CHAPTER VI

SUMMARY, CONCLUSIONS, IMPLICATIONS AND FUTURE SUGGESTIONS
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THE PRESENT RESEARCH:

In the National Policy on Education 1986, one whole section of the document was devoted to the strategies for making education accessible to women, scheduled castes, scheduled tribes, minorities and handicapped. The policy spelled out important issues relating to the setup, pedagogical constraints such as absence of good educational facilities in the schools serving the needs of scheduled castes and scheduled tribes, irrelevance of curriculum, unsympathetic teachers and alien dialects. All these issues were to be carefully looked into with a view to making the schools attractive and useful to the children.

As per the 1981 census, the tribal population in Orissa was about 59,150,67 i.e. 22.42%, the second highest in the country. In
otherwise, the tribal population constituted more than one fifth of the state's population and it affected, to a great extent, the progress of the entire state. A document, published by NIEPA, 1981, showed that the percentage of literacy rate in case of Orissa was below the National Average 36.23%. Therefore, the education of such a large group, who were under the shadow of ignorance and illiteracy and far below the poverty line, need be seriously taken into account.

Inspite of the financial measures for the education of the scheduled tribes by the Government, the tribal students lagged behind in their educational, social and professional achievements, in comparison to the general students. Various psychological and academic problems were experienced by them which need to be properly studied. The school atmosphere was not conducive to their emotional and cognitive growth. In Orissa, the major thrust was given to two types of schooling for tribal children.
There were integrated U.P. schools where tribals and non-tribals read together. Besides these schools, some Ashram and Sevashram schools were located in the tribal populated districts. The tribal pupils going to purely tribal schools, developed an inferiority complex that they withdrew or failed when they entered into the general education system with other pupils. It was felt that both kinds of school experiences played a critical role towards the education of tribal children. So, the present research was conducted.

The research objectives were stated as:

- Tribal children attending special Ashram schools and Integrated U.P. Schools differ significantly from each other in their cognitive functioning, affective adjustment and academic achievement, and also from non-tribal children in integrated U.P. Schools.

The specific objectives of the study were as follows:

1. To study independent and interactional effects of group type, class and sex on
cognitive functioning of tribal and non-tribal children.

2. To study the independent and interactional effects of group type, class and sex on affective adjustment of tribal and non-tribal children.

3. To study the independent and interactional effects of group type, class and sex on academic achievement of tribal and non-tribal children.

4. To study the inter-relationships among the cognitive functioning variables and academic achievement of the tribal children in tribal schools, the tribal children in integrated schools and the non-tribal children in integrated schools.

5. To study the inter-relationships among the affective adjustment variables and academic achievement of the tribal children in tribal schools, the tribal children in integrated
schools and the non-tribal children in integrated schools.

6. To study the inter-relationships among cognitive functioning and affective adjustment of the tribal children in tribal schools, the tribal children in integrated schools and the non-tribal children in integrated schools.

7. To evolve detailed family profiles representative of the tribal children in tribal schools, the tribal children in integrated schools and the non-tribal children in integrated schools with a view to compare their developmental condition.

8. to study the inter-relationships between the family setting and cognitive functioning variables.

9. To study the inter-relationships between the family setting and the affective adjustment variables.
10. To study the inter-relationships between the family setting and the academic achievement of children.

11. To predict academic achievement of children in different classes in tribal schools, tribal children in integrated schools and non-tribal children in integrated schools by using data on their cognitive functioning and affective adjustment.

12. To develop some representative case studies on children in the three groups, e.g., tribal children in tribal schools, the tribal children in integrated schools and the non-tribal children in integrated schools to have insight into their life styles and conditions of learning etc.

A preliminary study was conducted in order to test the relevance of the sample, appropriateness of the tools and formulation of the hypotheses. The results of the preliminary
study proved sufficiently interesting to warrant an extensive investigation into the cognitive and affective development of tribal children in different school settings by using the appropriately selected tests and procedure of investigation. On this basis a set of testable hypotheses were formulated and listed below:

HYPOTHESES:

H1: Three groups, e.g., tribal children in tribal schools, tribal children in integrated schools and non-tribal children in integrated schools will vary significantly in their cognitive functioning.

H2: There will be significant effects of class/grade on cognitive functioning of children in all groups.

H3: Male children will differ significantly from female children on cognitive functioning.
H4: There will be significant interactional effects of group type, class and sex on cognitive functioning.

H5: Three groups, e.g., tribal children in tribal schools, tribal children in integrated schools and non-tribal children in integrated schools will vary significantly in their affective adjustment.

H6: There will be significant effects of class on affective adjustment of children in all groups.

H7: Male children will differ significantly from female children on affective adjustment.

H8: There will be significant interactional effects of group type, class and sex on affective adjustment.

H9: Three groups, e.g., tribal children in tribal schools, tribal children in integrated schools and non-tribal
children in integrated schools will vary significantly in their academic achievement.

H10: There will be significant effects of class on academic achievement of children in all groups.

H11: Male children will differ significantly from female children on academic achievement.

H12: There will be significant interactional effects of group type, class and sex on academic achievement.

H13: The academic achievement will be positively associated with measures of cognitive functioning in the following groups:

a) Classes II, III and IV tribal children in tribal schools.

b) Classes II, III and IV tribal children in integrated schools.

c) Classes II, III and IV non-tribal children in integrated schools.
H14: The academic achievement will be positively associated with measures of affective adjustment in the following groups:
   a) Classes II, III and IV tribal children in tribal schools.
   b) Classes II, III and IV tribal children in integrated schools.
   c) Classes II, III and IV non-tribal children in integrated schools.

H15: Cognitive functioning variables will be positively related to the measures of affective adjustment in the following groups:
   a) Classes II, III and IV tribal children in tribal schools.
   b) Classes II, III and IV tribal children in integrated schools.
   c) Classes II, III and IV non-tribal children in integrated schools.

H16: Family setting variables will be significantly related to cognitive
functioning variables.

H17: Family setting variables will be significantly related to affective adjustment variables.

H18: Family setting variables will be significantly related to academic achievement.

H19: Academic achievement can be significantly predicted by combining cognitive functioning and affective adjustment measures.

SAMPLE:

A multi-stage sampling procedure was followed to select the sample for the study. The sampling units were the district and block inhabited by tribals. These were selected from the complete census survey list. Blocks were selected by keeping the choice of a major tribe (Santal) and the facilities for ashram and integrated schools. The following sample of children was selected for the study.
### Tribal Children in Tribal Schools | Tribal Children in Integrated Schools | Non-Tribal Children in Integrated Schools
---|---|---
M | F | M | F | M | F
Class II | 20 | 20 | 20 | 20 | 20 | 20
Class III | 20 | 20 | 20 | 20 | 20 | 20
Class IV | 20 | 20 | 20 | 20 | 20 | 20
Total = 360.

**Variables:**

The following variables were selected for the present investigation.

1) **Cognitive Functioning:**

The cognitive processes are assumed to be operational in perception, learning and thinking. Here the information was sought from children by including the following measures of cognitive functioning.

a) Cognitive Styles.

b) Conservation of number, quantity, area,
length, volume and composite cognitive development.

(2) Affective Adjustment:

Affective adjustment referred to the situational stress disorder associated with emancipatory striving of impulses and emotions (including truancy, frustration, running away, dropout from schools and defiance of schools' rules). In the present study the affective adjustment was operationalised to include the child's level of frustration and reactions, and his/her social status in the group.

(3) Academic Achievement:

The knowledge attained or skills developed through the school curriculum were usually measured and represented in terms of children's examination scores and teacher's assessments.

T O O L S:

The following tests were administered.

1. A modified version of Piaget's Conservation

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tasks

2. Sinha's Story-Pictorial Embedded Figure Test

3. The Indian Adaptation of Rosenzweig Picture-Frustration Study (Children's Form by U.N. Pardeck)

4. Sharma's Sociometric Test (Oriya Version)

5. Interview schedules to develop case studies of the children and schools.

RESEARCH DESIGN:

The study involved three independent variables, namely: group type, class and sex. The group had three types, namely: tribal children in tribal schools, tribal children in integrated schools and non-tribal children in integrated schools, three levels of class such as class II, III and IV, and two levels of sex, i.e. male and female. Hence, a 3x3x2 (ANOVA) was useful in the present study. Three measures such
as cognitive functioning, affective adjustment and academic achievement were used as dependent variables.

PROCEDURE:

Data for the present investigation were collected in three sessions:

Session I involved the administration of the Piagetian conservation tasks along with sociometric test. These two tests took 45 minutes for each child. Since the tests were administered individually, in a day a maximum of four students were examined before lunch break i.e. from 10 A.M. to 1 P.M.

Session II involved the administration of the Rosenzweig P-F Study and Story-Pictorial Embedded Figure Test. These two tests took 22 minutes for each child for completion of all tasks. This session started after lunch.

Session III involved the establishment of contacts with selected families of children
in the nearby villages. A total of sixty families were visited and information was recorded as per the schedule.

MAJOR FINDINGS:

The major findings of the present research may briefly be summarised as under:

(1) Mean differences were significant between the two groups of tribal children. The tribal children in integrated schools showed more field-independent cognitive style than the tribal children in tribal schools. Also the non-tribal children in integrated schools performed better on cognitive style test (M=27.99) as compared to tribal children in tribal schools. Berry (1975) in his researches suggested that the quality of schooling would be a potent factor differentiating among children on cognitive styles. Ghosh and Massey (1978) also observed the significant effect of school conditions on cognitive style.
(2) The two groups, namely, tribal children in integrated schools and non-tribal children in integrated schools did not show any significant differences on cognitive style test. Karp, Silberman and Winters (1969), in two studies (reported together) one on lower and middle class boys and the other on lower and middle class adults, did not observe significant differences in cognitive styles. Bowd (1974) found no significant correlation between cognitive style of the socio-economically advantaged and disadvantaged groups. Sinha (1979) reported that the effect of caste memberships was not significant on cognitive styles. This finding was in support of the earlier findings by Majeed and Ghosh (1979), Mishra and Tripathy (1980) and Puspa (1981).

(3) Mean differences were significant among different classes. The higher the class of children they adopted more independent cognitive styles. Witkin (1954), Goodenough and Karp (1964), Cradall and Sinkeldam (1964), Berry
(1971), Cradall and Lacey (1972), and Kagan and Klein (1973) in their researches reported significant age/grade effects on cognitive style.


(5) There was no significant difference between the two groups of tribal children, e.g., tribal children in tribal schools and tribal children in integrated schools on conservation of number, quantity, area, volume and composite cognitive development. The non-tribal children performed better on all conservation tasks than the tribal children in tribal schools and tribal children in integrated schools. Werner and Murlidharan (1970), Sinha and Shukla (1974), Broota and Ganguli (1975), Mishra and Tripathy (1975),
Sahoo (1975), and Tripathy and Mishra (1976) observed that parental, social, cultural and economic deprivations result in deficient cognitive functioning. Differences between children from advantaged and disadvantaged homes on several measures of cognitive functioning have been reported by Das (1973), Das and Singh (1974), Das and Panda (1977), Verma and Sinha (1977), Juneja (1979), and Mishra & Tripathy (1980).

(6) In all conservation tasks, higher class children did better than the lower class children. Carpenter (1955), Lunzer (1956), Hyde (1959), McNally (1971), Goldschmid (1973) found that the sequence of conservation might vary with the level of schooling. Rao (1976) found a significant age effect on conservation of mass, weight and volume.

(7) The sex contributed significantly towards the variance in performance on conservation tasks. The mean values confirmed that male children tended to had better
performance on conservation tasks than the female children. Renner et al. (1976) found that males scored significantly higher than the females on Piagetian conservation tasks. This finding was supported by White and Friedman (1977) and Pesch (1984).

(8) The two groups of tribal children, e.g., tribal children in tribal schools and tribal children in integrated schools, did not differ significantly on extrapunitiveness (E), intropunitiveness (I), impunitiveness (M), obstacle-dominance (O-D), ego-defence (E-D) and need-persistence (N-P) reactions to frustration. So the levels of frustration of tribal children were more or less similar in special tribal schools and integrated schools.

(9) Tribal children in integrated schools showed more conformity to the group (GCR) behaviour than their non-tribal counterparts and tribal children in tribal schools.

(10) The two groups, e.g., non-tribal children in integrated schools and tribal children in
integrated schools did not differ significantly in different levels of reactions to frustration.

(11) The mean values of the different classes were significant on the measures of reaction to frustration. Higher class children showed more intropunitiveness, impunitiveness, obstacle-dominance, ego-defense, need-persistence, and group conformity ratings than the lower class children. It indicated that the higher classes children developed a self-critical tendency to a desired degree to avoid frustrating situations. McCarr (1950) found a change and modification in reaction patterns to frustration of individuals with the development of age and experience. Pareek (1960) and Rosenzweig (1978) supported this view. Mellina (1977) found that childrens' chronological age affects the modality of reaction to frustration. This finding was supported by Rao and Singh (1981) and Rauchfleisch (1981).

(12) Sex differences were not significant in all the dimensions of frustration, except group
conformity ratings (GCR). The mean values for males and females on GCR were 59.07 and 47.01 respectively. The males showed more conformity to the group behaviour than females. Spach (1951), Stoltz and Smith (1959), Moore and Schwartz (1963), and Rauchfleisch (1981) have reported insignificant sex differences in reaction to frustration. Studies by Rosenzweig and Braun (1970), Sharma and Sharma (1971), Rao and Singh (1981), and Bhan (1984) have found sex differences in reaction to frustration. Recently Biswas (1989) found that girls had stronger tendencies to point out the presence of frustrating obstacles insistently than the boys.

(13) Tribal children in tribal schools feel their social status better than tribal children in integrated schools. Also the non-tribal children in integrated schools felt their social status better than their tribal counterparts. This finding was supported by Minocha (1966), Ahluwalia and Bhargav (1968), Jain (1968), Malhotra (1970), and Tripathy & Badami (1984). They reported that sociometric status appeared
to have some relationship to background factors such as religion, family size, SES and family culture.

(14) The higher class children showed better sociometric status than the lower class children. Ahluwalia and Bhargav (1968) found that sociometric status is positively related to chronological age of children.

(15) Sex differences were significant on sociometric scores. The mean sociometric values for males and females were 7.15 and 4.36 respectively. The males felt their social status better than the females. Male and female differences were also found by McGuire (1984).

(16) Three groups, e.g., tribal children in tribal schools, tribal children in integrated schools and non-tribal children in integrated schools did not differ significantly on academic achievement scores.

(17) The lower class children showed higher academic achievement than the higher class
children. It may be due to the increasingly difficult nature of the subjects in higher classes.

(18) Sex differences on academic achievement were significant. The mean values for males and females were 35.23 and 21.51 respectively. The males showed higher academic achievement than the females. Aruna (1981) reported that the academic achievement of boys was superior to that of girls. Bisht (1984) also found that male students having higher academic achievement than female students.

(19) The academic achievement was positively associated with measures of cognitive functioning such as cognitive style, conservation of volume and composite cognitive development in all the groups. Bowie (1979) found that the arithmetic achievement of children was positively related to conservation tasks. In case of cognitive style, Frechner (1973) reported that the traits found in the
cognitive style were positively related with all aspects of academic achievement. Recently Verma and Swami (1990) reported that field-independence cognitive style facilitates the scholastic achievement of economically disadvantaged students.

(20) The sociometric status was positively related to academic achievement of children in all the groups. Bhargav (1968), Jain (1968), Malhotra (1970), Sharma (1970), Badami & Badami (1973), Bal (1974), Basu & Sarkar (1978), Nair (1978) and Nagy (1985) have reported that academic achievement was positively related to sociometric status of children.

(21) Family setting variables such as occupation of the father, income of the family, education of the parents, reading time, housing facilities, reading materials and parental involvement in the study were positively related to conservation and cognitive style. This finding confirms the earlier findings reported by Werner.
and Murlidharan (1970), Sinha and Shukla (1974), Broota and Ganguli (1975), Mishra and Tripathy (1975) and Sahoo (1975). They found that sensory, muscular, social, parental, cultural and economic deprivations result in deficient cognitive functioning.

(22) The academic achievement of children was positively related to family setting variables such as education of the family, reading time and parental involvement in the study. Girija and Bhadra (1976), Nandy and Singhal (1981), Aruna (1981) and Thompson (1983) reported close associations between the home environment and variations in educational performance.

(23) The academic achievement of children can be well predicted by cognitive style, sociometric status, conservation of volume and composite cognitive development. This finding confirms the earlier findings reported by Lunzer et.al (1976), Bowie (1979), Kingma (1984), Robinson (1974), Kagan et.al (1975), and Basu & Sarkar (1978).
IMPLICATIONS:

The findings of the study seem to have the following theoretical and practical implications:

IMPLICATIONS FOR THEORETICAL MODELS AND CONSTRUCTS

(1) The Piagetian model provided a useful developmental perspective to teachers and educational administrators since it focused on the domain most relevant to education. Piaget had documented the stages of development from infancy to adolescence. It served as a framework to select appropriate curriculum materials, situations and tasks to order them. But the important limitations of this model are inherent in social and cultural settings in which the child reacts. Most of the conservation tasks are urban-centred. The distinctions between urban/rural need to be made and materials identified on the basis of three important criteria such as (a) physical characteristics of
the environment; (b) interaction between the child and the environment; (c) type of reasoning used in the setting. The situation is further difficult in case of tribal children. The development of conservation skills can be effectively assessed and variations explained if tasks focus in their physical setting and local materials, and these facilitate a cause-effect style of reasoning. Pupils, especially tribals, however, will only be able to benefit from such an attempt if the conservation experiences are within their cognitive grasp and relate to their physical and social environments. This idea will help the educational administrators in policy and curriculum decision in the context of tribal education. Thus Piagetian model can be suitably extended by school psychologists to include remedial measures.

(2) The work of Witkin et al. (1962) focused on the cognitive style of field-independence and field-dependence. The construct of cognitive style helps the psychologists and educationists
to understand the individual differences in respect of perceiving, thinking and judging. These findings of this study indicate that Witkin et al.'s can be modified to include the teaching-learning materials appropriate to the levels of cognitive styles of tribal children.

(3) Rosenzweig's theory of frustration offered a systematic means of assessing an individual's characteristic modes of responding to stress and appraising the degree of his frustration-tolerance due to the various educational conditions and social interactions. Schools, as a social system, impart certain types of values. Students may feel frustration if the values are blocked by some internal or external conditions. Blocking of those values may adversely affect the academic performance of the students. This theoretical framework can be usefully extended to mainstreaming tribals with non-tribal children in integrated schools and in school guidance programmes.
(4) The use of sociometric technique revealed the structure of the group as a whole, the interactions between males and females, children of different background such as tribal/ non-tribal. In the integrated educational setting, the sociometric test has the potential to provide the information regarding the social acceptibility and communication among tribals and non-tribals. This construct has the tremendous potential if used properly in the school setting having diverse population.

PRACTICAL IMPLICATIONS:

Policy Implications:

(1) As evident from the findings, the tribal children in tribal schools and tribal children in integrated schools did not differ significantly in academic achievement. It is understood that tribal children in tribal schools do not perform well in academic achievement as compared to tribal children in integrated schools. Though the Government
provides better academic facilities to special tribal schools, but it does not help them to score better in academic achievement than the tribal children in integrated schools, who get less academic facilities in integrated schools. So the educational development in separate tribal schools is low and questioned. Allen and Osborn (1984) observed that students who were integrated with common children perform better on academic achievement. Kluin and Moores (1985) reported the similar views. In National Policy on Education (1986), it is reported that the central focus in educational development of SC/ST is their equalisation with the non-SC/ST population at all stages and levels of education. Hence, it is felt that the Government should make provisions to improve the condition of the integrated schools rather than spending a lot of money for the education of the tribal children by opening separate schools for tribal children.

(2) In the context of Universalisation of Elementary Education (UEE), the present study
can draw the attention of the educational administrators. As the study is confined to the age group of 6-11 years of children, it can suggest the idea to bring the tribal children towards the educational mainstream in order to achieve the goal of Comprehensive Access to Elementary Education.

(3) The National Policy on Education (1986) has emphasised the need of Early Childhood Education. It is realised that tribal children feel inferiority complex as compared to non-tribal children in an integrated setting because the level of language development is not at par with the non-tribal children. Realising the crucial importance of rapid physical and mental growth during early children, the special attention should be given by the government for pre-school education in case of tribal children.

Educational Implications:

The findings indicate the following educational implications:
(a) Improvement in Curriculum Content and Teaching Methodology.

The results of the study indicate that school curriculum has not been fully beneficial to children's cognitive growth and academic achievement. There is need of improvement in many spheres. The National Policy on Education (1986) indicated the following steps to be taken for making the curricula value oriented in respect of scheduled tribes: i) Preparation of primers for classes I and II in respect of tribal languages having more than 1 lakh speakers. ii) The Centre and the State governments will constitute committees at appropriate levels to review the contents of the existing curricula to ensure that caste and other prejudices do not come in the way of integration.

Piaget had offered a mass of substantive data on the forms of knowledge compatible with sound educational objectives. The introduction and gradation of concepts with
suitable operations in different subjects areas may be attempted.

In case of tribal children, the curriculum contents must reflect their social and cultural experiences which will lead to better social and cognitive growth.

(b) Language Training:

It was observed during the testing as well as developing case studies that tribal children in general showed poor levels of communication. They need some language orientation before coming to primary schools. In this direction, the government should institute language centres in different tribal districts/blocks so as to prepare children for primary education.

(c) Providing Minimum Educational Facilities to Primary Schools:

It was observed that the integrated schools were poorly equipped so far as the educational materials were concerned. In this direction an important step has been taken
under the National Policy on Education (1986), namely, Operation Black-Board (OB). It is recommended that all schools should have i) two reasonably large rooms that are useable in all weather; ii) necessary toys and games materials; iii) blackboards; iv) maps; v) charts; vi) other learning materials. These facilities will help children to achieve better cognitive development and academic achievement.

(d) Recruitment and Training of Teachers:

Teachers from tribal background, if found possible may be posted in tribal districts to facilitate better academic development and communication. The non-tribal teachers should undergo the language training in local language in order to teach tribal children effectively. It implies that to enable the teachers to work more effectively in the tribal areas, the teachers should learn the local language. Training should be provided to orient them to the specific context in which they are operating. The need for teacher training and recruitment of teachers from SC/ST background
have also been stressed in the National Policy on Education (1986).

(e) Guidance and Supportive Services:

It was observed that while integration was beneficial for cognitive and academic development, the personal and social problems of children increased. Tribal children feel their social status low as compared to non-tribal children in integrated schools. It was also observed that tribal children have the problems in understanding teachers, in communication, in social status and keeping up with classroom interactions. To overcome problems of social adjustment it may be better to institute guidance cells and support services for tribal children in integrated schools.

(f) Proper Educational Inspection and Supervision:

The school records indicated that many schools in tribal districts of Orissa have not been inspected even once in a year. Lack of inspection may remove the pressure as well as
ignore the smooth administration of the schools. This problem must be overcome by the educational administrators by inspecting the schools regularly.

(g) Evaluation and Monitoring:

The progress in tribal education needs effective and regular evaluation and monitoring. A strong coordination is required at the Centre and State levels. The National Policy on Education (1986) provides detailed guidelines for evaluating and monitoring the various educational schemes for SC/ST children. It is suggested that a standing committee of the CABE under the chairmanship of Minister, Human Resource Development (HRD) may be constituted to monitor and review of the educational programmes for SC/ST at the central level. A similar committee may be constituted at the state level. The evaluation of important schemes like scholarships, hostels and the proposed incentives may be taken by external agencies.
LIMITATIONS OF THE STUDY:

In spite of all attempts to implement the study systematically, it had some limitations.

(1) The other dimensions of cognitive styles are not examined in the present research.

(2) Some tasks of Piagetian conservation are influenced by urban culture which are less culture-sensitive for tribal children.

(3) The relationships among cognitive functioning, effective adjustment and academic achievement have been studied in the present investigation without controlling many intervening variables such as intelligence, SES and motivation. This should be done in future studies to achieve better explanations.

(4) The present sample is inadequate for definite conclusions for policy decisions. This study covered only a particular tribe, e.g., Santal of a district in Orissa. Many other
districts and different types of tribes ought to be included.

(5) The concept of mainstreaming of tribal children cannot be justified by only looking at the academic achievement. Many other dimensions such as teacher's attitude, administrative framework and constitutional provisions have not been taken in to consideration.

(6) In the present study more emphasis has been on quantitative data. The qualitative aspects of educational development have been inadequate. These ought to be properly assessed in future research.

(7) The use of verbal explanation as the criterion for measuring cognitive functioning and affective adjustment has been questioned to some extent for tribal children. This needs intensive investigation.

FUTURE SUGGESTIONS:

Considering the above limitations, the following suggestions may be offered for future
researches:

(1) The groups may be matched on the field-independence-dependence cognitive styles, taught and evaluated on cognitive functioning and academic achievement in an ongoing manner.

(2) The tribal non-school going children may be compared with school-going children on conservation and cognitive style.

(3) Effects of different types of reinforcements in the family on the motivational and psychological level of the tribal children, on conservation and academic achievement may be studied.

(4) Studies with the proper control of intelligence, SES and other cultural variables may be undertaken in order to understand the relationships among cognitive functioning, affective adjustment and academic achievement.

(5) New tools may be devised which are culture-free to assess the levels of cognitive functioning of tribal children.
(6) The present study can be replicated in other areas of the country by taking other tribes and higher age groups.

(7) The concept of mainstreaming and integration of tribal children must be evaluated by studying perceived attributes of mainstreaming, changing strategy and teacher's attitudes towards the concept.

(8) The management's resistance to instruction modifications in mainstreamed environments must be studied.

(9) In order to understand the effectiveness of mainstreaming education, a control and experimental groups of tribal children may be studied by controlling the socio-economic variables.

(10) The non-verbal criteria may be designed for assessing cognitive functioning and affective adjustment of tribal children. It would help the subjects having inadequate language development.