the primary level. The situation among non-tribals, though better, was not much encouraging as only 8-21 per cent children continued their education beyond the primary level. It may be noted the data is more consistent in regard to the father's working as labourer in both of the social groups—tribal and non-tribals. The tribal/non-tribal difference in schooling and educational attainment is minimum

TABLE7 : PERCENTAGE DISTRIBUTION OF OCCUPATION OF FATHER ACCORDING TO THE EDUCATIONAL ATTAINMENT OF THEIR CHILDREN

<i>Educational attainment</i>	<i>Occupation of Father</i>											
	<i>Cultivator</i>		<i>Ag. Labour</i>		<i>Labour</i>		<i>Business</i>		<i>H. H. Industry</i>		<i>Services</i>	
	<i>T</i>	<i>NT</i>	<i>T</i>	<i>NT</i>	<i>T</i>	<i>NT</i>	<i>T</i>	<i>NT</i>	<i>T</i>	<i>NT</i>	<i>T</i>	<i>NT</i>
Illiterate	55.3	27.9	6.38	28.1	61.0	50.0	64.3	13.4	-	55.3	31.3-	15.2
Up to primary	37.2	57.1	3.12	57.8	31.9	41.9	35.7	70.4	-	33.0	57.6	63.8
More than primary	7.5	15.0	5.0	14.1	7.1	8.1	-	16.2	-	11.7	11.1	21.0

T : Tribal; NT: Non -Tribal.

when the father of the child belonged to the labour class. This observation indicates that the schooling is mainly an economic problem. The pattern in the occupation of agricultural labour is not similar to that of labour class because the agriculture labourers in the tribal villages do not get much wages as compared to the non-tribals. In contrast, when they worked as labourers (mostly job given by the contractors), no discrimination is made in payment of wages and thus both have similar economic status reflecting similar schooling pattern of their children.

VII. Working Status of Children who do not Go to School

It is interesting to know as to what do the children do if they do not go to school? Table 8 gives the distribution of children by their work status. It may be noticed that most of them do not work or are perceived as not working by elders in the family and thus reported as non-workers. Their percentage is 65 among the tribal and 71 per cent among the non-tribal children. As is evident from Table 8, 24 per cent among the non-school going tribal children were helping their family in cultivation and 11 per cent were working as labourers. The corresponding percentages for non-tribal children were 15 and 14 respectively.

TABLE 8 : PERCENTAGE DISTRIBUTION OF CHILDREN (5-14) NOT GOING TO SCHOOL
WORKING STATUS

<i>Working Status of Children</i>	<i>Tribal</i>	<i>Non-Tribal</i>	<i>Total</i>
Own Agriculture	24.3	14.7	19.5
Labour	10.7	13.7	12.2
Service	—	—	—
Business	—	0.2	0.1
Non-Worker	65.0	71.4	68.2
Total number of children	1008	475	1483

VIII. Reasons for not Going to School.

Various reasons as stated by the parents for their children not attending school are presented in Table 9. As is evident from the table, 28 per cent female children were not attending school because their parents were of the opinion that girls should not go to school. Another about 29 per cent children were looking after the young siblings or were taking cattle for grazing. About 14 per cent were not sent to school because school was far off. These observations are consistent with the observations made by Mishra, *et al.* (1990) in a different tribal area of Madhya Pradesh.

TABLE 9 : PERCENT DISTRIBUTION OF TRIBAL CHILDREN (5-14) NOT GOING TO SCHOOL ACCORDING TO REASONS FOR NON-SCHOOLING

<i>Reasons</i>	<i>Percentage children who do not go to school</i>		
	<i>M</i>	<i>F</i>	<i>Total</i>
1. Agricultural activities labour	32.8	30.6	31.7
2. Look after the young sibilings/take cattle for grazing	30.2	28.0	29.1
3. Unwilling to go school/ Girls should not be sent to school	0.5	28.4	14.5
4. School is far off	19.7	8.3	14.0
5. The child is too young	16.8	4.7	10.7
Total	519	489	1000

M : Male; F : Female.

Summary and Conclusions

From this study, the following points have emerged:

- (a) The literacy among the tribals has improved considerably over time. However, the increase is much faster among the non-tribals. As a result, the study shows that the gap in literacy levels between tribals and non-tribals has increased seven times over last forty years.
- (b) The drop-out cases are higher among the tribal children particularly among the females after the class V. Only one-sixth enrolled in class VIII compared to class I.
- (c) The low parity tribal male children are less likely to go to school and also have higher chance of drop-out.
- (d) The children, particularly female children, of literate fathers are more likely to go to school.
- (e) The children of fathers working as agriculture labourers are less likely to go to school. (f) About one-third children who do not go school assist their parents in economic activities, (g) One-fourth of the tribal female children are not being sent to school on the plea that they are females. Another one-fourth were looking after their young sibilings or taking the cattles for grazing. About 14 percent children are not sent to school due to distance.

The above observations indicate that there is a need to look into the educational planning, particularly for the tribals. Besides, increasing infrastructure, there is a need for motivating and educating the tribal people regarding importance of literacy particularly for the females where tribal/non-tribal gap in literacy is increasing over time. Poverty is also one of the important causes for non-schooling of the tribal children, as instead of sending them to school,

they are required to help their parents in economic activities at homes. This suggests that income generating activities should also be made a part of curricular in the schools in tribal areas.

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References

- Mishra, D. K., Pandey, G. D. and Sinha, P. K., 1990, *Economic Aspects of Health Care in a Tribal Area of Madhya Pradesh*. Regional Medical Research Centre (I.C.M.R.), Jabalpur (mimeo). Pandey, G. D. and Talwar, P. P., 1980, Some correlates of literacy and educational attainment among the children in rural areas of Uttar Pradesh. *Demography India*, 9:129-138. Sharma, O. P. and Retherford, D. R., 1987, Recent Literacy Trends in India. *Occasional Paper No. 1*, Registrar General, India, New-Delhi.
- Singh, A. K., 1985, Education and development in India: The God that failed. *Social Change* 15(3): 3-15. Singh, R. J. and Pandey, G. D., 1987, *Differentials in some Demographic Characteristics of Tribal and Non-tribal Population of a Rural Area of Madhya Pradesh*. Regional Medical Research Centre (I.C.M.R.), Jabalpur.
- Srivastava, O. S., 1987, *Techno-economic Profile of Madhya Pradesh*, Vikas Publications, Bhopal.