CHAPTER – V
SUMMARY OF FINDINGS, RECOMMENDATIONS, SUGGESTIONS FOR FURTHER RESEARCH AND CONCLUSION

5.01 Introduction

The present investigation is an attempt to study the Mental Health and Scientific Aptitude of high school students in relation to their Achievement in Science. The chapter consists of the consolidated findings of the present study, recommendations, suggestions for further research and conclusion.

5.02 Statement of Problem

The problem chosen for the study may be stated as follows; “A Study on Mental Health and Scientific Aptitude of high school students in relation to their Achievement in Science”

5.03 Method of Study

In the present investigation normative survey method has been adopted. The survey method gathers data from relatively large number of cases at a particular time

5.04 Sample

A sample of 650 High School students were selected from Puducherry by using Random Sampling Technique
5.05 Objectives of Study

The following are the objectives of the present study:

1. To find out the Mental Health of high school students’
2. To assess the Scientific Aptitude of high school students’
3. To find out the Level of Reasoning of high school students’
4. To find out the Level of Numerical Ability of high school students’
5. To find out the Level of Science Information of high school students’
6. To find out the Level of Science Vocabulary of high school students’
7. To study the Achievement in Science of high school students’
8. To find out whether there is any significant difference in Mental Health among the high school students’ in respect of the following variables:
   a) Gender   b) Religion
c) Students Residence  d) Father’s Education
e) Father’s Occupation  f) Mother’s Education
g) Mother’s Occupation  h) Parents Income per month
i) Total No. of Members in a Family  j) Type of School
9. To find out whether there is any significant difference in Scientific Aptitude among the high school students’ in respect of the following variables:
   a) Gender  b) Religion
c) Students Residence  d) Father’s Education
10. To find out whether there is any significant difference in the Level of Reasoning among the high school students’ in respect of the following variables:
   a) Gender  
   b) Religion  
   c) Students Residence  
   d) Father’s Education  
   e) Father’s Occupation  
   f) Mother’s Education  
   g) Mother’s Occupation  
   h) Parents Income per month  
   i) Total No. of Members in a Family  
   j) Type of School

11. To find out whether there is any significant difference in the Level of Numerical Ability among the high school students’ in respect of the following variables:
   a) Gender  
   b) Religion  
   c) Students Residence  
   d) Father’s Education  
   e) Father’s Occupation  
   f) Mother’s Education  
   g) Mother’s Occupation  
   h) Parents Income per month  
   i) Total No. of Members in a Family  
   j) Type of School

12. To find out whether there is any significant difference in the Level of Science Information among the high school students’ in respect of the following variables:
a) Gender b) Religion
c) Students Residence d) Father’s Education
e) Father’s Occupation f) Mother’s Education
g) Mother’s Occupation h) Parents Income per month
i) Total No. of Members in a Family j) Type of School

13. To find out whether there is any significant difference in the Level of Science Vocabulary among the high school students’ in respect of the following variables

a) Gender b) Religion
c) Students Residence d) Father’s Education
e) Father’s Occupation f) Mother’s Education
g) Mother’s Occupation h) Parents Income per month
i) Total No. of Members in a Family j) Type of School

14. To find out whether there is any significant difference in Achievement in Science among the high school students’ in respect of the following variables

a) Gender b) Religion
c) Students Residence d) Father’s Education
e) Father’s Occupation f) Mother’s Education
g) Mother’s Occupation h) Parents Income per month
i) Total No. of Members in a Family j) Type of School
15. To find out whether there is any significant relationship between Achievement in Science and Mental Health of the high school students’ in respect of the following variables

a) Gender b) Religion
c) Students Residence d) Father’s Education
e) Father’s Occupation f) Mother’s Education
g) Mother’s Occupation h) Parents Income per month
i) Total No. of Members in a Family j) Type of School

16. To find out whether there is any significant relationship between Achievement in Science and Scientific Aptitude of high school students’ in respect of the following variables

a) Gender b) Religion
c) Students Residence d) Father’s Education
e) Father’s Occupation f) Mother’s Education
g) Mother’s Occupation h) Parents Income per month
i) Total No. of Members in a Family j) Type of School

17. To find out whether there is any significant relationship between Achievement in Science and Level of Reasoning of high school students’ in respect of the following variables

a) Gender b) Religion
c) Students Residence d) Father’s Education
e) Father’s Occupation f) Mother’s Education
g) Mother’s Occupation  h) Parents Income per month
i) Total No. of Members in a Family  j) Type of School

18. To find out whether there is any significant relationship between Achievement in Science and Level of Numerical Ability of high school students’ in respect of the following variables:

a) Gender  b) Religion
c) Students Residence  d) Father’s Education
e) Father’s Occupation  f) Mother’s Education
g) Mother’s Occupation  h) Parents Income per month
i) Total No. of Members in a Family  j) Type of School

19. To find out whether there is any significant relationship between Achievement in Science and Level of Science Information of high school students’ in respect of the following variables:

a) Gender  b) Religion
c) Students Residence  d) Father’s Education
e) Father’s Occupation  f) Mother’s Education
g) Mother’s Occupation  h) Parents Income per month
i) Total No. of Members in a Family  j) Type of School

20. To find out whether there is any significant relationship between Achievement in Science and Level of Science Vocabulary of high school students’ in respect of the following variables:

a) Gender  b) Religion
c) Students Residence  

d) Father’s Education  

e) Father’s Occupation  

f) Mother’s Education  

g) Mother’s Occupation  

h) Parents Income per month  

i) Total No. of Members in a Family  

j) Type of School  

21. To study the variables which discriminate the under achievers, normal achievers and over achievers.

5.06 Hypotheses of Study

Appropriate hypotheses relating to all the above mentioned objectives were formulated and put to Test (vide Chapter – 1)

5.07 Important Findings

The hypotheses formulated at the beginning of the study have been examined in the light of the data gathered. The following are the main findings of the present investigation.

5.07.01 Descriptive analysis

1. The descriptive statistics have been applied upon the obtained data and the important findings are given here under

2. Mental Health of high school students are said to be high (65.00 is the midpoint for the maximum of 130 marks). The computed mean ranges from 84.26 to 106.74. The highest mean score (106.74) is secured by the
students of Private Schools and the lowest mean score (84.26) by the Students of Govt. Schools.

3. Scientific Aptitude of High School students is said to be average (weighted score: -293 = high, 292 to 238 = above average, 237 to 156 = average, 155 to 101 = Below average, -100 = Low) The students of Private Schools secured the weighted scores of (269.71) and the students belonging to urban area secured the weighted scores of (238.35) in Scientific Aptitude which show that both the groups are above average Level, Other sub samples are at the average Level.

4. The Level of Reasoning of high school students is said to be satisfactory (26.00 is the midpoint for a maximum of 52 marks). The computed mean ranges from 23.45 to 36.17. The highest mean scores (36.17) is secured by the students of Private Schools and lowest mean score (23.45) by the Students of Govt. Schools.

5. The Level of Numerical Ability of high school students are said to be satisfactory (26.00 is the midpoint for the maximum of 52 marks). The computed mean ranges from 17.23 to 33.73. The highest mean score is 33.73 secured by the students of Private Schools and the lowest mean score is 17.23 secured by the Students of Govt. Schools.

6. The Level of Science Information of high school students is said to be satisfactory (25.00 is the midpoint for a maximum of 50 marks). The
computed mean ranges from 25.46 to 36.08. The highest mean score is 36.08 secured by the students of Private Schools and the lowest mean score is 25.46 secured by the Students of rural areas.

7. The Level of Science Vocabulary of high school students is said to be high (28.00 is the midpoint for a maximum of 56 marks). The computed mean ranges from 26.83 to 39.57. The highest mean score is 39.57 secured by the students of Private Schools and the lowest mean score is 26.83 secured by the Students of Govt. Schools.

8. Achievement in Science of high school students is said to be high (27.00 is the midpoint for a maximum of 54 marks). The computed mean ranges from 31.18 to 44.14. The highest mean score is 44.14 secured by the students of Private Schools and lowest mean score is 31.18 secured by the Students of Govt. Schools.

5.07.02 Differential Analysis

Under the differential analysis, the following are the important findings.

A. Mental Health of high school students

1. There is no significant difference between male and female (0.30) high school students.

2. There is no significant difference between Hindu, Christian and Muslim (0.02) high school students
3. There is significant difference between rural and urban (14.05) high school students.

4. The computed t-values are significant at 0.05 Level except for graduate &post graduate and others (0.34) for the sub sample of Father’s education.

5. The computed t-values are significant at 0.05 Level except for the daily wages and agriculture (0.57) agriculture and Self Employee (1.87) Self Employee and Government Employee (1.33) Self Employee and non Government Employee (0.63) Self Employee and others (0.64) Government Employee and non Government Employee (0.73) Government Employee and others (0.62) non Government Employee and others (0.06) for the sub sample of Father’s occupation.

6. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (0.21) for the sub sample of Mother’s education.

7. The computed t-values are significant at 0.05 Level except for daily wages and agriculture (0.42), daily wages and others (1.47), agriculture and others (1.19), Self Employee and Government Employee (1.29), Self Employee and non Government Employee (0.09), Self Employee and others (0.74), Government Employee and non Government Employee (1.19), Government Employee and
others (1.87), non Government Employee and others (0.82) for the sub sample of Mother’s occupation.

8. The computed t-values are significant at 0.05 Level except for income in the categories of Rs.25000 to 50000 and Rs.10000 to 25000 per month (1.61), Rs.25000 to 50000 and below Rs.10000 per month (1.86), Rs.10000 to 25000 per month and below Rs.10000 per month (0.32) for the sub sample of Parent’s income.

9. There is no significant difference between above 10 members, 5 to 10 members and less than 5 members (1.97) for the sub sample of total number of members in the family.


B. Scientific Aptitude of high school students

1. There is no significant difference between male and female (1.06) high school students.

2. There is no significant difference between Hindu, Christian and Muslim (0.70) high school students.

3. There is significant difference between rural and urban (13.0) high school students.
4. The computed t-values are significant at 0.05 Levels except for the uneducated and School educated (1.86), graduate & post graduate and others (1.35) for the sub sample of Father’s education.

5. The computed t-values are significant at 0.05 Level except for the daily wages and agriculture (0.35) Self Employee and Government Employee (1.29) Self Employee and non Government Employee (0.83) Self Employee and others (0.66) Government Employee and non Government Employee (0.37) Government Employee and others (0.51) non Government Employee and others (0.13) for the sub sample of Father’s occupation.

6. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (0.61), graduate & post graduate and others (1.33) for the sub sample of Mother’s education.

7. The computed t-values are significant at 0.05 Level except for daily wages and agriculture (1.15), agriculture and non Government Employee (1.00), agriculture and others (1.00), Self Employee and Government Employee (1.54), Self Employee and non Government Employee (1.38), Self Employee and others (1.15), non Government Employee and others (0.09) for the sub sample of Mother’s occupation.

8. The computed t-values are significant at 0.05 Level except for income in the categories of Rs.25000 to 50000 and Rs.10000 to
25000 per month (1.17), Rs.25000 to 50000 and below Rs.10000 per month (1.40), Rs.10000 to 25000 per month and below Rs.10000 per month (0.30) for the sub sample of Parent’s income.

9. There is no significant difference between above 10 members, 5 to 10 members and less than 5 members (2.22) for the sub sample of Total No. of Members in a Family.

10. The computed t-value for Government and Government Aided School (5.07), Government and Private School (22.68), Government Aided and Private School (16.46) differ significantly

C. Reasoning of high school students

1. There is no significant difference between male and female (1.21) high school students.

2. There is no significant difference between Hindu, Christian and Muslim (0.33) high school students.

3. There is significant difference between rural and urban high school students (13.25).

4. The computed t-values are significant at 0.05 Levels except for the uneducated and School educated (1.94) for the sub sample of Father’s education.

5. The computed t-values are significant at 0.05 Level except for the daily wages and agriculture (0.08), daily wages and Self Employee (1.39), Self Employee and Government Employee (1.38), Self
Employee and non Government Employee (1.26), Self Employee and others (1.16) Government Employee and non Government Employee (0.03) Government Employee and others (0.05) non Government Employee and others (0.02) for the sub sample of Father’s occupation.

6. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (0.21), graduate & post graduate and others (1.71) for the sub sample of Mother’s education.

7. The computed t-values are significant at 0.05 Level except for daily wages and agriculture (1.00), agriculture and non Government Employee (0.97), agriculture and others (1.23), Self Employee and Government Employee (1.73), Self Employee and non Government Employee (0.01), Self Employee and others (0.55), non Government Employee and others (0.38) for the sub sample of Mother’s occupation.

8. The computed t-values are significant at 0.05 Level except for income in the categories of more than 50000 per month and 10000 to 25000 per month (2.65), more than Rs.50,000 and below Rs.10,000 per month (2.79) for the sub sample of Parent’s income.

9. There is no significant difference between above 10 members, 5 to 10 members and less than 5 members (1.35) for the sub sample of Total No. of Members in a Family.

D. Numerical Ability of high school students

1. There is no significant difference between male and female (1.13) high school students.

2. There is no significant difference between Hindu, Christian and Muslim (0.13) high school students.

3. There is significant difference between rural and urban (10.13) high school students.

4. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (1.78), Graduate & post graduate and others (1.56) for the sub sample of Father’s education.

5. The computed t-values are significant at 0.05 Level except for the daily wages and agriculture (0.46), agriculture and Self Employee (1.92), Self Employee and Government Employee (1.34), Self Employee and non Government Employee (0.99), Self Employee and others (0.25) Government Employee and non Government Employee (0.26) Government Employee and others (0.98) non Government Employee and others (0.67) for the sub sample of Father’s occupation.
6. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (0.43), graduate & post graduate and others (1.61) for the sub sample of Mother’s education.

7. The computed t-values are significant at 0.05 Level except for daily wages and agriculture (1.33), daily wages and others (1.91) agriculture and non Government Employee (1.23), agriculture and others (0.82), Self Employee and Government Employee (1.12), Self Employee and non Government Employee (1.12), Self Employee and others (1.42), non Government Employee and others (0.29) for the sub sample of Mother’s occupation.

8. The computed t-values are significant at 0.05 Level except for income in the categories of more than 50000 per month and 10000 to 25000 per month (2.90), more than Rs.50, 000 and below Rs.10, 000 per month (3.39) for the sub sample of Parent’s income.

9. There is no significant difference between above 10 members, 5 to 10 members and less than 5 members (1.38) for the sub sample of Total No. of Members in a Family.

10. The computed t-value for Government and Government Aided School (5.02), Government and Private School (24.84), Government Aided and Private School (17.77) differ significantly.
E. Science Information of high school students

1. There is no significant difference between male and female (1.16) high school students.

2. There is no significant difference between Hindu, Christian and Muslim (2.67) high school students.

3. There is significant difference between rural and urban (9.97) high school students.

4. The computed t-values are significant at 0.05 Levels except for the uneducated and School educated (1.93), Graduate & post graduate and others (0.66) for the sub sample of Father’s education.

5. The computed t-values are significant at 0.05 Level except for the daily wages and agriculture (0.71), Self Employee and Government Employee (1.90), Self Employee and non Government Employee (0.64), Self Employee and others (0.66) Government Employee and non Government Employee (1.15) Government Employee and others (1.07) non Government Employee and others (0.05) for the sub sample of Father’s occupation.

6. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (0.94), graduate & post graduate and others (1.38) for the sub sample of Mother’s education.

7. The computed t-values are significant at 0.05 Level except for daily wages and agriculture (1.00), agriculture and non Government
Employee (1.35), agriculture and others (1.54), Self Employee and non Government Employee (0.71), Self Employee and others (0.33), non Government Employee and others (0.32) for the sub sample of Mother’s occupation.

8. The computed t-values are significant at 0.05 Level except for income in the categories of more than 50000 per month and 10000 to 25000 per month (2.98), more than Rs.50,000 and below Rs.10,000 per month (2.82) for the sub sample of Parent’s income.

9. There is no significant difference between above 10 members, 5 to 10 members and less than 5 members (2.15) for the sub sample of total number of members in the family.

10. The computed t-value for Government and Government Aided School (2.42), Government and Private School (14.73), Government Aided and Private School (11.47) differ significantly.

F. Science Vocabulary of high school students

1. There is no significant difference between male and female (0.38) high school students.

2. There is no significant difference between Hindu, Christian and Muslim (1.42) high school students.

3. There is significant difference between rural and urban (9.97) high school students.
4. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (1.93), Graduate & post graduate and others (1.38) for the sub sample of Father’s education.

5. The computed t-values are significant at 0.05 Level except for the daily wages and agriculture (0.09), daily wages and Self Employee (1.91), daily wages and non Government Employee (1.89), Self Employee and Government Employee (0.08), Self Employee and non Government Employee (0.09), Self Employee and others (0.32) Government Employee and non Government Employee (0.02) Government Employee and others (0.25) non Government Employee and others (0.23) for the sub sample of Father’s occupation.

6. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (0.93), graduate & post graduate and others (0.12) for the sub sample of Mother’s education.

7. The computed t-values are significant at 0.05 Level except for daily wages and agriculture (0.91), daily wages and non Government Employee (1.16), daily wages and others (1.12), agriculture and non Government Employee (0.15), agriculture and others (0.15), Self Employee and Government Employee (0.84), Self Employee and others (1.84), non Government Employee and others (0.02) for the sub sample of Mother’s occupation.
8. The computed t-values are significant at 0.05 Level except for income in the categories of more than Rs. 50000 per month and Rs. 25000 to 50000 per month (2.72), more than 50000 per month and Rs. 10,000 to 25000 per month (2.98), more than Rs. 50,000 and below Rs. 10,000 per month (2.82) for the sub sample of Parent’s income.

9. There is no significant difference between above 10 members, 5 to 10 members and less than 5 members (2.94) the sub sample of Total No. of Members in a Family.

10. The computed t-value for Government and Government Aided School (5.54), Government and Private School (19.83), Government Aided and Private School (14.18) differ significantly.

G. Achievement in Science of high school students

1. There is no significant difference between male and female (0.98) high school students.

2. There is no significant difference between Hindu, Christian and Muslim (0.23) high school students.

3. There is significant difference between rural and urban (10.81) high school students.

4. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (1.93), graduate & post graduate and others (1.95) for the sub sample of Father’s education.
5. The computed t-values are significant at 0.05 Level except for the daily wages and Self Employee (2.78), daily wages and Government Employee (3.41), daily wages and non Government Employee (2.20), agriculture and Government Employee (2.24), Government Employee and others (2.02) for the sub sample of Father’s occupation.

6. The computed t-values are significant at 0.05 Level except for the uneducated and School educated (0.99), School education and others (1.46), graduate & post graduate and others (1.65) for the sub sample of Mother’s education.

7. The computed t-values are not significant at 0.05 Level except for daily wages and Self Employee (2.85), daily wages and Government Employee (3.97), daily wages and others (1.68), agriculture and Government Employee (2.81), Government Employee and non Government Employee (3.23), Government Employee and others (2.07), for the sub sample of Mother’s occupation.

8. The computed t-values are not significant at 0.05 Level except for the category of more than Rs.50.000 per month and Rs. 10.000 to 25.000 per month (2.43), more than Rs.50.000 and below Rs.10.000 per month (2.44) for the sub sample of parent’s income.

9. There is no significant difference between above 10 members, 5 to 10 members and less than 5 members (1.37) for the sub sample of total number of members in the family.
10. The computed t-value for Government and Government Aided School (4.60), Government and Private School (19.06), Government Aided and Private School (13.29) differ significantly.

5.07.03 Correlation Analysis

The following are the important findings arrived at on the basis of correlation analysis.

1. The correlation co-efficient of Achievement in Science with Mental Health is found to be significant at 0.01 Level for the entire sample and all the sub samples. For the sub sample Total No. of Members in a Family where there are more than 10 members in the family of the sub sample Total No. of Members in a Family has shown the highest correlation (0.791) and Private School students have shown the least correlation (0.435)

2. The correlation co-efficient of Achievement in Science with Scientific Aptitude is found to be significant at 0.01 Level for the entire sample and all the sub samples. For the sub sample mother’s education where there are mother’s having School educated has shown highest correlation (0.866) and Govt. Aided School students have shown the least correlation (0.610)

3. The correlation co-efficient of Achievement in Science with the Level of Reasoning is found to be significant at 0.01 Level for the
entire sample and all the sub samples. For the sub sample father’s occupation where there are students father is non Govt. Employee has shown highest correlation (0.796) and urban residence students shown the least correlation (0.544)

4. The correlation co-efficient of Achievement in Science with Numerical Ability is found to be significant at 0.01 Level for the entire sample and all the sub samples. For the sub sample religion were there are who’s Self employed mother and Muslim students have shown highest correlation (0.779) and Govt. Aided School students shown the least correlation (0.492)

5. The correlation co-efficient of Achievement in Science with Science Information is found to be significant at 0.01 Level for the entire sample and all the sub samples. The students whose father’s are non Govt. Employee has shown highest correlation (0.782) and Govt. Aided School students shown the least correlation (0.501)

6. The correlation co-efficient of Achievement in Science with Level of Science Vocabulary is found to be significant at 0.01 Level for the entire sample and all the sub samples. For the sub sample mother’s occupation, the students whose mother’s belong to the category of mother’s have shown highest correlation (0.817) and Govt. Aided School students shown the least correlation (0.427)
5.07.04 Discriminant Function Analysis

From the discriminant function analysis the following findings were arrived

1. 64.3 percent of grouped achievers correctly classified into under-achievers, normal achievers and over achievers.

2. Numerical Ability, reasoning ability, Science Vocabulary, Science Information and Mental Health are the variables ordered by the function 1 (under achievers in one group and the others in second group) with largest absolute correlation between each variable and any discriminant function. It indicates that Numerical Ability scores highly discriminate from other groups.

3. Science Vocabulary, Science Information is ordered by the function 2 (over achievers in one group and the others in second group) with largest absolute correlation between each variable and any discriminant function. It indicates that the Science Vocabulary scores are discriminates from other two groups.

5.08 Implications of the Study

There is no significant difference between male and female high school students in respect of their Mental Health.
Vani and Manju, 1998 found that there is no significant difference between male and female students in their Mental Health. These findings are found to agree with the findings of the present study.

Bernadette et al, 2000 found that the girls had better Mental Health status as compared to Boys. This finding is not found to agree with the finding of the present study.

**There is significant difference between rural and urban high school students in respect of their Mental Health.**

The findings of Veereshwar, 1972 Lydiaseott and Anna Chur–Hansen, 2008 that students belonging to urban areas have high Mental Health, is found to agree with the findings of the present investigation.

**There is significant difference between rural and urban high school students in respect of the Achievement in Science.**

Rajasekar, 1997 found that students belonging to the urban area have high achievement and this finding is found to agree with the findings of the present study.

**There is no significant difference between male and female high school students in respect of the Scientific Aptitude.**
The findings of Bernadette, C and Hayes, 2001 that there is significant
difference in Scientific Aptitude on the basis of Gender is not found to agree
with the finding of the present study.

There is no significant difference between male and female high
school students in respect of Achievement in Science.

The findings of Thakur, 1972 and Sudhir, M.A 1987 that Boys were
superior to Girls in Science Achievement and the findings of Soundararajan
and Andal, 1989 that there was statistically significant difference between
Boys and Girls in their academic achievement is not found to agree with the
findings of the present study.

On the other hand the findings of Rajasekar, 1997 and Adelaide et al
1998 that there is no significant difference between male and female
students in respect of their Achievement in Physics is found to agree with
the findings of the present study.

The students belonging to Private Schools have high Achievement
in Science.

The finding of Rajasekar, 1997 that students belonging to Government
Schools Perform better than Private School Students is not found in
agreement with the present study findings.
This finding is in agreement with few earlier findings of Jane Bee and Xin Liang, 2010.

**The correlation coefficient of Achievement in Science with Mental Health and Scientific Aptitude are found to be significant.** The findings of Claro et al, 2003 and Pandy et al, 1998 that correlation coefficient of Achievement in Science with Mental Health is found to be significant is in agreement with the findings of the present study.

(Edna, F 1994) studied in positive correlates with Scientific Aptitude and (Nhuan, Le et al, 2009) studies in positive relationship between Science and Maths Achievement.

(Rao, 1995 Dey and Sinha, 1968) also found that the Scientific Aptitude Test had significant correlation with Science Achievement.

**5.09 Recommendations**

In the light of the above findings of the study, the following recommendations are made.

1. To develop the Scientific Aptitude of high school students; field trips/tours/exhibitions can be arranged periodically at state /national / international Levels.

2. Weekly Tests can be conducted to improve the Achievement in Science of high school students.
3. Scientific method, problem solving method and project method can be applied to improve the Scientific Aptitude of high school students.

4. Special classes can be arranged periodically in the field of science like Physics, Chemistry, Botany and Zoology etc.

5. The School should create better environment for the students

6. Guidance and counselling social work services, yoga and meditation practices in high Schools can develop better Mental Health.

7. In addition to the above recommendation the high School teachers and the Government should provide harmonious environment in the Schools for better Achievement in Science.

5.10 Suggestions for Further Research

The following are some of the suggested research problems for further research and for healthy research outcomes on this present theme.

1. The present study could be undertaken at various geographical areas.

2. A similar study could be made of higher secondary Level and college Levels.

3. Psychological factors related to Achievement in Science of higher secondary students and college students could be undertaken.

4. Sociological factors related to the Achievement in Science of higher secondary and college students could be undertaken.
5. Achievement in Science of high school students can be studied with some other correlates which are not studied in this study.

5.11 Conclusion

The present study focuses on Mental Health and Scientific Aptitude of high school students in relation to their Achievement in Science. The findings of the present study reveal that Mental Health, Scientific Aptitude, reasoning and Numerical Ability, Science Information and Science Vocabulary have an impact on the Achievement in Science of high school students. So, if one wants to overcome the problem of Achievement in Science, they must consider the above independent variables. In addition to the above recommendations and suggestions, proper guidance and counselling is to be given to high school students for better Achievement in Science for. The future generation of students must keep in mind that their valuable time, practice, involvement and dedicative work would contribute to national development.