CHAPTER V
Chapter V

DISCUSSION

5.0 The purpose of this research was to study the cognitive development in relation to the family atmosphere and child rearing patterns. The study was conducted on the children between the ages 6 to 12 years representing three socio-economic levels and both males and females. The results of the study are given in the previous chapter. This chapter deals the interpretation & discussion of the results. Since the age group range is quite large (6 to 12 years) the investigator divided the sample into three groups viz. 6-8 years, 8-10 years and 10-12 years. Each age group data has been analysed separately. Hence, in the present chapter interpretation of the result has also been done separately.

The results for the age group 6-8 years show that the socio-economic status is significant ($F<.05$). Other factors like sex and family climate are found to be insignificant. The socio-economic status at this stage of cognitive development is shown to be an important factor by researches done earlier e.g. by Macoby, Good enough and Eagle (1963) and Keller Barbara (1975). The scale which the investigator used for identifying subjects from three socio-economic backgrounds takes into account the educational background of the parents also. Thus the reason
for children from low socio-economic status having poor cognitive
scores may be due to the fact that parents are less educated and
hence are not able to provide enough stimulation at home. The
other reasons may be of poor nutrition and poor facilities for
reading and working provided to the child. Other variables like
sex is not important at this stage. Even if there are differences
in the way a boy or a girl is treated at home they are not
having any influence on the child's cognitive development.
McArthur (1967) in his study has shown similar results by indicating
that sex differences in field independence may be largely due to
social role influences.

The family climate or atmosphere is also found to be
insignificant when studied through analysis of variance. This
variable when it was studied along with home environment inven-
tory through regression it was found to be highly significant
($F-P<.01$). The home environment inventory (Mohite Home Enviorn-
ment Inventory) gives information about child's rearing practices
as well as the general environment or atmosphere of his/her home.
The result indicate that home environment is significant for the
cognitive development of the child ($F-P<.05$). The importance of
the way the child is reared was realized by Piaget as early as
in (1952). Several other investigators like Burton White (1965),
Bing (1963), Payne (1967) have shown the importance of mother's
inter-action with the child's for the later's cognitive develop-
ment. Here the socio-economic status as well as the home environment. These results show that the children coming from low socio-economical strata are likely to have poor home environment or atmosphere. This in turn affects their cognitive development.

The analysis of questionaires of child rearing practices show that female subjects whose mother followed stricter feeding patterns have lower cognitive scores than the females whose mothers followed a relaxed feeding patterns (Table 19). For males subjects the dimension of general care found to be of more importance. The males who had better care from their parents and better father participation were having better cognitive scores (Table 19). These observation collaborates with the study done in eighties by Kagen (1984) and more recently by Bolger (1991), Scarret (1992) and Pruell Kyle(1993).

The results of analysis of variance for the age group 3 to 10 indicate that main effects of SES and sex are non significant while the main effect of family climate is significant (F=P<0.1). The socio-economic status and sex are not playing an important role for the cognitive development of the subjects who are slightly older. The socio-economic status is not influencing the children at this stage. The reason for this may be that the children are benefiting from school experience and their interaction with their peers. The sex differences are also not evident at
This finding is in contrast with findings of earlier investigations Anastasi (1958), Mc Arthur (1967), Shean Raymond W. Starrol, Helen (1973) but collaborates with the study by Barbara B (1975).

The findings indicate that the home environment when studied in isolation through analysis of variance is found to be insignificant but when it was studied along with family climate scale through regression the effect becomes significant ($F=P<.05$). The family climate scale and home environment inventory are both studying family atmosphere as well as child rearing patterns employed by the parents. These findings indicate that interaction between parents and child which constitutes the family atmosphere is an important factor for the cognitive development. The findings collaborated with findings of Swan Raymen, Stavros who found that parent-child interaction help in building cognitive skills even when they are from low SES & socio-economic status. Similar supporting results (give study by Py Swan are shown by the studies done by Hollos (1975) Mc Guilicaddy et al (1979) and Reid (1984).

The observations based on the means obtained from the questionnaire on child rearing patterns for the age group 8 to 10 do not show any apparent difference among the students with high cognitive scores and low cognitive scores. The dimensions like
feeding, general care, religions and moral values and discipline have almost similar means with a difference of 2 or 3. The dimension of father's participation is showing slight significance for both female and male subjects. Those having greater father participation show slightly better cognitive scores. Pruell Kyle (1992) has also shown in his study the importance of father's participation for the development of intellectual capabilities. The hypothesis that the cognitive development is influenced by child rearing practices has been established by the finding of the age of 8 to 10 years.

The findings for the 3rd and the oldest group of this investigation show that all the main effects three independent variables i.e. SES (F=P<.05) found through analysis of variance are significant. The results indicate that socio-economic status and family climate are influencing the cognitive development of the subjects between ages 10 to 12 years. The results are in agreement with the study hypothesis that cognitive development of the child is influenced by his socio-economic status. Similar findings are reported for the age group 6-8 years thus showing that the socio-economic status is an important variable for the present study. These findings collaborates with the earlier studies done in cognitive development on social class differences (Vernon 1965, Almy 1966, Skypet 1967, Kaplan 1969). The importance of social class and economic and educational levels of the
Parents can influence child's cognitive development is also shown in findings of researches done Reid (1970), Gil Gandia (1972), Hopper (1973) recently Koutes (1991) have found that child's IQ is dependent on family income besides other factors. The findings of studies done by Razze, Antomico & Bryant Petter (1992) and by Light, Paul & Butterworth (1992) also show importance of relationship between social class differences and cognitive development.

The family climate is another variable which is found to be of immense importance for the cognitive development of the child. This result is in agreement with the hypothesis that cognitive development is influenced by the family atmosphere. The family atmosphere & the home environment are found to be significant in this study. The scales and inventory used for this purpose give us information about family atmosphere as well as the child rearing patterns used by the parents of the subjects. The third hypothesis that cognitive development is influenced by child rearing patterns has also been found. The results are in agreement with the studies done earlier on home environment by Bradley & Caldwell (1975, 1976, 1977, 1979, 1980, 1980) Kagen (1981). The importance of home environment could be gained from the studies done Finkelstein (1982) Lally et al (1983) and Holt (1989) as they found that cognitive scores of the children improved when they were given better home environment.
Other recent findings of the studies e.g. by Bulker, Hilary David e ries J.C & Plomina Robert (1990, 1993). Coen.
Collaborates with the findings of the present study.

The means table (Table 15) show that when SES and family climate clustered together them there are significant differences in the means (mean for negative family climate x low socio-economic status is 11.8, men for positive family climate x High socio-economic status is 15.5). This indicates that children coming from low socio-economic status have an unfavourable family climate which is thus affecting their cognitive scores. As mentioned earlier this may be due to poor nutrition and lack of awareness and education on the part of parents.

The observation made by qualitative analysis of questionnaire on child rearing pattern show that for both male and female subjects the dimension of father's participation is important for the cognitive scores for both male and female subjects. The cognitive scores subjects are better when they have fathers who have been involved with their upbringing (Coren 1965, Dyk & Whitkin 1965, Sherman 1967, Cusumano 1967). Subjects who had relaxed feeding patterns, general care and discipline had
slightly better cognitive scores. Those male subjects had high cognitive scores whose mother interacted more with them in explaining the religious and moral values. This study is in agreement with the results of study done by (Chilman and Meyer 1967) who have shown that democratic child bringing results in independent thinking and acting. This collaborates with the study done by Clarle Steward and Burton White (1965) on the importance of mother interaction with the child. Similar results are shown in the studies by Hoves & Olenick (1986) who report that interaction between quality of child rearing & family characteristics are important for cognitive development. More recently the studies by Hart Valley, Risely, Todd R (1992) and Pruell Kyle O (1993) also collaborates the findings of this present study i.e. the interaction with the parents is an important factor for the child's IQ and his cognitive development. The result of the study brings out the importance of home and mastering for the cognitive development on the child. Recently, the importance of early experience and mother interaction and relationship has also been mentioned in the article by Sandra Blakeslee (Telegraph 95) in title "Morning Makes the Day". The author has quoted the studies carried out by Scientist Psychologists & at Simon Fraser University in Burnaby, British Columbia, are studying the early critical period for brain, social and emotional development, so that parents may be taught when and how to provide kind of mastering (or rearing) needed for healthy brain development.
The variable of sex is found to be significant for this age group while for earlier the age groups (i.e., 6 to 8 years, 8 to 10 years) it was to be found non-significant. The hypothesis of this study that cognitive development in males and females follows a similar pattern have been proved for the two age groups (i.e., 6 to 8 years & 8 to 10 years) while its been rejected for the age groups 10 to 12 years. The mean table (table no 15) for the sex group show that the mean cognitive scores for females (14.73) are better than the males (10.76). This may be due to the reason that girl students are more serious and most of the parents these days do not show any favouritism towards boy students. These findings are in contrast with the earlier findings where males subjects were found to be better on EFT BAT & RFT measures of field independence (Macoby, Goodenough & Eagle 1963, Macoby 1968). Some studies found differences in social competence and cognitive development associated with gender (Moore 1975, Hofman 1980, Laslow et al 1986, Home 1988 and Holt 1989).

The socio-economic status, family atmosphere and child rearing patterns are found to be important variables in this present study. These results may be useful for parents as well as teacher in realising that there may some family influences besides other factors which may be affecting the child's cognitive
development. The parents and guardians can see to it that they provide a favourable home environment to the child. The socioeconomic status have an impact on a child when he is small and later on when he starts understanding the difference between the him/her and the child who comes from the family of higher income bracket. The realization of this difference influences the all round development of the child. The sex differences also become evident in the later stages of childhood. Earlier studies have shown that boys were better on cognitive scores but this present study shows that the girls on average performed better on cognitive tasks than the boys. This indicates a change which has come in recent times where girls are brought up in a similar manner as boys are. The results of the present study show that girls performed better than boys may be due to the fact that the sample consisted of urban population. The city people are more aware and are exposed more to new challenges and experiences of life. They realize that girls also have equal potentials as boys and are thus looked after well at home and also sent to good schools too.