CHAPTER 5
DISCUSSION

The results given in chapter 4 are discussed here in the same order of presentation under five sections.

5.1. SECTION 1:
CORRELATION BETWEEN THE STUDY VARIABLES

The correlation between the study variables, namely, OPP, its components, PPP, AInt, AAch, self-esteem, creativity and its dimensions, and, overall SES and its variables are discussed under the following subheadings.

5.1.1. Correlation between OPP, its Components and PPP

The significant positive association ($r = .62$) between OPP and PPP (vide, Table 3) indicates that higher the academic pressure reported by parents as exerting on their children, the higher will be the parental pressure perceived by their children. The results support the hypothesis that there is significant relationship between OPP and PPP. The substantial association shows that adolescents to a significant extent
perceive the parental pressure, reported by parents as exerting on them, for better performance in studies.

The high positive correlation between OPP and PPP, suggests more of causation, that is, parental academic pressure can contribute to a significant extent a feeling of pressure in their adolescents for studies. Thus, adolescents in the present study have been found to be very perceptive of the pressure, which the parents say they are exerting on them. Thus, today's demanding parents should be cautioned about the high perceptive ability of their adolescents regarding parental academic pressure.

The high correlation value between OPP and PPP shows the validity of both the scales that measure parental academic pressure.

Since the components of OPP, namely, parental expectations, parental anxiety, parental attitudes, parental control over studies, and parental control over extra-curricular activities are also positively correlated to PPP, with coefficient values ranging from $r = .32$ to $.47$, the hypothesis that there is significant relationship between the components of OPP and PPP is accepted.
5.1.2 Correlation between OPP, its Components and AInt

In the present study the variable AInt measure the academic interest of children, including their stress related to examination and studies. The results of the study have shown that OPP has no significant relationship with the academic interest of children ($r = -.10$). Therefore the hypothesis that there is significant relationship between OPP and AInt of children is to be rejected. However, while analysing the components of OPP, only the component, namely, parental expectations regarding the children's studies, is found to be significantly and negatively related to the academic interest of children ($r = -.18, p < .001$). Therefore, the hypothesis that there is significant relationship between parental expectations regarding studies and AInt of children is accepted.

There are no studies conducted in India to support the finding that indicates negative relationship between parental expectation and AInt (low academic interest also indicates more stress related to studies). However, psychiatrists and educationalists from all parts of India blame demanding parents for the general stress-related problems seen in children. The negative association between parental expectation for children's studies and AInt of children may be explained as follows.
Parental expectations in children's studies have an influence in determining their children's level of expectations regarding their studies and performance in the examinations. Parental expectations are more often considered as an important variable necessary for better academic performance. Unfortunately, many parents fail to maintain realistic aspirations regarding their children's performance in the examination. If parental expectations go too high, then children may feel frustrated, which in turn, can cause a dislike for studies and some amount of stress related to their studies and examination. Thus, in the present study one can find an association between parental over-expectations regarding their children's studies and lower level of AInt in adolescents.

Recent surveys conducted in Ireland (Irish Independent (Dublin), 26 June 1995) and Britain (Sunday Independent (Dublin), 28 April 1996) on adolescents, partly support the results of the present investigation and report that parental over-expectation is associated with severe examination stress. However, these studies do not relate parental expectation and academic interest. Thus, the present study has examined an unexplored area both in India and abroad, and found that parental pressure as reported by the parents does not relate to academic interest of children, as predicted under hypothesis. However, parental over-
expectation is found to be associated with poor academic interest in adolescents.

5.1.3. Correlation between OPP, its Components and AAch

The substantial negative association of AAch with OPP \( r = -0.58 \) and also with the components of OPP indicates that greater pressurisation in studies as reported by parents, accompanies poor academic achievement in children. Therefore, the hypothesis that there will be significant relationships between OPP and its components and the AAch is accepted.

The negative association between parental pressure as reported by parents and AAch could be discussed on the basis of theoretical literature relating parenting styles and academic achievement. Grolnick et al. (1991) have identified three inner resources or motivation variables necessary for school success, as control understanding, perceived competence, and perceived autonomy or self-regulation, which in turn is predicted by parental involvement and support of children's autonomy. In adolescents, authoritative parenting enhances their psycho-social maturity, or development including their self-reliance, identity and self-direction,
which in turn contributes to their success in school (Steinberg et al. 1989, 1992; Oh-Hwang, 1995).

Based on the studies by Steinberg et al. (1989, 1992), and Grolnick et al. (1991) it is recognised that three inner resources are very important for achieving one's academic potential. They are: (1) self-interest or intrinsic motivation, (2) self-esteem or self-regard, and (3) self-regulation or psychological autonomy. Excessive pressurisation from parents (reported by parents or perceived by adolescents), tends to curb the development of these inner resources which are very important for academic achievement. Thus, it is quite reasonable to expect a negative association between academic pressurisation and academic achievement through the negative influence of parental pressurisation on the development of inner resources, namely, intrinsic motivation, self-esteem and psychological autonomy. Since, academic pressurisation by parents is only an emerging problem in the Indian society, no study has so far been carried out to assess its impact on the AAcCh of children. The deleterious effect of academic pressurisation is supported by the findings of Okagaki and Sternberg (1993) that encouragement of autonomous behaviours would be positively related to school performance and that the encouragement of conforming behaviours would be negatively related to school performance.
Like any other parent-child relationship, the relationship between OPP and AAch tends to be bi-directional, that is, poor academic performance of children in the examinations can make the parents apply more pressure on their children for better academic performance.

Parents who put pressure on children for academic performance unwittingly damage children’s self-esteem. The present study has found significant negative association between OPP and self-esteem \( (r = -0.24, p < .001) \). Also, self-esteem is found to have a positive association with AAch \( (r = 0.24, p < .001) \). Thus, it is plausible that academic pressurisation from parents lowers the self-esteem of children which in turn lowers their academic performance. Also, in the present study SES is found to be the strongest predictor of AAch (vide, section 4.2.3.) and low SES parents are found to exert more pressure (vide, section 4.1.2.) and hence, low SES of the family may explain the negative association between OPP and AAch.

5.1.4. Correlation between OPP, its Components and Self-esteem

As predicted under hypothesis, the OPP is found to have a significant association \( (r = -0.24, p < .001) \) with self-esteem. While analysing the components of OPP, it is found that the negative association of OPP with self-esteem (vide, Section 4.1.1.4.) is due to the negative association of
the sub-variables, namely, parental expectation regarding their children's studies \( (r = -0.34) \) and the parental attitudes towards their children's studies, (restrictive attitudes favouring control, \( r = -0.20 \)). Since only two components of OPP are found to be negatively associated with self-esteem, the hypothesis stating that there will be significant relationship between the components of OPP and self-esteem is partly accepted.

The significant and high negative relationship between parental expectation and self-esteem of children may be discussed as follows. Parental aspirations can influence the development of self-concepts in children. Parents' realistic demands help the children to realise their potential resulting in better self-regard. The over-demanding and high-aspiring parents tend to push their children for better performance in the examinations without realising their actual abilities. This parental demand can create a lot of stress in children creating anxiety and fear, which in turn produce feelings of self-doubt and poor self-esteem. A recent study by Abouserie (1994) pointing out that students with high self-esteem are less stressed than those with low self-esteem supports this explanation. Also, according to Stewart and Friedman (1987) young adolescents (11-14 years) are most likely to be plagued with feelings of unhappiness and self-doubt, if they are under stress from several sources. Thus, an
important rule for parents to be aware of is that unrealistic demands lead to low self-esteem.

Parents' report of their attitudes restricting autonomy in children's studies is also found to be associated with poor self-esteem. Parental attitudes restricting autonomy in studying can suggest to the child that the parent is not trusting him or considering him or her to be a responsible person. This in turn can lower the self-esteem of the adolescents. This explanation is supported by the studies conducted by Coopersmith (1967), Rosenberg (1965), Bachman (1970), and Thomas et al. (1974) which show that parental willingness to grant autonomy and freedom to their children are positively related to high self-esteem among children.

The relationship between parental expectations, parental attitudes restricting autonomy in studies, and self-esteem can also be bi-directional, like any other parent-child relationship. The bi-directionality of the influence between parents and the children's self-esteem is explained by Papalia and Olds (1992). In the present context, it is possible that when adolescents start feeling less competent and show less self-confidence, then, parents tend to exert more influence on their studies, by keeping up unrealistic demands and attitudes restricting autonomy in learning.
Interestingly, parental control over studies and extra-curricular activities are not found to influence the self-esteem of children. This finding does not agree with the studies that show negative relationship between various types of negative controlling behaviours by parents and self-esteem (Openshaw, et al., 1981; Barber and Thomas, 1986; Felson and Zielinski, 1989; Barber, 1990). This may be because, all such studies have demonstrated negative relationships between the adolescents' perceptions of their parents' controlling behaviours and their self-esteem. Parental anxiety reported by parents was also not found to be influencing the self-esteem of their children, because parental anxiety is less influential in affecting children's self-esteem when compared to children's own anxiety.

Another possible reason for the negative association between OPP and self-esteem may be that, OPP is negatively associated with low SES conditions ($r = -.49, p < .001$) as revealed by the present study and low SES parents may be having lower levels of self-esteem because of their lower status in the society, and parents with low self-esteem produce children with low self-regard (Rice, 1984). The parent with high self-esteem is the most effective parent. All the clinical evidence now suggests that the more independent, separate, secure and personally fulfilled the person is, the more he is able to develop effective couple and family relationships.
Thus, the SES of family to some extent may contribute to the negative association between parental pressure and children's self-esteem.

5.1.5. **Correlation between OPP, its Components and Overall Creativity, nyCr, vCr and its Dimensions**

As expected, negative associations are observed between OPP and overall creativity, verbal and non-verbal creativity and its dimensions in children ($r = -.23$ to -.34, $p < .001$) and also between the components of OPP and overall creativity ($r = -.14$ to -.30, $p < .001$; vide, Section 4.1.1.5.). Therefore, the hypothesis that there is significant relationship between OPP and overall creativity and its dimensions is accepted. Also, the hypothesis that there is significant relationship between the components of OPP and overall creativity is accepted.

The negative association between the parental academic pressure and creativity dimensions may be explained by understanding the creative process. Creative thinking, according to Fontana (1981) and Fisher (1990), does not occur spontaneously, but an intentional and sustained effort is required involving several stages, and adults working with children can influence positively or negatively the continuity of the creative flow process. Fogel and Melson (1988) consider creative process as a flow that requires deep concentration. Investigators like Csikszentmihalyi (1980)
and Mayers (1978) assert that the children overwhelmed with work cannot experience creativity flow in their daily life. Pressurisation in studies, restricting the allowance of freedom, with too much of control and evaluation, disrupt the creative flow in children. Psychological freedom and safety are important for the nourishment of creativity in children. Pressurising parents tend to schedule the activities of their children, including their involvement in extra-curricular activities restricting the children's freedom of expression. The results are only supported by the study of Mogalia (1989) who found negative association between creativity and the degree families had cast work, school, and recreational activities into an achievement oriented and competitive frame work.

Other important factors necessary for creativity are self-regard and confidence, which are very important to venture into any field of creative undertaking. A recent study by Kalliopuska (1992) shows a positive correlation between self-regard, self-acceptance, and creativity. Academic pressurisation from parents with less positive appraisals may lower the general self-regard of the children, and such children may fail to realise their creative potential.

Finally, the association between pressurisation in studies and low creativity may also be due to the influence of low SES of the family. In the
present study pressurisation is found to be higher in low SES families along with low creativity scores. Thus, low creativity scores associated with higher parental pressurisation (OPP or PPP) may be due to the influence of the low SES of their families.

5.1.6. Correlation between OPP, its Components and SES Variables

As shown in Table 4, the OPP, and its components are significantly and negatively associated with overall SES ($r = -0.20$ to $-0.49$, $p < .001$). Therefore, the hypothesis that there will be significant relationship between OPP, its components and overall SES is accepted.

Parents of low SES background may exert more pressure because, they are the people who, unfortunately, were not able to make use of their potential and would very much long to see their children performing well in their studies. Another reason could be that parents from low SES may believe in more of authoritarian pattern of disciplining in matters of studies, unaware of its consequences on their children’s development.

The OPP and its components are not found to show any relationship with the SES variable, mother's occupation. This is because, in the present sample, the educational level of women does not
correspond to their occupational status, as most of the educated women are not found to be employed.

5.1.7. Correlation between PPP and Overall SES and its Variables

The children's perception of the parental academic pressure is found to show a high negative association with overall SES and its variables, except mother's occupation (vide, Section 4.1.3.1). Therefore, the hypothesis that there is significant relationship between PPP and overall SES, and its variables, except mother's occupation, is accepted. This finding corroborates with the earlier finding (vide, 5.1.6) which showed a significant negative association between OPP and SES, and the same explanation applies here also. Also, low SES parents may use more of verbal abuses while disciplining children in matters of studies, which in turn leads to more perception of pressure by the adolescents. Thus, parental academic pressure, whether reported by parents or perceived by adolescents is found to be negatively associated with the SES level of their families.

5.1.8. Correlation between PPP and Alnt

The parental academic pressure perceived by children is found to show moderate negative association with academic interest \( r = -.23, \)
while that reported by parents does not show any relationship with academic interest. Therefore, the hypothesis that there is significant relationship between PPP and Alnt is accepted.

Thus, the finding suggests that children’s perception of parental pressurisation is more important in influencing their academic interest than the parents’ report of the academic pressure exerted on children. The finding indicates that children who perceive parental pressure show a poor interest in studies and also experience fear and anxiety related to their studies and examination. This finding is supported by the theory that children must experience their behaviour as autonomous (Ryan and Connell, 1989) or ‘self-regulation’ is a key resource for school competence (Grolnick et al., 1991). There are no Indian studies to support the result. However, reports by clinical psychologists and psychiatrists indicate a causal relationship between parental over-expectations and alarming rise in the stress-related problems.

5.1.9. Correlation between PPP and AAch

The results have indicated that excessive parental pressure perceived by children is associated with poor academic performance in the examination ($r = .54, p < .001$). Accordingly, the hypothesis that there
is significant relationship between PPP and AAch is accepted. The
association is similar to that between OPP and AAch \( (r = -.58, p < .001) \)
and hence a similar discussion is relevant here (vide, Section 5.1.3.). In
addition to this, it is found that PPP possesses a moderate negative
correlation with academic interest which explains its relation with AAch.
Thus, children's perception of parental pressure in studies can lower their
academic interest in studies with stress related to studies and examination,
and this in turn can lower their performance in the examinations. There
are reports in Indian media (Indian Express Sunday Magazine, 27
December, 1992 and 27 March, 1994; Femina 8 September, 1994) and
Western media (Irish Independent (Dublin), 26 June 1995; Sunday
Independent (Dublin), 28 April 1996) that indicate a causal relationship
between demanding parents and stress related to studies and examination
in adolescents. A study by Seipp (1991) showed a negative association
between anxiety and academic achievement. Thus, in the present study
perception of parental academic pressure in adolescents is associated with
poor performance in the examination.

It is also reasonable to expect the parental academic pressurisation
causing poor general self-esteem and also academic self-esteem, which
can lead to poor performance in the examination. The present study
found a moderate negative correlation between PPP and self-esteem, and
also a moderate positive correlation between self-esteem and academic achievement. This explains the mediating impact of self-esteem in producing a causal relationship between PPP and AAch.

There is also the possibility of bi-directionality in the relationship between PPP and AAch. Children’s poor academic performance may make the parents put more pressure on them for better performance in studies, which can make them perceive more pressure.

5.1.10. Correlation between PPP and Self-esteem

Children’s perception of parental academic pressure is negatively associated with self-esteem \( (r = -.30, p < .001) \) similar to that between OPP and self-esteem. Hence, the earlier discussion (vide, Section 5.1.4.) is relevant here. The hypothesis that there is significant relationship between PPP and self-esteem is accepted.

There are many studies which support the negative association between PPP and self-esteem (Openshaw, et al., 1981; Barber and Thomas, 1986; Gecas and Schwalbe, 1986; Felson and Zielinski, 1989; Barber, 1990). All such studies indicate negative relationship between adolescents’ perception of various types of negative parental controlling behaviours and self-esteem.
The association could be explained as follows. In the present study higher perception of parental pressure reveals children’s feelings that their parents are more demanding, anxious, and exerting control over their studies, and their extra-curricular activities. Parents who build up better self-esteem for their children make realistic aspirations, understand the children’s uniqueness, encourage them to reflect their individuality (in all areas including the choice of school subjects and leisure-time activities). Such parents allow personal time and space for their children and praise them for efforts and small improvements, avoid criticism, and comparison with other children. Adolescents perceiving parental pressure in studies and other activities, tend to develop hidden resentment, lack of self-worth and self-fulfilment.

In the present study, PPP is found to be associated with poor AAch, which in turn can influence the children’s self-regard including that in the academic domain. One’s achievements and successes have been theoretically considered as a contributing factor to self-esteem. Thus, AAch of children serves as a mediating factor explaining the association between PPP and self-esteem.

There is a possibility of a reversible influence between PPP and self-esteem, just like in any other parent-child relationship; that is, children
who possess poor self-regard including less competence in the academic
domain may cause the parents to put more pressure for studies and hence,
more perception of pressure by the students.

5.1.11. Correlation between PPP, Overall Creativity, nvCr, vCr and its
Dimensions

Children's perception of parental pressure is negatively associated
with overall creativity, verbal creativity, non-verbal creativity, and its
dimensions ($r = -.16, p < .01$ to $r = -.33, p < .001$). Therefore, the hypothesis
that there is significant relationship between PPP and overall creativity,
verbal creativity, non-verbal creativity and its dimensions is accepted. The
detailed discussion under OPP and creativity (vide, Section 5.1.5.) is
applicable in the present context also.

Children's perception of control from the anxious and demanding
parents, in all the activities related to studies, including their extra-
curricular activities (PPP) can impair their psychological freedom and
safety. Every child has a deeply driven need to express his own unique
person. Many parents would like their children to have the opportunities
and accomplishments they did not have. Today's Indian middle class
parents are aware of the importance of extra-curricular activities and
hence, tend to push children for hobby classes without considering the
child's liking and aptitude. Children's, especially adolescents' perception of this kind of pressure is not conducive to the flourishing of creativity. Parental guidance and support for the creative process will be lessened because of the pressure for academic achievement. Thus, there is sufficient explanation to support the moderate negative association between PPP and creativity dimensions observed in the present study.

5.1.12. Correlation between AInt and Overall SES and its Variables

The academic interest of the children of high and low SES does not show significant difference (vide, Section 4.1.3.6) even though their AAch show significant difference favouring high SES group; the AInt and AAch also show moderate positive relationship. This supports the rejection of the hypothesis that there is significant relationship between AInt, overall SES and its variables.

The absence of significant relationship between AInt and SES variables may be because, AInt also measures the stress related to their studies and examination and for adolescents of high SES, the higher score obtained for items showing interest in studies may be nullified by the higher examination stress caused by their high-pressurising schools. In the present study majority of children of lower SES attend government
and private-aided schools and such schools may not be as pressurising as private-unaided schools. Private-unaided schools tend to exert more pressure for academic achievement because the reputation of such schools depend on the quality of results produced at the end of the term.

5.1.13. Correlation between AInt and AAch

As predicted under hypothesis, AInt and AAch are found to be positively associated ($r = .19, p < .001$). Hence the hypothesis that there will be significant relationship between AInt and AAch is accepted. It is logical to expect that children with high AInt scores, with less stress in studies perform better in examinations.

5.1.14. Correlation between AInt and Self-esteem

The present study has shown that higher AInt scores are associated with better self-esteem ($r = .53, p < .001$) and accepts the hypothesis that there will be significant relationship between the two variables. In the present study better AInt also means less stress in studies. Low self-esteem and lack of self-confidence lead to anxiety and fear in a person. The study by Abouserie (1994) that students with high self-esteem are less stressed than those with low self-esteem supports the explanation.
Humphreys (1996) has stated that children with good self-esteem will be more eager to learn, acknowledge their strengths and weaknesses, and find enjoyment of academic effort; children with low self-esteem tend to have more fear of failure, low curiosity and low motivation. Therefore, one can find a significant positive association between AInt and self-esteem as observed in the present study.

The present study has shown that a low interest in studies is associated with poor academic performance and also a greater extent of perceived parental pressure, which in turn is found to be associated with poor self-esteem. Therefore, ACh and PPP serve as mediating factors in bringing about a positive association between AInt and self-esteem.

5.1.15. Correlation between AInt, Overall Creativity, nvCr, vCr, and its Dimensions

Academic interest is not found to be related to the overall creativity, non-verbal and verbal creativity and its dimensions (vide, Section 4.1.3.9). Therefore, the hypothesis stating significant relationships between AInt and overall creativity, nvCr, vCr and its dimensions is rejected. Academic interest and creative thinking ability are different and hence, creative children need not show an increased interest in studies which requires more of convergent thinking. The stress related to studies
and examination as measured under the variable AInt may not be sufficient enough to affect the creativity of children.

5.1.16. **Correlation between Self-esteem, Overall SES and its Variables**

The positive association between self-esteem and overall SES observed in the present study ($r = .17, p < .001$) is due to the influence of the variables of SES, namely, father's education, father's occupation, and mother's education. The monthly income of the family is not found to have any association with the self-esteem of the children. Mother's occupation also does not relate to self-esteem because the sample contained educated and unemployed mothers and hence their employment status did not correspond to maternal education. Therefore, the hypothesis that there is significant relationship between self-esteem and SES variables is partially accepted.

There are many studies by Western investigators which show a positive relationship between self-esteem and SES level of the families, supporting the results of the present study (Rosenberg, 1965; Ziller, 1969; Brown and Renz, 1973; Taylor and Walsh, 1979). However, these studies have not considered the different variables of SES. The present study has taken into account the relation of different aspects of SES and self-esteem. The finding that income of the family has no significant influence, but, the
educational level of the parents and employment status of the father have positive association with self-esteem of the children is noteworthy.

Parents of low SES may use more verbal abuses while disciplining children in academic matters. Frequent use of such verbal abuses can lead to poor self-esteem. The study by Joubert (1991) supports the explanation and found that sons and daughters with high self-esteem reported that their parents were more interested in their activities and refrained from verbal abuse. Also, parents of high SES may have higher self-esteem, due to their higher status in society. Rice (1984) is of the opinion that SES of the parents cannot by itself produce low self-esteem children; if parents’ self-esteem is high then, it produces high self-esteem children and the parental self-esteem depends on the self-acceptance of the parents within their community. Thus, it is reasonable to expect a positive relationship between self-esteem and SES.

4.6.17. Correlation between Self-esteem, Overall Creativity, \(\text{nvCr}, \text{vCr}\), and its Dimensions

A significant positive association between self-esteem and overall creativity, \(\text{nvCr}\) and \(\text{vCr}\) (\(r = .14, p < .01\) to \(r = .17, p < .001\); vide, section 4.1.3.11.) is observed in the present study. Hence the hypothesis stating significant relationships between self-esteem and overall creativity, \(\text{nvCr}\)
and vCr is accepted. However, the Elab nVCr, and Orig vCr are not found to be related to self-esteem.

Self-esteem is important for creative expression and this appears to be almost beyond disproof (Coopersmith, 1967). A willingness to stand up for one's own ideas and feelings requires a sound basis of self-esteem (Fisher, 1990). Salkind and Ambron (1987) found that low self-esteem tends to make children less original and more imitative, whereas, high self-esteem brings out initiative and independent judgement. Therefore, children who have high self-esteem tend to be more creative as observed in the present study. The studies relating creativity and personality have shown that creative individuals are high in self-sufficiency and self-confidence (Jha, 1975; Mallappa and Upadhyaya, 1977; Singh, 1978; Kundu, 1987).

The association between self-esteem and creativity may be bi-directional. Creativity to some extent can enhance the self-esteem. Creative self is one aspect of the child's sense of self (in addition to the physical, emotional, intellectual, behavioural, and social self). If children can find and pursue their own unique life pattern, then they can build up self-esteem with regard to creative self. Thus, if children can
affirm themselves in their uniqueness (creativity), they can lead a self-fulfilling life (with sufficient self-esteem).

5.1.18. Correlation between AAch, Overall SES and its Variables

AAch is found to be highly and positively influenced by overall SES and individually by each of the SES variables, namely, father's education and occupation, mother's education, and monthly income of the family. Therefore, the hypothesis that there is significant relationship between AAch and overall SES and its variables except the variable, namely, the occupational status of the mother is accepted.

There is considerable evidence of the association between academic achievement and social class background as represented by parental educational and occupational status. Schiefelbein and Simmons (1981) found that social class significantly helped predict student achievement in 28 out of 37 Third World studies. A recent study by Undheim and Nordvik (1992) on a very large sample of 16-year-olds found that parents' education was a powerful predictor of student achievement. In the present study mother's employment status did not influence the academic performance since the occupation of the mother has no correlation with overall SES (vide, Table 5).
5.1.19. Correlation between A Ach and Self-esteem

The results of the present study indicate a moderate positive association between A Ach and self-esteem (r = .24, p < .001). Accordingly, the hypothesis that there is significant relationship between A Ach and self-esteem is accepted.

Theoretically, children who have confidence in themselves, or who possess perceived competence, have the courage to try, and are motivated to live up to what they believe about themselves, and are likely to perform better in the examination (Purkey, 1970; Bandura, 1977; Harter, 1982a; Grolnick et al., 1991). According to Byrne (1984) students who obtain good grades have more favourable attitudes about themselves. Therefore, one can find a significant positive relationship between self-esteem and A Ach, as observed in the present study.

The question that arises regarding the relation between A Ach and self-esteem is that, 'Does high self-esteem lead students to perform better in school?' or, 'Does academic competence nurture the development of high self-esteem?' Most experts agree that both processes are at work.

Academic achievement can enhance the self-esteem of the adolescents (Maruyama et al., 1981; Bednar et al., 1989). Finally, the
significant positive relation indicates that self-esteem and academic achievement are mutually reinforcing.

5.1.20. Correlation between AACh, Overall Creativity, nvCr, vCr and its Dimensions

A substantial positive association between AACh and overall creativity, nvCr, vCr and its dimensions is observed in the present study ($r = .33$ to $.46$, all $p$'s $< .001$). Hence, the hypothesis that there will be significant relationship between AACh and overall creativity, vCr, nvCr and its dimensions is accepted.

The relation between the two may be indirect or direct. Indirectly, AACh due to its relation with low parental pressure and high self-esteem may be associated with high creativity. Also, in the present study AACh and creativity are found to be associated positively with SES and hence, SES of the family may be causing a positive relationship between the two.

A recent study by McCabe (1991) has found that high creativity in both figural and verbal area were positively associated with academic performance in early adolescents. The studies conducted by numerous Indian investigators support the present finding (Passi, 1972; Singh et al., 1977; Mehdi, 1977; Gupta, 1979; Asha, 1980; Jarial, 1981). More recently
Padhi (1995) found that creativity is significantly related to achievement in five subject areas. He reasons that high creative may be very inquisitive and very free to express their creative urge in the form of success in classroom performance as compared to low creative ability students.

More about the direct relationship between the two is discussed later while discussing the prediction of AAch by predictor variables that also include creativity (vide, Section 5.2.3.).

5.1.21. Correlation between Overall Creativity, nvCr, vCr, and its Dimensions and Overall SES and its Variables

In the present study a substantial positive association is observed between all the creativity variables and overall SES and its variables (except mother’s employment) \((r = .32 \text{ to } .46, p < .001)\). Thus, the hypothesis stating significant relationship between overall creativity and its dimensions and SES and its variables except mothers' employment is accepted.

The association may be direct or indirect. Directly, high SES level provides better parent-child relationships which encourage children to feel and express their feelings and opinions freely. Also, parents hailing from high SES avoid punitive discipline and tolerate and accept creative
ideas. The availability of resources in terms of knowledge, money, time and energy, helps to nourish the creative talent in children.

The positive significant association between creativity and SES may be indirect due to the positive association of SES with self-esteem and the negative association with parental pressure as observed in the present study. In the present study, children of higher SES found to possess better self-esteem (vide, Section 4.1.3.10.) and also, children with high self-esteem found to be more creative (vide, Section 4.1.3.11). Thus it is possible that children of high SES, who possess better self-regard and confidence, may have the ability to try out novel ideas and may not be unduly apprehensive about making mistakes. Also, in the present study, higher parental academic pressure is associated with low SES (vide, section 4.1.2. and 4.1.3.1.) and parental pressure variables are negatively associated with creativity variables (vide, section 4.1.1.5. and 4.1.3.5.). This explains the positive association between creativity and SES in the present study.
5.2. SECTION II:
PREDICTION OF DEPENDENT VARIABLES FROM A GROUP OF STUDY VARIABLES AND THEIR PARTIAL CORRELATION

The results of multiple regression analysis which predict each of the dependent variables, namely, PPP, AInt, AAch, self-esteem and creativity are discussed under the following headings. The results of partial correlation analysis of each of the dependent variables with other study variables (predictor variables) are also discussed.

5.2.1. Prediction of PPP from a group of combined Study Variables and its Partial Correlation

Stepwise multiple regression analysis shows five predictor variables, namely, OPP, AAch, AInt, father’s and mother’s employment, that together account for 47 percent of the variance in the PPP score (vide, section, 4.2.1.), and 53 percent of the variance may be due to other factors like personality characteristics not considered in the present study.

It is reasonable to find that among the predictor variables, the variable OPP has the most substantial positive association with PPP and hence the strongest predictor of PPP, accounting for 38 percent of the variance in PPP. The variables AInt and AAch are found to predict changes in PPP, showing negative associations. The presence of lower
levels of academic interest (along with stress related to studies and examination) in adolescents can predict PPP because of a substantial correlation as shown by a partial correlation coefficient value of -.23. Also, adolescents showing lower performance in the examination are found to predict PPP because of a moderate negative partial correlation coefficient value of -.18. Of all the SES variables, low scores in father's and mother's occupation is associated with more perception of parental pressure by the children, because such parents may like to compel their children to perform well in their examinations, so that their children could achieve a better status in the society, which they themselves could not.

5.2.2. Prediction of Alnt scores from combined Predictor Variables and its Partial Correlation

The variables, namely, self-esteem, mother’s education, AAch, parental attitudes towards studies, PPP, and overall creativity together account for 35 percent of the variance in the variable, Alnt (vide, section 4.2.2).

The variable, self-esteem is found to be the strongest predictor of Alnt because of a high positive association (the partial correlation coefficient being .52). Adolescents who have a good general self-regard for themselves will perceive academic ability and greater confidence in
themselves which make them motivated to achieve academically and develop interest in studies and experience lower stress during examination time. The explanation is supported by the view of Waschull and Kernis (1996) that, overall, children with high self-esteem will be intrinsically motivated than children with low self-esteem.

The variable AAch predicts Alnt and shows a moderate positive association. It is reasonable to find causal association between achievement in studies and better interest in studies. Adolescents who perform well in the examination tend to enjoy studies, and are likely to experience low levels of examination stress. Therefore, better academic performance in the examination would serve as reinforcing factor, that motivates children to show more interest and enjoyment in studies.

Unlike in the zero-order correlation analysis, parental attitudes favouring control over their children’s studies, are found to predict (showing positive association) Alnt (see Table 7). Thus, the present finding has indicated the significance of parental attitudes in influencing the Alnt of children rather than their actual control, expectations, and anxiety over studies. Mother’s education is found to predict Alnt, and surprisingly, shows a negative association. Educated mothers may try to involve more in their children’s studies and too much involvement may
cause dislike for studies and stress related to studies and examination. However, in the present study, education of mothers is associated with low levels of OPP and PPP. The prediction of AInt by mother's education rather than father's education is possible because, in the present sample, more mothers may be involved in the education of their children than the fathers.

Overall creativity is found to predict the scores of AInt, showing negative association. Children who are creative would like to involve themselves in tasks that require challenges and divergent thinking, and they may not necessarily value education in general, nor enjoy their studies.

PPP is found to predict AInt and shows a low significant partial correlation coefficient because perception of any form of pressure can hinder the motivation to achieve, producing a dislike for studies and more stress related to studies and examination.

5.2.3. Prediction of AAch and its Partial Correlation

The variables SES, OPP, AInt, overall creativity, PPP, and parental expectation for studies together account for about 58 percent of the total variance in AAch (vide, Section 4.2.3.).
The SES factor is found to be the strongest predictor of AAch. The prediction of AAch by the SES and its positive partial correlation may be explained as follows. Parents of high SES may have better availability of parental resources like time, energy, and money and will have better knowledge of the utilisation of these resources to realise the educational potential in their children.

The finding that indicates the prediction of AAch by OPP and PPP and its negative partial correlation shows the deleterious and direct influence of parental pressurisation on AAch and is discussed under sections 5.1.3 and 5.1.9.

Regarding the prediction of AAch by AInt and its positive partial correlation, one can easily reason that children who possess better AInt (including a desirable attitude towards education in general, more enjoyment in their studies, with low level of stress to studies and examinations) will perform better in their examinations.

The prediction of AAch by overall creativity and its positive partial correlation signify the influence of creativity on the academic performance and vice versa. After reviewing the literature regarding the two variables, one may realise that to achieve academically or creatively, certain inner
psychological resources are required. They are perceived autonomy, competence and self-worth. Creativity can be developed to a certain extent by any one with sufficient motivation and direction. AAch also requires a good level of motivation. Hence, adolescents possessing achievement motivation (mainly, intrinsic) tend to succeed academically or creatively. Four decades ago, Barron (1955) found that creative adults tend to be enthusiastic, ambitious, independent, introspective, etc. These are also the qualities that favour academic achievement. Hence, it is reasonable to expect the finding that creativity can predict AAch.

The positive and significant relationship between creativity and AAch supports the findings of Padhi, (1991, 1995). Padhi, (1991) has found that creative ability of secondary school students is a better predictor of academic self-concept in all the school subjects than achievement. Padhi, (1995) found that high creativity scores are associated with high test scores in all school subjects and reasons that high creatives may be very inquisitive, very free to express their creative urge in the form of success in the classroom performance as compared to low creative ability students.

The parental expectation as a predictor variable, and its positive association (partial correlation) with AAch may be explained as follows.
There are many studies conducted abroad that find parental expectation as a non-cognitive variable, positively influencing the academic performance of children (Finlayson, 1971; Fotheringham and Creal, 1980; Nile, 1981; Soto, 1988; Cherian, 1991; 1994). Thus, parental expectation can predict AACh. According to Parson et al. (1982) children's expectancies of success are more closely related to their parents' expectancies than to their own past performance. Thus, parental expectations to some extent help to raise their children's achievement motivation, which can result in better performance in the examination.

5.2.4. Prediction of Self-esteem and its Partial Correlation

The four independent variables, namely, AInt, parental expectation for studies, Orig nvCr and PPP predict self-esteem and together accounts for 37 percent of the variance (vide, Section 4.2.4.).

The AInt is found to be the strongest predictor of self-esteem because of its high positive partial correlation with self-esteem. As discussed earlier under section 5.1.14., the positive relation between the two is supported by the study by Abouserie (1994), who found that students with high self-esteem are less stressed than those with low self-esteem. Waschull and Kernis (1996) predicted that children with low self-
esteem would relate to lower levels of intrinsic motivation. Children with low intrinsic motivation may not possess an inherent interest in studies.

The present finding indicates the deleterious influence of parental over-expectations regarding their children’s studies in predicting the self-esteem of children. This may be due to the reason that parental aspirations on adolescent’s academic performance, helps to build up the adolescent’s ideal self; for instance, if the child’s parents expect him to score above 75 percent in the examination, then, it helps him to form the same level of expectation for achievement in the examination as his parents, and he tends to idealise himself as "I should get more than 75 percent in the examination". When the parental aspirations are too high, above his level of ability, then there will be a lot of incongruity between the child’s ideal self and the real self, which in turn result in poor self-esteem. The explanation is based on the recent findings of Harter (1990) who explains that those with low self-esteem see a discrepancy between ideal self and real self.

The finding that self-esteem is predicted by Orig nvCr and their positive partial correlation may be explained as follows. Original ideas in the figural or non-verbal area (painting, drawing, sculpture, handicraft, etc.,) are likely to be more appreciated and valued by others and by
oneself when compared to that in the verbal area, which in turn helps to acquire a good level of self-esteem. The reasoning is based on one of the theories regarding how self-esteem is acquired, that it is earned by one's competence either appraised by oneself (Gecas and Schwalbe, 1983) or by others (Mead, 1934). The association may also be reversible, that is, certain level of self-worth is required to explore original ideas in any area of creativity, including the non-verbal area.

In the present study, the variable, PPP predicts self-esteem and also shows a negative partial correlation, whereas, OPP is not found to predict the self-esteem of children. The finding signifies the role of perceived parental pressure over the parent reported pressure in influencing the self-esteem of the adolescents.

There are many studies that support the relation between PPP and self-esteem and indicate a negative relationship between adolescent's perception of various types of negative controlling behaviours and self-esteem (Openshaw et al., 1981; Barber and Thomas, 1986; Gecas and Schwalbe, 1986; Felson and Zielinski, 1989; Barber, 1990). Adolescent's perception of parental indulgence in academic matters, with less autonomy and few positive appraisals for achievement in studies, can lead to lower levels of self-esteem.
5.2.5. Prediction of Overall Creativity and its Partial Correlation

Overall Creativity is predicted from the variables AAch and SES and together accounts for 25 percent of the variance (vide, section 4.2.5.). AAch is found to be the strongest predictor of overall creativity and its partial correlation coefficient value being .25. The positive association between creativity and AAch is discussed under section 5.2.3., while discussing the prediction of AAch by overall creativity.

The SES of the family is found to be a predictor of overall creativity. The SES of the family determines the availability of material and psychological resources (psychological freedom and psychological safety) that facilitate creativity in children. The positive association between creativity and SES is discussed in the previous section (5.1.21.) while explaining the correlation between creativity and SES variables.

5.3. SECTION III:
COMPARISON OF STUDY VARIABLES BASED ON TYPE OF SCHOOL

The results obtained while comparing study variables based on three types of schools using analysis of covariance with SES as the covariate are discussed under the following sub-sections.
5.3.1. Comparison of OPP and its Components based on Type of School

The hypothesis that there is significant difference in OPP and its components exerted on children of the three types of schools is accepted in the present study. The group differences in OPP is found to be mainly due to the difference in the SES background of the families and to a less significant extent due to the main effect, the school (vide, Section 4.3.1). A negative association between SES and parental pressure is observed in the present study and is discussed earlier (under section 5.1.6.). Table 11 shows that the SES of the students varied according to type of school, with children of government schools coming from the lowest SES level, followed by those of private-aided schools and then by those of private-unaided schools. This gives sufficient explanation for the significant group difference in OPP contributed mainly due to the effect of the covariate, SES.

How can the group differences in the OPP scores be attributed to school-related factors? This may be explained in the following way. The government school environment may not favour the development of achievement-related behaviour and hence parents tend to exert more pressure fearing that their children are not very motivated for achievement in school. Private-aided schools provide better learning
facilities for their students than the government schools and hence, parents of such schools may not exert as much pressure as exerted by parents of the children of government schools. The parents of private-unaided schools are aware that their children are provided with the best educational facilities in school. Such parents know that in private-unaided schools their children are pressed for achievement, as bad performance of students in the examination can affect the reputation of the school. Thus the variable, type of school, is found to have a less significant effect in producing significant group differences in OPP.

While analysing the components of OPP, the significant difference in the first component, namely, parental expectation among the three groups is only due to difference in the SES level. The group differences in parental anxiety is due to the effect of both SES and school. Thus, the type of school can influence the anxiety of the parents towards their studies. Parental attitude towards studies and their control over studies are also found to be influenced by both the SES and the school. The parents of government school students tend to be more anxious, may have attitudes preventing autonomy in learning, and may exert control over studies because such parents find that government schools do not strive hard to bring out the academic potential in children. The group differences in
parental control over extra-curricular activities are found to be only due to the effect of SES.

As shown in Table 13, OPP and its components are found to be the highest for the children of government schools and the lowest for those of private-unaided schools. The possible reason for this trend may be due to the significant difference in the SES of the families. Parents of lower SES (in the urban and suburban background) may involve in their children's studies in a less authoritative manner which can be more pressurising.

While analysing significant difference in OPP and its components, in a pair-wise way, all the components except the component, namely, parental control over extra-curricular activities do not show any significant difference between government and private-aided schools (see Table 13). This may be because the mean SES scores of government and private schools do not vary as much when compared to that of private-unaided school (vide, Table 11).

5.3.2. Comparison of PPP based on Type of School

As shown in Table 14, there is significant difference in the PPP scores among the children of the three types of schools and the hypothesis that there is significant difference in PPP scores in children hailing from
three types of schools is accepted. The difference in PPP scores is found to be due to the difference in the SES of their families, and not due to school-related variables. The substantial negative correlation found between SES and PPP discussed earlier under section 5.1.7. accounts for the group difference in PPP due to SES of the families.

5.3.3. Comparison of Alnt based on Type of School

The Alnt of children does not show any significant group difference (vide, Table 16) in spite of significant group differences in the SES level and school-related variables. Therefore, the hypothesis that there is significant difference in the Alnt of children coming from three types of schools is rejected.

The absence of significant group difference is because, in the present study Alnt is not found to be related to the pressure reported by parents and also to the SES of the children's families. Surprisingly, the three types of schools with very different class environments in terms of teacher-related factors (teacher's motivation, expectation, teacher-student relationship, teaching strategy etc.) and class room facilities are not found to produce significant difference in the academic interest of children. This may be because Alnt measures the interest as well as the stress of students.
in relation to studies. The academic stress caused by the pressurising private schools may neutralise the conducive academic facilities provided by such schools.

5.3.4. Comparison of AAch based on Type of School

The present study has found significant difference in the AAch scores of children from three types of schools. Therefore, the hypothesis that there is significant difference in the AAch of children coming from three types of schools is accepted. The significant group difference in the AAch of children is found to be mainly due to the difference in the SES of their families. School-related factors also account for group differences, but to a less significant extent (vide, Table 17). Thus, the SES factor is found to be more important in producing significant group differences in academic achievement than the school-related factors. This finding supports the statement of Coleman (1987) who concludes that "variations among family backgrounds make more difference in achievement than do schools, which implies that schools of whatever quality are more effective for children from strong family backgrounds than for children from weak ones." The preceding results which show the prediction of AAch by the SES factor and also a positive and significant association between AAch
and SES, give sufficient explanation for the role of SES in producing
group differences in AAch.

The present study has shown that school-related factors also have
significant effect on the AAch, because the teacher-related factors (teacher-
student relationship, teachers' expectation regarding their students' achievement, teaching strategy, etc.), and the physical environment of the school including the class size and other facilities vary with regard to the kind of school. Finn and Achilles (1990) while explaining the relation between class size and achievement say that teachers have greater enthusiasm and higher morale when they are not burdened with large number of students and have more time to spend with individual student. The students are more likely to be attentive and engaged in class-room activities in small classes. As mentioned earlier, private schools in general tend to provide better learning environment than the government schools. Thus, one can expect significant group difference in the AAch score, due to the effect of the type of school from which the children are coming.

As shown in Table 18, the three pairs of groups showed significant
difference in the AAch score, with students of private-unaided schools scoring the highest for AAch followed by those of private-aided schools and then by those of government schools. One of the probable reasons
may be that the unaided schools are self-dependent schools. Since they are not getting any aid from the government, everything depends on how the schools are run and the Principals may give more attention on the teachers as to how they are working, how they are teaching, etc. In government schools, the teachers are disengaged, and the Principals will be little effective or less motivated in directing the activities of the teachers. Thus, the higher SES background of the students of the private-unaided schools is complemented by conducive school environment in producing better performance in the examinations. This explanation is drawn from the proposition made by Coleman (1987) that schools constitute a constructed institution, designed to complement the non-constructed, spontaneous institution, the family.

5.3.5. Comparison of Self-esteem based on Type of School

The children hailing from three types of schools differ significantly in self-esteem and hence, the hypothesis that there is significant difference in the self-esteem of children from three types of schools is accepted. The group difference in self-esteem is found to be due to the SES of their families and not due to school-related factors (vide, Table 19). The result is supported by the findings of Cheung and Lau (1985) that relationship with parents is a stronger predictor of self-esteem than that with school.
The study has found a positive relation between self-esteem and overall SES. High SES will be associated with more of democratic parenting practices, and the present study has indicated that they exert low levels of academic pressure; parental pressure in turn is found to be negatively associated with self-esteem. Also, educated and well-employed parents may be possessing better self-esteem, when compared to those hailing from a lower SES. The parents with high self-esteem will be more effective than those with low self-esteem in maintaining better family relationships which in turn helps in the development of self-esteem in children. Thus, it is reasonable to expect significant difference in the self-esteem scores of children from three types of schools due the effect of SES (the covariate) of the families.

The results of multiple range test given in Table 20 show that there is no significant difference between children of government and private-aided schools in self-esteem, in spite of significant difference in the SES level; significant difference in self-esteem is noticed in the other two pairs of groups. This may be because, the mean scores of SES of the students of private-unaided schools are far too high, when compared to that of private-aided and government schools (see Table 11). Also, there are other factors, which are not measured in the present study, that contribute
to the development of self-esteem in students hailing from private-unaided schools.

5.3.6. **Comparison of Creativity scores based on Type of School**

The children hailing from three types of schools differ significantly with regard to creativity and its dimensions. Therefore, the hypothesis that there is significant difference in creativity and its dimensions of children coming from three types of schools is accepted. Significant difference in the overall creativity scores and non-verbal creativity scores are found to be mainly due to the SES of their families and to a less significant effect due to school-related factors (vide, Table 21). The results that show the influence of both family and school in producing significant group differences in creativity and non-verbal creativity scores are supported by the findings of Raw and Marjoribanks (1991) that adolescents' creativity had modest associations with their perception of both family and school environment.

The results discussed earlier (vide, Section 5.1.21) that show significant positive association between creativity and overall SES explain the main role of SES in producing group differences in overall creativity and non-verbal creativity. The type of school has an effect in producing
significant group difference in overall creativity and non-verbal creativity because the class room environment differs with regard to the type of school in terms of teacher-student relationship and teaching strategy. Private-aided schools tend to have more democratic teacher-student relationship and teaching procedures that promote more participation and independence. A recent study in India by Padhi (1994) compared the class room environment in four types of schools and found that CES (Class room Environment Score) was the highest for unaided schools and the lowest for government schools. The CES is measured in terms of factors including 'Participation' and 'Independence'. Class room participation and independence provided to the students can, to a certain extent, promote creativity in students. This may be the reason for finding the highest creativity scores for students of private-unaided schools, followed by those of private-aided and government schools.

For verbal creativity and its dimensions the significant group difference is found to be only due to the SES factor. This indicates that the socio-economic factors in terms of better income, and higher educational and occupational level of parents have significant influence over school-related variables in producing significant differences in verbal creativity.
5.4. SECTION IV:
COMPARISON OF STUDY VARIABLES BASED ON GENDER,
MOTHER’S EMPLOYMENT AND BIRTH ORDER

5.4.1. Comparison of Study Variables based on the Gender of Children

There is no significant gender difference in OPP and its components (vide, Table 23) which means that the parents' report of the academic pressure on children does not show any gender difference. Therefore, the hypothesis stating that there will be significant difference in OPP and its components based on gender is rejected. The finding that indicates the absence of gender difference with regard to the academic pressurisation is surprising, because even Western researchers like Baker and Entwisle (1987) have suggested that gender-specific attitudes endorsed by mothers result in differential expectations for boys and girls, expectations that generally favour boys. The finding reveals a desirable trend in terms of the absence of sex discrimination in parental attitudes related to studies, which is a step towards raising the status of women.

It is worth noting that PPP differed significantly with regard to sex, with boys perceiving more parental academic pressure than girls (vide, Table 24). Therefore, the hypothesis that there will be gender difference with respect to PPP is accepted. With the pressure reported by parents as
exerting on their children (OPP) showing no gender difference, the perception of more parental pressure in boys may be due to many reasons. Girls tend to be or are expected to be more suited to structured learning and they adhere to time tables better when compared to boys. Boys in general are given more freedom, specially in Indian society, to engage in activities of their choice and the society expects the girls to be more homebound, more obedient to parental rules, and more responsible. Hence, structured learning with the involvement of parents suits girls better than boys, and boys tend to resent too much involvement from parents. This may be a reason for more perception of parental pressure by boys when compared to girls.

There is no gender difference with regard to the AInt and AAch of children. This finding is in contrast with the results of the study by Singh (1986) on high school children in India, which reveals significantly higher achievement among the girls. It is surprising to note that self-esteem does not show any gender difference. This is in contrast with the studies by O'Connor et al. (1978) and Wigfield et al. (1991) who found higher scores of self-esteem for males. Absence of gender difference in AAch and AInt may account for the absence of significant difference in self-esteem scores, as AAch, AInt and self-esteem are found to be positively and significantly
related. Thus, the hypothesis that there will be gender difference with regard to the variables, AInt, AAch, and self-esteem is rejected.

As shown in Table 24, Overall creativity, non-verbal creativity and its dimensions and the dimension elaboration of verbal creativity show gender difference with superiority of boys over girls. However, it is found that there is no significant gender difference in the verbal creativity and its dimension, originality. Therefore, the hypothesis that there will be significant gender difference in overall creativity and its dimensions is partially accepted. The results of the study agree with an Indian study by Raina (1971), who has found significant difference in the originality non-verbal creativity favouring males and no significant difference in the verbal creativity scores between males and females. There are other Indian studies showing significant difference in the different components of creativity favouring the males (Rawat and Agarwal, 1977; Badrinath and Satyanarayanan, 1979). Higher scores in overall creativity, nvCr and its dimensions, and Elab vCr may be because boys in general are expected to be more independent and get a lot of opportunities to indulge in activities of their choice. This in turn gives them more opportunities for self-expression; while girls are generally more protected and are expected to conform to the structured environment set by the parents.
5.4.2. Comparison of the Study Variables based on Mother’s Employment

The results comparing the study variables based on the employment of mothers are given in Table 25. The mothers whether employed or not, exerted similar amount of academic pressure except for the component of OPP, namely, parental control over studies. Therefore, the hypothesis relating OPP and its components is accepted except in the case of the component, parental control over extra-curricular activities. The probable reason for the employed mothers exerting more control over extra-curricular activities may be because working mothers, irrespective of their occupational status, will be more aware of the value of education as a career facilitating factor. So they tend to exert more control over their children’s extra-curricular activities so as to give more attention to studies. Also, since employed mothers are not able to spend as much time with their children as unemployed mothers, they tend to schedule the activities of their children and try to exert more control fearing that they may lose control over them.

The children of employed and unemployed mothers are not found to show significant difference with regard to the variables, namely, PPP, AInt, AAch, and self-esteem. Therefore, the hypothesis that there will be
significant difference in PPP, AInt, AAch, and self-esteem on the basis of mother’s employment is rejected. This is in contrast to the studies that show the positive effects of the employment of mothers on the adolescents: working mothers provide occupational aspirations, mainly in daughters (Almquist and Angrist, 1970; Hoffman, 1980) which in turn may translate into more successful educational progress and more positive orientations to work generally (Baruch, 1972; Etaugh, 1974). It is possible that girls with mothers employed outside the home, and particularly those in high status occupations, will have higher self-esteem than girls whose mothers do not work outside the home (Eder, 1985; Snyder and Spreitzer, 1983).

In the present study, the absence of significant difference may be due to many reasons. In the sample the employed mothers hail from both low and high SES background (as shown in Table 5, there is no significant relation between mother’s occupation and overall SES, $r = .02, p > .05$) and hence the occupational status of such mothers varied considerably and also the reasons for taking up the employment. In the present study AAch, and self-esteem are variables influenced by SES factors. Also, the status of mother’s occupation and the reasons for taking up employment are factors that determine the effect of mother’s employment on children. Hence, employment of mothers per se does not relate to variables like AInt,
AAch and self-esteem and hence, no significant difference is observed between children of employed and unemployed mothers in Alnt, AAch and self-esteem.

Overall creativity and verbal creativity do not show any significant difference with regard to maternal employment, but children of unemployed mothers are found to be more non-verbally creative than children of employed mothers. Therefore, the hypothesis that there will be significant difference in overall creativity and its dimensions based on mother's employment is not fully accepted.

Creativity in the non-verbal area would be the result of more opportunities for free self-expression. It is found earlier that employed mothers exert more control over extra-curricular activities, which means that during the lesser amount of time they get, they tend to provide a structured environment at home. They may not find time to provide their children with some amount of open-ended time for self-expression and to eliminate time constraints from enjoyable tasks. The study conducted in Kerala by Asha (1983), came out with a different finding that maternal employment is a factor that facilitates the development of creativity in children. But today’s working mothers will be under more stress, especially if their employment is out of sheer economic necessity. Stressful
mothers are less able to spend quality time with their children. Thus, one need expect only less of non-verbal creativity in children of employed mothers.

5.4.3. Comparison of Study Variables based on the Birth Order of children

The variables, namely, OPP and its components, PPP, Alnt and self-esteem do not vary in children whether first-born or later-born (vide, Table 26). Therefore, the hypothesis that there will be significant difference in the variables OPP, its components, PPP, Alnt, and self-esteem, on the basis of ordinal position of children in the family is rejected. The first-born children show greater mean values for AAch, than later-born children. Therefore, the hypothesis that there will be significant difference in the AAch of children based on birth order is accepted. There are many studies which support the present finding that indicates significantly higher AAch for first-born when compared to later-born. Like the only children, first-borns tend to score higher on IQ tests and have higher achievement motivation than other children (Glass et al., 1974; Zajnoc et al., 1979). They also tend to be more obedient and socially responsible (Suttonsmith and Rosenberg, 1970). According to Bukatko and Daehler (1995), the superiority of first-born children probably stem
from the greater attention parents give to their first-born children. Parents have higher expectations for their first-born, put more pressure for achievement and responsibility on them, and interfere more with their activities than they do with later-born children (Rothbart, 1971).

According to Santrock and Yussen (1992) parental demands and high standards established for first-borns result in these children excelling in academic and professional endeavours. Eisenman (1992) also supports the finding and reasons that parents tend to be overly anxious and more restrictive with the first child than with later children, and also the first child has more time alone with the parents than subsequent children by virtue of having no siblings until the second child is born.

With regard to creativity, only the dimension elaboration of verbal creativity shows significant difference with regard to birth order. Hence, the hypothesis that there will be significant difference based on birth order in overall creativity and its dimensions, except the dimension elaboration of verbal creativity is rejected. The dimension elaboration of verbal creativity indicates the child's ability to detail a number of verbal responses to the problem, and the ability tends to be more related to the proficiency in language (an academic subject), which in turn tends to be superior in the first-borns. This may explain the superiority of first-borns in the dimension elaboration of verbal creativity.
5.5. SECTION V:
ANALYSIS OF RESPONSES TO THE ITEMS OF ACADEMIC INTEREST INVENTORY

The results obtained while analysing the responses given by children to the items of the Academic Interest Inventory (vide, section 4.5. and Appendix 11) are discussed in the present section.

The adolescents' attitude towards education in general is found to be favourable. A substantial percentage of students show interest in studies. However, a good percentage of students from all the three different types of schools are found to experience stress related to their studies and examination. The results support the media speculations in India that relate the academic pressurisation on students and their stress-related problems.

The anxiety and fear related to their studies and examination experienced by students in the present sample may be from different sources. The reasons for stress may be due to the high ambitions of their parents, the demands of their schools, and also due to aspirations that arise from oneself for achievement in a highly competitive educational field. The children are caught between a rigid educational system and parental pressure to achieve. For today's children play time is restricted
and the pressure to study is mounting. The leisure time also has become a structured activity for children. In today’s families the children may not get the proper support which is needed to overcome the stress; sharing the stress makes coping with it easier. Thus, all these factors would have contributed to the stress experienced by adolescents in the present sample.

The stress related to studies and examination observed in adolescents of the study are supported by recent large scale surveys conducted in Ireland and Britain which show high levels of examination stress, mainly, due to their parents' high expectations (Irish Independent (Dublin), 26 June 1995; Sunday Independent (Dublin), 28 April 1996). It is lamentable that no systematic and scientific effort has been made so far in India to study the problem.