Chapter-6
Summary & Conclusions
The present investigation was carried out with the purpose of exploring certain personal and social factors possibly associated with over and underachievement in different schools viz. private and government schools. Underachievement in this context refers to actual achievement falling below and overachievement falling above the level predicted through intelligence.

A review of relevant researches showed that there are certain personality factors going with over and underachievement (Bhaduri, 1971; Jahan, 1985; Haq, 1987). Overachievers have been found to be higher in emotional stability (Gwaronski, 1965; Tushton, 1966; Dhaliwal, 1971; Suri, 1973; Puri, 1987), more enthusiastic (Dhaliwal, 1971; Puri, 1987), more persistent (Gebhart & Hoyt, 1958; Gwaronski, 1965; Menon, 1973), more sensitive and tender minded (Jayagopal, 1974; Doyl, 1999), more self-sufficient (Agarwal, 1976; Haq, 1987) than underachievers. Underachievers on the other hand were found to more immature (Gwaronski, 1965) having less enthusiasm (Dhaliwal, 1971; Puri, 1987), more expedient (Gebhart & Hoyt, 1958; Gwaronski, 1965; Menon, 1973), having low conformity towards social rules (Lo-Giudice, 1991; Willard-Holt, 1998), more tough-minded (Jayagopal, 1974; Doyl, 1999), more group dependent (Vanarse, 1970; Saxena, 1972) having anxious insecurity (Puri, 1987) than overachievers.

Overachievers have been found to have higher level of n-Ach than underachievers (Dhaliwal, 1971; Agarwal, 1976; Sharma, 1981; Singh, 1983; Lau & Chan, 2001). In girls lower level of n-Ach played a larger role than cognitive factors (Krietler et al, 1995) and low n-Ach determines underachievement of girls (Shama, 1981).

Personality differences of underachievers and overachievers by taking sex differences into consideration revealed some significant differences of personality between overachieving girls and underachieving
girls and between overachieving boys and underachieving boys (Gupta, 1983; Sharma, 1981; Ghuman, 1976).

Since personal factors are not the only possible factors causing underachievement, it was supposed that the environment in which the children live, experiment and gain experiences may also contribute to their over and underachievement. The most immediate environment of children, considered in the study as influencing variables, are their family climate and the type of school in which they study, the type of school, being private and government schools.

Review of related literature regarding family of overachievers and underachievers, indicated that overachievers have positive family atmosphere (Onatsu, 1997) whereas underachievement is contributed by family problems (Srivastava, 1967; Sharma, 1981), family variables (Chauhan, 1993; Casanova, 2005), parenting skills (Baker, Bridger & Evans, 1998), parents educational status (Maitra, 1985) and parental deprivation (Zaidi, 1986). Various family factors of underachievement have been studied but very little attention has been paid to factors like family relationships and emotionally satisfying family environment on academic over and underachievement.

There is a dearth of studies highlighting school related causes of underachievement and no work is yet reported in the field of over and underachievement by considering the type of school as a variable.

Hoping to gather some empirical evidence to fill in these gaps in knowledge the present work has been carried out with the following objectives;

1. To identify the personality characteristics, n-Ach and family climate of underachievers and overachievers.
2. To determine school type differences in the incidence of underachievement and overachievement in private and government schools and also determine school type differences in the incidence of underachievement and overachievement of boys and girls.

3. To study intercorrelations among social and personal variables viz. personality, n-Ach, family climate and school type that are presumed to determine over and underachievement.

The working hypotheses formulated for the study were as follows:

1a. There is no significant difference in personality characteristics of over and underachievers.

1b. There is no significant difference in n-Ach of over and underachievers.

1c. Family climate of over and underachievers does not differ significantly.

2a. There is no significant difference in personality factors of underachieving boys and overachieving boys.

2b. There is no significant difference in n-Ach of underachieving boys and overachieving boys.

2c. Family climate of underachieving boys and overachieving boys does not differ significantly.

3a. There is no significant difference in personality factors of underachieving girls and overachieving girls.

3b. There is no significant difference in n-Ach of underachieving girls and overachieving girls.

3c. Family climate of underachieving girls and overachieving girls does not differ significantly.

4a. There is no significant difference in personality factors of
underachievers in private schools and overachievers in private schools.

4b. n-Ach of underachievers (in private schools) does not differ significantly from n-Ach of overachievers (in private schools).

4c. There is no significant difference in family climate of underachievers (in private schools) and overachievers (in private schools).

5a. There is no significant difference in personality factors of underachievers (in govt. schools) and overachievers (in govt. schools).

5b. n-Ach of underachievers (in govt. schools) and overachievers (in govt. schools) does not differ significantly.

5c. Family climate of underachievers (in govt. schools) and overachievers (in govt. schools) does not differ significantly.

6a. There is no significant difference in personality factors of underachieving boys (in private schools) and overachieving boys (in private schools).

6b. n-Ach of underachieving boys (in private schools) does not differ significantly from n-Ach of overachieving boys (in private schools).

6c. There is no significant difference in family climate of underachieving boys (in private schools) and overachieving boys (in private schools).

7a. There is no significant difference in personality factors of underachieving girls (in private schools) and overachieving girls (in private schools).

7b. n-Ach of underachieving girls (in private schools) does not differ significantly from n-Ach of overachieving girls (in private schools).

7c. There is no significant difference in family climate of underachieving girls (in private schools) and overachieving girls (in private schools).

8a. Personality factors of underachieving boys (in govt. schools) and over
achieving boys (in govt. schools) do not differ significantly.

8b. There is no significant difference in n-ach of underachieving boys (in govt. schools) and overachieving boys (in govt. schools).

8c. There is no significant difference in family climate of underachieving boys (in govt. schools) and overachieving boys (in govt. schools).

9a. Personality factors of underachieving girls (in govt. schools) and over achieving girls (in govt. schools) do not differ significantly.

9b. There is no significant difference in n-Ach of underachieving girls (in govt. schools) and overachieving girls (in govt. schools).

9c. There is no significant difference in family climate of underachieving girls (in govt. schools) and overachieving girls (in govt. schools).

10a. The incidence of under and overachievement of boys does not differ from that of girls.

10b. There is no difference in the incidence of under and overachievement in private and government schools.

The present investigation was conducted on a sample of 1000 students from VIIth and VIIIth classes of six private and seven government schools to begin with. For the collection of data, the present investigator employed Cattell & Cattell’s Test of “g”, Culture Fair, Scale 2, From A & Form B for obtaining intelligence scores, Mehrotra’s H.S.P.Q.(an Indian adaptation of “IPAT”, 1967) for obtaining scores on fourteen personality factors, Deo Mohan Achievement Motivation Scale(DMAMS) for obtaining scores on n-Ach, family climate scale by Beena Shah for obtaining scores on family climate of students and final examination marks of previous years for each student was obtained as achievement measure.

Over and underachievers of private and government schools were identified with the help of regression equation as suggested by Thorndike
(1963). After obtaining the intelligence, predicted achievement scores, discrepancies between actual achievement and predicted scores were calculated to demarcate cases falling above and below the predicted scores. For defining the discrepant achievers in both the positive and negative directions more clearly, cases lying one SDe above the predicted scores were designated as overachievers and those lying one SDe below the predicted scores were designated as underachievers among the boys and girls separately. Following the above procedure nine pairs of groups were made for comparisons of fourteen personality factors, n-Ach and family climate of underachievers and overachievers in private and government schools:

1. Underachievers and overachievers
2. Underachieving boys and overachieving boys
3. Underachieving girls and overachieving girls
4. Underachievers and overachievers of private schools
5. Underachievers and overachievers of government schools.
6. Underachieving boys and overachieving boys of private schools
7. Underachieving girls and overachieving girls of private schools
8. Underachieving boys and overachieving boys of government schools.

For comparing these groups on personality, n-Ach and family climate Mann Whitney test (U) was employed which is one of the most powerful nonparametric tests. In order to probe deep into the phenomenon of underachievement, Binary Logistic Regression analysis was done to find out the factors which significantly predict the occurrence of underachievement.
The results of Mann Whitney test have been presented in Tables 2 to 28 and the results of regression analysis in Tables 29a, 29b, 29c and 29a.1. The findings may be summarized as under:

1. Underachievers have been found to be less participating (A), having less intelligence (B), less maturity (C), low level of enthusiasm (F), less persistence (G) and less sensitivity (I). They have more group dependence and less self-sufficiency (Q2), less controlled (Q3), having lower level of n-Ach and less favorable family climate than overachievers.

2. Underachiever boys are less intelligent (B), more immature (C), more aggressive and assertive (E), less enthusiastic (F), more expedient and less persistent (G), more group dependent and less self-sufficient (Q2), with lower level of n-Ach than overachiever boys.

3. Underachiever girls are less intelligent (B), more obedient, accommodating and milder (E), less persistent and more expedient (G), less sensitive and more tough minded (I), less self-sufficient and more group dependent (Q2), with lower level of n-Ach and less favorable family climate than overachiever girls.

4. Underachievers (in private schools) are less intelligent (B), less emotionally stable, less mature (C), less persistent but more expedient (G), more tough-minded and less sensitive (I), with lower level of n-Ach than overachiever students (in private schools).

5. Underachievers (in govt. schools) are less intelligent (B), more immature (C), more expedient and less persistent (G), less sensitive and more tough minded (I), less self-sufficient and more group dependent (Q2), more relaxed and more composed (Q4), with lower level of n-Ach than overachievers (in govt. schools).
6. Underachiever boys (in private schools) are less intelligent (B), less mature and less emotionally stable (C), more expedient and less persistent (G), than overachiever boys (in private schools). They are not different as far as their n-Ach and family climate is concerned.

7. Underachiever girls (in private schools) are more tough-minded, with lower level of n-Ach and less favorable family climate than overachiever girls of private schools.

8. Underachiever boys (in govt. schools) are more internally restrained and reflective (J), having lower level of n-Ach and less favorable family climate than overachiever boys (in govt. schools).

9. Underachiever girls (in govt. schools) are less intelligent (B), more obedient, milder and more accommodating (E), more expedient and have lower super ego strength (G). They are more group dependent and have lower self-sufficiency (Q2) than over achieving girls (in government schools). They are similar as far as their n-Ach and family climate is concerned.

The results of 27 analyses by means of Mann Whitney test (U) reveal some interesting observations:

1. Only significant differences have been found in the personality of underachieving boys and overachieving boys attending private schools similar to underachieving girls and overachieving girls attending government schools. n-Ach and family climate is similar for underachieving boys and overachieving boys of private schools as for underachieving girls and overachieving girls of government schools.

2. Significant differences have been obtained in the personality, n-Ach and family climate of underachieving girls and overachieving girls.
attending private schools similar to those of underachieving boys and overachieving boys attending government schools.

As is evident from the above summary, hypotheses no. 2c, 4c, 5c, 6b, 6c, 9b and 9c are accepted. The results have been discussed in terms of theoretical considerations and empirical findings relevant to field of study.

The results of Binary Logistic Regression analysis have been presented in Tables 29a, 29b, 29c and 29a.1. The findings may be summarized as under:

Four psychological factors viz. n-Ach, P2 (PF=B, high intelligence vs. low intelligence), P7 (PF=G, Expedient versus Persistent) and P9 (PF=I, Tough-minded versus Tender minded), significantly predict the occurrence of underachievement in the population of the present study. All four predictors have negative association with underachievement in varying degrees.