CHAPTER TWO

THE PRESENT INVESTIGATION

The investigation purports to study the level of achievement motivation of high school students belonging to scheduled tribes in Broach, Bulsar, Dang and Surat districts.

JUSTIFICATION FOR THE INVESTIGATION

Over the last twenty-six years, education and an improvement in the means of communication in India have, to some extent, brought the tribals closer to the non-tribal sections of the population. Special protection continues to be offerred to the tribals. In the rapidly changing contexts of national life they have been catapulted from their relative isolation into the vortex of competitive politics.

Sociologists and anthropologists, together, have indicated that an individual's behaviour, to a large extent, is determined by the social and cultural environment in which he is born and in which he develops. Sorokin (1947) has pointed out that the individual is born into a social and cultural environment which determines

his actions, goals, states of conflict and traits of personality. The personality factors are largely determined by the experiences of an individual who develops within this socio-cultural world. Although these factors lie within the individual, they do depend upon the socio-cultural environment. The tribes have to find for themselves a place in the Indian society consistent with their conception of honour but, unlike the Mizos and the Nagas, they should do so without detriment to the integrity or the strength of India as a nation.

McClelland (1953) has indicated that achievement motive in an individual or society develops out of growing expectations and therefore, to meet the aspirations of the new generation of tribals, it is necessary to bring young men into the modern ways of life. The demands put on ~~him~~ an individual by his social environment contribute to the development of his desire for success. Since the social environment in the rural areas is different from that in the urban areas, the demands placed by the environment on the children will vary, influencing their level of need to achieve.

Competence of the tribals has to be developed to enable them to face the growing competition of a developing society and to meet the challenges of an uncertain future.

In the National Seminar on 'Tribal Education in India' (1965), Sachchidananda declared that in a modern society the major link of education to social structure is through the economy. He further stated that the economy of a community guides, to a large extent, the quality of education the community should have. A redefinition and rescheduling of 'tribe' should be undertaken to ensure an even flow of benefits to the really backward and needy sections of the tribal community. Rational social and economic criteria, according to Srinivas and others (1972) should be laid down for the determination of a tribe. The system of granting special facilities and privileges has created a vested interest, inhibiting the growth of self-reliance among the tribals. According to Doshi (1972), what is needed is a new policy that takes into account the levels of integration reached by different sections of the tribals.

Motivation training programmes have indicated that individuals require both opportunities and the motivation to use those opportunities. Educational conditions in the developed countries have indicated that more upto date physical facilities, more sophisticated educational hardware and even money spent on research will not be sufficient unless the students' motivation to use the new opportunities is also increased.

Increasing achievement motivation (concern for excellence) and extension motivation (concern for others) is important for general socio-economic development. Equally important is reducing the dependence motive (concern for direction) in order to accelerate development. The relevance of n Ach to the students' long term life goals is, without doubt, crucial.

A study of n Ach among Adivasi and non-Advasi students studying together will help policy makers of future educational programmes, for example, in deciding whether tribal children should be enrolled in separate schools or whether they should study alongside all others.

A study of the n Ach levels of tribals and the non-tribals in the area will help understand their needs and the type of environment suitable for them. A study of the n Ach level of the different tribes will increase the understanding of these tribes.

McClelland (1965a) has suggested that important changes in the social structure and the development of new expectancy frames are necessary to foster, sustain and accelerate changes in motivation. A study of the relationship of some factors like sex, age, class, number of siblings, birth order, location of the school, pupils'

vocational aspirations, pupils' motivation towards school, their perception of achievement demands on them by peers, teachers and fathers, educational level of the father, occupational level of the father and the mobility of the family will help understand the nature of n Ach as a psychological construct.

In general, such a study will also help administrators in the decision-making process, for instance, a study of the effect of location of schools on n Ach will help decide whether schools for tribals should be situated inthe rural or urban areas.

Those conducting achievement motivation development programmes will, in the future, benefit by such a study as they will get a clear picture of the groups of students that are likely to have lower motivation than others in the same cultural group.

Educationists and parents may also benefit by such a study if it is indicated that if there are a large number of children in a family which of them will have a higher n Ach level — the earlier born or the later born — this will help decide the size of an ideal family.

OBJECTIVES OF THE INVESTIGATION

The object of the present investigation is to study the need achievement of scheduled tribe students studying in the high school classes of South Gujarat, mainly a tribal area.

The n Ach level of the different tribes has been studied separately. A comparative study of these tribes has also been made.

The fifteen tribes that comprise the sample are Bhils, Chaudharis, Dangis, Dhodiyas, Dublas, Gamits, Ganchis, Gurjars, Kanbis, Kokans, Kodis, Tadvis, Talaviyas, Vadirs and Vasavas.

The investigator also aims at making the following comparative studies of the n Ach levels of the different groups:

1. Tribals in tribal schools with non-tribals in tribal schools.
2. Tribals in tribal schools with tribals in non-tribal schools.
3. Non-tribals in tribal schools with non-tribals in non-tribal schools.

The investigation also attempts to study the relationship of the following factors with n Ach of pupils. (i) Age

(ii) Sex (iii) Class or grade (iv) Number of siblings (v) Birth order (vi) Location of the school (vii) Educational level of the father (viii) Occupational level of the father and (ix) Mobility of the family (x) Pupils' vocational aspirations (xi) Pupils' motivation towards school (xii) Pupils' perception of achievement demands by peers, teachers and fathers. The relationship of the above mentioned factors is studied in six different groups separately and also comparatively.

1. Pupils of tribal schools.
2. Pupils of non-tribal schools.
3. Tribals of tribal schools.
4. Non-tribals of tribal schools.
5. Tribals of non-tribal schools.
6. Non-tribals of non-tribal schools.

VARIABLES

As the investigation aims at studying the need achievement among tribal students, variables that have been found to have an impact on n Ach of individuals in several other cultures have been selected for study.

Dependent Variable

Achievement motivation among tribal pupils is the dependent variable under study. It is also referred to as

need achievement, n Achievement or n Ach.

Independent Variables

The thirteen independent variables in the study have been classified into broad categories — demographic and personality variables.

(1) Demographic Variables The variables in this category are (i) ses (ii) age (iii) class or grade (iv) number of siblings (v) birth order (vi) educational level of the father (vii) occupational level of the father (viii) location of the school and (ix) mobility.

Research on n Ach and sex has indicated several trends. Studies by Veroff (1950) and Veroff, Wilcox and Atkinson (1953) indicate that girls have higher n Ach than the boys. Choudhary (1970) and Gokulnathan (1972) found similar results. However, the findings of Sinha (1967) and Desai (1970) indicate the boys as having higher n Ach. Owing to these contradictory findings, it is not possible to generalise on the relationship of sex and n Ach.

Mehta (1969) described a curviliniar relationship between n Ach and age of high school boys of Delhi. As the age in present sample ranges from 12 years to 23 years, adolescence and beyond, the relationship between age and n Ach has been taken up for study.

The inherent positive relationship between age of pupils and their class suggests that n Ach relates to class in just the same way as it does to age. But the heterogenity in each class with regard to age of the pupils in the sample presents an interesting situation. The investigator intends to study the effect of class in which the pupil is studying, on his n Ach.

Rosen (1961), Sampson (1962), Atkinson and Miller (1965) and McClelland and his associates (1953) found that the first born have a higher n Ach than the later born as they receive greater parental care, particularly from the mothers, as the latter have less work on their hands but a study of the relationship of birth order and n Ach among the tribals is not likely to reveal a similar relationship because of the fact that women invariably go out to work.

De and Singh (1970) state that the number of siblings in a family does not affect the motivational level of the individual child. The study by Rosen (1961), however, indicates that an increase in the number of siblings in a family results in a decrease in the motivational level of pupils. As in a larger family there is less parental attention to the children, the number of siblings in the family, would influence their n Ach level.

Higher occupational status, according to Nutall (1964) is attained by persons with a high n Ach. Mehta (1966a, 1966b) finds a curvilinear relationship between the achievement motivation of boys and their fathers' occupations. Studying occupational status of the father and n Ach level of pupils among the tribal community will throw some light on the effect the fathers' occupation has on the pupils' motivation to achieve as a large portion of the tribal population earn a living by working as labourers or cultivators and some as peons and clerks.

A curvilinear relationship has also been found between the level of achievement motivation of pupils and their fathers' educational level (Mehta, 1966a, 1966b). Among the tribal community, it is the first generation of most tribes who is receiving education and the effect of this factor may reveal interesting trends in n Ach.

The n Ach level of individuals is dependent on, among a variety of other factors, experiences, challanges or opportunities they are exposed to. The rural environment offers fewer exposures to the outside world and this is even more so among the underdeveloped tribal areas. Surprisingly, a study on tribals of Assam, conducted by Gokulnathan and Mehta (1972), indicates that the area of

residence which is in most cases the same as the location of the school, has no bearing on the level of n Ach of the pupils. The investigator intends to study the effect of location of the school on the n Ach of the pupils. This relationship among tribals of South Gujarat is of further interest when one views the fact that the Christian missionaries have been working among the tribals of Assam for a long time while the population on which the present study is based had not been exposed to outside influence till very recently.

Hines pointed to the achievement motivation theory of McClelland and his associates (1953) which predicts that individuals who are attracted by situations in which there is an opportunity for moderate risk taking and individual responsibility are those who score high on n Ach.

Hines attempted to study the differences between 'stayers' and 'leavers' so as to improve understanding of the graduate emigration phenomenon. The study revealed that though a large number of personality factors influence the behaviour of university students, an interesting area for research exists in the examination of constructs which describe motives and reaction to change. It was therefore assumed that motivational differences between stayers and leavers guide their resolution of alternative courses of action.

The investigator aims at finding out the effect of mobility of the family on the n Ach level of pupils. The fact that some move out while others do not suggests interesting differences in the groups.

(2) Personality Variables The variables selected for the present investigation, under this category, are (i) vocational aspirations of pupils (ii) motivation towards school (iii) pupils' perception of achievement demands by peers, teachers and fathers.

Findings of the study by Muthayya and Rajeshwari (1969) did not reveal a significant relationship between achievement and level of aspiration. Desai (1972) found that, in general, pupils with higher n Ach lean towards higher vocational aspirations but was unable to trace a significant difference between vocational aspirations of high and low n Ach pupils. Atkinson (1957), Clark, Teevan and Riccuiti (1956) indicate that persons with high n Ach set a level of aspiration in the intermediate range of difficulty. This variable is selected, here, so as to study its relationship with n Ach of pupils of the tribal community.

According to Sinha (1970), academic attainment of a student depends upon many intellectual factors along with effort in the shape of drive or motivation. Research by

Mehta (1967) indicates a 'highly significant positive relationship' with total school marks. The problem of controlling, developing and utilising existing motivation is the main problem faced by schools. For providing instruction to students they must want to place themselves in the environment where such instruction occurs in order to be able to be affected by it. Young children are often found to have a rather weak motivation to attend school. Negative motivation to attend school is also often present among children who do not have a negative motivation regarding learning (Wilson, 1959), but toward school attendance. The present investigation attempts to study the pupils' motivation towards school in relation to their n Ach level.

Achievement demands on children vary from culture to culture. Achievement demands by parents, others in authority namely, teachers, and also peers is believed to affect the n Ach level of pupils. The greater the achievement demands on pupils by their parents and teachers it is likely to result in an increase in the n Ach level of pupils as it urges the individual to strive for excellence. Achievement demands by peers instill in the pupils the desire to compete 'with a standard of excellence'. As influence of culture, particularly among the tribals who have their very marked cultural characteristics, on the

achievement demands of peers teachers and fathers is likely to affect the n Ach of pupils, this variable is being studied in the present investigation.

DEFINITION OF TERMS

Achievement Motive

Achievement motive has been defined here, as defined by McClelland and others (1953), as the 'need to achieve' among individuals. It is also referred to as the n Ach or n Achievement.

Scheduled Tribe

The definition of tribes as a 'homogeneous group of people' (Singh 1972) who do not claim themselves as followers of any major religion of India (such as Hinduism, Christanity, Islam, etc.) will raise many an eyebrow and an application of it to the Indian situation may render tribals almost non-existent.

According to the Report of the Scheduled Areas and Scheduled Tribes Commission 1960-61, the term 'tribe' is nowhere defined in the Constitution and, in fact, there is no satisfactory definition anywhere. To the ordinary man the word suggests simple folk living in hills and forests; to people who are a little better informed, it signifies

colourful folk, famous for their dance and song; to an administrator it means a group of citizens who are the special responsibility of the President of India; to an anthropologist it indicates a special field for study of a social phenomenon. In their own way, all these impressions are correct.

No standard term has been accepted to denominate the people who are classified as of tribal origin. Even the Constitution has not defined them clearly except by declaring that the Scheduled Tribes are "the tribes or the tribal communities or parts of or groups within tribes or tribal communities" which the President may specify by public notification (Article 342). As these groups are presumed to form the oldest ethnological section of the population, the term 'Adivasi' (Adi = original and vasi = inhabitant) has become current among certain people. In classifying them, sometimes different and sometimes contradictory criteria tend to be used by administrators, anthropologists and social workers who may take as a basis for their designation, the colour of the skin, language, customs or living conditions or other considerations that they consider necessary. The International Labour Organisation has classified such people as "indigenous".

As there is no clear definition of the Scheduled Tribes, for purposes of this study the investigator decided to consider as 'tribals' those who have because of the power vested in the President in Article 341 of the Constitution, been listed as 'Scheduled Tribes'.

Tribal and Non-tribal Schools

These are the two types of schools from which data has been collected. The term 'tribal school' refers to a school in which more than seventy per cent of the pupils in classes VIII, IX, X and XI belong to scheduled tribes. A non-tribal school is one in which seventy per cent or more of the pupils do not belong to any scheduled tribe.

DESIGN OF THE INVESTIGATION

SAMPLE

Several districts in Gujarat have a large Adivasi population and schools have been opened in several parts of the state but the investigator has selected schools from South Gujarat, namely, Broach, Bulsar, Dang and Surat districts. The investigator has confined herself to tribal schools. A list of the 46 tribal schools (Annexure I) was obtained from the Educational Inspectors of the four districts. However, only 43 such schools were considered;

three schools were dropped because of their inaccessability.

Thirty per cent of the total number of pupils enrolled in each school in the classes VIII, IX, X and XI have been randomly selected. The number of pupils thus sampled was 1506. No stratification was done for tribals and non-tribals.

To compare these pupils from the tribal schools, 364 pupils have been randomly selected from the same classes (VIII, IX, X and XI) from non-tribal schools (Annexure II), situated in South Gujarat.

HYPOTHESES

N Ach Level

1. There is no difference between n Ach level of pupils of the tribal schools and those of the non-tribal schools.

2. There is no difference between the n Ach level of tribal and non-tribal pupils in tribal school.

3. There is no difference between the n Ach level of tribal pupils in the tribal and the non-tribal schools.

4. There is no difference in the n Ach level of non-tribal pupils in the tribal and non-tribal schools.

5. There is no difference in the n Ach level of tribal and non-tribal pupils in the non-tribal schools.

N Ach Level: Tribewise

1. There is no difference in the n Ach level of pupils of different tribes in the tribal schools.

2. There is no difference in the n Ach level of pupils of different tribes in the non-tribal schools.

3. There is no difference in n Ach level of pupils of the different tribes of the tribal and non-tribal schools.

N Ach and Independent Variables: Mean Differences

1. There is no difference between n Ach level of the boys and girls in the tribal schools.

2. There is no difference between n Ach level among the tribal boys and girls in the tribal schools.

3. There is no difference between n Ach level among the non-tribal boys and girls in the tribal schools.

4. There is no difference between n Ach level of boys and girls of the non-tribal schools.

5. There is no difference between n Ach level of tribal boys and girls in the non-tribal schools.

6. There is no difference between n Ach level of non-tribal girls and boys in the non-tribal schools.

7. There is no difference in n Ach level of pupils of the different age groups in the tribal schools.

8. There is no difference in n Ach level of tribal pupils of the different age groups in the tribal schools.

9. There is no difference in n Ach level of non-tribal pupils of the different age groups in the tribal schools.

10. There is no difference in n Ach level of pupils of the different age groups in the non-tribal schools.

11. There is no difference in n Ach level of tribal pupils of the different age groups in the non-tribal schools.

12. There is no difference in n Ach level of the non-tribal pupils of the different age groups in the non-tribal schools.

13. There is no difference in n Ach level of pupils of the different classes in the tribal schools.

14. There is no difference in n Ach level of tribal pupils among different classes in the tribal schools.

15. There is no difference in n Ach level of non-tribal pupils among different classes in the tribal schools.

16. There is no difference in n Ach level of pupils among different classes in the non-tribal schools.

17. There is no difference in n Ach level of tribal pupils among different classes in the non-tribal schools.

18. There is no difference in n Ach level of non-tribal pupils among different classes in the non-tribal schools.

19. There is no difference between n Ach level of pupils from urban and rural tribal schools.

20. There is no difference between n Ach level of tribal pupils from urban and rural tribal schools.

21. There is no difference between n Ach level of non-tribal pupils from urban and rural tribal schools.

22. There is no difference between n Ach level of pupils from the urban and rural non-tribal schools.

23. There is no difference between n Ach level of tribal pupils from the urban and rural non-tribal schools.

24. There is no difference between n Ach level of non-tribal pupils from urban and rural non-tribal schools.

25. There is no difference between n Ach level of pupils from the tribal schools whose fathers' educational level differs.

26. There is no difference between n Ach level of tribal pupils from the tribal schools whose fathers' educational level differs.

27. There is no difference between n Ach level of non-tribal pupils from the tribal schools whose fathers' educational level differs.

28. There is no difference between n Ach level of pupils from the non-tribal schools whose fathers' educational level differs.

29. There is no difference between n Ach level of tribal pupils in the non-tribal schools whose fathers' educational level differs.

30. There is no difference between n Ach level of non-tribal pupils in the non-tribal school whose fathers' educational level differs.

31. There is no difference in n Ach level of pupils of the tribal schools with fathers at different occupational levels.

32. There is no difference in n Ach level of tribal pupils of the tribal schools with fathers at different occupational levels.

33. There is no difference in n Achlevel of non-tribal pupils of the tribal schools with fathers at different occupational levels.

34. There is no difference in n Ach level of pupils of the non-tribal schools with fathers at different occupational levels.

35. There is no difference in n Ach level of tribal pupils of the non-tribal schools with fathers at different occupational levels.

36. There is no difference in n Ach level of non-tribal pupils of the non-tribal schools with fathers at different occupational levels.

37. There is no difference in n Ach level of pupils of tribal schools whether the family is mobile or not.

38. There is no difference in n Ach level of tribal pupils from the tribal schools whether the family is mobile or not.

39. There is no difference in n Ach level of non-tribal pupils from the tribal schools whether the family is mobile or not.

40. There is no difference in n Ach level of pupils of the non-tribal schools whether the family is mobile or not.

41. There is no difference in n Ach level of tribal pupils from the non-tribal schools, whether the family is mobile or not.

42. There is no difference in n Ach level of non-tribal pupils of the non-tribal schools, whether the family is mobile or not.

N Ach and the Independent Variables: Correlation

1. There is no relationship between age of pupils and n Ach among pupils of the tribal schools.

2. There is no relationship between age of pupils and n Ach among the tribal pupils in the tribal schools.

3. There is no relationship between age of pupils and n Ach among non-tribal pupils in the tribal schools.

4. There is no relationship between age of pupils and n Ach among pupils in the non-tribal schools

5. There is no relationship between age of pupils and n Ach among tribal pupils in the non-tribal schools.

6. There is no relationship between age of pupils and n Ach among non-tribal pupils in non-tribal schools.

7. There is no relationship between class and n Ach of pupils in the tribal schools.

8. There is no relationship between class and n Ach of tribal pupils in the tribal schools.

9. There is no relationship between class and n Ach of non-tribal pupils in the tribal schools.

10. There is no relationship between class and n Ach of pupils in the non-tribal schools.

11. There is no relationship between class and n Ach of tribal pupils in the non-tribal schools.

12. There is no relationship between class and n Ach of non-tribal pupils in the non-tribal schools.

13. There is no relationship between number of siblings and n Ach among pupils in the tribal schools.

14. There is no relationship between number of siblings and n Ach of tribal pupils in the tribal schools.

15. There is no relationship between number of siblings and n Ach of non-tribal pupils in the tribal schools.

16. There is no relationship between number of siblings and n Ach of pupils in the non-tribal schools.

17. There is no relationship between number of siblings and n Ach of tribal pupils in the non-tribal schools.

18. There is no relationship between number of siblings and n Ach of non-tribal pupils in the non-tribal schools.

19. There is no relationship between birth order and n Ach of pupils of the tribal schools.

20. There is no relationship between birth order and n Ach of tribal pupils in the tribal schools.

21. There is no relationship between birth order and n Ach of non-tribal pupils in the tribal schools.

22. There is no relationship between birth order and n Ach of pupils in the non-tribal schools.

23. There is no relationship between birth order and n Ach of tribal pupils in the non-tribal schools.

24. There is no relationship between birth order and n Ach of non-tribal pupils in the non-tribal schools.

25. There is no relationship between occupational level of the father and n Ach of pupils in tribal schools.

26. There is no relationship between occupational level of the father and n Ach of tribal pupils in the tribal schools.

27. There is no relationship between occupational level of the father and n Ach of non-tribal pupils in the tribal schools.

28. There is no relationship between occupational level of the father and n Ach of pupils in the non-tribal schools.

29. There is no relationship between occupational level of the father and n Ach of tribal pupils in the non-tribal schools.

30. There is no relationship between occupational level of the father and n Ach of non-tribal pupils in the non-tribal schools.

31. There is no relationship between pupils' motivation towards school and n Ach among pupils in the tribal schools.

32. There is no relationship between pupils' motivation towards school and n Ach among tribal pupils in the tribal schools.

33. There is no relationship between motivation towards school and n Ach among non-tribal pupils in the tribal schools.

34. There is no relationship between motivation towards school and n Ach of pupils in the non-tribal schools.

35. There is no relationship between motivation towards school and n Ach of tribal pupils in non-tribal schools.

36. There is no relationship between motivation towards school and n Ach of non-tribal pupils in the non-tribal schools.

37. There is no relationship between pupils' perception of achievement demands by peers and n Ach among pupils of the tribal schools.

38. There is no relationship between perception of achievement demands by peers and n Ach of tribal pupils in the tribal schools.

39. There is no relationship between perception of achievement demands by peers and n Ach of non-tribal pupils in the tribal schools.

40. There is no relationship between perception of achievement demands by peers and n Ach of pupils in the non-tribal schools.

41. There is no relationship between perception of achievement demands by peers and n Ach of tribal pupils in the non-tribal schools.

42. There is no relationship between perception of achievement demands by peers and n Ach of non-tribal pupils in the non-tribal schools.

43. There is no relationship between perception of achievement demands by teachers and n Ach of pupils in the tribal schools.

44. There is no relationship between perception of achievement demands by teachers and n Ach of tribal pupils in the tribal schools.

45. There is no relationship between perception of teachers' demands and n Ach of non-tribal pupils in the tribal schools.

46. There is no relationship between perception of teachers' achievement demands and n Ach of pupils in the non-tribal schools.

47. There is no relationship between perception of teachers' achievement demands and n Ach of tribal pupils in the non-tribal schools.

48. There is no relationship between perception of teachers' achievement demands and n Ach of non-tribal pupils in the non-tribal schools.

49. There is no relationship between perception of fathers' achievement demands and n Ach of pupils in the tribal schools.

50. There is no relationship between perception of fathers' achievement demands and n Ach of tribal pupils in the tribal schools.

51. There is no relationship between perception of fathers' achievement demands and n Ach of non-tribal pupils in the tribal schools.

52. There is no relationship between perception of fathers' achievement demands and n Ach of pupils in the non-tribal schools.

53. There is no relationship between perception of fathers' achievement demands and n Ach of tribal pupils in the non-tribal schools.

54. There is no relationship between perception of fathers' achievement demands and n Ach of non-tribal pupils in the non-tribal schools.

55. There is no relationship between achievement demands and n Ach of pupils of the tribal schools.

56. There is no relationship between achievement demands and n Ach of tribal pupils in the tribal schools.

57. There is no relationship between achievement demands and n Ach of non-tribal pupils in the tribal schools.

58. There is no relationship between achievement demands and n Ach of pupils of the non-tribal schools.

59. There is no relationship between achievement demands and n Ach of tribal pupils in the non-tribal schools.

60. There is no relationship between achievement demands and n Ach of non-tribal pupils in the non-tribal schools.

61. There is no relationship between educational level of the father and n Ach of pupils of tribal schools.

62. There is no relationship between educational level of the father and n Ach of tribal pupils in tribal schools.

63. There is no relationship between educational level of the father and n Ach of non-tribal pupils of tribal schools.

64. There is no relationship between educational level of the father and n Ach of pupils of non-tribal schools.

65. There is no relationship between educational level of the father and n Ach of tribal pupils in non-tribal schools.

66. There is no relationship between educational level of the father and n Ach of non-tribal pupils in non-tribal schools.

TOOLS OF RESEARCH

1. The thematic apperceptive measure prepared by Mehta (1969) has been used to assess the achievement motive (Annexure III). The stories have been scored for achievement imagery using the 'C' scoring system developed by McClelland and others (1953). Mehta's TAT is an adaptation of McClelland's TAT to suit the cultural setting in India.

The Thematic Apperception Test (TAT) consists of six line drawings which the respondent is allowed to look at, one at a time, for twenty seconds and is then required to write a story on each of the pictures. For each story the respondent is allowed only four minutes. The test takes approximately 30 minutes to be administered.

Research on achievement motivation has, to date, mainly been done with the help of projective measures (McClelland et al. 1953; Mehta, 1969). Objective tests have also been tried out in several researches as projective measures are

not only time consuming to administer and score but also require a considerable degree of training on the part of the scorer and, according to some researchers, lack validity and reliability criteria (Klinger, 1966). However in several cases (Barnette, de Charms) these objective tests have not been able to produce results similar to the projective measures. Myers (1965), while using a short objective measure of achievement motivation, found satisfactory results in two studies on high school students. The items were directly aimed at academic achievement and no attempt was made to obtain a measure of generalised need for achievement. However, this limitation has, to some extent, been overcome in the sentence completion tests.

The scoring categories of the n Ach scoring system are independent of any specific culturally determined means of attaining these goals. Thus the TAT reflects, with a fair degree of accuracy, differences in achievement motivation in subjects whose age, sex or cultural background differs from any other sample.

2. An identification data sheet (Annexure IV) was compiled to collect identification data regarding the pupils' age, sex, class, number of siblings, birth order, their tribe, location of the school, vocational aspirations

of pupils, educational level of the fathers, occupational level of the fathers and mobility of the family.

3. An Inventory of Qualities (Annexure V), standardised by Mehta (1969), was used to determine the achievement demands of peers, teachers and parents as perceived by pupils. The inventory consists of five pairs of statements for each of the three achievement demands. Each pair consists of two statements, either of which the students has to tick depending on the reason why he likes each of the individuals. Only one statement in each pair denotes achievement demands. If the student ticks the statement denoting achievement demands, he is given a score of 1, thus the maximum score for each, peers, teachers or fathers, is 5, the maximum score on the inventory being 15.

4. The Junior Index of Motivation (JIM Scale) (Annexure VI) has been used to measure motivation towards school. The scale, standardised by Frymier (1970), consists of 80 statements. To these the pupils are expected to respond along a four-point scale — strongly agree, agree, disagree, strongly disagree. Of these 80 items, only 50 are scored to obtain the pupil's motivation towards school.

The student's score for the relevant 50 items is added algebraically. An item scored 'strongly agree' is given a

score of +2, 'agree' a score of +1, 'disagree' a score of -1 and 'strongly disagree' a score of -2. Having derived the score of the 50 items the sign is reversed, that is, if the score is -20, it is changed to +20 and if it is +10 it is changed to -10. This raw score value is added to 100, algebraically, and gives the student's combined score of motivation towards school. The higher the score on these 50 statements, higher the motivation towards school.

These fifty statements cover six initial areas of concern. They are (i) attitude toward school (ii) value for education (iii) feeling for other people (iv) concern for material things (v) sense of personal determination (vi) attitude toward self. Factor analysis was done by Kaiser's Varimax method so as to highlight the specific content of the JIM Scale. The six largest of the rotated factors (in terms of per cent of common variance accounted for) included the highest factor loading for each of 20 of the 50 scored items and the second highest loading for each of an additional 14 items. These six factors accounted for only 51 per cent of the common variance and it was exceedingly difficult to interpret the remaining factors in any meaningful way. These six factors were named Belongingness - Alienation, Positive School Attitude - Negative School Attitude, Personal Control - Fatalism, Optimism - Pessimism,

Flexibility - Dogmatism and Idealism - Pragmatism.

This scale was originally standardised on a student population of age 12 and above. In one study, three samples were administered the Junior Index of Motivation to ascertain whether the scale differentiated between high and low motivated pupils. Of the fifty items, 24 discriminated beyond the .05 level in the three samples selected for validation purposes, while almost all the others significantly discriminated in at least two of the samples; very few discriminated in only one sample but were included in the scale as they approached significance in the other two samples. Similar results were found in several other validational studies.

In another study, students ranked high according to their expert teachers' estimates of their desire to do good work in school scored significantly higher on the JIM Scale than those who were ranked low. This is clear evidence that the JIM Scale does discriminate among high school students according to their desire to do good work in school.

Reliability studies indicated that the scale is a fairly consistent measure over an extended period of time — the test re-test reliability amounting to .70 and the split half reliability being .83.

ADMINISTRATION OF THE TOOLS

The investigator administered the tools, personally. The identification data sheet was administered first, followed by Mehta's TAT, the Inventory of Qualities and the Junior Index of Motivation. The tools were administered to the group selected from a school at the same time with a break of five minutes between the administration of the second and third tools. If the sample from any school was too large, the group was split up into two or more smaller groups. The tools were then administered to one group and then to the other.

MEASUREMENT OF THE VARIABLES

1. Before beginning the scoring of the stories obtained from the students in response to the six pictures of the TAT, the investigator's inter-scorer reliability was determined. The inter-scorer reliability calculated with that of two experts was .79 and .83, respectively.

The 'C' scoring technique of McClelland and his associates (1953) was used to determine the n Ach score of each individual. The investigator first decided whether each story contained any reference to an achievement goal (Achievement Imagery - AI), that is, whether there was mention of any competition with a standard of excellence,

unique accomplishment or long term involvement. If one or more of these criteria were present in the story, it was scored for achievement imagery (AI) and then was scored for the components of n Ach.

If someone in a story scored for achievement imagery stated the desire to reach an achievement goal, 'Need' (N) was scored 'Overt' or 'Mental' activity by one or more of the characters in the story indicating that something was being done about the achievement goal was considered Instrument Activity and was scored I+, I?or I- indicating whether the outcome of the instrumental activity was successful, doubtful or negative. When someone in the story anticipated goal attainment or frustration and failure, anticipatory goal states (Ga) were scored. When the individual was thinking of success it was scored positive (Ga+) and negative (Ga-) when the individual was concerned about failure. When the progress of goal directed activity was blocked or hindered blocks (Bp, Bw) were scored. The story was scored for personal blocks (Bp) when the obstacle was located within the individual and world block (Bw) when the obstacle was part of the environment. If the character in the story striving for success was aided by sources, personal in source, 'Nurturant Press' (NuP) was scored. Affective (emotional) states associated with goal

attainment, active mastery or frustration of the achievement directed activity were scored G. Positive affect (G+) was scored when someone in the story experienced a state of positive affect associated with definite accomplishment or objective benefits as a result of successful achievement. When an individual experienced negative affect associated with failure to attain an achievement goal or complete failure and depreviation, negative affect (G-) was scored. Achievement Thema was scored when the achievement imagery was elaborated in such a manner that it became the central plot or thema of the story.

Each of the above mentioned factors of n Ach were scored only once per story, irrespective of whether there may have been several mentions of it in a single story.

If none of the three criteria necessary for a story to be scored for achievement imagery were present, the story was either scored doubtful achievement imagery (TI) if it contained some reference to achievement or was task related or was scored Unrelated Imagery (UI) if it failed to have any reference to achievement.

A story scored UI was given a score of -1; a TI story was given a score of 0 and an achievement imagery story was given a score of +1. Each component of n Ach was given a

score of +1, thus the total score would vary from -6 to +66.

2. The identification data sheet used to collect data on the pupils' age, sex, class, number of siblings, birth order, their tribe, location of the school, vocational aspirations of pupils; educational level of the father, occupational level of the father and mobility of the family was compiled by the investigator.

The vocational aspirations of the pupils were measured by using the categories used for 'occupational level' in Udai Pareek's Socio-economic Status Scale (Rural). However, the category 'caste occupation' was omitted.

The father's educational level was measured by dividing their educational level into only two categories — literate and illiterate — as it was not possible to obtain accurate information regarding the exact education they had obtained.

The occupational level of the father was also obtained by classifying the occupations of the fathers into the five categories used in Udai Pareek's Socio-economic Status Scale (Rural) after omitting caste occupation.

Information regarding mobility of the family was obtained by classifying the data into two categories — whether they had moved out of their native place or not.

3. Using Mehta's (1969) Inventory of Qualities the pupils' perception of achievement demands of peers, teachers and fathers was measured.

Along with the total score, the scores of the pupils' perception of achievement demands by the peers, by the teachers and by their father were also calculated separately. In cases where the pupil had lost his father he was asked to answer the inventory keeping in mind the guardian.

4. Frymier's Junior Index of Motivation, scored according to the scoring system mentioned earlier, gave a picture of the pupil's motivation towards school.

STATISTICAL ANALYSIS

The n Ach level of the scheduled tribe students has been studied by calculating the means and standard deviations.

The n Ach levels of the different tribes have been compared by using the tribe-wise means and standard deviations.

Significance of differences in the n Ach levels have been tested among the following three groups:

(i) Tribals, in tribal schools (A_1) with non-tribals in tribal schools (A_2)

(ii) Tribals in tribal schools (A_1), with tribals in non-tribal (B_1) schools.

(iii) Non-tribals in tribal schools (A_2) with non-tribals in non-tribal schools (B_2).

The variables age, sex, class, location of the school, educational level of the father, occupational level of the father and mobility of the family have been selected for studying the mean differences in n Ach between and within groups. This has been done by computing the 't' ratios.

The relationship between age, class or grade, number of siblings, birth order, occupational level of the father, pupils' vocational aspirations, pupils' motivation towards school, pupils' perceptions of achievement demands by peers, teachers and fathers and educational level of the father and n Ach in the six different groups has been studied by computing product moment coefficients of correlation.