

# **EDUCATIONAL ACHIEVEMENT THROUGH THE LENS OF SOCIAL INEQUALITY: A STUDY IN A TRIBAL BELT OF MADHYA PRADESH**

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## **ABSTRACT:**

The connection between social inequality and the actual level of learning is not as well understood in India as the patterns of inequality in enrolment. A study was conducted of 23 neighbouring and similar government primary schools in a tribal belt of southern Madhya Pradesh to get the correlation of pupils' maths and language scores with various contextual factors. These included the pupils' gender, geographical location, out of school academic support provided by an external agency and their parents' caste, class, gender, political influence and education. Regression analysis was done to get the partial correlations after controlling for other factors. The greatest contributors to academic scores were found to be the parents' education and their political influence. Caste and class were significant processes but made relatively less contributions. Gender was statistically significant but had the least correlation with scores. The available out of school support was of a magnitude sufficient to decrease the difference between the advantaged and the disadvantaged, but in its present form was unlikely to ever erase it. The results suggest a need for rethinking some theoretical formulations in the sociology of education in India.

The growth of schools and universities in India is going hand in hand with the greater importance of degrees for social stratification. The formal education system is allocating an increasing number of roles in different strata of Indian society. While the educated sections may believe this to be right and proper, it is also true that education can give covert advantages and disadvantages to certain groups of children. This inevitably challenges some of the values associated with education in democratic societies. Education is commonly seen there as a way to open closed doors for the under-privileged and as the pathway to freedom from poverty and oppression. In India, the idea of "ability" has deep respect from the educated sections and, in combination with hard work, is seen as the means to greater prestige and wealth. It is believed by them that higher ranks in society come directly from good habits and personal qualities. The education system is thus supposed to give freedom and higher salaries to those who deserve it, through fair opportunities for upward mobility. However, there are large grey areas in this moral imaginary of achievement and just rewards. It is, for instance, well established that systemic disadvantages exist which go against the basic values of this vision.

Some of the systemic disadvantages are obvious while others need a bit of digging to uncover. The most visible disadvantages are seen in the process of access. Some kinds of education lead much more easily to higher ranks and wealth. These have been documented in a number of government, NGO and academic reports. A common practice has been to focus on the transition points in schools and colleges and note how progressively fewer of the under-privileged move on after every major board or university examination. This has commonly been measured through their sharply higher drop-out rates. For instance, the gross enrolment ratio (the ratio of students enrolled in comparison to the population in that age group) for class XI-XII students in 2007-8 shows clearly that the SC are below the average and the ST are further below them. (MHRD 2008) In all the groups, girls have a

lower presence than boys in school. In other words, there are some social (and not just individual) processes which are creating handicaps for certain sets of young people and giving advantages to others.

GER class XI-XII (16-17 years)

	BOYS	GIRLS
All-India Average	36.26	30.4
SC	30.12	25.31
ST	24.25	16.2

Source: MHRD 2008

The above patterns are corroborated through a vast multitude of studies. The 61<sup>st</sup> round of the NSSO's national survey, conducted in 2004-5, reports similar gulfs between the enrolments of SCs, STs, OBCs and the rest (NSSO 2006: A11-A22). The Sachar committee report made use particularly of the 2001 census, which was the first in recent years to enumerate how high respondents had made it in the education system. This report documented at length the differences in educational levels between Muslims and other social groups. Muslims were observed to be consistently lagging behind the "upper" castes and in some indicators were below the SC/ST as well (Prime Minister's High Level Committee 2006: 49-85).

## STUDYING INEQUALITY IN EDUCATION

Understanding and measuring the extent of inequality in education is one of the important tasks facing us. The most common way of examining inequality in education has been that of studying how high students are able to go in the education system. The indicators commonly used for this are the gross enrolment ratio and the drop-out figures of different classes and communities and genders. The differences between the number of young people from different social groups who move into higher levels of school or college are an expression of social inequality. Transition rates have been the focus of the best known studies of inequality in education (e.g. Shavit and Blossfeld 1993, Raftery and Hout 1993) since mobility is often seen as a process of moving from one particular set of positions to another.

A distinct shade of inquiry into educational inequality has looked at the differences in learning *within* schools and universities themselves, rather than on who gets left out of them. It looks at how differences are created within these institutions between the privileged and un-privileged groups in terms of the level or kind of learning which is achieved by them. This approach is exemplified, for instance, by Pierre Bourdieu and Jean-Claude Passeron's book *The Inheritors* (Bourdieu and Passeron 1979) in which they argued that the culture of French universities of the 1960s was such that it gave the greatest advantages to young people from higher executive and professional classes. The result was that youth of other classes did less well and got lower scores. The teachers could tell themselves that they had been scrupulously fair in grading examinations, but still the result was invariably tilted in favour of the advantaged social groups.

In recent years we have seen a sharp increase in enrolment rates and state governments have been declaring satisfactory levels of school presence of various under-privileged groups in primary schools. Under these circumstances, the study of why different social groups learn in different ways is drawing greater attention. Several scholars have pointed out that social exclusion operates beyond

questions of brute access. Potent disadvantages come into play even after children have entered a school and its classroom (e.g. Subrahmanian, et.al. 2003, Velaskar 2008). In developed countries it is emerging that subsequent to all children gaining access, children from middle class backgrounds seem to do much better than others (Nogueira 2010, Ball 2003). Scholars there have been pointing to another direction of inquiry: not just what happens in school, but also the variations in the roles played by parents in promoting the education of their children. Phillip Brown (1990) was amongst the first to point out that the equalizing effect of schools is actually declining in significance as the social differences between parents re-assert themselves. The effects of globalization on middle-class jobs in the developed economies has led to greater competition and insecurity. Under these conditions, parents pour in their resources in helping their own children get ahead by learning more as well as by focusing on strategically advantageous knowledges. The meritocracy, these scholars argue, is being subverted by a “parentocracy”.

A small but growing number of studies in India report broadly similar observations from here, too (Nambisan 2010). Among the few large scale surveys which examined differences in learning levels, rather than transition rates, is the India Human Development Survey conducted in 2005 which surveyed 41550 households. This showed differences in actual levels of learning at the primary school level amongst different castes and communities even after allowing for differences in socio-economic factors and rural-urban residence (Desai, Adams and Dubey 2008).

In India, while there has been considerable progress in recent years, we are still far short of a comprehensive understanding of what education does to a social structure. We do not know the dimensions or the limits of the processes shaping inequality through education. We do know that caste, class, gender and geography all matter in the creation of inequality and opportunity through schooling. But we are still trying to estimate how and how much. We do not have strong evidences to decide whether, say, caste is more important than class in educational attainment. Our understanding of class processes in India and their interaction with community mostly languishes at the metaphor of a nexus between the two (Sharma 2001). There are no good ethnographies of caste in schools. There are no studies which follow cohorts across a decade or so to see how inequality pans out as they grow up. The absence of a clear picture is not just theoretically frustrating, it prevents us from making well-designed interventions. For instance, sixty years after the Indian constitution set up its version of affirmative action through reservations, we are still labouring to improve upon it through a more sophisticated and precise picture of the actual inequalities in our country. In a general way we know that special interventions are needed but, even among those with a consensus about that need, it is difficult to say what the interventions should be and how much of a counter-balance is needed and where.

The common-sense picture of a level playing field within education (or for that matter, any other institution) is unfounded. Cultures, role structures, economic barriers all influence how individuals fare in an apparently neutral institution. Pierre Bourdieu (Bourdieu and Wacquant 1992: 96-100) reminded us that fields are distorted by the presence of those with greater field-specific resources and that the distortions can benefit them disproportionately. These inequalities operate above and beyond the simple inequalities of access. The field perspective in studying inequality, however, is still at a nascent stage in the developing world. We are only now struggling to develop theories of educational inequalities in fields which are significantly different from those found in Bourdieu's dirigiste, welfare-oriented France.

In countries like India we have an economy which has a tiny sector with high productivities driven by science and modern organizations. They have the state at their command to facilitate and ease their way. Beyond them, however, exists a huge population engaged in agriculture of many kinds and in

informal industry and services. The differences in social structures and cultures straddle a wide spectrum. The welfare state is still only a dream in the eyes of a few intellectuals. Across this diversity of situations, we may observe a great deal of variation in the effects of processes like class, caste, etc. How the local and contextual variations connect with each other or add up is not well understood. We know that the way, for instance, caste operates in Punjab is not quite the way it operates in Maharashtra. How does that influence, say, the cultures which dominate schools in these respective provinces? Even within different parts of the same region there may be a lot of variation.

A student wishing to survey the literature on education and social inequality in India is faced with many problems. Some of the basic processes which seem to act in the relation between education and society have been established. However, working out the interconnections between the processes, the weighing of one against the other and so on is something which still needs to be done.

## **A REGION WITH RELATIVELY LOW STRATIFICATION**

The analyses being presented here are a small step towards building a more comprehensive picture of educational inequality. They try to depict the relative advantage or disadvantage offered by social context to the academic scores of different children within the same school. This paper draws from data gathered as part of a larger study (Eklavya 2009) conducted with the NGO Eklavya. The data is particularly interesting since it is from a region that offers special conditions for studying educational inequality. Shahpur, a tribal majority taluk in Betul district of Madhya Pradesh has a relatively low internal stratification in its rural parts. It is geographically remote and impoverished, with marginalized communities practising subsistence agriculture on poor, hilly land. The town of Shahpur is quite small and the overwhelming majority of people live in the little villages scattered around a dusty, rolling countryside. It is this rural Shahpur which interests us. While it may be quite poor in comparison to many other parts of India, the villages are relatively homogeneous with only a few communities living in the rural parts. It is easier to isolate and identify the roots of inequality here. Many villages have just one or two scheduled tribes. The residents of the rural area are mainly from the scheduled tribes (ST), almost all being Gonds and Korkus. There are also three OBCs, the Kumbi, Kurmi and Bhoyar, all of whom are quite impoverished and with poor landholdings. There is only one scheduled castes (SC) group of some size, the Mehra.

Agriculture is the main source of livelihood and depends almost entirely on the monsoons. The main crops here are the coarse millets like kodon and kutki, with some oilseeds like til and jagni also being grown. In the belt studied by us, landholdings are small and there are hardly any large landowners. Exploitation by moneylenders has stripped many farmers of their land and the number of landless agricultural labour is quite high. The hilly terrain has a meagre yield and large numbers become seasonal migrants every year, going to the Narmada valley and other parts of Madhya Pradesh to help farmers harvest their crops.

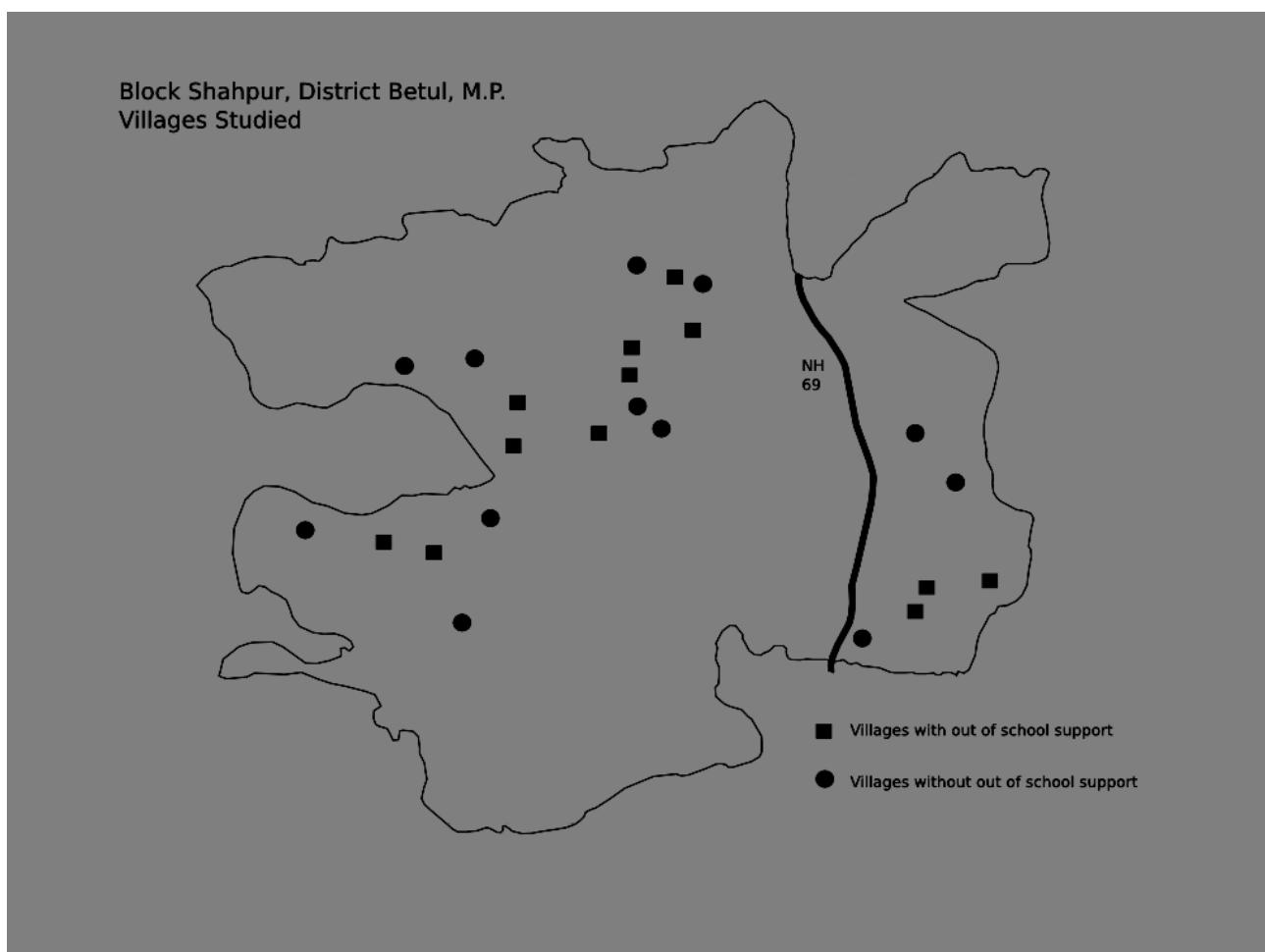
### **DEMOGRAPHIC PROFILE OF SHAHPUR TAHSIL (2001 CENSUS)**

Number of Households	17,316	Average Household Size(per Household)	6.0
Population-Total	95,909	Proportion of Urban Population (%)	4.2
Population-Rural	91912	Sex Ratio	976
Population-Urban	3997	Proportion of SC (%)	8.0
SC Population	7,679	Proportion of ST (%)	64.0
ST Population	61,770	Literacy Rate (%)	50.0

[http://www.censusindia.gov.in/Census\\_Data\\_2001/Census\\_Data\\_Online/Area\\_Profile/SubDistrictProfile.aspx?cki=kexfywetQ78, dt. 11/11/201](http://www.censusindia.gov.in/Census_Data_2001/Census_Data_Online/Area_Profile/SubDistrictProfile.aspx?cki=kexfywetQ78, dt. 11/11/201)

There are hardly any private schools – small or large – in rural Shahpur. Almost all children go to the same government primary schools. The government schools were very similar to each other, with hardly any difference in school amenities and infrastructure. This reduces considerably the variation to be seen in education here. As such this is an interesting counter-point to complexly stratified situations where access is more strongly regulated and resources brought into play vary considerably. The number of factors at play here is less and offers a way to comprehend and measure the consequences of social existence on school learning. Of course, in most of India we may expect a relatively more complex set of relationships and greater inequality between the top and the bottom. It is also true that Shahpur does not form an isolated social system and is interlocked with the rest of the world through the movement of people and goods. However, addressing a simpler situation may help identify some trends in differential attainment, which may be more difficult to tease apart in situations with greater surpluses and stratification.

In Shahpur we are also fortunate in having an additional educational intervention in some schools which can help us examine how interventions make a difference to stratification. The NGO Eklavya has been running for several years out of school support centres called Shiksha Protsahan Kendras (SPKs). These work with under-privileged children in several parts of Madhya Pradesh, including Shahpur. A question that has nagged debates on education has been whether education can actually help to decrease inequality or not. A comparison of learning levels among ordinary schools with those schools which had extra support from SPKs offered a way to examine what happened to inequality



when an additional dose of academic support was offered.

## METHODOLOGY

Government schools were studied in 23 villages in a belt running approximately west to east, across northern Shahpur. Given the absence of private schools and near universal enrolment, this provided a nearly complete sample of children from those villages. A modified control group design was done to examine the growth of children's learning across two primary school years. This was done not by following a cohort, but by testing children from grades 3 and 5 simultaneously. They were asked a series of questions that ranged in a continuous way from the grade 3 syllabus into the grade 5 syllabus. Since no significant social change had occurred in the region over the last three years this yielded a snapshot of the level at which grade 3 stood and where grade 5 stood against a common measuring scale. The responses given by the students showed their relative positions from a common base. The differences between the scores of grade 5 and grade 3 students were seen as depicting the approximate degree of growth which was taking place over two years. The scores and changes between grades 3 and 5 were then examined with reference to various sociological factors including their gender, parental education, class, caste, political participation in local bodies and proximity to transport channels. Multi-variate linear regression analysis of the results was done to give a measure of the children's scores which could be attributed to any single factor, after controlling for the rest. The partial correlations of these sociological factors with students' scores was obtained by the use of the open source software R.

The common test instrument for grades 3 and 5 was first validated through a pilot study. The scores obtained were used to calculate the required sample size so as to achieve a power of 0.8. The main study was done on 778 children, of whom 408 were in grade 5 and 370 in grade 3. The schools were selected by initially identifying government schools which had had SPK support for at least four years. This ensured that children in grade 5 had had the complete benefit of the out of school support programme. Matching government schools without SPK support were chosen from adjacent villages so as to maintain as similar a village demographic profile as possible. Children who were more or less regularly attending school were the ones included in the study. Those who were usually absent were not followed home for testing since our interest was more in seeing the differences amongst those who were regular school goers. The school teachers were the source of information about the parents' occupation, caste and so on. They were considered reliable since the numbers of children in each school were not high. Teachers knew all the families in their village and had previously gathered their demographic details for the reports that they periodically submitted to various departments.

## SOCIAL ORIGIN AND SCHOOL ATTAINMENT

The children's maths and language scores were regressed against factors which influenced their environment and the kind of support they received at home. This enabled estimation of the approximate contributions of each factor, after having separated away the contributions of all other factors. The partial correlations of the test scores with different aspects of the children's social condition are discussed below.

## CLASS, OCCUPATION AND SCHOOL ATTAINMENT

Almost all the children came from agricultural families (92.7%). The greatest number of children's fathers were farmers with small landholdings and few resources (50.5%). About a third of the children (32.8%) came from parents who were exclusively agricultural labourers. Of course, many of those

who had land also worked seasonally as agricultural labour. A small number (9.4%) had fair sized landholdings, with some irrigation or other agricultural resources. The soil in the area in which this study was conducted was poor and stony and there were hardly any big landowners, though they could be found on the rich black soil of the southern part of the district, outside our study area. A tiny proportion of the children came from families of craftsmen (2.7%) and traders / shopkeepers (2.4%). An even smaller number (2.0%) had fathers who were in some kind of service.

#### PARENTAL OCCUPATIONS

Occupational Categories	n	percent
Small Farmer	388	49.94
Middle Farmer / Big Farmer	72	9.27
Agricultural labourer	262	33.72
Craftsman	20	2.57
Trader / shopkeeper	20	2.57
Service	15	1.93

#### PARTIAL CORRELATION OF SCHOOL ATTAINMENT WITH OCCUPATION IN GRADES 3 AND 5

Occupational Categories	$\beta$ 3 <sup>rd</sup> Maths	$\beta$ 5 <sup>th</sup> Maths	$\beta$ 3 <sup>rd</sup> Language	$\beta$ 5 <sup>th</sup> Language
Small Farmer	Reference condition	Reference condition	Reference condition	Reference condition
Middle Farmer / Big Farmer	7.36**	-9.83 **	5.25	-8.87*
Agricultural labourer	-3.65*	-4.36*	-0.82	0.81
Craftsman	-1.65	-9.83	0.05	3.46
Trader / shopkeeper	4.05	8.47	5.35	11.18
Service	2.67	5.23	4.74	0.67

Signif. Codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ''

Having agricultural labourers as parents seems to consistently lead to maths scores a little lower than having parents who were small farmers. The children of craftsmen slip further behind small farmers as they go to grade 5, though the trend is not statistically significant. The children of traders, shopkeepers and those doing service are consistently ahead, though again the numbers in this rural, tribal belt are too low to show statistical significance. Interestingly, the children of middle farmers seem to enjoy an advantage in grade 3 over small farmers and labourers, but the contribution of their class origin to their scores gets strongly reversed as they grow older. In grade 5, origin in middle farmers' families seems to have a markedly negative correlation in maths scores. The surprising dip in scores suggests that reasonably well endowed rural families have a certain kind of assessment of

possible benefits from schooling. It is possible that in this region middle farmers expect fewer risks and greater returns from putting in efforts in their own land, rather than in the uncertainties of school education and the chance of a career through it.

A pattern similar to maths is observable in language scores, though the degree of difference between classes is less. Perhaps this is because language learning is closer to daily life than mathematics and calls for less effort to learn. What requires greater individual effort, of course, is what is more likely to be influenced by the processes of social stratification.

## CASTE AND SCHOOL ATTAINMENT

PARENTAL CASTES

CASTE	n	Percent
SC	79	10.17
ST	512	65.89
OBC	181	23.29
GENERAL	5	0.64

## PARTIAL CORRELATION OF SCHOOL ATTAINMENT WITH CASTE IN GRADES 3 AND 5

CASTE	$\beta$ 3 <sup>rd</sup> Maths	$\beta$ 5 <sup>th</sup> Maths	$\beta$ 3 <sup>rd</sup> Language	$\beta$ 5 <sup>th</sup> Language
SC	4.29 .	10.41**	4.00	4.37
ST	4.86**	0.03	4.65	-3.6
OBC	Reference condition	Reference condition	Reference condition	Reference condition
GENERAL	Absent in sample	11.26	Absent in sample	-7.07

Signif. Codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ''

Nearly two-thirds of the children were from the Scheduled Tribes (65.89%). The OBCs were about a quarter of the children (23.29%) with the SC being much smaller in numbers (10.17%). There were just 5 (0.64%) children in the entire sample who came from the so-called upper castes. While the smallness of the number of upper castes in this impoverished region was interesting in its own right, it had an unfortunate side-effect. It prevented any statistically significant conclusions to be drawn about them and all but removed the upper castes from the scope of our analysis.

In grade 3 children with ST and SC origins had a slightly higher correlation with maths and language scores than those with OBC origins. In maths, however, by grade 5 the SC shot above the rest, with the OBC and ST left behind at approximately the same level. In language, the ST were slightly more correlated with higher scores than the SC and OBC at the level of grade 3. By grade 5, however, there was no significant difference between the different caste categories in their language scores.

The results tend to support the hypothesis that caste does matter. However, in this impoverished region, the relative correlation of scores with caste was not more than with class. This may be because the comparison was only between the SC, ST and the OBC who among them do not offer too great a range of diversity. One can only wonder whether a similar study with a substantial number of upper-caste children would have produced a much greater difference in correlations with caste than with

class. Meanwhile, the sharp rise of the SC's correlation with Maths scores as they grew older was interesting and deserves greater investigation. It was consistent with the proliferation of an Ambedkarite ideology that promoted education. It could be that social groups which were more oriented towards the urban job market due to political and other kinds of socialization tended to support their children more in academic learning and also pushed them harder to do well.

## GENDER AND EDUCATIONAL ATTAINMENT

GENDER

GENDER	n	Percent
BOYS	359	46.20
GIRLS	418	53.8

### PARTIAL CORRELATION OF GENDER AND SCHOOL ATTAINMENT IN GRADES 3 AND 5

GENDER	$\beta$ 3 <sup>rd</sup> Maths	$\beta$ 5 <sup>th</sup> Maths	$\beta$ 3 <sup>rd</sup> Language	$\beta$ 5 <sup>th</sup> Language
BOYS	1.71	5.04**	1.9	-0.21
GIRLS	Reference condition	Reference condition	Reference condition	Reference condition

Signif. Codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ''

Boys (46.2 %) and girls (53.8%) were both well represented in the sample. At grade 3 there was little difference made by gender to maths or language scores. Girls were not observed to be doing any better than boys in grade 5 language. However, in grade 5 maths the boys were doing significantly better. The appearance of differences with an increase in age was consistent with the argument that growing up in a certain kind of society was what led to the construction of gender differences. Interestingly, this was being expressed in mathematics here but not in language.

## DISTANCE FROM A MAJOR HIGHWAY AND EDUCATIONAL ATTAINMENT

GEOGRAPHICAL LOCATION

Proximity to Highway	n	Percent
Up to one hour's cycle ride to highway	421	54.18
More than one hour's cycle ride to highway	356	45.82

### GEOGRAPHICAL LOCATION AND SCHOOL ATTAINMENT IN GRADES 3 AND 5

Proximity to Highway	$\beta$ 3 <sup>rd</sup> Maths	$\beta$ 5 <sup>th</sup> Maths	$\beta$ 3 <sup>rd</sup> Language	$\beta$ 5 <sup>th</sup> Language
Up to one hour's cycle ride to highway	-0.01	9.53***	-1.55	3.16
More than one hour's cycle ride from highway	Reference condition	Reference condition	Reference condition	Reference condition

Signif. Codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ''

National Highway 69 cuts north to south through the region studied. Children from villages both close (54.2%) and distant (45.8%) from the highway were well represented in the sample. Proximity to the

highway was defined as being within one hour's cycle ride to the highway. In grade 3 there was little difference with geographical location in maths or language scores. In grade 5, too, there was little difference in language scores. However, grade 5 maths was a different story. There was a substantial and significantly higher partial correlation of children from villages closer to the highway with higher maths scores. This was, interestingly, nearly twice as much as the advantage provided by being a boy in grade 5 maths scores.

## POLITICAL PARTICIPATION AND EDUCATIONAL ATTAINMENT

Local education activists had many field anecdotes relating how children of people who were politically connected and in positions of power did better in school than others. The present study operationalised this by gathering information on whether children had parents in (i) school committees or (ii) the village panchayat or any higher elected body. While, as expected, most of the parents did not hold any elected post, there was a reasonably large number which did. About 12 % of the fathers and 9% of the mothers had a position in one or the other school committee. About 3% fathers were in the panchayat, 25 in number, which was adequate to provide significant results if a big enough difference existed. 0.8% of the mothers held a post in the panchayat or above, which with a number of 6 may not be depended upon to show a reliable trend.

FATHER'S POLITICAL POSITION

<b>Father in a Post of Authority</b>	<b>n</b>	<b>Percent</b>
None	663	84.67
School Committee	95	12.13
Panchayat or above	25	3.19

FATHER'S POLITICAL POSITION AND SCHOOL ATTAINMENT IN GRADES 3 AND 5

<b>Father in a Post of Authority</b>	<b><math>\beta</math> 3<sup>rd</sup> Maths</b>	<b><math>\beta</math> 5<sup>th</sup> Maths</b>	<b><math>\beta</math> 3<sup>rd</sup> Language</b>	<b><math>\beta</math> 5<sup>th</sup> Language</b>
None	Reference condition	Reference condition	Reference condition	Reference condition
School Committee	-3.53 .	7.36 .	-1.41	5.62
Panchayat or above	5.87	23.14**	2.92	17.08*

Signif. Codes: 0 \*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ''

MOTHER'S POLITICAL POSITION

<b>Mother in a Post of Authority</b>	<b>n</b>	<b>Percent</b>
None	700	90.09
School Committee	71	9.14
Panchayat or above	6	0.84

MOTHER'S POLITICAL POSITION AND SCHOOL ATTAINMENT IN GRADES 3 AND 5

<b>Mother in a Post of</b>	<b><math>\beta</math> 3<sup>rd</sup> Maths</b>	<b><math>\beta</math> 5<sup>th</sup> Maths</b>	<b><math>\beta</math> 3<sup>rd</sup> Language</b>	<b><math>\beta</math> 5<sup>th</sup> Language</b>
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Authority				
None	Reference condition	Reference condition	Reference condition	Reference condition
School Committee	2.27	2.85	4.04	3.32
Panchayat or above	-1.81	-16.88 .	-2.33	-16.54

Signif. Codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ''

In grade 3 there is virtually no difference in the correlations between various post-holders and language scores. There is only a very slight negative correlation between maths scores and school committee members. In grade 5, however, a dramatically different pattern is to be seen. Any kind of post held by the father has a positive correlation with maths scores in grade 5. The panchayat post especially has a large correlation with maths scores. In language, the father being on a school committee has no significant correlation with grade 5 scores, but the father's holding a panchayat post has a large and significant correlation.

If the mother of a grade 5 student is a post holder, then a surprising pattern is to be seen. The mother's presence in the school committees has no correlation with maths or language scores. However, if the mother is a member of a panchayat, there is a marked negative correlation with both language and maths scores. This is statistically significant for maths, but not so for language in spite of the relatively large dimension of the dip. While assessing this it should be kept in mind that only a small number of women (6) was found to be holding panchayat and higher posts. It is not clear why this negative correlation occurred in Shahpur. Further study is called for to examine whether poorer scores were because women were no longer available to help their children in their studies or because of patriarchal reactions to women occupying positions of power or because some other reason was at play.

## PARENTAL EDUCATION AND SCHOOL ATTAINMENT

### FATHER'S EDUCATION

Father's Education	n	Percent
None	284	36.65
Primary school: grade 1 to grade 5	309	39.87
Middle school: grade 6 to grade 8	115	14.84
Secondary school: grade 9 to grade 12	61	7.87
College	6	0.77

### MOTHER'S EDUCATION

Mother's Education	n	Percent
None	577	74.36
Primary school: grade 1 to grade 5	133	17.14

Middle school: grade 6 to grade 8	51	6.57
Secondary school: grade 9 to grade 12	12	1.55
College	3	0.39

#### FATHER'S EDUCATION AND SCHOOL ATTAINMENT IN GRADES 3 AND 5

Father's Education	$\beta$ 3 <sup>rd</sup> Maths	$\beta$ 5 <sup>th</sup> Maths	$\beta$ 3 <sup>rd</sup> Language	$\beta$ 5 <sup>th</sup> Language
None	Reference condition	Reference condition	Reference condition	Reference condition
Primary school: grade 1 to grade 5	1.93	2.25	3.75	0.15
Middle school: grade 6 to grade 8	2.22	3.06	3.12	2.76
Secondary school: grade 9 to grade 12	4.22	-2.84	10.29**	-3.35
College	25.58**	29.14 .	36.73***	16.75

Signif. Codes: 0 \*\*\* 0.001 \*\* 0.01 \* 0.05 . 0.1 ''

#### MOTHER'S EDUCATION AND SCHOOL ATTAINMENT IN GRADES 3 AND 5

Mother's Education	$\beta$ 3 <sup>rd</sup> Maths	$\beta$ 5 <sup>th</sup> Maths	$\beta$ 3 <sup>rd</sup> Language	$\beta$ 5 <sup>th</sup> Language
None	Reference condition	Reference condition	Reference condition	Reference condition
Primary school: grade 1 to grade 5	0.09	-1.49	3.44	0.09
Middle school: grade 6 to grade 8	-1.35	9.37 .	-0.34	15.27*
Secondary school: grade 9 to grade 12	-4.8	7.23	5.38	11.07
College	48.91	-5	42.38**	11.81

Signif. Codes: 0 \*\*\* 0.001 \*\* 0.01 \* 0.05 . 0.1 ''

The educational level of the parents was very low, typical of this rural tribal belt of southern Madhya Pradesh. Only about 8% of the fathers and less than 2% of the mothers had studied in secondary school or above. The actual number of college-goers in the entire sample was just 9. Mothers who had studied in secondary school were very few, being 12 in number while those who had gone to college were just 3.

Having an educated father seems to offer a significant advantage over an illiterate father only if the father had gone to college. This is to be seen in both maths and language and there the difference is huge. In grade 3 language, children with fathers who had gone to secondary school also seemed to be

doing better. However this pattern was absent in grade 3 maths. Fathers of even up to secondary level education did not seem to be contributing to better maths learning. This pattern seems consistent with the general belief that the quality of school education of the older generation here has been very low.

Mothers' education tended to show an impact on children's learning after fewer years of schooling than that of fathers. They had a significant impact on grade 5 maths as well as grade 5 language after having themselves studied only up to middle or upper elementary levels. This was unlike the pattern shown by fathers. The number of mothers who had studied in secondary school dwindled almost to nothing and it was difficult to say anything for sure about mothers with higher education here.

Overall, parental education was one of the largest contributors to children's scores, with the mother's education having a greater correlation than the father's, even though the latter was far from inconsequential. This was to be seen in the most pronounced fashion in the case of parents with a college education. In these villages of Shahpur, having parents with just a school education had a markedly lower impact on children's scores than having parents who had gone to college.

### **OUT OF SCHOOL SUPPORT AND EDUCATIONAL ATTAINMENT**

**OUT OF SCHOOL SUPPORT**

<b>Extra Support</b>	<b>n</b>	<b>Percent</b>
Children going to an SPK	398	51.22
Children not going to an SPK	379	48.78

**OUT OF SCHOOL SUPPORT AND SCHOOL ATTAINMENT IN GRADES 3 AND 5**

<b>Extra Support</b>	<b><math>\beta</math> 3<sup>rd</sup> Maths</b>	<b><math>\beta</math> 5<sup>th</sup> Maths</b>	<b><math>\beta</math> 3<sup>rd</sup> Language</b>	<b><math>\beta</math> 5<sup>th</sup> Language</b>
Children going to an SPK	Reference condition	Reference condition	Reference condition	Reference condition
Children not going to an SPK	6.12***	13.73***	13.76***	25.08***

Signif. Codes: 0 \*\*\* 0.001 \*\* 0.01 \* 0.05 . 0.1 ''

The availability of out of school support was in the form of Shiksha Protsahan Kendras, run by the NGO Eklavya. A large sample size was available for villages which had this support as well (51.2%) as those which lacked it (48.8%). The presence of out of school support correlated positively with students' scores across all grades and increased as students moved to higher grades. The correlation with out of school support was greater in language scores than in maths. This may be the result of greater emphasis on language teaching than on maths in the support centres.

## **DISCUSSION**

The belt of villages studied in Shahpur had relatively low internal stratification. The children studied and compared had relatively low differences in social advantages and disadvantages. This is a region which has the scheduled tribes in a majority and is dependent almost entirely on rural forms of work. It did not have big landowners oppressing the rest and nor did it have many industrial forms of production to display a sharp contrast with non-industrial forms. Almost all children went to the same kinds of schools. And yet differences in social origin were seen to weigh heavy on children's learning levels.

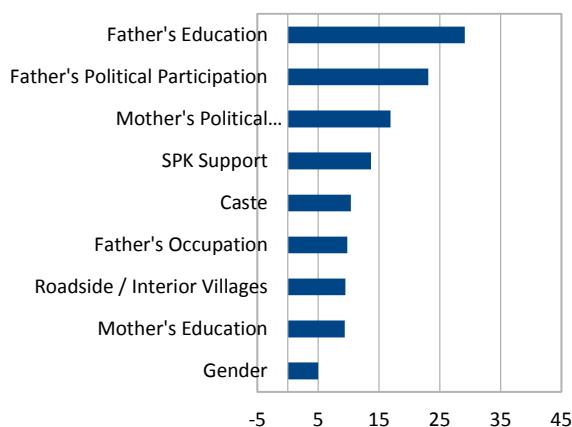
Of the two school knowledges which were examined, maths displayed the greatest amount of variation with social context. This may be because learning maths called for more deliberate and directed efforts than the language curriculum of these schools. Language was more closely associated with everyday life and required relatively less effort to learn. Inequality's most direct impact can be expected to land upon how much effort different groups were able to put into a given activity. It is not surprising then to observe that social inequality would have a greater impact on scores in what required greater efforts than in what required less. This seems consistent with, for instance, boys and girls not having any significant difference in maths scores when they were in grade 3, but girls getting left behind in maths with an increase in age and the gradual specialization of social roles.

The methodology and choice of a simple form of regression analysis was specifically to try and tease apart the contribution of different sociological factors. It was aimed at helping us understand which factors were shaping educational inequality more and which less. Through this it was hoped to make it easier to understand the processes shaping inequality. The overall explanation of the variation of learning scores within the villages studied, through the chosen sociological factors, was moderately high. In class 5 maths about 29 % of the variance in the scores could be explained by the social context including the out of school support. Class 5 language had slightly more, 32%, explained by the social context, but much of that was probably because the out of school support was particularly strong in language. In class 3 maths the variations in scores were explained only to a degree of 21% by the social context. In class 3 language much more could be explained, 31%,- again probably due to the strength of the out of school support programme. The overall dimensions corresponded to the low internal stratification of this belt. To get a sense of perspective on this, it could be pointed out that Chris Jencks had estimated that in the 1970s USA about 35% of the variation in intelligence could be explained by social context (Robinson 1981: 168). This could be loosely interpreted as implying that the degree of social inequality visible here was about the same general order or slightly less than in USA. It may be expected that when comparisons were done across other pockets which had urban, industrial as well as upper-caste populations, much greater inequality would be found.

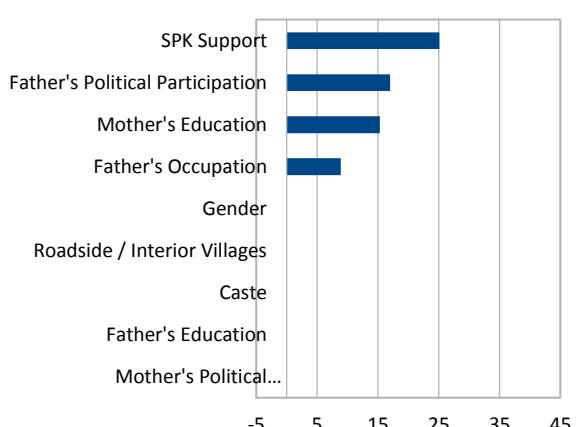
	R <sup>2</sup> (Variance of the scores explained by social context)
Class 5 Maths	0.29
Class 5 Language	0.32
Class 3 Maths	0.21
Class 3 Language	0.31

## SIGNIFICANT PARTIAL CORRELATIONS WITH DIFFERENT SOCIOLOGICAL FACTORS

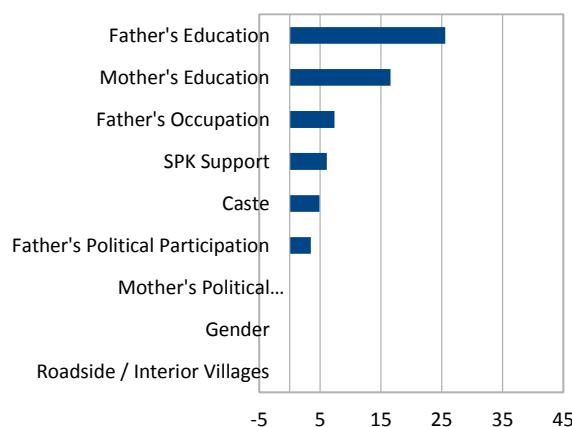
### 5 Maths



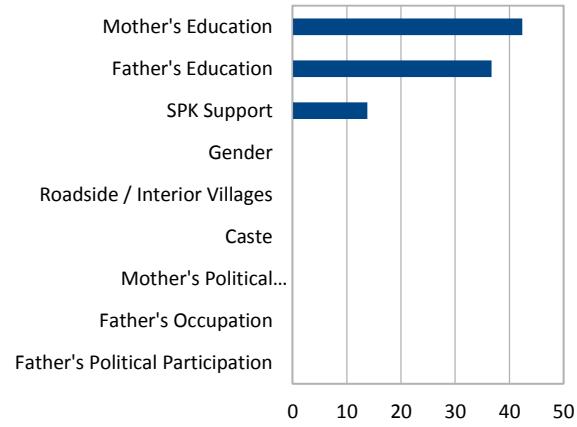
### 5 Language



### 3 Maths



### 3 Language



The comparison of different sociological factors offers fresh light on the structure and processes of social inequality. Caste, class and gender are the best known ways in which social inequality is identified. All of these made their presence felt in the levels of learning in these villages of Shahpur.

An examination of these social categories, however, challenged some popularly held theories. To begin with, the gender of the child seemed to be having the least contribution to make when compared to caste and class. While the correlation with gender was statistically significant, it was not of particularly large dimensions. It must be recalled that the majority of people in the studied villages are from the scheduled tribes, who are known to have much less gender inequality than is to be seen in the rest of India. Most of the visible inequality instead appeared to be linked with other sociological factors.

Caste and class had a greater contribution to social inequality. But in this study it was difficult to say which of the two had more of an impact. In grade 5 maths the father's caste was just a shade ahead of his occupation. In grade 5 language, however, the father's occupation was what had a significant impact and caste had no significant impact at all. In grade 3 Maths, too, class was above caste, while in grade 3 language neither seemed to make any difference. While interpreting these results, it is important to keep in mind that there were hardly any upper castes in the sample and the range of caste-based inequality ranges only from the ST to the poorer OBCs. This may have led to an underestimation of the impact of caste in this particular region. At the same time, there was hardly any industry or big city here. This in turn could have led to an underestimation of class processes, too, on education. Whatever the larger picture be, it can still safely be said that both caste and class had a significant impact. While caste and class may have had some degrees of overlap, their independent effects were coming through in a sufficiently strong manner to justify talking of them as separate processes. It was difficult to support the claim that class was only an expression of caste or vice-versa.

The local singularities of the caste and class structure also influenced the character of educational inequality. This could be seen in children from families which had more land or resources actually doing worse than children from other social classes as they moved into grade 5. The relation between class, occupation and education was clearly not a linear one. Shahpur was well integrated in the labour market for unskilled and agricultural labour so it could not be said that class had nothing to do with education and its opportunities. But different kinds of opportunities were being weighed against each other and choices seemed to be getting made. The idea that education could lead to a different kind of work, with higher incomes, was not well supported by actual examples in the community. This meant that higher class positions with greater resources did not necessarily translate into higher efforts at schooling.

The nature of the school curriculum and the pre-dominance of urban-centric knowledges might also be influencing choices made by people from different locations in the social structure. People with greater likelihoods of returns from farming were actually choosing to pay less attention to schooling. This could be another expression of the sharp disjunction in opportunities and knowledges of the local communities when compared to the the urban, commercialized cultures to which schools were allied.

One of the important results this study has thrown up is that caste and class were not the only or even the major factors at play so far as school inequality was concerned. While the study tended to support the importance of both caste and class, it is important to observe that a far greater contribution was made by other factors. After controlling for caste and class, etc., geographical location, too, was important. The parents' being in important posts and their own education made the greatest contribution of all. These observation raise serious problems for those approaches towards educational inequality which are based only on caste, class and gender.

In studies of social inequality there has been a much-maligned Weberian thread which has gone in the direction of exploring the effects of power or having the capacity to achieve one's will. The works of Ralf Dahrendorf (1959) and Erik Olin Wright (1996) have examined how the axis of being in

positions of authority combines with other social inequalities to make a difference to the quality of life and to one's life chances. In the villages studied, the advantages which come from being more in control of things appear to be getting carried over to the academic scores of children of the powerful, too. In this particular area, the overall contribution of power differences amongst individuals to children's scores appears to be substantially greater than that of caste, class and gender, after controlling for all factors.

However, power is still not the greatest contributor to educational inequality. The impact of parents' education after controlling for caste, occupation, gender, power etc. stands over and above all other factors. Interestingly, gender comes into the scene again through the differences between the father and mother's education and their respective correlations with children's learning scores. This pattern may be seen to be significant in spite of the low numbers in the sample of those who had studied up to secondary school or gone to college. The large contribution of parental education poses another question for our caste, class and gender based understanding of inequality. It cannot be said to merely spring from them. To simply call it a "cultural capital" may help to understand that socially inherited advantage accumulates and gets transferred to subsequent generations, but that does not help us in defining or delineating the character of this advantage. If, for instance, it cannot be said to be, say, an expression of class, then what is it? We must search for fresh ways to conceptualize and understand such advantages.

Finally let us turn to the question of whether educational interventions can make a difference to social inequalities. The particular intervention in the area of our study was an out of school support for the children of these impoverished villages. It had a substantial correlation with higher scores, showing a greater impact on language learning while also being palpable in maths. In class 5 language it was by far the single largest contributor to scores. However, when one looks at it in comparison with the host of inequalities acting in this region, a different picture is formed of its potential to decrease injustice here. Its dimensions which seem quite impressive when viewed in isolation now appear too low for it to overcome more than a few of the inequalities. It cannot balance the entire effect of inequality. Further, if the out of school support was made available to all the students across the board, it may be expected that those with previous advantages would benefit, too, and they would also increment their learning levels, thus still remaining above the rest. The result could be that on the one hand absolute levels of learning would go up and social differences could also be narrowed. However, there would still persist a difference between those with family advantages and those without. If selections for higher positions had a small window of opportunity, then many more of the advantaged would get in than those with initial disadvantages. Under those conditions only a reproduction of inequality would take place. To reduce the difference, what was needed was clearly an intervention in which the disadvantaged preferentially caught up with the rest. *They had to grow faster than the others*, only then would they be able to come abreast of them. Generally speaking, this seems to suggest targeted efforts rather than a general broadcasting approach.

To conclude, it is reiterated that we still have much to learn about the contours of educational inequality and the principles through which it acts. There are still many unresolved questions in the study of education and inequality in India. And yet such an understanding is essential if we are to make a serious contribution to reducing social inequalities. The present paper has been only a tentative effort at measuring and comparing the links between some sociological factors and school learning levels. It is not at all presumed that it can present a definitive picture. Many more studies are called for at national and local levels before a comprehensive understanding is attained. This calls for a good deal of empirical work as well as for a rethinking of at least some aspects of our theories of educational inequality.

Amman

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