CHAPTER 4

REVIEW, CONCLUSIONS, EDUCATIONAL IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

The educational process aims at the enhancement of level of academic achievement of students along with aiming at the fullest development of individual according to his abilities and interests. To fulfill this aim of educational process, the educationists, psychologists and others in the field of behavioral research have made a number of attempts to identify the factors which determine the educational achievement of students. There are various factors which affect the student’s achievement such as academic anxiety, achievement motivation, level of aspiration, study habits, learning ability, interest and aptitude.

Academic anxiety can be defined as a persistent distressing, psychological state arising from inner conflicts. Anxiety is a complex of many emotions as distinguished from a passing experience of anger, fear or grief.

Achievement motivation is the expectancy of finding satisfaction in mastering challenging and difficult performance. When discussed in relation to school achievement, achievement motivation is motivation to perform specific tasks for which there is a standard of excellence against which results can be judged. Typically, classroom teachers decide what learning tasks students are to perform and also the quality of achievement. Motivation may be called as the heart of achievement and it is sure without motivation, no achievement is possible.
4-1 Objectives

The following objectives were laid down for the present study:

1. To study the nature of distribution of scores for senior secondary school boys on the following variables:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
   D. Non-Verbal Intelligence and
   E. Academic Achievement?

2. To study the nature of distribution of scores for senior secondary school girls on the following variables:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
   D. Non-Verbal Intelligence and
   E. Academic Achievement?

3. To study the nature of distribution of scores for total sample of senior secondary school students on the following variables:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
   D. Non-Verbal Intelligence and
   E. Academic Achievement?

4. To study the nature of relationship between scores for senior secondary school boys on the following variables:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
   D. Non-Verbal Intelligence and
   E. Academic Achievement?

5. To study the nature of relationship between scores for senior secondary school girls on the following variables:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
   D. Non-Verbal Intelligence and
   E. Academic Achievement?

6. To study the nature of relationship between scores for total sample of senior secondary school students on the following variables:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
To compare senior secondary school boys and girls with respect to their mean scores on the following variables:

A. Academic Anxiety
B. Achievement Motivation
C. Academic Achievement Motivation
D. Non-Verbal Intelligence and
E. Academic Achievement?

To compare senior secondary school boys exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Academic Anxiety.

To compare senior secondary school girls exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Academic Anxiety.

To compare senior secondary school students (total sample) exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Academic Anxiety.

To compare senior secondary school boys exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Achievement Motivation.

To compare senior secondary school girls exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Achievement Motivation.

To compare senior secondary school students (total sample) exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Achievement Motivation.

To compare senior secondary school boys exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Academic Achievement Motivation.

To compare senior secondary school girls exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Academic Achievement Motivation.

To compare senior secondary school students (total sample) exhibiting high, average and low level of Non-Verbal Intelligence with respect to their mean scores on Academic Achievement Motivation.
17. To compare senior secondary school boys exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Academic Anxiety.

18. To compare senior secondary school girls exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Academic Anxiety.

19. To compare senior secondary school students (total sample) exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Academic Anxiety.

20. To compare senior secondary school boys exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Achievement Motivation.

21. To compare senior secondary school girls exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Achievement Motivation.

22. To compare senior secondary school students (total sample) exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Achievement Motivation.

23. To compare senior secondary school boys exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Academic Achievement Motivation.

24. To compare senior secondary school girls exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Academic Achievement Motivation.

25. To compare senior secondary school students (total sample) exhibiting high, average and low level of Academic Achievement with respect to their mean scores on Academic Achievement Motivation.

4-2 Hypotheses of the Study

The following hypotheses are formulated which will be tested in the present study:

1. Senior secondary school boys differ in their level of:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
   D. Non-Verbal Intelligence and
   E. Academic Achievement
2. Senior secondary school girls differ in their level of:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
   D. Non-Verbal Intelligence and
   E. Academic Achievement?

3. Senior secondary school students (total sample) differ in their level of:
   A. Academic Anxiety
   B. Achievement Motivation
   C. Academic Achievement Motivation
   D. Non-Verbal Intelligence and
   E. Academic Achievement?

4. For senior secondary school boys there is:
   A. Negative and significant relationship between Academic Anxiety and Achievement Motivation.
   B. Negative and significant relationship between Academic Anxiety and Non-Verbal Intelligence.
   C. Negative and significant relationship between Academic Anxiety and Academic Achievement.
   D. Positive and significant relationship between Achievement Motivation and Non-Verbal Intelligence.
   E. Positive and significant relationship between Achievement Motivation and Academic Achievement.
   F. Positive and significant relationship between Non-Verbal Intelligence and Academic Achievement.
   G. Positive and significant relationship between Academic Achievement Motivation and Non-Verbal Intelligence.
   H. Positive and significant relationship between Academic Achievement Motivation and Academic Achievement.
   I. Positive and significant relationship between Academic Achievement Motivation and Achievement Motivation.
   j. Negative and significant relationship between Academic Achievement Motivation and Academic Anxiety.

5. For senior secondary school girls there is:
   A. Negative and significant relationship between Academic Anxiety and Achievement Motivation.
   B. Negative and significant relationship between Academic Anxiety and Non-Verbal Intelligence.
   C. Negative and significant relationship between Academic Anxiety and Academic Achievement.
   D. Positive and significant relationship between Achievement Motivation and Non-Verbal Intelligence.
E. Positive and significant relationship between Achievement Motivation and Academic Achievement.
F. Positive and significant relationship between Non-Verbal Intelligence and Academic Achievement.
G. Positive and significant relationship between Academic Achievement Motivation and Non-Verbal Intelligence.
H. Positive and significant relationship between Academic Achievement Motivation and Academic Achievement.
I. Positive and significant relationship between Academic Achievement Motivation and Achievement Motivation.
j. Negative and significant relationship between Academic Achievement Motivation and Academic Anxiety.

6. For total sample of senior secondary school students there is:

A. Negative and significant relationship between Academic Anxiety and Achievement Motivation.
B. Negative and significant relationship between Academic Anxiety and Non-Verbal Intelligence.
C. Negative and significant relationship between Academic Anxiety and Academic Achievement.
D. Positive and significant relationship between Achievement Motivation and Non-Verbal Intelligence.
E. Positive and significant relationship between Achievement Motivation and Academic Achievement.
F. Positive and significant relationship between Non-Verbal Intelligence and Academic Achievement.
G. Positive and significant relationship between Academic Achievement Motivation and Non-Verbal Intelligence.
H. Positive and significant relationship between Academic Achievement Motivation and Academic Achievement.
I. Positive and significant relationship between Academic Achievement Motivation and Achievement Motivation.
j. Negative and significant relationship between Academic Achievement Motivation and Academic Anxiety.

7. Senior secondary school boys and girls differ significantly with respect to their mean scores on the following variables:

A. Academic Anxiety
B. Achievement Motivation
C. Academic Achievement Motivation
D. Non-Verbal Intelligence and
E. Academic Achievement?

8. Senior secondary school boys exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Academic Anxiety.
9. Senior secondary school girls exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Academic Anxiety.

10. Senior secondary school students (total sample) exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Academic Anxiety.

11. Senior secondary school boys exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Achievement Motivation.

12. Senior secondary school girls exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Achievement Motivation.

13. Senior secondary school students (total sample) exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Achievement Motivation.

14. Senior secondary school boys exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Academic Achievement Motivation.

15. Senior secondary school girls exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Academic Achievement Motivation.

16. Senior secondary school students (total sample) exhibiting high, average and low level of Non-Verbal Intelligence differ significantly with respect to their mean scores on Academic Achievement Motivation.

17. Senior secondary school boys exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Academic Anxiety.

18. Senior secondary school girls exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Academic Anxiety.

19. Senior secondary school students (total sample) exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Academic Anxiety.

20. Senior secondary school boys exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Achievement Motivation.
21. Senior secondary school girls exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Achievement Motivation.

22. Senior secondary school students (total sample) exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Achievement Motivation.

23. Senior secondary school boys exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Academic Achievement Motivation.

24. Senior secondary school girls exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Academic Achievement Motivation.

25. Senior secondary school students (total sample) exhibiting high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Academic Achievement Motivation.

4-3 Method

In the view of the objectives of present study descriptive method of research was used.

4-4 Sample

The total sample consisted of 200 students studying in class X1, which includes 100 boys and 100 girls drawn from 20 senior secondary schools by random sampling situated in district Kangra of Himachal Pradesh.

4-5 Tools Used

In order to measure academic anxiety of the selected sample of students, Academic Anxiety Scale for children (AASC) by Dr. A.K Singh and Gupta Dr. (K.M) A Sen Gupta (1986) was used.

In order to measure achievement motivation of the selected sample of students, Costello Achievement Motivation Scale Adapted by O.P. Misra and S.K. Srivastava was used.

In order to measure academic achievement motivation of the selected sample of students, Sharma Academic Achievement Motivation Test by Dr. T.R. Sharma (1984) was used.
In order to measure non-verbal intelligence of the selected sample of students, Standard Progressive Matrices by Raven, Court and Raven (1977) was used.

One of the variables under study was Academic Achievement which was taken in of aggregate scores obtained by students in class –X Annual Examinations conducted by Board of School Education, Himachal Pradesh.

4-6 **Statistical Technique Used**

1. The technique of frequency distribution followed by bar and line diagrams was used to study the nature of distribution of scores.
2. The technique of product moment correlation was used to study the relationship between scores.
3. The technique of t-test was used to compare senior secondary school boys and girls with respect to their mean scores.
4. The technique of One-way Analysis of Variance followed by t-test was used to compare senior secondary school boys and senior secondary school girls as well as total sample exhibiting high, average and low Non-verbal intelligence with respect to their mean scores.
5. The technique of One-way Analysis of Variance followed by t-test was used to compare senior secondary school boys and senior secondary school girls as well as total sample exhibiting high, average and low Academic Achievement with respect to their mean scores.

4-7 **Conclusions**

On the basis of analysis and interpretation of data, the following conclusions may be drawn for the present study.

4-7.1 **Nature of Distribution of Scores for the variables Academic Anxiety, Achievement Motivation, Academic Achievement Motivation, Non-verbal intelligence and Academic Achievement for boys, girls and total sample**

1. The scores on the variable of Academic Anxiety are distributed over a range of 13 for boys, 13 for girls and 13 for total sample. Thus, it may be said that the senior secondary school students do not differ in their level of Academic Anxiety. Further, the nature of distribution of scores on the variable of Academic Anxiety is more or less similar for boys, girls and total sample.
2. The scores on the variable of Achievement Motivation are distributed over a range of 12 for boys, 9 for girls and 12 for total sample. Thus, it may be said
that the senior secondary school students differ in their level of Achievement motivation. Further, the nature of distribution of scores on the variable of Achievement motivation is more or less similar for boys, girls and total sample.

3. The scores on the variable of Academic Achievement Motivation are distributed over a range of 16 for boys, 17 for girls and 17 for total sample. Thus, it may be said that the senior secondary school students differ in their level of Academic Achievement Motivation. Further the nature of distribution of scores on the variable of Achievement motivation is more or less similar for boys, girls and total sample.

4. The scores on the variable of Non-verbal intelligence are distributed over a range of 16 for boys, 17 for girls and 17 for total sample. Thus, it may be said that the senior secondary school students differ in their level of Non-verbal intelligence. Further, the nature of distribution of scores on the variable of Non-verbal intelligence is more or less similar for boys, girls and total sample.

5. The scores on the variable of Academic Achievement are distributed over a range of 50.42 for boys, 42.14 for girls and 54.42 for total sample. Thus, it may be said that the senior secondary school students differ in their level of Academic Achievement. Further, the nature of distribution of scores on the variable of Achievement motivation is more or less similar for boys, girls and total sample.

4.7.2 Relationship between Academic Anxiety, Achievement Motivation, Academic Achievement Motivation, Non-verbal intelligence and Academic Achievement for boys, girls and total sample

1. The relationship between Academic Anxiety and Achievement Motivation in terms of product moment correlation did not come out to be significant at 0.05 level of confidence for boys, girls and for the total sample. It may be interpreted from this that the change (increase or decrease) in Achievement Motivation among boys, girls and for the total sample does not correspond with any change (increase or decrease) in their level of Academic Anxiety.

2. The relationship between Academic Anxiety and Non-verbal intelligence in terms of product moment correlation did not come out to be significant at 0.05 level of confidence for boys, girls and for the total sample. It may be interpreted from this that the change (increase or decrease) in Non-verbal
intelligence among boys, girls and for the total sample does not correspond with any change (increase or decrease) in their level of Academic Anxiety.

3. The relationship between Academic Anxiety and Non-verbal intelligence in terms of product moment correlation did not come out to be significant at 0.05 level of confidence for boys, girls and for the total sample. It may be interpreted from this that the change (increase or decrease) in Non-verbal intelligence among boys, girls and for the total sample does not correspond with any change (increase or decrease) in their level of Academic Anxiety.

4. The relationship between Achievement Motivation and Non-verbal intelligence in terms of product moment correlation did not come out to be significant at 0.05 level of confidence for boys, girls and for the total sample. It may be interpreted from this that the change (increase or decrease) in Non-verbal intelligence among boys, girls and for the total sample does not correspond with any change (increase or decrease) in their level of Achievement Motivation.

5. The relationship between Achievement Motivation and Academic Achievement in terms of product moment correlation did not come out to be significant at 0.05 level of confidence for boys, girls and for the total sample. It may be interpreted from this that the change (increase or decrease) in Academic Achievement among boys, girls and for the total sample does not correspond with any change (increase or decrease) in their level of Achievement Motivation.

6. The relationship between Non-verbal intelligence and Academic Achievement in terms of product moment correlation come out to be significant at 0.01 level for boys, girls and for the total sample. It may be interpreted from this that the change (increase or decrease) in Academic Achievement among boys, girls and for the total sample correspond with change (increase or decrease) in their level of Non-verbal intelligence.

7. The relationship between Academic Achievement Motivation and Non-verbal Intelligence in terms of product moment correlation come out to be significant at 0.05 level of confidence for boys, and for the total sample. But the relationship between Academic Achievement Motivation and Non-verbal Intelligence in terms of product moment correlation did not come out to be significant at 0.05 level of confidence for girls. It may be interpreted from this
that the change (increase or decrease) in Non-Verbal Intelligence among boys, and for the total sample correspond with change (increase or decrease) in their level of Academic Achievement Motivation and the change (increase or decrease) in Non-Verbal Intelligence among girls does not correspond with change (increase or decrease) in their level of Academic Achievement Motivation.

8. The relationship between Academic Achievement Motivation and Academic Achievement in terms of product moment correlation comes out to be significant at 0.05 level of confidence for the total sample. But the relationship between Academic Achievement Motivation and Academic Achievement in terms of product moment correlation did not come out to be significant at 0.05 level of confidence for girls and boys. It may be interpreted from this that the change (increase or decrease) in Academic Achievement for the total sample correspond with change (increase or decrease) in their level of Academic Achievement Motivation and the change (increase or decrease) in Academic Achievement among girls and boys does not correspond with change (increase or decrease) in their level of Academic Achievement Motivation.

9. The relationship between Academic Achievement Motivation and Achievement Motivation in terms of product moment correlation come out to be significant at 0.01 level for boys, girls and for the total sample. It may be interpreted from this that the change (increase or decrease) in Achievement Motivation among boys, girls and for the total sample corresponds with change (increase or decrease) in their level of Academic Achievement Motivation.

10. The relationship between Academic Achievement Motivation and Academic Anxiety in terms of product moment correlation come out to be significant at 0.05 level of confidence for boys and the total sample but the relationship between Academic Achievement Motivation and Academic Anxiety in terms of product moment correlation did not come out to be significant at 0.05 level of confidence for girls. It may be interpreted from this that the change (increase or decrease) in Academic Anxiety for boys and the total sample corresponds with change (increase or decrease) in their level of Academic Achievement Motivation and the change (increase or decrease) in Academic Anxiety for girls does not correspond with change (increase or decrease) in their level of Academic Achievement Motivation.
Anxiety among girls does not correspond with change (increase or decrease) in their level of Academic Achievement Motivation.

4-7.3 Comparison of boys and girls on the Variables of Academic Anxiety, Achievement Motivation, Academic Achievement Motivation, Non-verbal intelligence and Academic Achievement

1. Senior secondary school boys and girls do not differ significantly with respect to their mean scores on Academic Anxiety.

2. Senior secondary school boys and girls differ significantly with respect to their mean scores on Achievement Motivation. Since, the mean score on Achievement Motivation is higher for senior secondary school girls (16.76) as compared to senior secondary school boys (15.82), it may be inferred that senior secondary school girls possess significantly higher achievement motivation in comparison to senior secondary school boys.

3. Senior secondary school boys and girls differ significantly with respect to their mean scores on Academic Achievement Motivation. Since, the mean score on Academic Achievement Motivation is higher for senior secondary school girls (30.55) as compared to senior secondary school boys (29.38), it may be inferred that senior secondary school girls possess significantly higher Academic Achievement Motivation in comparison to senior secondary school boys.

4. Senior secondary school boys and girls do not differ significantly with respect to their mean scores on Non-verbal intelligence.

5. Senior secondary school boys and girls do not differ significantly with respect to their mean scores on Academic Achievement.

4-7.4 Comparison of Senior Secondary School Boys, Girls and Total Sample Exhibiting High, Average and Low Non-Verbal Intelligence with respect to their Mean Scores on the Variables Academic Anxiety, Achievement Motivation and Academic Achievement Motivation

1. Senior secondary school boys having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Academic Anxiety.

2. Senior secondary school boys having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Achievement Motivation.
3. Senior secondary school boys having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Academic Achievement Motivation.

4. Senior secondary school girls having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Academic Anxiety.

5. Senior secondary school girls having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Achievement Motivation.

6. Senior secondary school girls having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Academic Achievement Motivation.

7. Senior secondary school students having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Academic Anxiety.

8. Senior secondary school students having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Achievement Motivation.

9. Senior secondary school students having high, average and low level of Non-verbal intelligence do not differ significantly with respect to their mean scores on Academic Achievement Motivation.

4.7.5 Comparison of Senior Secondary School Boys, Girls and Total Sample Exhibiting High, Average and Low Academic Achievement with respect to their Mean Scores on the Variables Academic Anxiety, Achievement Motivation and Academic Achievement Motivation

1. Senior secondary school boys having high, average and low level of Academic Achievement do not differ significantly with respect to their mean scores on Academic Anxiety.

2. Senior secondary school boys having high, average and low level of Academic Achievement differ significantly with respect to their mean scores on Achievement Motivation.

- Senior secondary school boys having high and average Academic Achievement do not differ significantly with respect to their mean scores on Achievement motivation.
• Senior secondary school boys having high and low Academic Achievement do not differ significantly with respect to their mean scores on Achievement motivation.

• Senior secondary school boys having average and low Academic Achievement differ significantly with respect to their mean scores on Achievement motivation. Since, the mean score on Achievement motivation is higher for senior secondary school boys having low Academic Achievement (16.94) as compared to senior secondary school boys having average Academic Achievement (15.00), it may be inferred that senior secondary school boys having low Academic Achievement exhibit significantly superior Achievement motivation in comparison to senior secondary school boys having average Academic Achievement.

3. Senior secondary school boys having high, average and low level of Academic Achievement do not differ significantly with respect to their mean scores on Academic Achievement Motivation.

4. Senior secondary school girls having high, average and low level of Academic Achievement do not differ significantly with respect to their mean scores on Academic Anxiety.

5. Senior secondary school girls having high, average and low level of Academic Achievement do not differ significantly with respect to their mean scores on Achievement Motivation.

6. Senior secondary school girls having high, average and low level of Academic Achievement do not differ significantly with respect to their mean scores on Academic Achievement Motivation.

7. Senior secondary school students having high, average and low level of Academic Achievement do not differ significantly with respect to their mean scores on Academic Anxiety.

8. Senior secondary school students having high, average and low level of Academic Achievement do not differ significantly with respect to their mean scores on Achievement Motivation.

9. Senior secondary school students having high, average and low level of Academic Achievement do not differ significantly with respect to their mean scores on Academic Achievement Motivation.
4-8 **Educational Implications**

1. The study has revealed boys and girls differ with respect to mean score on achievement motivation. Further girls have higher achievement motivation in comparison to boys. It means that thinking of our society has changed completely on girls education. To raise the achievement motivation of boys, reinforcement at proper schedules contributes a lot in motivating to learn and achieve educational goals.

2. Although it has been found that boys and girls do not differ significantly with respect to their mean score on academic anxiety. But still the mean score of girls is higher than boys. It means girls possess higher academic anxiety in comparison to boys. Anxiety level of girls can be minimized by encouraging them to participate in various co-curricular activities such as music, dance, singing, painting, drawing, debates, sports etc. Academic anxiety of girls can be overcome by continuous evaluation of the girls through the academic year. A unit test, monthly tests, half yearly examinations always helps in reducing the academic anxiety of students. A guidance service in schools should be organized as they help students in selection of proper educational courses as well as vocation in accordance with need, capabilities as well as interest of the students. By providing this service academic anxiety can be reduced. Parents and teachers should help the students to develop the habits of regular study rather allowing them to exert excessively during the examination days, to minimize anxiety on the eve of examination.

3. Study has revealed that boys and girls differ significantly with respect to their mean score on academic achievement motivation. Further girls possess higher academic achievement motivation in comparison to boys. To raise the
academic achievement motivation of boys in the classroom, it is more important to change the way they learn that what they learn. The way students think, act and feel in learning is determined by the rules of implicit learning games and the teacher’s leadership. Teacher should correlate the subject matter with the life situations of the students, in order to concretize the abstract subject matter and to make it interesting for the students. Students should not be encouraged to rely completely on class notes only. They should be asked to read text books also along with class notes, otherwise they will the habit of depending on cooked matter only and will not grasp the subject.

4. Although, it has been found that boys and girls do not differ significantly with respect to their mean score on academic achievement. But girls are showing are showing higher academic achievement than boys. It means there is need to improve the academic achievement of boys. Boys should be asked to devote more time to those subjects in which they are poor. Teachers should make the subject matter as clear as possible to his students by adopting new methods of teaching such as personalized system of interaction, programmed instruction, discussion method and team teaching, so that students may develop interest in difficult subjects. Teacher should help the students to frame the time table for study, instructed to adhere it. Use of various audio-visual teaching aids has always a positive impact on the academic achievement of students. Parents should check that their wards do not study in places of distraction and disturbances.

5. Although, it has been found that boys and girls do not differ with respect to their non-verbal intelligence. But still boys are showing superior non-verbal intelligence than girls. It means boys possess higher non-verbal intelligence
than girls. For developing non-verbal intelligence of girls, subjects which include non-verbal reasoning should be added in curriculum.

4-9 Suggestion for further Research

In the present study, the researcher has studied the relationship of academic anxiety, achievement motivation, academic achievement motivation to non-verbal intelligence and academic achievement. There is need for further development in this areas the investigator made following suggestions for further research.

1. Research studies may be carried out by taking a large sample of senior secondary school students.

2. The present study may be extended by taking variables such as stream, social category and level of aspiration.

3. The study was conducted in one district of Himachal Pradesh. Similar study may also be conducted through the state or comparison can be done state wise also.

4. Similar research studies needs to be conducted among students of college and university level.