6.0 Introduction.

Quality of performance has become the key factor for personal progress. Parents desire that their children climb the ladder of performance as high as possible. This desire for high level of achievement puts a lot of pressure on students. Thus, a lot of time and efforts of the schools are used for helping students to achieve better in their scholastic endeavors.

In spite of all efforts there have been high incidences of failure in schools at different levels. What may be the causes of children’s failure in schools? Do they fail due to less interest in studies? Do they fail due to poor school and home environment? Do they fail due to low general mental ability? These are some of the questions which need to be answered. The problem of academic achievement has gained new proportion in the present time because there are many factors which are responsible for poor academic achievement of the students. The problem of deteriorating standard has forced educationists to thoroughly probe the student’s academic achievement in schools. By studying the factors of academic achievement, the causes of high and low achievement of the school going children may be traced.

Family involvement has been a key theme in early childhood education for more than three decades (Fantuzzo, Tighe and child, 2000). For thousands of years Indian culture has emphasized the influence of family in which the child is born and brought up. The parents are the primary agents in child’s academic achievements. The pattern of family life differs from one social group to another. The kind of husband –
wife relationship and parent-child relationship varies. Similarly the family values, the use of money and the types of home management also vary.

The school can play a significant role in promoting achievement of the children. A good school provides an atmosphere in which each is respected as an individual, and congenial for the academic achievement. It provides a curriculum enriched by activities of various types that meet the needs and interests of the pupils. Such a school is a positive factor in the achievement of children. Specifically speaking, the following factor are directly related to the achievement of the students in a school - over dominating attitude of teachers, partial attitude of teachers, failure in schools, type of curriculum, lack of facilities in school, system of examination, employment insecurity, un-psychological handling by the teachers, lack of teachers’ inspiration.

When parents are involved in their children’s education at home, they do better in school. The family makes critical contributions to students achievement from pre-school through high school. A home environment that encourages learning is more important to student’s achievement than income, education level, or cultural background. On the other when parents are involved at school, as well as at home children do better and stay in school longer.

Schools also play a significant role on the children’s achievement. Personality characteristics of the teachers and their way of motivating children and conceptualizing them are strong determinants of academic achievement. Negligence, by teachers and peers in school hampers the student’s achievement. The teachers’ skills and information also affects the achievement of children. Gottfried (1990) found that young students
with higher academic intrinsic motivation had significantly higher achievement.

Schunck and Pajares (2000) attribute the cause of poor achievement to various factors including greater competition, less teacher attention to individual student’s progress, and stresses associated with school transition. Students were motivated by teachers who cared about student learning and showed enthusiasm. These teachers introduced topics in an interesting and challenging way, used varied teaching strategies, and promoted student involvement by allowing participation in the selection of learning activities (Cothran and Ennis 2000).

In the past several research studies have been conducted to find out the role of different variables on academic achievement of school children. The academic achievement of children is dependent on positive or negative influence of a host of independent variable like intelligence, personality factors, socio-economic status, adjustment level, home and school environment and so on. Among them the immediate environment of the child which he gets at home and school is very important because the amount and the kind of stimulation the child receives in these two environments exercise strong influence on the child’s conceptual thinking, reasoning and problem solving capacity which in turn affects his academic achievement. Research studies in this connection have been conducted by many researchers.

Garg, Chitra (1992) found that parental responsiveness was positively and significantly related with academic achievement. Neihbur (1995) found that student’s motivation showed no significant effect on the relationship with academic achievement.

Hammer (2003) states that the home environment is as important as what goes on in the school. Important factors include parental involvement in their children’s education, how children are allowed to watch TV and how often students change schools. Jeynes (2005), Coyer Eric (2008) Eirin Flouri’ and Ann Buchanan (2004) states that families involvement independently and significantly predicted educational attainment of the children. Aishwarya Raj Lakshmi and Meenakshi Arora; (2006) Henry.M.Codjoe, (2007) found that parental acceptance and encouragement were positively related with academic school success and academic competence. Haseen Taj and B.G Bhaskar (2010) in their findings show that there is a significant relationship between family environment and academic achievement.

6.1 Need and Justification of the Study

The effectiveness of any educational system is gauged to the extent the pupils involved in the system achieve academically. But, it has generally been observed that the children greatly differ in their academic achievement. Low achievement and school failure has become a general problem of almost all countries of the world. Though there may be many factors which contribute to academic achievement as already described earlier, home and school environment play an important role in contributing to the pupil’s scholastic performance. Parents and teachers have a crucial role to play to make sure that every child becomes a high achiever. Parental influence has been identified as an important factor affecting student’s achievement. Researchers indicate that parent’s education and
encouragement are strongly related to improved students achievement (Wang, Wildman and Calhoun, 1996).

A home environment that encourages learning is more important to student’s achievement than income, educational level and cultural background of the family. Similarly, school which provide effective teaching learning environment in school contributes more to the pupils’ achievement than any other factor.

It is in this background that the present study has been undertaken to determine whether home and school environment has an effect on the academic achievement of school children or not. If those home and school factor which facilitate academic achievement of students are identified then it may be possible to provide a healthy educational environment at home and school which may pave the way for student’s academic success. It is therefore necessary to investigate the various homes and school factors which influence academic achievement. A study of this nature would definitely help parents, teachers and educationists in further understanding the mental make-up of the students in connection with their academic achievement.

6.2 Statement of the Problem:

In view of the background as described above, the problem under study is specifically titled as follows:-

“Effect of Home and School Environment on Academic Achievement of School Going Children in the Ri-Bhoi Dist of Meghalaya.”
6.3. Operational Definitions of the Key Terms Used:

I. Academic Achievement -;

It refers to the scholastic achievement of the students at the end of an educational programme. It is reflected in terms of the percentage of marks obtained by class X Students in the H.S.L.C Exam conducted by Meghalaya Board of School education (MBOSE).

II. Home Environment-;

It refers to the psycho-social climate of home as perceived by children. It provides a measure of the quality and quantity of cognitive, emotional and social support that has been available to the children within home. Home Environment consists of the following dimensions-;

A) Relationship Dimensions

(i) Cohesion- It refers to the degree of commitment, help, and support family members provide for one another.

(ii) Expressiveness- It refers to the extent to which family members are encouraged to act openly and express their feelings and thoughts directly.

(iii) Conflict- It refers to the amount of openly expressed aggression and conflict among family members.

(iv) Acceptance and caring - It refers to the extent to which the members are unconditionally accepted and the degree to which caring is expressed in the family.
B) Personal Growth Dimensions;

(i) Independence- It refers to the extent to which the members are assertive and independently make their own decisions.

(ii) Active Recreational Orientation- It refers to the extent of participation in social and recreational activities.

C) System Maintenance Dimensions;

(i) Organization- It refers to the degree of importance of clear organization structures in planning family activities and responsibilities.

(ii) Control - It refers to the degree of limit setting within a family.

III. School Environment;

It refers to the psycho-social climate of the schools as perceived by the pupils. It provides measures of the quality and quantity of the cognitive, emotional and social support that has been available to the students during their school life in terms of teachers- pupil interactions. School Environment consists of the following six dimensions:

(i) Creative Stimulation- It refers to “teacher’s activities to provide conditions and opportunities to stimulate creative thinking.”

(ii) Cognitive Encouragement – It implies “teacher’s behavior to stimulate cognitive development of student by encouraging his actions or behaviors”.

(iii) Permissiveness – It indicates “a school climate in which students are provided opportunities to express their views freely and act according to their desires with no interruption from teachers.”
(iv) **Acceptance**- It implies “a measure of teacher’s unconditional love, recognizing that students have the right to express feelings, to uniqueness, and to be autonomous individuals. Teachers accept the feelings of students in a non-threatening manner.”

(v) **Rejection**- It refers to “a school climate in which teachers do not accord recognition to student’s rights to deviate, act freely and be autonomous persons.”

(vi) **Control**- It indicates “autocratic atmosphere of the school in which several restriction are imposed on students to discipline them.”

### 6.4 Delimitation of the Study

This study is delimited to the regular students of class X belonging to different secondary schools of RI-BHOI Dist affiliated to Meghalaya Board of School Education (MBOSE), Shillong.

### 6.5 Objectives of the Study:

i To find out the strength of home environment with respect to its various dimensions as perceived by class X students.

ii To find out the strength of school environment with respect to its various dimensions as perceived by class X students

iii To find out the level of academic achievement of class X students as obtained from schools records.
iv To find out the relationship between various dimensions of home environment and academic achievement of class X students.

v To find out the relationship between various dimensions of school environment and academic achievement of class X students.

vi To study the effect of various dimensions of home environment on the academic achievement of class X students.

vii To study the effect of various dimensions of school environment on the academic achievement of class X students.

viii To suggests measures to improve the quality of home and school environment.

6.6 Hypotheses

A. Research Hypotheses

i There is a significant relationship between various dimensions of home environment and academic achievement of class X students.

ii There is a significant relationship between various dimensions of school environment and academic achievement of class X students.

iii There is a significant difference in student’s achievement among high, average and low groups formed in respect to the various dimensions of home environment.
There is a significant difference in student’s achievement among high, average and low groups formed in respect to the various dimensions of school environment.

B. Null Hypotheses.

i. There is no significant relationship between various dimensions of home environment and academic achievement of class X students.

ii. There is no significant relationship between various dimensions of school environment and academic achievement of class X students.

iii. There is no significant difference in student’s achievement among high, average and low groups formed in respect to the various dimensions of home environment.

iv. There is no significant difference in student’s achievement among high, average and low groups formed in respect to the various dimensions of school environment.

6.7 Design of the Study

A brief presentation of the methodology used is given below:

I. Population.

All the students studying in class X in the secondary schools situated in Ri Bhoi District will constitute the population of the study. The Ri Bhoi District has the total of 52 secondary schools. The total enrollment at class x level in these schools are approximately 1300 in the year 2007.
II. Sample.

The sample for the present study was consist of 472 students studying in class X which will be selected randomly by giving fair representation to all types of schools.

III. Tools Used:

The following tools were used for the present study:
(a) School Environment Inventory (SEI) by Dr. Karuna Shankar Mishra. (1983).
(b) Family Environment Scale (FES) by Dr. Harpreet Bahtia and Dr. N. K Chadha.(1993).

IV. Data Collection.

The investigator visited the schools under study and sought the permission from the heads of the institutions under study and tests were administered to the class X students. While administering the tests, instructions were read out by investigator and illustrative examples were explained to the students. When required. It was made sure that all the students had understood the instruction fully regarding the answering of the tests and then they were asked to respond the tests. Both the tests were administered concurrently after short break in between.

The marks obtained by the students in their previous examination (i.e. SSLC) conducted by Meghalaya Board of School Education were used as data for academic achievement.

V. Statistical Technique Used:

The following are the statistical technique used.
(a) Mean and Standard Deviation.
6.8 Analysis and Interpretation:

Analysis and interpretation of the data has been presented keeping in view the objectives and hypotheses of the study.

(I) Strength of home environment:

The home environment is classified in eight dimensions as given below:

A. Cohesion:

<table>
<thead>
<tr>
<th>Qualitative Norm As Per Manual</th>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>62 above</td>
<td>14</td>
<td>61.71</td>
<td>0.82</td>
<td>2.97%</td>
<td>69.28%</td>
</tr>
<tr>
<td>Average</td>
<td>46 to 60</td>
<td>327</td>
<td>52.32</td>
<td>3.77</td>
<td>69.28%</td>
<td>27.75%</td>
</tr>
<tr>
<td>Low</td>
<td>45 below</td>
<td>131</td>
<td>40.09</td>
<td>5.3</td>
<td>27.75%</td>
<td></td>
</tr>
</tbody>
</table>
**B. Expressiveness:**

Table .1 B

**Showing Mean, SD and Percentage Under Various Qualitative Norm Group as Perceived by the Class X Students (N=472)***

<table>
<thead>
<tr>
<th>Raw Scores</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 above</td>
<td>2</td>
<td>40.5</td>
<td>0.7</td>
<td>0.42%</td>
<td>High</td>
</tr>
<tr>
<td>28 to 39</td>
<td>374</td>
<td>31.83</td>
<td>2.74</td>
<td>79.24%</td>
<td>Average</td>
</tr>
<tr>
<td>27 Below</td>
<td>96</td>
<td>20.23</td>
<td>2.50</td>
<td>20.34%</td>
<td>Low</td>
</tr>
</tbody>
</table>

**C. Conflict**

Table .1 C

**Showing Mean, SD and Percentage under Various Qualitative Norm Group as Perceived by the class X Students. (N=472)***

<table>
<thead>
<tr>
<th>Raw Scores</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>37 Below</td>
<td>234</td>
<td>33.29</td>
<td>3.88</td>
<td>49.58%</td>
<td>High</td>
</tr>
<tr>
<td>38 to 51</td>
<td>238</td>
<td>41.46</td>
<td>2.84</td>
<td>50.42%</td>
<td>Average</td>
</tr>
<tr>
<td>52 &amp; above</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Low</td>
</tr>
</tbody>
</table>
d. Acceptance and Caring

Table .1 D

Showing Mean, SD and Percentage under Various Qualitative Norm Groups as Perceived by class X students (N=472)

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 &amp; above</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>High</td>
</tr>
<tr>
<td>41 to 54</td>
<td>229</td>
<td>44.15</td>
<td>2.63</td>
<td>48.52%</td>
<td>Average</td>
</tr>
<tr>
<td>40 below</td>
<td>243</td>
<td>36.09</td>
<td>4.08</td>
<td>51.48%</td>
<td>Low</td>
</tr>
</tbody>
</table>

E. Active Recreational Orientation

Table .1 E

Showing Mean, SD and Percentage under Various Qualitative Norm Groups as Perceived by class X Students. (N=472)

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 &amp; above</td>
<td>34</td>
<td>35.64</td>
<td>3.02</td>
<td>7.2%</td>
<td>High</td>
</tr>
<tr>
<td>26 to 33</td>
<td>313</td>
<td>28.95</td>
<td>2.19</td>
<td>66.32%</td>
<td>Average</td>
</tr>
<tr>
<td>25 &amp; below</td>
<td>125</td>
<td>22.15</td>
<td>2.8</td>
<td>26.48%</td>
<td>Low</td>
</tr>
</tbody>
</table>
F. Independence

Table 4.1 F

Showing Mean, SD and Percentage Under Various Qualitative Norm Groups as Perceived by Class X Students. (N=472)

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>41 &amp; above</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>High</td>
</tr>
<tr>
<td>31 to 40</td>
<td>85</td>
<td>32.88</td>
<td>1.63</td>
<td>18.01%</td>
<td>Average</td>
</tr>
<tr>
<td>30 &amp; below</td>
<td>387</td>
<td>25.77</td>
<td>3.47</td>
<td>81.99%</td>
<td>Low</td>
</tr>
</tbody>
</table>

G. Organization

Table 1G

Showing Mean, SD and Percentage under Various Qualitative Norm Groups as Perceived by Class X Students. (N=472)

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 &amp; above</td>
<td>60</td>
<td>10.00</td>
<td>0</td>
<td>12.71%</td>
<td>High</td>
</tr>
<tr>
<td>6 to 9</td>
<td>279</td>
<td>8.15</td>
<td>0.77</td>
<td>59.11%</td>
<td>Average</td>
</tr>
<tr>
<td>62 below</td>
<td>133</td>
<td>4.97</td>
<td>1.26</td>
<td>28.18%</td>
<td>Low</td>
</tr>
</tbody>
</table>
### H. Control

**Table .1 H**

**Showing Mean, SD and Percentage Under Various Qualitative Norm Groups as Perceived by Class X Students (N=472)**

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 and above</td>
<td>62</td>
<td>18.70</td>
<td>1.61</td>
<td>13.14%</td>
<td>High</td>
</tr>
<tr>
<td>14 to 17</td>
<td>227</td>
<td>15.42</td>
<td>1.04</td>
<td>48.09%</td>
<td>Average</td>
</tr>
<tr>
<td>13 below</td>
<td>183</td>
<td>11.47</td>
<td>1.66</td>
<td>38.77%</td>
<td>Low</td>
</tr>
</tbody>
</table>

(II) **Strength of School Environment:**

The School Environment is classified in 6 (six) dimensions as given below:

**A. Creative Stimulation:**

**Table II.A**

**Showing Mean, SD and Percentage Under Various Qualitative Norm Groups as perceived by the class X Students (N=472)**

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>57 above</td>
<td>120</td>
<td>62.5</td>
<td>4.43</td>
<td>25.42%</td>
<td>High</td>
</tr>
<tr>
<td>38 to 56</td>
<td>314</td>
<td>48.49</td>
<td>4.97</td>
<td>66.53%</td>
<td>Average</td>
</tr>
<tr>
<td>O to 37</td>
<td>38</td>
<td>31.47</td>
<td>5.88</td>
<td>8.05%</td>
<td>Low</td>
</tr>
</tbody>
</table>
B. Cognitive Encouragement:

Table II B

Showing Mean, SD and Percentage under Various Qualitative Norm Groups as Perceived by Class X Students (N=472).

<table>
<thead>
<tr>
<th>Raw Scores</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 above</td>
<td>201</td>
<td>36.15</td>
<td>2.26</td>
<td>42.58%</td>
<td>High</td>
</tr>
<tr>
<td>27 to 32</td>
<td>209</td>
<td>29.9</td>
<td>1.65</td>
<td>44.28%</td>
<td>Average</td>
</tr>
<tr>
<td>0 to 26</td>
<td>62</td>
<td>20.71</td>
<td>5.13</td>
<td>13.14%</td>
<td>Low</td>
</tr>
</tbody>
</table>

C. Acceptance and Caring

Table II C

Showing Mean, SD and Percentage Under Various Qualitative Norms Groups as Perceived by Class X Students. (N=472)

<table>
<thead>
<tr>
<th>Raw Scores</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 above</td>
<td>236</td>
<td>31.87</td>
<td>2.32</td>
<td>50%</td>
<td>High</td>
</tr>
<tr>
<td>19 to 28</td>
<td>190</td>
<td>24.6</td>
<td>2.71</td>
<td>40.25%</td>
<td>Average</td>
</tr>
<tr>
<td>0 to 18</td>
<td>46</td>
<td>14.5</td>
<td>3.51</td>
<td>9.75%</td>
<td>Low</td>
</tr>
</tbody>
</table>
D. Permissiveness

Table II.D

Showing Mean, SD and Percentage Under Various Qualitative Norm Groups as Perceived by the Class X Students (N = 472).

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 above</td>
<td>202</td>
<td>28.57</td>
<td>2.71</td>
<td>42.8%</td>
<td>High</td>
</tr>
<tr>
<td>15 to 24</td>
<td>232</td>
<td>20.72</td>
<td>2.65</td>
<td>49.15%</td>
<td>Average</td>
</tr>
<tr>
<td>0 to 14</td>
<td>38</td>
<td>11.79</td>
<td>2.39</td>
<td>8.05%</td>
<td>Low</td>
</tr>
</tbody>
</table>

E. Rejection

Table II. E

Showing Mean, SD and Percentage Under Various Qualitative Norm Group as Perceived by the Class X Students (N = 472).

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 &amp; above</td>
<td>116</td>
<td>23.40</td>
<td>3.26</td>
<td>24.58%</td>
<td>High</td>
</tr>
<tr>
<td>14 to 19</td>
<td>256</td>
<td>16.25</td>
<td>1.63</td>
<td>54.23%</td>
<td>Average</td>
</tr>
<tr>
<td>0 to 13</td>
<td>100</td>
<td>10.17</td>
<td>2.8</td>
<td>21.19%</td>
<td>Low</td>
</tr>
</tbody>
</table>
F Control

**Table .II. F**

Showing Mean, SD and Percentage Under Various Qualitative Norm Group as Perceived by the Class X Students (N= 472).

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Percentage</th>
<th>Qualitative Norm As Per Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 above</td>
<td>120</td>
<td>31.43</td>
<td>2.05</td>
<td>25.42%</td>
<td>High</td>
</tr>
<tr>
<td>22 to 28</td>
<td>261</td>
<td>25.26</td>
<td>1.90</td>
<td>55.3%</td>
<td>Average</td>
</tr>
<tr>
<td>0 to 21</td>
<td>91</td>
<td>17.02</td>
<td>4.3</td>
<td>19.28%</td>
<td>Low</td>
</tr>
</tbody>
</table>

(III) Level of Academic Achievement.

To find out the Level of Academic Achievement of students, Mean, SD and Percentage of students for different level of academic achievement were calculated. The same is given below in the table. (III) A

**Table. III. A**

Showing Mean & SD of Academic Achievement at different level as Obtained by the Class X Students of Ri Bhoi District of Meghalaya. (Under MBOSE, Shillong).

<table>
<thead>
<tr>
<th>Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (above 60%)</td>
<td>55</td>
<td>67.95</td>
<td>6.43</td>
</tr>
<tr>
<td>Average (45 to 59%)</td>
<td>207</td>
<td>50.55</td>
<td>4.02</td>
</tr>
<tr>
<td>Low (below 45%)</td>
<td>210</td>
<td>36.70</td>
<td>6.83</td>
</tr>
<tr>
<td>Total</td>
<td>472</td>
<td>51.73</td>
<td>5.76</td>
</tr>
</tbody>
</table>
The table above shows that:

(1) High Achievers consists of 55 students with Mean=67.95 and SD=6.43.
(2) Average Achievers consists of 207 students with Mean=50.55 and SD=4.02.
(3) Low Achievers consists of 210 students with Mean=36.70 and SD=6.83.

(IV) Relationship between various dimensions of Home Environment and Academic Achievement of class X students.

To find out the relationship between home environment and academic achievement the Pearson’s coefficient of correlation were calculated between various dimensions of home environment and academic achievement in the following order:

IV (A) Relationship between Cohesion and Academic Achievement.

Hypotheses No 1 A:

“There is no significant relationship between cohesion dimension of home environment and academic achievement”.

Table .IV (A)

Showing the Pearson’s Co efficient of Correlation (r) between Cohesion and Academic Achievement (N=472).

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion X Achievement</td>
<td>0.28</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>
IV (B) Relationship between Expressiveness and Academic Achievement.

Hypotheses No 1 B:

“There is no significant relationship between expressiveness dimension of home environment and academic achievement”

Table IV (B)

Showing the Pearson’s coefficient of correlation (r) between Expressiveness and Academic Achievement (N= 472).

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressiveness x Achievement</td>
<td>0.17</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>

IV (C) Relationship between Conflict and Academic Achievement.

Hypotheses No 1 C:

“There is no significant relationship between conflict dimension of home environment and academic achievement”.

Table IV (C)

Showing the Pearson’s Coefficient of Correlation (r) of between Conflict and Academic Achievement. (N = 472).

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict x Achievement</td>
<td>0.35</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>
IV (D) Relationship between Acceptance and Caring and Academic Achievement.

Hypotheses No 1 D:

“There is no significant relationship between acceptance and caring dimension of home environment and academic achievement”

Table IV (D).

Showing the Pearson’s Coefficient of Correlation between Acceptance and Caring and Academic Achievement (N=472)

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance &amp; Caring x Achievement</td>
<td>0.26</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>

IV (E) Relationship between Independence and Academic Achievement.

Hypotheses No 1 E:

“There is no significant relationship between independence dimension of home environment and academic achievement”

Table IV. E.

Showing the Pearson’s Coefficient of Correlation r between Independence and Academic Achievement (N =472).

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence x Achievement</td>
<td>0.20</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>
IV (F) Relationship between and Active Recreational Orientation and Academic Achievement

Hypotheses No 1 F:

“There is no significant relationship between active recreational orientation dimension of home environment and academic achievement”.

Table IV (F)

Showing the Pearson’s Coefficient of Correlation between Active Recreational Orientation and Academic Achievement=472.

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Recreational Orientation</td>
<td>0.17</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
<tr>
<td>x Achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IV (G) Relationship between Organization and Academic Achievement.

Hypotheses No 1 G:

“There is no significant relationship between organization dimension of home environment and academic achievement”

Table .IV.G

Showing the Pearson’s Coefficient of Correlation between Organization and Academic Achievement=472.

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization x Achievement</td>
<td>0.59</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IV (H) Relationship between Control and Academic Achievement.

Hypotheses No 1 H:

“There is no significant relationship between control dimension of home environment and academic achievement”

Table .IV (H)

Showing the Pearson’s Coefficient of Correlation between Control and Academic Achievement=472.

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control X</td>
<td>0.27</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
<tr>
<td>Achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V  Relationship between various dimensions of School Environment and Academic Achievement of class X students.

To find out the relationship between school environment and academic achievement the Pearson’s coefficient of correlation were computed between various dimensions of school environment and academic achievement in the following order.

V (A) Relationship between Creative Stimulation and Academic Achievement.

Hypotheses No 2 A:
“There is no significant relationship between creative stimulation dimension of school environment and academic achievement”

Table V (A)  
Showing the Pearson’s Co efficient of Correlation between Creative Stimulation and Academic Achievement (N=472)  

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Stimulation x Achievement</td>
<td>0.14</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>

V (B) Relationship between Cognitive Encouragement & Academic Achievement.  

Hypotheses No 2.B:  

“There is no significant relationship between cognitive encouragement dimension of school environment and academic achievement”

Table V (B)  
Showing the Pearson’s Co efficient of Correlation between Cognitive Encouragement and Academic Achievement (N=472).  

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive encouragement x Achievement</td>
<td>0.22</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>
V (C) Relationship between Permissiveness and Academic Achievement.

Hypotheses No 2 C:

“There is no significant relationship between permissiveness dimension of home environment and academic achievement”

Table V. (C)

Showing the Pearson’s Co efficient of Correlation between Permissiveness and Academic Achievement (N=472).

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissiveness X Achievement</td>
<td>0.15</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>

V (D) Relationship between Acceptance and Caring and Academic Achievement.

Hypotheses No 2 D:

“There is no significant relationship between acceptance and caring and academic achievement”.

Table V (D)

Showing the Co efficient of Correlation between Acceptance and Caring and Academic Achievement (N=472).

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance &amp; Caring X Achievement</td>
<td>0.16</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>
V (E) Relationship between Rejection and Academic Achievement.

Hypotheses No 2 E:

“There is no significant relationship between Rejection dimension of school environment and Academic Achievement”.

Table V (E)

Showing the Pearson’s Correlation between Rejection and Academic Achievement (N=472).

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rejection X Achievement</td>
<td>0.18</td>
<td>470</td>
<td>0.118</td>
<td>.01</td>
</tr>
</tbody>
</table>

V (F) Relationship between Control and Academic Achievement

Hypotheses No 2 F:

“There is no significant relationship between control dimension of school environment and academic achievement

Table V (F)

Showing the Coefficient of Correlation between Control and Academic Achievement. N=472

<table>
<thead>
<tr>
<th>Variables</th>
<th>(r)</th>
<th>df</th>
<th>Table Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control x Achievement</td>
<td>0.07</td>
<td>470</td>
<td>0.118</td>
<td>NS</td>
</tr>
</tbody>
</table>
VI. Effect of Various Dimensions of Home Environment on the Academic Achievement of Class X Students.

To find out the effect of various dimensions of home environment on the academic achievement of class X students, first of all, three groups viz: high, average and low were formed for each dimension of home environment on the basis of their scores obtained on Family Environment Scale as given in the manual. Then, the Means and Standard Deviations of the achievement scores for each group level were calculated. Mean Differences in achievement scores between the two pairs of groups (high vs. average, high vs. low and average vs. low) for each dimension of home environment were then tested by applying t test in the following order:

A. Cohesion (COH)
B. Expressiveness (EXP)
C. Conflicts (CON)
D. Acceptance and Caring (APC)
E. Active Recreational Orientation (ARO)
F. Independence (IND)
G. Organization (ORG)
H. Control (CNT)

VI (A) Effect of Cohesive Dimension of Home Environment on the Academic Achievement of Class X Students.

To study the effect of cohesive dimension of home environment on the academic achievement of class X students, the following null hypotheses was formulated.
HYPOTHESES. 3.A.

“There is no significant difference in student’s achievement among high, average and low groups of cohesive dimension of home environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to cohesive dimension which is shown below in the table No VI (A.)

Table No: VI.A

Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Cohesive Dimension of Home Environment.

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t− value</th>
<th>Significance Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High COH</td>
<td>14</td>
<td>51.78</td>
<td>11.62</td>
<td>339</td>
<td>3.79</td>
<td>3.09</td>
<td>1.23</td>
<td>NS *</td>
</tr>
<tr>
<td>Avg COH</td>
<td>327</td>
<td>47.99</td>
<td>11.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High COH</td>
<td>14</td>
<td>51.78</td>
<td>11.62</td>
<td>143</td>
<td>10.62</td>
<td>3.13</td>
<td>3.39</td>
<td>.01</td>
</tr>
<tr>
<td>Low COH</td>
<td>131</td>
<td>41.60</td>
<td>11.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg COH</td>
<td>327</td>
<td>47.99</td>
<td>11.32</td>
<td>456</td>
<td>6.83</td>
<td>0.59</td>
<td>11.57</td>
<td>.01</td>
</tr>
<tr>
<td>Low COH</td>
<td>131</td>
<td>41.16</td>
<td>11.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Not Significant.

The above table shows that:

1. For the high and average cohesive groups, the null hypothesis is accepted and the research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between high and average cohesive group. It shows that there is no effect of degree of cohesiveness on students’ achievement when the students’ achievement of high and average cohesive groups is compared.
2. For the high and low cohesive groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and low cohesive groups. As this difference is in favor of high cohesive group, it reveals that the students belonging to high cohesive group achieve more as compared to the students belonging to low cohesive group. It shows that there is a favorable effect of group cohesiveness on student’s achievement in favor of high cohesive group.

3. For the average and low cohesive groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between average and low cohesive groups. As this difference is in favor of average cohesive group, it reveals that the students belonging to average cohesive group achieve more as compared to the students belonging to low cohesive group. It shows that there is a favorable effect of group cohesiveness on student’s achievement in favor of average cohesive group.

VI (B) Effect of Expressiveness Dimension of Home Environment on the Academic Achievement of Class X Students.

To study the effect of expressiveness dimension of home environment on the academic achievement of class X students, the following null hypotheses was formulated.

HYPOTHESES. 3.B.

“There is no significant difference in student’s achievement among high, average and low groups of expressiveness dimension of home environment”
To test this hypothesis, the t values were calculated for each pair of groups belonging to expressiveness dimension which is shown below in the table no VI (B).

**Table No: VI.B**

**Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Expressiveness Dimension of Home Environment**

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High EXP Avg EXP</td>
<td>2</td>
<td>56.17</td>
<td>4.24</td>
<td>374</td>
<td>8.99</td>
<td>8.29</td>
<td>1.08</td>
<td>NS *</td>
</tr>
<tr>
<td></td>
<td>374</td>
<td>47.18</td>
<td>11.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High EXP Low EXP</td>
<td>2</td>
<td>56.17</td>
<td>4.24</td>
<td>96</td>
<td>13.17</td>
<td>75.18</td>
<td>0.17</td>
<td>NS *</td>
</tr>
<tr>
<td>Avg EXP Low EXP</td>
<td>374</td>
<td>47.18</td>
<td>11.70</td>
<td>468</td>
<td>4.18</td>
<td>1.15</td>
<td>3.60</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>96</td>
<td>43.00</td>
<td>10.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not Significant*

The table above shows that:

1. For the high and average expressiveness groups, the null hypothesis is accepted and the research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between high and average expressiveness group. It shows that there is no effect of degree of expressiveness on students’ achievement when the students’ achievement of high and average expressiveness groups are compared.

2. For the high and low expressiveness groups, the null hypothesis is accepted and research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between high and low expressiveness groups. It shows that there is no effect of degree of expressiveness on students’ achievement when the students’ achievement of high and low expressiveness groups are compared.
3. For the average and low expressiveness groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between average and low expressiveness groups. As this difference is in favor of average expressive group, it reveals that the students belonging to average expressiveness group achieve more as compared to the students belonging to low expressiveness group. It shows that there is a favorable effect of group expressiveness on student’s achievement in favor average expressiveness group.

VI (C) Effect of Conflict Dimension of Home Environment on the Academic Achievement of Class X Students.

To study the effect of conflict dimension of home environment on the academic achievement of class X students, the following null hypotheses was formulated.

HYPOTHESES. 3. C.

“There is no significant difference in student’s achievement among high, average and low groups of conflict dimension of home environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to conflict dimension which is shown below in the table no .6(C).
Table No. VI (C)

Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Conflict Dimension of Home Environment.

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg CON</td>
<td>238</td>
<td>48.57</td>
<td>11.85</td>
<td>470</td>
<td>4.48</td>
<td>1.05</td>
<td>4.24</td>
<td>.01</td>
</tr>
<tr>
<td>High CON</td>
<td>234</td>
<td>44.09</td>
<td>11.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above shows that:

1. For average and high conflict groups, the null hypothesis is rejected and the research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between average and high conflict group. As this difference is in favor of average conflict group, it reveals that the students belonging to average conflict group achieve more as compared to the students belonging to high conflict group. It shows that there is a favorable effect of group conflictness on student’s achievement in favor of average conflict group.

VI (D) Effect of Acceptance and Caring Dimension of Home Environment on the Academic Achievement of Class X Students.

To study the effect of acceptance and caring dimension of home environment on the academic achievement of class X students, the following null hypotheses was formulated.
HYPOTHESES. 3. D.

“There is no significant difference in student’s achievement among high, average and low groups of acceptance and caring dimension of home environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to acceptance and caring dimension which is shown below in the table no VI (D).

**Table No: VI.D.**

**Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Acceptance and Caring Dimension of Home Environment.**

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg ACC</td>
<td>229</td>
<td>49.32</td>
<td>11.50</td>
<td>470</td>
<td>5.75</td>
<td>1.038</td>
<td>5.53</td>
<td>.01</td>
</tr>
<tr>
<td>Low ACC</td>
<td>243</td>
<td>43.57</td>
<td>11.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above shows that:  
For the average and low acceptance and caring groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between average and low acceptance and caring groups. As this difference is in favor of average acceptance and caring group, it reveals that the students belonging to average acceptance and caring group achieve more as compared to the students belonging to low acceptance and caring group. It shows that there is a favorable effect of group acceptance and caring on student’s achievement in favor of average acceptance and caring group.
VI (E) Effect of Active Recreational Orientation Dimension of Home Environment on the Academic Achievement of Class X Students.

To study the effect of active recreational orientation dimension of home environment on the academic achievement of class X students, the following null hypotheses was formulated.

HYPOTHESES. 3. E.

“There is no significant difference in student’s achievement among high, average and low groups of active recreational orientation dimension of home environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to active recreational orientation dimension which is shown below in the table no VI (E).

Table No: VI.E.

Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Active Recreational Orientation Dimension of Home Environment.

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High ARO</td>
<td>34</td>
<td>48.80</td>
<td>14.14</td>
<td>345</td>
<td>1.50</td>
<td>2.06</td>
<td>0.75</td>
<td>NS *</td>
</tr>
<tr>
<td>Avg ARO</td>
<td>313</td>
<td>47.30</td>
<td>11.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High ARO</td>
<td>34</td>
<td>48.80</td>
<td>14.14</td>
<td>157</td>
<td>5.30</td>
<td>1.90</td>
<td>2.70</td>
<td>.01</td>
</tr>
<tr>
<td>Low ARO</td>
<td>125</td>
<td>43.49</td>
<td>10.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg ARO</td>
<td>313</td>
<td>47.30</td>
<td>11.70</td>
<td>436</td>
<td>3.81</td>
<td>0.63</td>
<td>6.04</td>
<td>.01</td>
</tr>
<tr>
<td>Low ARO</td>
<td>125</td>
<td>43.49</td>
<td>10.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Not Significant.

The table above shows that:

1. For the high and average recreational orientation groups, the null hypothesis is accepted and the research hypothesis is rejected. This indicates that
there is no significant difference in students’ achievement between high and average recreational orientation group. It shows that there is no effect of degree of active recreational orientation on students’ achievement when the students’ achievement of high and average recreational orientation groups are compared.

2. For the high and low recreational orientation groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and low recreational orientation groups. As this difference is in favor of high recreational group, it reveals that the students belonging to high recreational group achieve more as compared to the students belonging to low recreational group. It shows that there is a favorable effect of group recreational orientation on student’s achievement in favor of high recreational group.

3. For the average and low recreational orientation groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between average and low recreational orientation groups. As this difference is in favor of average recreational group, it reveals that the students belonging to average recreational group achieve more as compared to the students belonging to low recreational group. It shows that there is a favorable effect of group recreational on student’s achievement in favor of average recreational group.

VI (F) Effect of Independence Dimension of Home Environment on the Academic Achievement of Class X Students.

To study the effect of independence dimension of home environment on the academic achievement of class X students, the following null hypotheses was formulated.
HYPOTHESES. 3. F.

“There is no significant difference in student’s achievement among high, average and low groups of independence dimension of home environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to independence dimension which is shown below in the table no VI. F.

Table No: VI.F

Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Independence Dimension of Home Environment.

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg IND</td>
<td>85</td>
<td>47.10</td>
<td>11.58</td>
<td>470</td>
<td>0.86</td>
<td>1.16</td>
<td>0.74</td>
<td>NS *</td>
</tr>
<tr>
<td>Low IND</td>
<td>387</td>
<td>46.24</td>
<td>11.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Not Significant

Table above shows that:

1. For the high and average independence groups, the null hypothesis is accepted and the research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between high and average independence group. It shows that there is no effect of degree of independence on students’ achievement when the students’ achievement of high and average independence groups are compared.

VI (G) Effect of Organization Dimension of Home Environment on the Academic Achievement of Class X Students.
To study the effect of organization dimension of home environment on the academic achievement of class X students, the following null hypotheses was formulated.

**HYPOTHESES. 3.G.**

“There is no significant difference in student’s achievement among high, average and low groups of organization dimension of home environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to organization dimension which is shown below in the table no VI (G).

**Table No: VI.G.**

**Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Organization Dimension of Home Environment.**

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>T value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High ORG Avg ORG</td>
<td>60</td>
<td>47.10</td>
<td>47.63</td>
<td>11.83</td>
<td>11.67</td>
<td>337</td>
<td>0.53</td>
<td>1.66</td>
</tr>
<tr>
<td>High ORG Low ORG</td>
<td>60</td>
<td>47.10</td>
<td>47.63</td>
<td>11.83</td>
<td>11.10</td>
<td>191</td>
<td>3.27</td>
<td>1.76</td>
</tr>
<tr>
<td>Avg ORG Low ORG</td>
<td>279</td>
<td>47.63</td>
<td>43.83</td>
<td>11.67</td>
<td>11.10</td>
<td>410</td>
<td>3.80</td>
<td>0.56</td>
</tr>
</tbody>
</table>

* Not Significant

The table above shows that:

1. For the high and average organization groups, the null hypothesis is accepted and the research hypothesis is rejected. This indicates that there is no
significant difference in students’ achievement between high and average organization group. It shows that there is no effect of degree of organization on students’ achievement when the students’ achievement of high and average organization groups are compared.

2. For the high and low organization groups, the null hypothesis is accepted and research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between high and low organization groups. It shows that there is effect of degree of organization on students’ achievement when the students’ achievement of high and low organization group are compared.

3. For the average and low organization groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between average and low organization groups. As this difference is in favor of average organization group, it reveals that the students belonging to average organization group achieve more as compared to the students belonging low organization group. It shows that there is a favorable effect of group organization on student’s achievement in favor of average organization group.

VI (H) Effect of Control Dimension of Home Environment on the Academic Achievement of Class X Students.

To study the effect of control dimension of home environment on the academic achievement of class X students, the following null hypotheses was formulated.
HYPOTHESES. 3.H.

“There is no significant difference in student’s achievement among high, average and low groups of control dimension of home environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to control dimension which is shown below in the table no VI (H).

Table No: VI.H
Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Control Dimension of Home Environment.

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High CNT Avg CNT</td>
<td>62</td>
<td>51.86</td>
<td>11.46</td>
<td>287</td>
<td>4.96</td>
<td>1.70</td>
<td>2.9</td>
<td>.01</td>
</tr>
<tr>
<td>Low CNT</td>
<td>227</td>
<td>46.90</td>
<td>12.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High CNT Low CNT</td>
<td>62</td>
<td>51.86</td>
<td>11.46</td>
<td>243</td>
<td>8.06</td>
<td>1.63</td>
<td>4.9</td>
<td>.01</td>
</tr>
<tr>
<td>Avg CNT Low CNT</td>
<td>227</td>
<td>46.90</td>
<td>12.02</td>
<td>408</td>
<td>3.10</td>
<td>1.15</td>
<td>2.69</td>
<td>.01</td>
</tr>
</tbody>
</table>

The table above shows that:

1. For the high and average control groups, the null hypothesis is rejected and the research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and average control group. As this difference is in favor of high control group, it reveals that the students belonging to high control group achieve more as compared to the students belonging to low control group. It shows that there is a favorable effect of group control on student’s achievement in favor of high control group.

2. For the high and low control groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and low control groups. As this difference is in favor of high control group, it reveals that the students
belonging to high control group achieve more as compared to the students belonging to low control group. It shows that there is a favorable effect of group control on student’s achievement in favor of high control group.

3. For the average and low control groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is significant difference in students’ achievement between average and low control groups. As this difference is in favor of average control group, it reveals that the students belonging to average control group achieve more as compared to the students belonging to low control group. It shows that there is a favorable effect of group control on student’s achievement in favor of average control group.

**VII. Effect of Various Dimensions of School Environment on the Academic Achievement of Class X Students.**

To find out the effect of various dimensions of school environment on the academic achievement of class X students, first of all, three groups viz: high, average and low were formed for each dimension of school environment on the basis of their scores obtained on School Environment Scale as given in the manual. Then, the Means and Standard Deviations of the achievement scores for each group level were calculated. Mean Difference in achievement scores between two pairs of groups (high vs average, high vs low, and average vs low) for each dimension of school environment were then tested by applying t test in the following order:

A. Creative Stimulation (CRS)
B. Cognitive Encouragement (COE)
C. Acceptance and Caring (ACC)
D. Permissiveness (PER)
E. Rejection (REJ)
F. Control (CON)
VII (A). Effect of Creative Stimulation Dimension of School Environment on the Academic Achievement of Class X Students.

To study the effect of creative stimulation dimension of school environment on the academic achievement of class X students, the following null hypotheses was formulated.

HYPOTHESES. 4. A.

“There is no significant difference in student’s achievement among high, average and low groups of creative stimulation dimension of school environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to creative stimulation dimension which is shown below in the table no VII (A).

Table No: VII.A

Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Creative Stimulation Dimension of School Environment.

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High CRS</td>
<td>120</td>
<td>49.05</td>
<td>10.89</td>
<td>432</td>
<td>3.35</td>
<td>1.24</td>
<td>2.6</td>
<td>.01</td>
</tr>
<tr>
<td>Avg CRS</td>
<td>314</td>
<td>45.70</td>
<td>11.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High CRS</td>
<td>120</td>
<td>49.05</td>
<td>10.89</td>
<td>156</td>
<td>5.35</td>
<td>2.00</td>
<td>2.6</td>
<td>.01</td>
</tr>
<tr>
<td>Low CRS</td>
<td>38.00</td>
<td>43.70</td>
<td>10.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg CRS</td>
<td>314</td>
<td>45.70</td>
<td>11.90</td>
<td>350</td>
<td>2</td>
<td>2.02</td>
<td>0.98</td>
<td>NS *</td>
</tr>
<tr>
<td>Low CRS</td>
<td>38.00</td>
<td>43.70</td>
<td>10.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not Significant

The table above shows that:
1. For the high and average creative stimulation groups, the null hypothesis is rejected and the research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and average creative stimulation group. As this difference is in favor of high creative stimulation group, it reveals that the student’s belonging to high creative stimulation group achieve more as compared to the students belonging to average creative stimulation group. It shows that there is a favorable effect of group creative stimulation on student’s achievement in favor of high creative stimulation group.

2. For the high and low creative stimulation groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and low creative stimulation groups. As this difference is in favor of high creative stimulation group, it reveals that the student’s belonging to high creative stimulation group achieve more as compared to low creative stimulation group. It shows that there is a favorable effect of group creative stimulation on students’ achievement in favor of high creative stimulation group.

3. For the average and low creative stimulation groups, the null hypothesis is accepted and research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between average and low creative stimulation groups. It shows that there is no effect of degree of creative stimulation on students’ achievement when the students’ achievement of average and low creative stimulation groups are compared.

VII (B) Effect of Cognitive Encouragement Dimension of School Environment on the Academic Achievement of Class X Students.
To study the effect of cognitive Encouragement dimension of school environment on the academic achievement of class X students, the following null hypotheses was formulated.

**HYPOTHESES. 4.B.**

“There is no significant difference in student’s achievement among high, average and low groups of cognitive encouragement dimension of school environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to cognitive encouragement dimension which is shown below in the table no VII (B).

**Table No: VII.B.**

Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Cognitive Encouragement Dimension of School Environment.

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High COE Avg COE</td>
<td>201</td>
<td>49.50</td>
<td>11.49</td>
<td>408</td>
<td>4.6</td>
<td>1.124</td>
<td>4.09</td>
<td>.01</td>
</tr>
<tr>
<td>High COE Avg COE</td>
<td>201</td>
<td>49.50</td>
<td>11.49</td>
<td>261</td>
<td>8.65</td>
<td>1.67</td>
<td>5.17</td>
<td>.01</td>
</tr>
<tr>
<td>Avg COE Low COE</td>
<td>209</td>
<td>44.99</td>
<td>11.28</td>
<td>269</td>
<td>4.14</td>
<td>1.43</td>
<td>2.88</td>
<td>.01</td>
</tr>
</tbody>
</table>

The table above shows that:

1. For the high and average cognitive encouragement groups, the null hypothesis is rejected and the research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and average cognitive encouragement group. As this difference is in favor high cognitive
encouragement group, it reveals that the student’s belonging to high cognitive encouragement group achieve more as compared to average cognitive encouragement group. It shows that there is a favorable effect of group cognitive encouragement on students’ achievement in favor of high cognitive encouragement group.

2. For the high and low cognitive encouragement groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and low cognitive encouragement groups. As this difference is in favor of high cognitive encouragement group, it reveals that the student’s belonging to high cognitive encouragement group achieve more as compared to low cognitive encouragement group. It shows that there is favorable effect of group cognitive encouragement on student’s achievement in favor of high cognitive encouragement group.

3. For the average and low cognitive encouragement groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between average and low cognitive encouragement groups. As this difference is in favor of average cognitive encouragement group, it reveals that the student’s belonging to average cognitive encouragement group achieve more as compared to low cognitive encouragement group. It shows that there is a favorable effect of group cognitive encouragement on students’ achievement in favor of average cognitive encouragement group.

VII (C) Effect of Acceptance and Caring Dimension of School Environment on the Academic Achievement of Class X Students.
To study the effect of acceptance and caring dimension of school environment on the academic achievement of class X students, the following null hypotheses was formulated.

**HYPOTHESES. 4.C.**

“There is no significant difference in student’s achievement among high, average and low groups of acceptance and caring dimension of school environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to acceptance and caring dimension which is shown below in the table no VII(C).

**Table No: VII.C.**

**Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Acceptance and Caring Dimension of School Environment.**

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High ACC</td>
<td>236</td>
<td>48.00</td>
<td>10.83</td>
<td>424</td>
<td>2.8</td>
<td>1.11</td>
<td>2.50</td>
<td>.01</td>
</tr>
<tr>
<td>Avg ACC</td>
<td>190</td>
<td>45.20</td>
<td>12.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High ACC</td>
<td>236</td>
<td>48.00</td>
<td>10.83</td>
<td>280</td>
<td>4.8</td>
<td>1.79</td>
<td>2.68</td>
<td>.01</td>
</tr>
<tr>
<td>Low ACC</td>
<td>46</td>
<td>43.20</td>
<td>12.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg ACC</td>
<td>190</td>
<td>45.22</td>
<td>12.23</td>
<td>234</td>
<td>2.02</td>
<td>2.01</td>
<td>1.00</td>
<td>NS *</td>
</tr>
<tr>
<td>Low ACC</td>
<td>46</td>
<td>43.20</td>
<td>12.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Not Significant.

The table above shows that:

1. For the high and average acceptance and caring groups, the null hypothesis is rejected and the research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and average acceptance and caring group. As this difference is in favor of high
acceptance and caring group, it reveals that the student’s belonging to high acceptance and caring group achieve more as compared to the average acceptance and caring group. It shows that there is a favorable effect of group acceptance and caring on students’ achievement in favor of high acceptance and caring group.

2. For the high and low acceptance and caring groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and low acceptance and caring groups. As this difference is in favor of high acceptance group, it reveals that the student’s belonging to high acceptance and caring group achieve more as compared to the students belonging to low acceptance and caring group. It shows that there is a favorable effect of group acceptance and caring on students’ achievement in favor of high caring group.

3. For the average and low acceptance and caring groups, the null hypothesis is accepted and research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between average and low acceptance and caring groups. It shows that there is no effect of degree of acceptance and caring on students’ achievement when the students’ achievement of average and low acceptance and caring groups are compared.

VII (D) Effect of Permissiveness Dimension of School Environment on the Academic Achievement of Class X Students.

To study the effect of Permissiveness dimension of school environment on the academic achievement of class X students, the following null hypotheses was formulated.
HYPOTHESES. 4.D.

“There is no significant difference in student’s achievement among high, average and low groups of permissiveness dimension of school environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to permissiveness dimension which is shown below in the table no VII (D).

Table .No: VII.D.

Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Permissiveness Dimension of School Environment.

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High PER</td>
<td>202</td>
<td>47.49</td>
<td>11.70</td>
<td>432</td>
<td>1.43</td>
<td>1.12</td>
<td>1.27</td>
<td>NS *</td>
</tr>
<tr>
<td>Avg PER</td>
<td>232</td>
<td>46.06</td>
<td>11.70</td>
<td>432</td>
<td>1.43</td>
<td>1.12</td>
<td>1.27</td>
<td></td>
</tr>
<tr>
<td>High PER</td>
<td>202</td>
<td>47.49</td>
<td>11.70</td>
<td>238</td>
<td>2.03</td>
<td>2.32</td>
<td>4.73</td>
<td>.01</td>
</tr>
<tr>
<td>Low PER</td>
<td>38</td>
<td>47.49</td>
<td>11.70</td>
<td>238</td>
<td>2.03</td>
<td>2.32</td>
<td>4.73</td>
<td></td>
</tr>
<tr>
<td>Avg PER</td>
<td>232</td>
<td>46.06</td>
<td>11.70</td>
<td>268</td>
<td>3.3</td>
<td>2.01</td>
<td>1.63</td>
<td>NS *</td>
</tr>
<tr>
<td>Low PER</td>
<td>38</td>
<td>46.06</td>
<td>10.42</td>
<td>268</td>
<td>3.3</td>
<td>2.01</td>
<td>1.63</td>
<td></td>
</tr>
</tbody>
</table>

* Not Significant

The table above shows that:

1. For the high and average permissiveness groups, the null hypothesis is accepted and research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between high and average permissiveness groups. It shows that there is no effect of degree of permissiveness on students’ achievement when the students’ achievement of high and average permissiveness groups are compared.

2. For the high and low permissiveness groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is significant
difference in students’ achievement between high and low permissiveness groups. As this difference is in favor of high permissiveness group, it reveals that the student’s belonging to high permissiveness group achieve more as compared to the low permissiveness group. It shows that there is a favorable effect of group permissiveness on students’ achievement in favor of high permissiveness group.

3. For the average and low permissiveness groups, the null hypothesis is accepted and research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between average and low permissiveness groups. It shows that there is no effect of degree of permissiveness on students’ achievement when the students’ achievement of average and low permissiveness groups are compared.

VII (E) Effect of Rejection Dimension of School Environment on the Academic Achievement of Class X Students.

To study the effect of rejection dimension of school environment on the academic achievement of class X students, the following null hypotheses was formulated.

HYPOTHESES. 4.E.

“There is no significant difference in student’s achievement among high, average and low groups of rejection dimension of school environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to rejection dimension which is shown below in the table no VII (E).
### Table No: VII.E.

**Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Rejection Dimension of School Environment.**

<table>
<thead>
<tr>
<th>Group Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>(D)</th>
<th>σD</th>
<th>t value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High REJ Avg REJ</td>
<td>116</td>
<td>42.40</td>
<td>10.51</td>
<td>370</td>
<td>4.5</td>
<td>1.26</td>
<td>3.5</td>
<td>.01</td>
</tr>
<tr>
<td>High REJ Low REJ</td>
<td>116</td>
<td>42.41</td>
<td>10.51</td>
<td>214</td>
<td>7.27</td>
<td>1.54</td>
<td>4.6</td>
<td>.01</td>
</tr>
<tr>
<td>Avg REJ Low REJ</td>
<td>256</td>
<td>46.94</td>
<td>11.61</td>
<td>354</td>
<td>2.74</td>
<td>1.39</td>
<td>1.97</td>
<td>NS *</td>
</tr>
</tbody>
</table>

*Not Significant

The table above shows that:

1. For the high and average rejection groups, the null hypothesis is rejected and the research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and average rejection group. As this difference is in favor of high rejection group, it reveals that the students belonging to high rejection group achieve less as compared to the students belonging to average rejection group. It shows that there is a favorable effect of group rejection on students’ achievement in favor of high rejection group.

2. For the high and low rejection groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is a significant difference in students’ achievement between high and low rejection groups. As this difference is in favor of high rejection group, it reveals that the student’s belonging to high rejection group achieve less as compared to low rejection group. It shows that there is a favorable effect of group rejection on students’ achievement in favor of high rejection group.
3. For the average and low rejection groups, the null hypothesis is accepted and research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between average and low rejection groups. It shows that there is no effect of degree of rejection on students’ achievement when the students’ achievement of average and low rejection groups are compared.

VII (F) Effect of Control Dimension of School Environment on the Academic Achievement of Class X Students.

To study the effect of control dimension of school environment on the academic achievement of class X students, the following null hypotheses was formulated.

HYPOTHESES. 4.F.

“There is no significant difference in student’s achievement among high, average and low groups of control dimension of school environment”.

To test this hypothesis, the t values were calculated for each pair of groups belonging to control dimension which is shown below in the table no VII (F).
Table No: VII.F.

Showing the Mean Differences in Student’s Achievement among High, Average and Low Groups of Control Dimension of School Environment.

<table>
<thead>
<tr>
<th>Group</th>
<th>Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>D</th>
<th>σD</th>
<th>t value</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High CNT</td>
<td>Avg CNT</td>
<td>120</td>
<td>47.35</td>
<td>12.59</td>
<td>379</td>
<td>1.05</td>
<td>1.36</td>
<td>0.76</td>
<td>NS *</td>
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<tr>
<td>High CNT</td>
<td>Low CNT</td>
<td>120</td>
<td>47.35</td>
<td>12.27</td>
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<td>1.89</td>
<td>1.59</td>
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<td>NS *</td>
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<tr>
<td>Avg CNT</td>
<td>Low CNT</td>
<td>261</td>
<td>46.3</td>
<td>9.71</td>
<td>350</td>
<td>0.84</td>
<td>1.42</td>
<td>0.59</td>
<td>NS *</td>
</tr>
</tbody>
</table>

*Not Significant

The above table shows that:

1. For the high and average control groups, the null hypothesis is accepted and research hypothesis is rejected. This indicates that there is no significant difference in students’ achievement between high and average control groups. It shows that there is no effect of degree of control on students’ achievement when the students’ achievement of high and average control groups are compared.

2. For the high and low control groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is significant difference in students’ achievement between high and low control groups. It shows that there is effect of degree of control on students’ achievement when the students’ achievement of high and low control groups are compared.

3. For the average and low control groups, the null hypothesis is rejected and research hypothesis is accepted. This indicates that there is no significant difference in students’ achievement between average and low control groups. It
shows that there is no effect of degree of control on students’ achievement when the students’ achievement of average and low control groups are compared.

6.9 FINDINGS, CONCLUSIONS AND RECOMMENDATION

(I) Strength of home environment with respect to its various dimensions as perceived by class X students.

The research findings with regards to strength of home environment and its various dimensions as perceived by class X students are as follows:

a) Cohesion:

The majority of students (69.28%) perceive the cohesiveness of their home environment as average followed by some students (27.75%) who perceive the same as low and few students (2.97%) as high. This shows that the cohesiveness of the home environment as perceived by the students, by & large, is average.

b) Expressiveness:

The majority of the students (79.24%) perceive the freedom to express in their home environment as average followed by some students (20.34%) who perceive the same as low and few students (0.42%) high. This shows that the expressiveness of the home environment as perceived by the students, by and large, is average.

c) Conflict:

The majority of the students (50.42%) perceive the conflict of their home environment as average followed by other students (49.58%) as high. This shows that the conflict of the home environment as perceived by the students, by and large, is average.
d) Acceptance and Caring:

The majority of the students (51.48%) perceive the nature of acceptance and caring of their home environment as low followed by other students (48.52%) who perceive the same as average. This shows that the nature of acceptance and caring of the home environment as perceived by the students, by and large, is low.

e) Active Recreational Orientation:

The majority of the students (66.32%) perceive the recreational orientations of their home environment as average followed by some students (26.48%) who perceive the same as low and few students (7.2%) as high. This shows that the recreational orientation of the home environment as perceived by the students, by and large, is average.

f) Independence:

The majority of the students (81.99%) perceive the independence in their home environment as low followed by few students (18.01%) who perceive the same as average. This shows that the independence in the home environment as perceived by the students, by and large, is low.

g) Organization:

The majority of the students (59.11%) perceived the organization of their home environment as average followed by some students (28.18%) who perceive the same as low and few students (12.71%) as high. This shows that the organization of the home environment as perceived by the students, by and large, is average.
h) Control:

The majority of the students (48.09%) perceived the control in their home environment as average followed by some students (38.77%) who perceived the same as low and few students (13.14%) as high. This shows that the control of the home environment as perceived by the students, by and large, is average.

(III) Strength of School environment with respect to its various dimensions as perceived by class X students.

The research findings with regards to the strength of school environment and its various dimensions as perceived by class X Students are as follows

a) Creative Stimulation:

The majority of the students (66.53%) perceive that the creative stimulation at school environment as average followed by some students (25.42%) who perceive the same as high and few students (8.05%) as low. This shows that the creative stimulation as perceived by the students, by and large, is average.

b) Cognitive Encouragement:

The majority of the students (44.28%) perceive that the cognitive encouragement at school environment as average followed by some students (42.58%) who perceive the same as high and few students (13.14%) as low. This shows that the cognitive encouragement as perceived by the students, by and large, is average.
c) Acceptance and Caring:

The majority of the students (50%) perceive that the nature of acceptance and caring at school as high followed by some students (40.25%) who perceive the same as average and few students (9.75%) as low. This shows that the cognitive encouragement of the home environment as perceived by the students, by and large, is high.

d) Permissiveness:

The majority of the students (49.15%) perceive that the permissiveness at school as average followed by some students (42.8%) who perceive the same as high and few students (8.05%) as low. This shows that the permissiveness of the home environment as perceived by the students, by and large, is high.

e) Rejection:

The majority of the students (54.23%) perceive that the rejection at school as average followed by some students (24.58%) who perceive the same as high and few students (21.19%) as low. This shows that the rejection of the home environment as perceived by the students, by and large, is average.

(f) Control:

The majority of the students (55.3%) perceive that the control at school as average followed by some students (25.42%) who perceive the same as high and few students (19.28%) as low. This shows that the control of the home environment as perceived by the students, by and large, is average.
(III) Level of Academic Achievement:

The study reveals that:

The majority of the students fall in the category of low achiever with M=36.70 and SD=6.83 and a good number of student fall in the category of average achiever with M=50.55 and SD=4.02. Very few students fall in the category of high achiever with M=67.95 and SD=6.43.

(IV) Relationship between the various dimensions of home environment and academic achievement:

The following are the findings and conclusions with regards to the relationship between various dimensions of home environment and academic achievement:

a) Cohesion and Academic Achievement:

There exists a significant relationship between the cohesive dimensions of home environment and academic achievement. It shows that more the home environment is cohesive; the higher will be the academic achievement.

The result is not unique in case of the present study, rather these have been explored by several studies conducted earlier by Harris (1961) who found that children did not learn when they were emotionally disturbed due to unfavorable home conditions. Levin et al. also (1972) concluded that more supportive home environment of children may have been found responsible for higher academic achievement.

b) Expressiveness and Academic Achievement:

There exists a significant relationship between the expressiveness dimensions of home environment and academic achievement. It shows that more the home environment is expressive; higher will be the academic achievement.
Research in this connection has been supported by many studies, Patel (1966), Kuppuswami (1980); found that there is a significant positive relationship between expressiveness and academic achievement.

c) Conflict and Academic Achievement:

There exists a significant relationship between conflict dimensions of home environment and academic achievement. It shows that higher the conflict in family, higher will be the academic achievement.

Stagner (1974); in contrary to the above study found that there is no significant relationship between the conflict dimension of home environment and academic achievement.

d) Acceptance and Caring and Academic Achievement:

There is a significant relation between acceptance & caring and achievement. It shows that more the nature of acceptance and caring, higher the academic achievement.


e) Independence and Academic Achievement:

This variable of home environment is also significantly related. The present findings show that the students who do not get more independence at home are also likely to achieve better than those who get independence at home.
These findings are also supported by the findings of Winterbottom (1958), Miller (1970), Hurlock (1974), Srivastav and Chanderamani (1995), Kumar (1963), who found that there is a significant positive relation between academic achievement and independence.

However, there are some research studies which differ from the finding of the present study, for e.g. Jain Sikha (1991), who found that dependency was negatively and significantly related to academic achievement.

f) **Active Recreational Orientation and Academic Achievement:**

There exists a significant relationship between recreational orientation and academic achievement. It shows higher the recreational orientations at the home, higher will be the academic achievement.

The result in this regard are supported by, Solunke (1979), Jain (1987), Singhal (1991); Allen and Kickbusch (1992), Lazarowitz Horvitz (2002), who observed that educational facilities and emotional happiness in the home contribute positively to the pupil performance in studies.

g) **Organization and Academic Achievement:**

There exists a significant relationship between the organization dimensions of home environment and academic achievement. It shows that better the home organization, the higher will be the academic achievement.

Research in this connection revealed by Shah and Shah (1984), Shelet (1975), also found a significant positive relationship between organization and academic achievement.

h) **Control and Academic Achievement.**

There exists a significant positive relationship between control and academic achievement. It shows that more the control at home, the higher will be the academic achievement.
The finding is supported by Rollins and Thomas, (1979), Halawoh (2006), who found that high parental control, is associated with high achievement. whereas Estrada et al. (1987) critically reviewed the dimensions of home environment and reported that controlling and punitive home environment is essentially detrimental for cognitive development and thus academic achievement.

The results also subscribe to the view that where the parents of high achievers provide good quality home environment, children get induced to higher scholastic achievement. Srivastava (1991) reported that families of high achievers were more structured and exercised more control than those of low achievers.

Thus, we find that the different dimensions of the home environment (cohesion, expressiveness, acceptance and caring, conflict, independence, organization and control) act as a significant factor on enhancing academic achievement.

(V) Relationship between the various dimensions of school environment and academic achievement:

The following are the findings and conclusions with regards to various dimensions of school environment and academic achievement:

(a) Creative Stimulation and Academic Achievement:

The present study reveals that there exists a significant relationship between creative stimulation dimension of school environment and academic achievement. It shows that the student’s academic performance is likely to be better if they are provided favorable conditions & opportunities for creative stimulation. Thus, higher the creative stimulation in school higher will be the academic achievement.
This study is supported by Mishra, and Walberg (1982) who reveals that there is a significant relationship between creative stimulation and academic achievement.

b) Cognitive Encouragement and Academic Achievement:

The study reveals that there exists a significant relationship between cognitive encouragement dimensions of school environment and academic achievement. It shows that teachers who stimulate cognitive development of the student by encouraging their behaviors, achieve more than those students who were not encouraged for their behaviors. Thus, more the cognitive encouragement in the school, higher will be the academic achievement.

This finding has been supported by Jain and Mishra (1994), Hawley et al (1984), Wang, Wildman, and Calhoun, (1996), Henry. M. Codjoe (2007). These studies have revealed that parental encouragement and a supportive home environment is a contributing factor to the educational achievement.

c) Permissiveness and Academic Achievement:

The study reveals that there exists a significant relationship between permissiveness dimension of school environment and academic achievement. It shows that if students were provided with opportunities to express their views freely and act according to their desires with no interruptions from teachers, they perform better academically in schools than those students who were not provided any opportunities to express their desires freely. Thus, higher the permissiveness in the school, the higher will be the academic achievement.

The research in this connection has been found to be similar with that of Cot and Cot (1966), Hurlock (1973) Darn Bush et al (1987), Baumrind, (1991); whose studies revealed that permissiveness in school atmosphere is better
for children of higher ability, and is significantly related with academic achievement.

d) Acceptance and Academic Achievement:

The study reveals that there exists a significant relationship between acceptance and caring dimension of school environment and academic achievement. This shows that the teacher who accept the feelings of students in a non-threatening manner are likely to achieve more and perform better in school. Thus it shows that more the nature of acceptance and caring in school, the higher will be the academic achievement.

Importantly, this study has connection with the studies of Hudgins, Smith and Johnson (1962), Tiwari (1979), who found that there is positive relation between achievement and acceptance.

e) Rejection and Academic Achievement:

The study reveals that there exists a significant relationship between rejection and academic achievement. It shows that more the rejection, higher will be the achievement.

But the finding of this study is contrary to the studies of Rosen and ‘D’ Andrade (1959) who found that rejection leads to failures. According to Faiz Unnisa and Parameswaran (1967), rejection act as a cause of academic failure. Cottle (1968) points out that rejection is likely to cripple the school success. Mishra (1982) found that decreasing level of rejection is significantly related to student’s scores on overall scientific creativity in school.

F) Control and Academic Achievement:

The study reveals that there is no significant positive relationship between control and academic achievement. It shows that school control does not influence academic achievement. So, from the present study it can be said
that even if the school will impose several restrictions on students to discipline them there will be no difference in their academic achievement.

The result in this regard is also supported by Mishra (1982), who found that control and academic achievement are not significantly related.

(VI) Effect of various dimensions of home environment on the academic achievement of Class X Students

The findings and conclusions with regards to the effect of various dimensions of home environment on the academic achievement of class X students are discussed as below:

(a) Cohesion:

The study has revealed that the students belonging to high and average cohesive group achieve more as compared to low cohesive group. It shows that there is a favorable effect of group cohesiveness on student’s achievement in favor of high and average cohesive group.

It means that the degree of commitment, help and support from family members for one another influence the academic achievement of school children favorably.

This result have been supported by Kumar (1963), McGurick (1973), and Tiwari (1979), who found that love, cooperation, help and trust have greater effect on academic achievement.

(b) Expressiveness:

The study has revealed that the students belonging to average expressive group achieve more as compared to low expressive group. It shows that there is a favorable effect of group expressiveness on student’s achievement in favor of average expressive group.
It means that the extents to which family members are encouraged to act openly and express their feelings and thoughts directly influence the academic achievement of school children favorably.

Though freedom in studying is not generally considered as a separate dimension, indirect effects of it are noted by some researchers. Patel and others (1966) pointed out that too many suggestions by the parent’s leads to antagonism towards study. Kuppuswami (1980) stated that when children are given reasonable freedom, they are bound to be resourceful, cooperative self reliant and well adjusted.

(c) Conflict:

The study has revealed that the students belonging to average conflict group achieve more as compared to the students belonging to low conflict group. It shows that there is a favorable effect of group conflict on student’s achievement in favor of average conflict group.

It means that children achieve more in those environments when they get the opportunity to openly express their aggression and conflict among family members.

(d) Acceptance and Caring:

The study has revealed that the students belonging to average acceptance and caring group achieve more as compared to the students belonging to low acceptance and caring group. It shows that there is a favorable effect of group acceptance and caring on student’s achievement in favor of average acceptance and caring group.

It means that the extent to which the members are unconditionally accepted and the degree to which caring is expressed in the family influence the academic achievement favorably.
Many researchers such as Pringal (1975), Crandall (1963), Stagner (1974), Mc Kinley (1964), are in favor of this study that proved that children who are warmly accepted by their parents have stronger effect on their academic achievement than the rejected ones.

(e) Active Recreational Orientation:

The study has revealed that the students belonging to high and average recreational group achieve more as compared to the students belonging to low recreational group. It shows that there is a favorable effect of recreational orientation on student’s achievement in favor of high and average recreational group.

It means that the extent of participation in social and recreational activities influence the academic achievement of school children. Singhal (1991), in favor of this study indicates that there is favorable effect of recreational on students’ achievement.

(f) Independence:

The study has revealed that there is no effect of group independence on student’s achievement between high, average and low independence group. It means that extent to which family members are assertive and independently make their own decisions doesn’t influence the academic achievement.

Kumar (1963) reported that dependency on parents, not loved feeling and feeling that parents were disappointed with them was observed more in underachievers.

(g) Organization:

The study has revealed that the students belonging to average organization group achieve more as compared to the students belonging low
organization group. It shows that there is a favorable effect of group organization on student’s achievement in favor of average organization group.

It means that the degree of importance of clear organization structure in planning family activities and responsibilities influence the academic achievement of children.

**h) Control:**

The study has revealed that the students belonging to high and average control group achieve more as compared to the students belonging to low control group. It shows that there is a favorable effect of group control on student’s achievement in favor of high and average control group.

It means that the degree of limit setting within a family influence the academic achievement of school children. Kamal Raj (2008), positive and affective relation is likely to hampered when control exist beyond optimum limits.

**(VII) Effect of various dimensions of school environment on the academic achievement of Class X Students.**

The findings and conclusions with regards to the effect of various dimensions of school environment on the academic achievement of class X students are discussed as below:

**(a) Creative Stimulation:**

The study has revealed that the students belonging to high creative stimulation group achieve more as compared to the students belonging to low and average creative stimulation group. It shows that there is a favorable effect of group creativeness on student’s achievement in favor of high creative stimulation group.
It means that if teachers provide conditions and opportunities to the students to stimulate creative thinking it will influence the academic achievement of the children more than those who do not get such opportunities and conditions.

Singhal (1991) teachers support, task orientation, competitions and innovations etc. have positive effects on the achievement of the children.

(b) Cognitive Encouragement:

The study has revealed that the students belonging to high and average cognitive encouragement group achieve more as compared to the students belonging to low cognitive encouragement group. It shows that there is a favorable effect of group cognitive encouragement on student’s achievement in favor of high cognitive encouragement group.

It means that if a teacher encourages student’s actions or behaviors to stimulate cognitive development it will influence the academic achievement of the children.

Agarwal (1986) reported that effect of parental encouragement upon the educational development of the students. Marfatia (1960) explained the importance of encouragement. As a result lack of encouragement may demoralize the child and they may give up.

(c) Acceptance:

The study has revealed that the students belonging to high and average acceptance group achieve more as compared to the students belonging to low acceptance group. It shows that there is a favorable effect of group acceptance in student’s achievement in favor of high acceptance group.

It means that the extent to which students are accepted unconditionally by the teacher's it will influence the academic achievement.
Smith and Johnson (1962), Tiwari (1979) found that there is a positive effect of acceptance in achievement.

**(d) Permissiveness:**

The study has revealed that the students belonging to high permissiveness group achieve more as compared to the students belonging to low and average permissiveness group. It shows that there is a favorable effect of group permissiveness on student’s achievement in favor of high permissive group.

It means that schools climate in which students are provided opportunities to express their views freely and act according to their desires with no interruption from teachers influence the academic achievement of the children.

The research in this connection has been supported by Hurlock (1973), Darn Bush et al (1987), and Baumrind (1991), who found that permissiveness in school atmosphere, effects the academic achievement of the children. Result is unique in case of Pandey (1985), who found that permissiveness does not effect the achievement of the children.

**(e) Rejection:**

The study has revealed that the students belonging to high and average rejection group achieve more as compared to the students belonging to low rejection group. It shows that there is a favorable effect of group rejection on student’s achievement in favor of high and average rejection group

It means that schools climate in which even if the teachers do not accord recognition to students’ rights to deviate and act freely still influence the academic achievement of the children. But in contrary to the above study, Mishra (1982) revealed that there is an effect of rejection on students’ achievement.
(f) **Control:**

The study has revealed that there is no favorable effect of group control on students' achievement in favor of high, average and low control group. It means that autocratic atmosphere of the school in which several restrictions are imposed on students to discipline them does not influence the academic achievement of the children. Mishra (1982) found that there is no effect of control on students' achievement.

**(VIII) Implications & Recommendations for Improving the Quality of Home and School Environment**

After discussing the findings and conclusions of the present study in the last chapter, the investigator is now in a position to drive the educational implication of the present study. Some recommendations for improving the quality of home and school environment have been made.

The findings from the present study have confirmed the importance of various dimensions of home and school environment in influencing the academic achievement of school going children. The following educational implications can be derived on the basis of the present study. Some recommendations have also been made on the basis of these implications to improve the home and school environment in order to enhance the academic achievement of the children.

**(i) Home Environment and Academic Achievement:**

The significant relationship and marked differences between various dimensions of home environment and academic achievement of the students indicates that home environment have an important role to play in the academic performance of the students.
In the present study various dimensions of home environment, like cohesion, expressiveness, acceptance and caring, conflict, active recreational orientations, organization, independence, control etc were found to be correlated with academic achievement. This shows that the various home dimensions constitute important determinant of academic achievement. The knowledge of various home dimensions contributing to academic achievement may be useful to the teachers and educators to understand those who are academically low in their performance.

The following measures may be recommended to strengthen the quality of home environment so that the same may help in enhancing the academic achievement of children.

**a) Family support:**

The family should provide full support to the children at home by providing an atmosphere of love and happiness, developing a sense of recognition and security, and helping in his or her home work given in the school. It is therefore recommended that at home, children should get full support, help and commitment from the family members.

**b) Freedom to express:**

Present study shows that in order to enhance academic achievement the children at home should be provided opportunities to express freely. If the family members encourage their children to act openly and express their feelings and thought directly the academic achievement of children is likely to enhance. It is therefore recommended that at home children should be allowed to express their feelings and thought directly.
c) **Acceptance and caring:**

Family members at home should unconditionally accept their children and should express the feelings of caring for them. Thus, the higher is the acceptance and caring at home; higher will be the academic achievement. It is therefore recommended that family members at home should unconditionally accept their children and should express the feelings of caring for them.

d) **Independence:**

For better academic achievement, independence at home is important. More the independence at home higher will be the academic achievement. Thus, children at home should get more independence to enhance their academic achievement. It is therefore recommended that children at home should get more independence to enhance their academic achievement.

e) **Social participation:**

Higher degree of social participation by the children enhances the achievement favorably. Students’ participation in social and recreational activities helps in higher achievement. Thus, higher is the social participation, higher will be the achievement. It is therefore recommended that children at home should be provided with the opportunities to actively involve in social activities.

f) **Planning:**

Better planning at home is very important for better academic achievement. Planning family activities and responsibilities at home leads to higher academic achievement. Home environment structured in a specific ways affects children achievement positively. Thus, better is the home planning, higher will be the academic achievement. It is therefore recommended that there
should be clear organization structure in planning family activities and responsibilities in the family.

**g) Discipline:**

Better discipline at home leads to better academic achievement. The degree of limit setting at home within the family makes the students high achiever. High parental control is associated with high achievement.

Disciplining home is essentially detrimental for cognitive development. Thus, higher is the discipline at home, greater will be the chance of high achievement. It is therefore recommended that Parents at home should provide limit setting within a family, and should subscribe good quality home environment to induce the children to achieve more.

The present study suggests that the various dimensions of home environment influence the pupil’s academic achievement. Therefore, it becomes necessary that all the dimensions of home environment should be improved by the parents, teachers and educators to enhance the academic achievement of the school children.

**(ii) School Environment and Academic Achievement:**

The significant relationship and marked differences between various dimensions of school environment and academic achievement of students indicates that school environment have an important role to play in the academic achievement of the students.

In the present study various dimensions of school environment, like creative stimulation, cognitive encouragement, acceptance, rejection, control etc were found to be significantly related to the academic achievement of the children. This shows that the various school dimensions constitute important
determinant of academic achievement. The knowledge of various school dimensions contributing to academic achievement may be useful to the teachers and educators to understand those who are academically low in their performance.

The following measures may be recommended to strengthen the quality of school environment so that the same may help in enhancing the academic achievement of children.

a) Creative Stimulation:

Student’s performance is better in school if the teachers provide them favorable conditions and opportunities for creative stimulation. Thus, higher is the creative stimulation in school, higher will be the academic achievement. It is therefore recommended that teacher in school should provide favorable conditions and opportunities to stimulate creative thinking in the school.

b) Cognitive Encouragement:

Teacher who stimulate cognitive development of the student by encouraging their behaviors, achieve more than those students who were not encouraged for their behaviors. Thus, more is the cognitive encouragement in the school; higher will be the academic achievement. It is therefore recommended that children should get more parental encouragement and a supportive home environment.

c) Permissiveness:

If students were provided with opportunities to express their views freely and act according to their desires with no interruptions from teachers, they perform better academically in school. Thus, higher is the permissive in the schools, higher will be the academic achievement. It is therefore
recommended that there should be good school climate where students will get the opportunities to express their views freely and act according to their desires with no interruption from teachers.

d) Acceptance:
Teacher who accept the feelings of students in a non threatening manner are likely to achieve more and perform better in school. Thus, more is the nature of acceptance in school; the higher will be the academic achievement. It is therefore recommended that teachers in school should provide unconditional love, accept them with their unique needs and Interests, give them right to express their feelings and accept their feelings in a non threatening manner.

e) Rejection:
There is no affect of rejection on the academic achievement of the children in the school. They are in position to achieve more even if they are rejected in the school. It is therefore recommended that to achieve more the students need not to worry if they were rejected in the school.

f) Control:
There is no effect of degree of control on student’s achievement. it means that the autocratic atmosphere of the school in which several restrictions are imposed on students to discipline them have no difference on the achievement of the students. To achieve more, the students need not to worry if several restrictions are imposed to discipline the students.

The present study suggests that the various dimensions of school environment influence pupil’s academic achievement. Therefore it becomes necessary that all the dimensions of school environment should be improved to enhance the academic achievement of the school children.