Chapter 5

SUMMARY, CONCLUSION AND SUGGESTIONS
Education is a unique investment and academic achievement is a vital aspect of it. Academic achievement is considered as a key to judge ones potentialities and capacities. Hence parents and teachers become highly disappointed when children fall behind in academic achievement. The reasons for achieving low in academics are numerous. Physical disabilities, poor family background, poverty, emotional conflicts at home and lack of motivation are some of them. Deficiency in intelligence is however, considered as the most critical reason for the scholastic backwardness of children.

There are several children in the classrooms who achieve low in spite of their average or above average intelligence. Such children are considered as low achievers. Low achievers are those whose ability is not quite so limited, but who nevertheless have more difficulty in learning than average children. Low achievement is defined as a discrepancy between the child's actual ability and achievement. It may be related to poor self-concept, lack of family involvement and encouragement, damaging peer pressure, cultural deprivation, study skill deficiency, emotional problems, physical illness, lack of academic motivation or lack of interest in school subjects and curriculum. Absence from school, unfortunate personal circumstances and life events or inadequate environmental conditions further limits their progress. Failures to recognize these problems and provide solutions are also reported to be the contributory factors for their continuing academic backwardness (Thompson and Rudolph, 1992).
Since the low achievers have average or above average intelligence, but remain unable to score high due to other environmental and personality factors, these children tend to suffer from emotional and behavioural problems. For the same reason much of the child's potentials will be burned up, for handling his problems and related stress. Such children definitely need attention and special care from the part of the teachers as well as the parents.

During the last couple of decades there has been an increasing interest on this issue. Personality factors, family interaction pattern, academic achievement motivation, study habits and teacher effectiveness have been studied extensively. Although, the significance of the above said factors on educational outcomes have been well recognized, not much intervention has been made to change the educational system, incorporating the required changes. Various studies have been taken up by different researchers regarding scholastic backwardness in general. However a comprehensive yet concise research work focusing on the psychosocial variables in academic achievement could be located only in the western literature. Hence, much work needs to be done with reference to each of the variables mentioned, in India, especially in Kerala culture. Thus, this study aims at a new perspective with an earnest attempt to satisfy the need of presenting an epidemiology of the condition, and the factors related to it. The findings of the study would equip the professionals with information about the required strategies in alleviating the condition of low achievement.
Statement of the Problem

The problem is stated as Psycho social variables in relation to academic achievement – a comparative study of high and low achievers.

Objectives of the study

The major objectives of the study were:

1. To find out whether there would be any difference between high and low achievers in the personality traits.
2. To find out whether there would be any difference between high and low achievers in the family interaction patterns.
3. To find out whether there would be any difference between high and low achievers in the academic achievement motivation.
4. To find out whether there would be any difference between high and low achievers in the study habits.
5. To find out whether there would be any difference between high and low achievers in the teacher effectiveness.
6. To find out whether there would be any association between high and low achievers to certain socio demographic variables.
7. To identify the better predictor variables of high and low achievement.
8. To develop and standardize the teacher effectiveness scale.
Hypotheses of the study

The major hypotheses are stated here and the specific hypotheses of the major hypotheses, if any, are elaborated in chapter 1.

1. There will be significant difference between high and low achievers specific to gender in personality traits.

2. There will be significant difference between high and low achievers specific to gender in family interaction pattern.

3. There will be significant difference between high and low achievers specific to gender in academic achievement motivation.

4. There will be significant difference between high and low achievers specific to gender in the study habits.

5. There will be significant difference between high and low achievers specific to gender in the teacher effectiveness.

6. There will be significant association between certain socio demographic variables and high and low academic achievement.

7. Academic high achievement and academic low achievement can be predicted from a set of predictor variables.
Population

The secondary school students of Kottayam educational district in Kerala state were the population for the study.

Sample

Sampling was done through different steps. At the initial step all the secondary schools of Kottayam educational district in Kerala state were contacted and the purpose of the study was explained to the principals. A list of the schools that was then prepared. Marks obtained for all the papers for all the three consecutive terminal examinations were noted down for all the students of class VIII, IX, and X. These marks were subjected for scrutiny and it was made sure that the student fits into the criteria set for high or low achiever. A detailed interview of the class teachers was done to elicit information of these students to substantiate the inclusion and exclusion criteria. Those students who have satisfied all the criteria were subjected to IQ assessment. And those students who have scored in the average range on a culture free test of intelligence were included in the sample. After finishing all these procedures, only 273 samples could be identified of which 89 were high achievers and 184 were low achievers.
Tools for data collection

The following tools were used for data collection.

1. **Socio Demographic Data Sheet**: The data sheet was carefully prepared by the investigator herself after going through an extensive related literature.

2. **Raven's Standard Progressive Matrices (SPM)**: This is a standardized tool, which is published in 1938 by Raven, Court and Raven. This is based on Spearman's (1927) principles. SPM is a test of a person's capacity at the time of the test to apprehend the meaningless figures presented for observation, see the relations between them, conceive the nature of the figure completing each system of relations presented, and by so doing, developing a systematic method of reasoning.

3. **High School Personality Questionnaire (HSPQ)**: This is a standardized tool, developed on the basis of the theoretical foundation of Raymond B Cattel (1970). It was developed by Cattell and Scheier (1961). The scale has high reliability ($r=0.8$, 4 weeks interval) and validity.
4. **Family Interaction Pattern Scale (FIPS):** This questionnaire was developed by Bhatti (1986). The reliability ($r = 0.72$, 4 weeks interval) and validity were established and published.

5. **Academic Achievement Motivation Questionnaire (AAMQ):** Mohan (1982) has developed this questionnaire. The reliability coefficient is reasonably high ($r = 0.69$, 4 weeks interval) using the test retest method and the item validity is established by the high low discrimination method and it was accepted as the validity of the whole measure.

6. **Study Habits Inventory (SHI):** It is developed by Palsane and Sharma (1989), which was standardized with the purpose to assess the study habits. The reliability coefficient is found to be 0.88 by test retest method with an interval of 4 weeks. The inventory, besides having high face validity, has high validity coefficients with external criterion (similar type of study habits inventories) and the highest value being 0.83.

7. **Teacher Student Opinionnaire (TSO):** This scale was constructed and standardized by the investigator for the purpose of measurement of teacher effectiveness.
Procedure of data collection

The students were grouped into the high and low achiever categories were contacted later and their convenient time was sought with the help of the class teachers. Later on, the investigator personally administered all the printed test materials. Each individual had taken almost 3 to 4 hours to complete the test materials. Before starting the testing, all the doubts were clarified and were instructed about the test taking method. They were convinced about the confidentiality that was observed.
Statistical techniques used

The data collected from the sample chosen were analyzed to test the hypotheses formulated. The following statistical techniques were employed for the analysis of the data.

Mean and Standard deviation. were calculated for further statistical analysis.

Two-way analysis of variance was carried out to find out the difference between high and low achievers with respect to gender on various psychosocial variables.

Chi square test was done to analyze the association of various socio demographic data to the level of academic achievement.

Discriminant analysis was carried out to find out the best predictors of academic achievement.

Results

Major results obtained are presented below.

1. There was significant difference between high and low achievers specific to gender in factor A (Affectothymia V/s Schizothymia, p value, 0.04).

2. There was significant difference between high and low achievers specific to gender in factor B (High scholastic ability v/s low scholastic ability, p value, 0.04).
3. There was significant difference between high and low achievers specific to gender in factor C (High ego strength vs Low ego strength, p value, 0.001).

4. There was no significant difference between high and low achievers specific to gender in factor D (Excitability vs Phlegmatic trait, p value, 0.18).

5. There was significant difference between high and low achievers specific to gender in factor E (Dominance vs Submissiveness, p value, 0.00).

6. There was significant difference between high and low achievers specific to gender in factor F (Surgency vs Desurgency, p value, 0.04).

7. There was no significant difference between high and low achievers specific to gender in factor G (Stronger super ego vs Weaker super ego, p value, 0.31).

8. There was significant difference between high and low achievers specific to gender in factor H (Parmia vs Threctia, p value, 0.00).

9. There was no significant difference between high and low achievers specific to gender in factor I (Premsia vs Horria, p value, 0.12).
10. There was no significant difference between high and low achievers specific to gender in factor J (Coasthania v/s Zappia, p value, 0.88).

11. There was significant difference between high and low achievers specific to gender in factor O (Guilt proneness v/s Untroubled adequacy, p value, 0.00).

12. There was no significant difference between high and low achievers specific to gender in factor Q2 (Self sufficiency v/s Group adherence, p value, 0.90).

13. There was no significant difference between high and low achievers specific to gender in factor Q3 (Self concept v/s Low integration, p value, 0.21).

14. There was no significant difference between high and low achievers specific to gender in factor Q4 (High ergic tension v/s Low ergic tension, p value, 0.13).

15. There was significant difference between high and low achievers specific to gender in family interaction pattern, p value, 0.00).

16. There was significant difference between high and low achievers specific to gender in academic achievement motivation, p value, 0.00).

17. There was significant difference between high and low achievers specific to gender in study habits, p value, 0.00).
18. There was no significant difference between high and low achievers specific to gender in teacher effectiveness, $p$ value, 0.97).

19. There was significant association between the achievement level and class, ($p$ value, 0.001), age, ($p$ value, 0.001), medium of education, ($p$ value, 0.001), father's education, ($p$ value, 0.001), father's occupation, ($p$ value, 0.001), mother's education, ($p$ value, 0.001), mother's occupation, ($p$ value, 0.05), type of school, ($p$ value, 0.05), size of the class, ($p$ value, 0.05), tuition, ($p$ value, 0.05), ordinal position, ($p$ value, 0.05), academic background of the family, ($p$ value, 0.05), gender, ($p$ value, 0.05), and chronic physical ailments, ($p$ value, 0.05).

**Conclusion**

- High achievers are affectothymic than the low achievers. High achieving females are affectothymic than high achieving males, low achieving males and low achieving females.

- High achievers are more intelligent and bright than the low achievers. High achieving females show the highest scholastic capacity than the high achieving males, low achieving males and the low achieving females.

- High achievers are more emotionally calm, stable and face reality appropriately than the low achievers.
• There is no difference between high and low achievers in excitability.

• High achievers are dominant than the low achievers. High achieving females are dominant than the high achieving males, low achieving males and low achieving females.

• High achievers have got a happy go lucky, impulsively lively and enthusiastic personality than the low achievers.

• There is no significant difference between high and low achievers in super ego strength.

• High achievers are more venturesome, socially bold, uninhibited and spontaneous than the low achievers.

• There is no significant difference between high and low achievers in premsia.

• There is no significant difference between high and low achievers in coassthania.

• High achievers are more guilt prone than the low achievers. High achieving females are more guilt prone than the high achieving males, low achieving males and low achieving females.

• There is no difference between high and low achievers in self-sufficiency.

• There is no difference between high and low achievers in self-concept.
• There is no difference between high and low achievers in high ergic tension.

• High achievers have a good family interaction pattern than the low achievers. Low achieving males report poor family interaction pattern than the high achieving females, high achieving males and low achieving females.

• High achievers have a high academic achievement motivation than the low achievers. High achieving females have reported a better academic achievement motivation and the low achieving males reported the lowest level of academic achievement motivation.

• High achievers have a better study habits than the low achievers. High achieving females have reported better study habits and the low achieving males show poor study habits.

• There is no difference between high and low achievers in teacher effectiveness.

• The class and age of the student, medium of education, father's education, father's occupation, mother's education, mother's occupation, type of school, size of the class, tuition ordinal position, academic background of the family, gender and chronic physical ailments are associated with academic achievement.
Implications of the study

From the conclusion it is seen that the high achievers have scored more in personality factor A that is, affectothymia, factor B, that is high scholastic capacity, factor C, that is high ego strength, factor E, that is dominance, factor F, that is surgency, factor H, that is parmia and factor O, that is guilt proneness, when compared to the low achievers. This indicates that personality variable has an important role to play in the academic achievement. This points to the need of considering the personality of the students while planning any kind of educational intervention programme in schools. In addition to the academic programme personality development courses and leadership training programme etc must be organized periodically in schools. Children who are found to have personality problems and emotional problems should be identified by the teachers and must be given adequate counseling.

It has been established through the result of this study that the low achievers have presented a pathological profile, in all the dimensions studied under family interaction pattern. The following factors were studied under family interaction pattern. They are reinforcement, social support, role, cohesion, communication and leadership pattern. The low achievers reported to experience significantly poor quality of all these above-mentioned dimensions of family interaction pattern. It is a generally accepted fact that, for optimal development, the child must grow up in a family environment of happiness, love and understanding. A quality family life assures better performance of the children. Parental awareness programmes
about the significance of family interaction pattern in a child's achievement must be provided though various gatherings like open house or parent teacher associations. Individual counseling sessions must be arranged for parents of children who are found to have family problems. Parental involvement in student's academic activities must be encouraged.

The study also shows that the high achievers have reported better study habits than the low achievers. Skill of having a good study habit is such a promising quality, that at some point it acts as a shield against other unfortunate psychological variables and thus protects the student from performing below his or her actual ability. Even educated parents have not recognized the importance of establishing a proper study habit. Hence there is a need to inculcate a systematic and proper study habit in every child. Skill development programme may be organized for the students, where factors like budgeting time, note taking style, examination writing skills, memory enhancement techniques, need for maintaining a good physical condition and health, techniques to improve reading ability and the need for learning motivation enhancement may be thoroughly discussed.

It is evident from this study that, the high achievers always exhibit a higher level of academic achievement motivation as compared to the academic low achievers. In times of need it acts as a pushing force from inside to get along with the pressures and pleasures of academics. Thus it is emphasized that, inculcation of
an intense motivational level would propel, one to strive hard for a higher level of academic achievement. And this can be started through healthy family interactions at an early school age.

Though this study could not prove the influence of teaching effectiveness on academic achievement, most of the researchers report a favorable finding that, personal characteristics, professional characteristics, and teacher student relationship influence a student's academic achievement. A better understanding between the teachers and the students would only facilitate the smooth functioning of the system. Also, a healthy climate at the school, provided by the teachers, would act as a social support system for majority of the students. The very feeling of the student that his/her teacher understands him/her well provides a back up in times of stress. In general, counseling sessions with school children gives a feedback that an effective teacher improves and the confidence level and self-acceptance. This would in turn serve the ultimate aim of education that is, formation of a healthy and civilized human being.

A number of socio demographic factors that were found to have some association with academic achievement was subjected for the present study. And it is found that class, age, medium of education, father's education, father's occupation, mother's education, mother's occupation, type of school, size of the class, tuition, ordinal position, academic background of the family, gender, chronic physical ailments all have a significant association with
academic achievement. Hence when the interventional strategies are planned for the students with low achievement all these factors must be taken into consideration. Some of these factors were subjected for studies and it was found that proper intervention would improve the level of performance. In spite of all the existing needs and research findings pointing to the essentialities of psychosocial intervention, these factors are always kept into the periphery of the educational system. Only if parents and teachers work together required changes can be accomplished in this area. Educationists and policy makers should also take these factors into account while designing course curriculum and other activities.

Limitations of the study

Every possible effort, small and big has been taken with utmost caution to conduct this research work, as scientific as possible. Still, certain limitations, which are inevitable in this kind of studies, have crept in. The following limitations would be taken care of while interpreting and generalizing the results. The samples were taken only from Kottayam educational district. A larger representation from all districts would have given more authenticity for wider generalization of the findings. The students who follow the state syllabus were subjected for the study. A more meaningful picture of the problem would have been obtained if students from the other streams were also considered. Individual sessions with each child as a method of test administration, and mathematical applications in analysis, if employed would have given a more sensitive information. It would have been better to compare each of the domains of the
variables item by item to get a clear picture of what exactly troubles a typical low achiever. Due to lack of time this was not done.

While collecting the data consistency and continuity could be reassured to maximize the reliability of the information. However, the third factor corroboration of the data with the informant has not been recorded separately as it was not intended as an agenda in the present research. The low achiever has given his or her subjective perspective. An objective report from the family members or a teacher or a peer would have been more informative. The categorization of low achievers was done based on the careful scrutiny of school records and assessment of cognitive ability. However, the investigator would have felt more satisfied if a standardized intelligence test, which has a performance and verbal part appropriate to the age, education and culture was administered. The discussion about the personality traits would have been more meaningful if it had been translated to sten scores after the calculations. Review of literature had to be confined to the studies reported up to 2001. The studies published after that would have been of much informative. Due to lack of time this was not included.

**Suggestions**

Based on the results and implications of the study, the investigator wish to make the following suggestions:

1. Service of the psychologists, special educators and social workers must be availed by the school authorities to render a professional help to the academic low achievers. More
comprehensive training should be given to special teachers so that their competency in managing behaviour problems and awareness on problem behaviour management strategies is increased.

2. Refresher courses that focus on problem behaviour management strategies should be given to special teachers.

3. Awareness programs such as talks by experts should be arranged to help them in acquiring more awareness regarding behaviour management strategies.

4. Seminars should be organised to expose the special teachers to recent developments and researches in the field of special education and problem behaviour management.

5. Training and talks by experts should also be provided to parents of children with low academic achievement so that the associated problem behaviour management is ensured.

6. Support of psychologists should be ensured in all schools so that teachers receive necessary support to manage problem behaviour of children with low academic achievement.

7. More researches should be conducted in the field of problem behaviour management to understand in depth the difficulties of the teachers, their awareness on problem behaviour management and the extent of parental involvement in problem behaviour management.
Scope for further research

Replication of the study may be done using larger samples and wider varieties of variables as an in-depth study would be of great benefit in knowing more about the underlying factors related to low achievement.

Research must be conducted in such a way that their results would promote a practical application in order to ease the problems faced by the low achievers, their family members and their teachers.

Efforts should be made to identify whether the low achievement of the child could be because of the psychopathic make up of the parents.

Research reports may be published with a view to find out whether any legal provision could be made to ease the burden imposed on them and their parents.

Research should be conducted on the efficacy of the counseling and awareness programme in helping the teachers, parents and the students to handle the issues related to low achievement.

The present investigation, on the whole, suggests the need for a changing out look towards the needs and problems of the low achievers. The investigator would feel gratified if the results of the study are considered by the authorities and applied for the betterment of these low achieving students.