CHAPTER V

PERFORMANCE ON SCIENTIFIC TEMPER SCALE

5.1 Introduction

According to Royal Society 1985, "Research is needed on how to measure public understanding, so as to enable monitoring of whether particular actions have changed public understanding of science, and whether such changes in fact bring about their intended consequences."

These observations point out that there are two kinds of premises which underlie science. First, the general sociological assumptions concerning the understanding of science related to how people interpret the content and values of science, second, the more particular assumptions underlying the purposes of science education, that is, development of scientific thinking, scientific thought, scientific temper. These assumptions are of considerable importance presenting composite action as related to ideology of science and ethos of science. The fundamental and broad educational directions for science educational directions for science education shall emerge from the ideology and ethos of science as these inherent the values which serve as guidelines.

The ideology of science attempts to describe the 'idea systems' or basic irreducible assumptions that permeate scientific practices. In
otherwords, scientific ideology relates primarily to a system of ideas or a way of thinking that characterise science, but ethos of science attempts to define the more affective aspects of scientific activity (Smolicz and Nunan, 1975). Clearly both the ideology and ethos are interactive, each 'circulatory' affecting the other: further their total effect contributes to image of science. Hodson and Reid (1988) has observed:

> If you genuinely seek an informed and thinking citizenry - capable of considering scientific and technological matters in the context of economic constraints, environmental issues, ethical concerns and social and aesthetic considerations - we must include in our science curriculum a consideration of the impact of science and technology on society, and the influence of society on science, scientific research and scientific development. A related issue is that of ensuring that future scientists and technologists behave in a socially responsible manner.

The authors have further specified affective goals for science education (Hodson, Reid, 1988):

* Independence of thought and self-confidence.
* Preseverance and tenacity in the face of difficulties.
* Intellectual curiosity.
* Tolerance of the views of others.
* Open mindedness, willingness to change one’s mind in the light of new evidence, willingness to suspend judgement if there is insufficient evidence.
* Acceptance of scientific inquiry as a legitimate way of thinking about issues and problems.
* Enthusiasm for Science.

* Application of Science problem solving skills to everyday situations.

These objectives of science education will help the cultivation of scientific outlook or scientific temper which is more important than acquiring scientific knowledge or its application. India need both understanding of science and scientific temper to develop relevant socio-cultural environment for national development, both intellectually and materially.

In this chapter the investigator has analysed the data obtained on Scientific Temper Scale.

5.2 Analysis of the Responses of the Total Sample on Scientific Temper Scale

TABLE 5.1

PERFORMANCE OF TOTAL SAMPLE (N=1000) ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Mean</th>
<th>S. D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>39.38</td>
<td>5.57</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>21.73</td>
<td>3.41</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>8.06</td>
<td>2.18</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.28</td>
<td>1.43</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>5.42</td>
<td>1.59</td>
</tr>
</tbody>
</table>
Discussion:

The above table has indicated that the mean and S. D. of total sample (N=1000) has been 39.38 and 5.57 respectively on the Scientific Temper Scale. The obtained mean of the sample is more than the theoretical mean of 30.0. Therefore, it is inferred that the total sample has above average scientific temper. Hence, hypothesis No. 7 has been rejected.

Dimension I - Value Perspective:

The above table has indicated that the mean and S. D. on Dimension I of Scientific Temper Scale of the total sample (N=1000) has been 21.73 and 3.41 respectively. The obtained mean on this dimension is more than the theoretical mean of 16.0. Hence, it is inferred that the sample has positive and favourable value perspective.

Dimension II- Aversion to Superstitions:

Table 5.1 has indicated that the mean and S. D. on Dimension II- Aversion to superstitions of Scientific Temper Scale of the total sample (N=1000) has been 8.06 and 2.18 respectively. The obtained mean on this dimension is more than the theoretical mean of 6.0. Hence, it is inferred, that the sample has aversion to superstitions.

Dimension III- A Set of Attitudes:

Table 5.1 has indicated that the obtained mean is higher than the theoretical mean on this dimension obtained mean is 4.28 and S. D.
is 1.43 which is higher than the theoretical mean of 4.0. Hence, the sample has favourable attitudes towards science and its contribution.

**Dimension IV- A World View Perspective:**

The table has indicated that the theoretical mean of 4.0 is much less than the obtained mean of 5.42. Therefore, the sample has constructive world view about science and its role in developing a balanced world.

**5.3 Analysis of the Responses of Hindu and Muslim Students on Scientific Temper Scale**

**TABLE 5.2**

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Hindu Students (N=600)</th>
<th>Muslim Students (N=400)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S. D.</td>
<td>Mean S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>39.25 4.97</td>
<td>37.94 5.72</td>
<td>3.74 &lt; .01</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>21.58 2.98</td>
<td>20.47 3.56</td>
<td>5.04 &lt; .01</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>8.13 1.62</td>
<td>7.13 2.17</td>
<td>7.69 &lt; .01</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>3.65 1.33</td>
<td>4.86 1.50</td>
<td>13.44 &lt; .01</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>4.19 1.41</td>
<td>4.92 1.67</td>
<td>7.30 &lt; .01</td>
</tr>
</tbody>
</table>
Discussion:

Table 5.2 has indicated that the mean and S. D. of students of Hindu (N=600) has been 39.25 and 4.97 and that of Muslim has been 37.94 and 5.72 respectively. While applying the critical ratio to determine the difference between the two groups, the 'CR' value was found to be 3.74 which is more than 2.58, hence significant at .01 level. Thus there is difference between the total sample of Hindu and the total sample of Muslim concerning their levels of scientific temper. Hence, hypothesis No. 8 was failed to be retained.

This study has indicated that the students of Hindu reflect higher level of scientific temper than the students of Muslim. There may be many and varied reasons for this.

Dimension I- Value Perspective:

The table has indicated that the mean and S. D. on Dimension-I of Scientific Temper of Hindu students has been 21.58 and 2.98 and that of Muslim has been 20.47 and 3.56 respectively. While applying critical ratio to determine the difference between two groups of students the 'CR' value was found to be 5.04 which is higher than 2.58, hence significant at .01 level. Thus, there is significant difference between the students from two religion on Value Perspective. The Hindu students have higher scientific temper concerning value perspective.

Dimension II- Aversion to Superstitions:

The table has indicated that the mean and S. D. on Dimension
II of Scientific Temper of Hindu has been 8.13 and 1.62 and that of Muslim has been 7.13 and 2.17 respectively. While applying the critical ratio to determine the difference between the two groups of students the 'CR' value was found to be 7.69 which is higher than the value 2.58. Thus there is significant difference at .01 level between the two religion on Aversion to Superstitions. The Hindu students have higher scientific temper concerning aversion to superstitions.

**Dimension III- A Set of Attitudes:**

The table has indicated that the mean and S. D. on Dimension III of Scientific Temper of Hindu has been 3.65 and 1.33 and that of Muslim has been 4.86 and 1.50 respectively while applying critical ratio to determine the difference between the two groups of students the value was found to be 13.44 which is higher than the value 2.58, hence significant at .01 level. Thus there is significant difference between the two religion on Dimension III. The Hindu students possess more scientific temper concerning set of attitude.

**Dimension IV - A World View Perspective:**

The table indicated that the mean and S. D. on Dimension of Scientific Temper of Hindu has been 4.19 and 1.41 and that of Muslim has been 4.92 and 1.67 respectively. While applying the critical ratio to determine the difference between the two groups of students the 'CR' value was found to be 7.30 which is higher than the value of 2.58, hence significant at .01 level. Thus there is significant difference between the
two religion on Dimension IV. The Hindu students possess more scientific temper concerning world view perspective.

5.4 Analysis of Responses of Total Sample From Class 9th and 10th to Determine their Scientific Temper

Table 5.3

MEAN, S. D. AND CRITICAL RATIO OF 9TH CLASS STUDENTS AND 10TH CLASS STUDENTS ON SCIENTIFIC TEMPER AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>9th Class Students (N=660)</th>
<th>10th Class Students (N=340)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Total Score</td>
<td>38.13</td>
<td>5.85</td>
<td>41.14</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>20.86</td>
<td>3.59</td>
<td>21.77</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>7.72</td>
<td>2.16</td>
<td>7.97</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.16</td>
<td>1.25</td>
<td>4.89</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>4.94</td>
<td>1.37</td>
<td>4.72</td>
</tr>
</tbody>
</table>

Discussion:

The above table has indicated that the mean of 9th class students and 10th class students has been 38.13 and 41.14 and S. D. 5.85 and 5.97. While applying the critical ratio to determine the difference between two groups, the 'CR' value was found to be 7.53 which is higher than the value of 2.58. Therefore, hypothesis No. 9 has been rejected. Hence, it is inferred that 10th class students possess higher level of scientific temper in comparison to 9th class students.
Dimension I- Value Perspective:

The table 5.3 indicated that the mean and S. D. on Dimension I of Scientific Temper of 9th class and 10th class students have obtained mean 20.86 and 21.77 and S. D. 3.59 and 3.74 respectively. While applying critical ratio to determine the difference between two groups of students the 'CR' value was found to be 3.64 which is higher than 2.58. Therefore, it can be inferred that the students of 10th class possess higher level of scientific temper than the students of 9th class concerning value perspective of the scientific temper.

Dimension II- Aversion to Superstitions:

The table has indicated that the mean and S. D. on Dimension II of Scientific Temper Scale of 9th class students and 10th class students have obtained mean 7.72 and 7.97 and S. D. 2.16 and 2.07 respectively. While applying the critical ratio to determine the difference between the two classes the 'CR' value was found to be 1.78, which is less than the value 1.96, hence not significant at .05 level. Therefore, it can be inferred the their is no difference between 9th and 10th class students concerning dimension II- Aversion to superstition of Scientific Temper.

Dimension III- A Set of Attitudes:

The table has indicated that mean and S. D. on Dimension III of Scientific Temper Scale of 9th class students and 10th class students have obtained mean 4.16 and 4.89 and S. D. 1.25 and 1.23 respectively. While applying critical ratio to determine the difference between the two
classess the 'CR' value was found to be 9.12 which is higher than the value 2.58. This difference has indicated that the students of 10th class have higher scientific temper than the students of 9th class concerning dimension III- A set of attitude.

**Dimension IV - A World View Perspective**

The table has indicated that mean and S. D. on Dimension of Scientific Temper Scale of 9th class students and 10th class students have obtained 4.94 and 4.72 and S. D. 1.37 and 1.23 respectively. While applying the critical ratio to determine the difference between the two groups the 'CR' value was found to be 2.75 which is higher than the value of 2.58. This significant difference has indicated that the students of 10th class have higher scientific temper than the students of 9th class concerning Dimension IV- A world View Perspective.

Contd....
5.5 Analysis of Responses of the Male and Female Students on Scientific Temper Scale

**TABLE 5.4**

MEAN, S. D. AND CRITICAL RATIO OF MALE AND FEMALE STUDENTS ON SCIENTIFIC TEMPER SCALE

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Male</th>
<th>Female</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students (N=650)</td>
<td>Students (N=350)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean S. D.</td>
<td>Mean S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>39.74  4.31</td>
<td>39.85  4.49</td>
<td>0.38 &lt; .05</td>
</tr>
</tbody>
</table>

Dimensions:

I- Value Perspective
21.65  2.78 | 21.81  2.98 | 0.84 > .05

II- Aversion to Superstitions
7.82   1.93 | 7.63   1.91 | 1.46 > .05

III- A Set of Attitudes
4.49   1.52 | 4.79   1.49 | 3.00 < .01

IV- A World View Perspective
5.51   1.18 | 5.68   1.16 | 2.13 < .05

Discussion:

The table has indicated that the mean and S. D. of Male students was found to be 39.74 and 4.31 respectively. Similarly, the mean and S. D. of female students was 39.85 and 4.49. The 'CR' value has been 0.38 which is much less than the value of 1.96, hence not significant at .05 level. This has proved that there was no difference of scientific temper due to differences in sex. Hence, hypothesis No. 10 has been retained.

Dimension I- Value Perspective:

The above table has indicated that the male students have
obtained mean 21.65 and S. D. 2.78 on dimension - Value perspective. Similarly, female students have obtained mean 21.81 and S. D. 2.98 on this dimension. While using the critical ratio to determine the difference on dimension, Value perspective the 'CR' value found to be was 0.84 which has indicated that the difference is not significant due to sex differences.

**Dimension II- Aversion to Superstitions :**

The above table has indicated that the male students have obtained mean 7.82 and S. D. 1.93 on Dimension Aversion to Superstitions on the scientific temper scale. Similarly, female students have obtained mean 7.63 and S. D. 1.91 on this dimension. While using critical ratio to determine the level of difference, 'CR' value was found to be 1.46 which is less than the value 1.96, hence not significant at .05 level. Thus there is no difference concerning aversion to superstition due to sex difference.

**Dimension III- A Set of Attitudes :**

The above table has indicated that the male students (N=650) have obtained mean 4.49 and S. D. 1.52 on dimension a set of attitudes of the Scientific Temper Scale. Similarly female students (N=350) have obtained mean 4.79 and S. D. 1.49. The 'CR' value obtained after using the critical ratio has been 3.00 which is more than 2.58, hence significant at .01 level, indicating significant difference of attitudes due to sex difference.
**Dimension IV - A World View Perspective:**

The above table has indicated that the male students have obtained mean 5.51 and S. D. 1.18 on dimension A World View Perspective of the Scientific Temper Scale. Similarly, female students have obtained mean 5.68 and S. D. 1.16. While applying critical ratio to determine the difference due to sex difference, the 'CR' value was found to be 2.13 which is higher than the value 1.96, significant at .05 level. Therefore, there is significant difference concerning world view perspective due to sex differences. The female students have more world view perspective concerning scientific temper.

**5.6 Analysis of Responses of the Rural and Urban students on Scientific Temper Scale**

**TABLE 5.5**

**MEAN, S. D. AND CRITICAL RATIO OF RURAL AND URBAN STUDENTS ON SCIENTIFIC TEMPER SCALE**

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Rural Students (N=200)</th>
<th>Urban Students (N=800)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S. D.</td>
<td>Mean S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>35.53  6.41</td>
<td>39.38  5.54</td>
<td>7.86 &lt; .01</td>
</tr>
</tbody>
</table>

Dimensions:

- I- Value Perspective 19.65  3.33  21.43  3.17  6.85 < .01
- II-Aversion to Superstitions 5.85  2.38  7.77  2.17  10.67 < .01
- III- A Set of Attitudes 4.07  1.26  4.39  1.20  3.20 < .01
- IV- A World View Perspective 4.63  1.38  4.97  1.21  3.09 < .01
Discussion:

The table has indicated that the mean and S. D. of students from schools located in rural area and students from urban schools has been 35.53 and 39.38 and S. D. 6.41 and 5.54 respectively. While applying the critical ratio to determine the difference between two groups, the 'CR' value was found to be 7.86 which is more than the value 2.58, hence significant at .01 level. Therefore, hypothesis No. 11 has been rejected. It is inferred that the students from schools situated in urban areas have much higher level of scientific temper than the students from rural areas schools.

Dimension I- Value Perspective:

The above table indicated that the mean and S. D. on dimension I- of Scientific temper scale of students from rural schools and students from urban schools have obtained 19.65 and 21.43 and S. D. 3.33 and 3.17 respectively. While applying critical ratio to determine the difference between the two groups the 'CR' value was found to be 6.85 which is more than the value 2.58, hence significant at .01 level. Therefore, students from urban schools possess higher level of scientific temper concerning value perspective than the students from rural schools.

Dimension II- Aversion to Superstitions:

The above table has indicated that the mean and S. D. on dimension II- of Scientific temper scale of rural students and urban students have obtained 5.85 and 7.77 and S. D. 2.38 and 2.17
respectively. While applying critical ratio to determine the level of difference between the two groups the 'CR' value was found to be 10.67 which is more than the value 2.58, hence significant at .01 level. Therefore, students from urban schools possess higher level of scientific temper concerning aversion to superstition.

**Dimension III - A Set of Attitudes:**

The table indicated that mean and S. D. of dimension III of Scientific temper scale of rural and urban students have obtained mean 4.07 and 4.39 and S. D. 1.26 and 1.20 respectively. While applying the critical ratio to determine the difference between two groups, the 'CR' value was found to be 3.20 which is higher than the value 2.58, hence significant at .01 level. This significant difference has indicated that the students from urban area have higher scientific temper on dimension III - A set of attitudes of scientific temper.

**Dimension IV - A World View Perspective:**

The table has indicated that mean and S. D. of Dimension IV of Scientific temper scale of rural and urban students have obtained mean 4.63 and 4.97 and S. D. 1.38 and 1.21 respectively. While applying critical ratio to determine the difference between two groups, the 'CR' value was found to be 3.09 which is higher than the value 2.58, hence significant at .01 level. This difference has indicated that the students from urban area have higher scientific temper in dimension IV - A world view perspective.
## 5.7 Analysis of Responses of Students from Government Schools and Private Schools on Scientific Temper Scale

**TABLE 5.6**

MEAN, S. D. AND CRITICAL RATIO OF STUDENTS FROM GOVERNMENT SCHOOLS AND PRIVATE SCHOOLS ON SCIENTIFIC TEMPER SCALE ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Government School Students (N=750)</th>
<th>Private School Students (N=250)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>Mean</td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td>38.23</td>
<td>5.93</td>
<td>41.16</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>20.93</td>
<td>2.89</td>
<td>22.26</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>6.98</td>
<td>2.19</td>
<td>8.68</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.18</td>
<td>1.46</td>
<td>4.07</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>5.36</td>
<td>1.52</td>
<td>5.98</td>
</tr>
</tbody>
</table>

**Discussion:**

The above table has indicated that the students from Government schools (N=750) have obtained mean 38.23 and S. D. 5.93. Similarly, students from Private schools (N=250) have obtained mean 41.16 and S. D. 3.38. While applying critical ratio to determine the difference between two groups, the 'CR' value was found to be 9.77 which is more than the value 2.58, hence significant at .01 level. The difference has indicated that there is difference between students of Government schools and students of Private schools concerning their level of scientific
temper. The students of private schools definitely possess high level of scientific temper. Hence, the hypothesis No. 12 has been rejected.

**Dimension I- Value Perspective :**

The table has indicated that the students of Government schools have obtained mean 20.93 and S. D. 2.89 on the dimension of Scientific temper scale. Similarly, students from Private schools have obtained mean 22.26 and S. D. 2.34. While applying the critical ratio to determine the difference between the groups on this dimension, the 'CR' value was found to be 7.39 which is more than the value 2.58, hence significant at .01 level. The finding has indicated that the students of Private schools possess much more favourable positive value perspective on scientific Temper Scale. This is feasible due to school climate, socio-cultural background of students or the scientific thought among the teachers.

**Dimension II- Aversion to Superstitions :**

The table has indicated that the students of the Government schools and students from Private schools have obtained mean 6.98 and 8.68 and S. D. 2.19 and 1.56 respectively. While applying critical ratio to determine the difference between two groups the 'CR' value was found to be 13.08, hence significant at .01 level. Thus, there is a significant difference between two groups concerning Aversion to Superstition. This may due to socio-educational backdrop of the family and exposure of students to the values of science.
Dimension III - A Set of Attitudes:

The table has indicated that the students from Government schools have obtained mean 4.18 and S. D. 1.46 on dimension A set of attitudes on Scientific temper scale. Similarly, students from Private schools have obtained mean 4.07 and S. D. 1.43. The 'CR' value obtained after applying critical ratio was 1.10 which is less than 1.96, hence not significant at .05 level. Therefore, there is no significant difference between Government schools students and Private schools students concerning attitudes of scientific temper scale.

Dimension IV - A World View Perspective:

The table has indicated that students of Government schools (N=750) have obtained mean 5.36 and S. D. 1.52 on this dimension, A world view Perspective of Scientific Temper Scale. Similarly, students of Private schools (N=250) have obtained mean 5.98 and S. D. 1.32. While applying critical ratio to get the difference between two groups, the 'CR' value was 6.20 which is higher than the value 2.58, This has clearly shown that the students of Private schools possess favourable and constructive world view Perspective regarding socio - scientific issues.
5.8 Responses of 9th class Students of Hindu and 9th class Students of Muslim on Scientific Temper Scale

TABLE 5.7

MEAN, S. D. AND CRITICAL RATIO OF 9TH CLASS STUDENTS OF HINDU AND MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>9th Class Hindu Students (N=410)</th>
<th>9th Class Muslim Students (N=250)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S. D.</td>
<td>Mean S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>38.52 4.97</td>
<td>36.27 5.93</td>
<td>5.00 &lt; .01</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>21.87 2.98</td>
<td>19.62 3.18</td>
<td>9.00 &lt; .01</td>
</tr>
<tr>
<td>II-Aversion to Superstitions</td>
<td>7.95 1.27</td>
<td>6.93 2.28</td>
<td>6.38 &lt; .01</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.16 1.36</td>
<td>4.85 1.58</td>
<td>5.75 &lt; .01</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>5.18 1.23</td>
<td>5.10 1.59</td>
<td>0.67 &gt; .05</td>
</tr>
</tbody>
</table>

Discussion:

The above table has indicated that the mean and S. D. 9th class students of Hindu was found to be 38.52 and 4.97. Similarly the mean and S. D. of 9th class students of Muslim was found to be 36.27 and 5.93 respectively. The 'CR' value was found to be 5.00 which is higher than the value 2.58, hence significant at .01 level. Therefore it is inferred that the 9th class students of Hindu possess higher level of Scientific Temper in comparison to 9th class students of Muslim.
Dimension I- Value Perspective:

The table 5.7 indicated that the mean and S. D. of the students of 9th class of Hindu and Muslim have obtained 21.87 and 2.98 and 19.62 and 3.18 respectively. Using critical ratio to determine the difference between two groups of students the value was found to be 9.00 which is higher than the value 2.58 at .01 significance level. Therefore, it can be inferred that the students of 9th class of Hindu possess higher level of scientific temper than the 9th class students of Muslim on Value perspective of scientific temper.

Dimension II- Aversion to Superstitions:

The table indicated that the mean and S. D. on dimension II of Scientific temper scale of 9th class students of Hindu have obtained mean 7.95 and S. D. 1.27 and that of Muslim is 6.93 and 2.28 respectively. The critical ratio was found to be 6.38 which is higher than the value 2.58, hence significant at .01 level. This has indicated that there is significant difference between two groups of students. 9th class students of Hindu possess more favourable level of scientific temper than the 9th class students of Muslim concerning Aversion to Superstitions.

Dimension III- A Set of Attitudes:

The table has indicated that the mean and S. D. of 9th class students of Hindu and Muslim was found to be 4.16 and 1.36 and 4.85 and 1.58 respectively. Using critical ratio to determine the difference
between the two groups the 'CR' value was found to be 5.75 which is higher than the value 2.58, hence significant at .01 level. Therefore, it can be inferred that there is significant difference between two groups of students. 9th class students of Muslim possess higher level of scientific temper than the 9th class students of Hindu concerning a set of attitudes.

**Dimension IV - A World View Perspective:**

The table has indicated that mean and S. D. of the 9th class students of Hindu and Muslim was found to be 5.18 and 1.23 and 5.10 and 1.59 respectively. Using critical ratio to determine the difference between the two groups the 'CR' value was found to be 0.67 which is less than the value 1.96, hence not significant at .05 level. This has indicated that there is no significant difference between 9th class students of Hindu and Muslim on scientific temper concerning a word view perspective.

Contd...
5.9 Analysis of Responses of 10th class Students of Hindu and Muslim on Scientific Temper Scale

TABLE 5.8

MEAN, S. D. AND CRITICAL RATIO OF 10TH CLASS STUDENTS OF HINDU AND MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>10th Class Hindu Students (N=190)</th>
<th>10th Class Muslim Students (N=150)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S. D.</td>
<td>Mean S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>41.46 4.95</td>
<td>39.19 5.86</td>
<td>3.78 &lt; .01</td>
</tr>
</tbody>
</table>

Dimensions:

I- Value Perspective     23.59 2.16 21.49 2.96 7.24 < .01

II- Aversion to Superstitions 7.89 1.48 7.48 1.93 2.16 < .05

III- A Set of Attitudes 4.18 1.27 4.66 1.33 3.43 < .01

IV- A World View Perspective 5.43 1.23 5.18 1.37 1.79 > .05

Discussion:

The above table has indicated that the mean and S. D. of 10th class students of Hindu and 10th class students of Muslim were found to be 41.46 and 4.95 and 39.19 and 5.86 respectively. Applying critical ratio to determine the difference between two groups, the 'CR' value was found to be 3.78 which is higher than the value 2.58, hence significant at .01 level. This has proved that there is significant difference between the two groups of students. The 10th class students of Hindu have higher scientific temper than the 10th class students of Muslim.
**Dimension I- Value Perspective:**

The table has indicated that the mean and S. D. of 10th class students of Hindu and Muslim were found to be 23.59 and 2.16 and 21.49 and 2.96 respectively. The 'CR' value was found to be 7.24 which is higher than the value 2.58, hence significant at .01 level. This has proved that the 10th class students of Hindu have higher scientific temper than the 10th class students of Muslim concerning value perspective of scientific temper.

**Dimension II- Aversion to Superstitions:**

The table has indicated that the mean and S. D. of 10th class students of Hindu and Muslim were found to be 7.89 and 1.48 and 7.48 and 1.93 respectively. The 'CR' value was found to be 2.16 which is higher than the value 1.96, hence significant at .05 level. This has inferred that the 10th class students of Hindu have higher Scientific Temper than the 10th class students of Muslim concerning dimension II- Aversion to superstitions.

**Dimension III- A Set of Attitudes:**

The table has indicated that the mean and S. D. of 10th class students of Hindu and 10th class students of Muslim were found to be 4.18 and 1.27 and 4.66 and 1.33 respectively. The 'CR' value was found to be 3.43, significant at .01 level. This has indicated that there is significant difference between the two groups of students on scientific temper scale concerning a set of attitudes.
Dimension IV - A World View Perspective:

The table has indicated that the mean and S. D. of 10th class students of Hindu and 10th class students of Muslim were found to be 5.43 and 1.23 and 5.18 and 1.37 respectively. The 'CR' value was found to be 1.79, which is less than the value 1.96, hence not significant at .05 level. This has indicated that there is no significant difference between the two groups of students concerning a world view perspective of scientific temper.

5.10 Responses of Male Students of Hindu and Muslim on Scientific Temper Scale

TABLE 5.9

Mean, S. D. and Critical Ratio of Male Students of Hindu and Muslim on Scientific Temper Scale and Its Dimensions

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Male Hindu Students (N=367)</th>
<th>Male Muslim Students (N=233)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Total Score</td>
<td>40.44</td>
<td>4.58</td>
<td>39.51</td>
</tr>
</tbody>
</table>

Dimensions:

I- Value Perspective     21.64  2.86  20.75  2.93  3.71 < .01
II- Aversion to Superstitions 7.94  1.48  7.73  2.16  1.31 > .05
III- A Set of Attitudes   4.23  1.37  4.91  1.46  5.67 < .01
IV- A World View Perspective 5.24  1.46  5.13  1.67  0.85 > .05
Discussion:

The above table indicated that the mean and S. D. of Male students of Hindu and Male students of Muslim possess 40.44 and 4.58 and 39.51 and 5.34 respectively. Applying critical ratio to determine the difference between two groups, The 'CR' value was found to be 2.21 which is higher than the value 1.96, significant at .01 level. It is evident from this difference that there is significant difference between the two groups of students. The male students of Hindu have higher scientific temper than the male students of Muslim.

Dimension I- Value Perspective:

The table has indicated that the mean and S. D. of male students of Hindu and male students of Muslim have obtained 21.64 and 2.86 and 20.75 and 2.93 respectively. The 'CR' was found to be 3.71, which is higher than the value 2.58, significant at .01 level. This has indicated that there is significant difference between the two groups of students on scientific temper scale. The male students of Hindu possess higher scientific temper concerning Value Perspective than the male students of Muslim.

Dimension II- Aversion to Superstitions:

The table has indicated that the male students of Hindu and the male students of Muslim possess mean and S. D. of 7.94 and 1.48 and 7.73 and 2.16 respectively. The 'CR' value was found to be 1.31 which is less than the value 1.96, hence not significant at .05 level. This
has indicated that there is no significant difference between the two groups of students on scientific temper concerning Aversion to superstitions.

**Dimension III - A Set of Attitudes:**

The table has indicated that the mean and S. D. of the male students of Hindu and male students of Muslim have obtained mean and S. D. of 4.23 and 1.37 and 4.91 and 1.46 respectively. The 'CR' value was found to be 5.67 which is higher than the value 2.58, hence significant at .01 level. This has inferred that there is significant difference between the two groups of students in Scientific temper. The male students of Muslim have higher scientific temper concerning a set of attitudes than the male students of Hindu.

**Dimension IV - A World View Perspective:**

The table has indicated that the mean and S. D. of the male students of Hindu and male students of Muslim have obtained mean and S. D. of 5.24 and 1.46 and 5.13 and 1.67 respectively. The 'CR' value was found to be 0.85 which is less than the value 1.96, hence not significant at .05 level. This has proved that there is no significant difference between the two groups of students in scientific temper.
5.11 Responses of Female Students of Hindu and Muslim on Scientific Temper Scale

TABLE 5.10

MEAN, S. D. AND CRITICAL RATIO OF FEMALE STUDENTS OF HINDU AND MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Female Hindu Students (N=233)</th>
<th>Female Muslim Students (N=167)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S. D.</td>
<td>Mean S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>39.48 5.16</td>
<td>38.43 6.71</td>
<td>1.69 &gt; .05</td>
</tr>
<tr>
<td>Dimensions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>21.98 3.23</td>
<td>20.43 3.93</td>
<td>4.19 &lt; .01</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>7.61 1.43</td>
<td>7.18 2.28</td>
<td>2.15 &lt; .05</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.38 1.39</td>
<td>4.76 1.40</td>
<td>2.71 &lt; .01</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>5.89 1.36</td>
<td>5.23 1.41</td>
<td>4.71 &lt; .01</td>
</tr>
</tbody>
</table>

Discussion:

The above table has indicated that the mean and S. D. of the female students of Hindu (N=233) and the female students of Muslim (N=167) have obtained 29.48 and 5.16 and 38.43 and 6.71 respectively. The 'CR' value was found to be 1.69 which is less than the value 1.96, hence not significant at .05 level. This has proved that there is no significant difference between the two groups of students in scientific temper.
Dimension I- Value Perspective:

The table has indicated that the mean and S. D. of female students of Hindu and the female students of Muslim have 21.98 and 3.23 and 20.43 and 3.93 respectively. The 'CR' was found to be 4.19 which is higher than the value 2.58, hence significant at .01 level. This has inferred that there is significant difference between the two groups of students on scientific temper scale. The female students of Hindu possess higher scientific temper concerning Value Perspective.

Dimension II- Aversion to Superstitions:

The table has indicated that the mean and S. D. of the female students of Hindu and the female students of Muslim have 7.61 and 1.43 and 7.18 and 2.28 respectively. The 'CR' value was found to be 2.15 which is higher than the value 1.96, hence significant at .05 level. This has inferred that there is significant difference between the two groups of students. The female students of Hindu possess higher scientific temper than the female students of Muslim concerning aversion to superstitions.

Dimension III- A Set of Attitudes:

The table has indicated that the mean and S. D. of the female students of Hindu and the female students of Muslim obtained 4.38 and 1.39 and 4.76 and 1.40 respectively. The 'CR' value was found to be 2.71 which is higher than the value 20.58, hence significant at .01 level. This has indicated that there is significant difference between the two
groups of students. The female students of Hindu have higher scientific temper than the female students of Muslim concerning a set of attitudes.

Dimension IV - A World View Perspective:

The table has indicated that the mean and S. D. of the female students of Hindu and the female students of Muslim possess 5.89 and 1.36 and 5.23 and 1.41 respectively. The 'CR' value was found to be 4.71 which is more than the value 2.58, hence significant at .01 level. This difference has indicated that there is significant difference between the female students of Hindu and the female students of Muslim in scientific temper scale concerning a world view perspective. Female students of Hindu possess more world view perspective concerning scientific temper.

Contd...
5.12 Responses of Rural Students of Hindu and Muslim on Scientific Temper Scale

TABLE 5.11

MEAN, S. D. AND CRITICAL RATIO OF RURAL STUDENTS OF HINDU AND MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Rural Hindu Students (N=117)</th>
<th>Rural Muslim Students (N=83)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>34.83 5.48</td>
<td>35.79 6.87</td>
<td>1.05 &gt; .05</td>
</tr>
</tbody>
</table>

Dimensions:

I- Value Perspective        18.42 3.11     20.34 3.91     3.69 < .01
II- Aversion to Superstitions 6.94 2.14    5.17 2.38     5.36 < .01
III- A Set of Attitudes      4.23 1.37    4.97 1.47    3.70 < .01
IV- A World View Perspective 4.98 1.62    4.47 1.59     2.22 < .05

Discussion:

The above table has indicated that the mean and S. D. of the rural students of Hindu and rural students of Muslim have obtained 34.83 and 5.48 and 35.79 and 6.87 respectively. The 'CR' value was found to be 1.05 which is less than the value 1.96, hence not significant at .05 level. This has indicated that there is no significant difference between the rural students of Hindu and the rural students of Muslim on scientific temper scale.
Dimension I- Value Perspective:

The table has indicated that the mean and S. D. of rural students of Hindu and the rural students of Muslim have obtained 18.42 and 3.11 and 20.34 and 3.91 respectively. The 'CR' value was found to be 3.69 which is higher than the value 2.58, hence significant at .01 level. This has indicated that there is significant difference between the two groups of students. The rural students of Hindu possess higher scientific temper concerning value perspective.

Dimension II- Aversion to Superstitions:

The table has indicated that the mean and S. D. of the rural students of Hindu and the rural students of Muslim have obtained 6.94 and 2.14 and 5.17 and 2.38 respectively. The 'CR' value was found to be 5.36 which is higher than the value 2.58, hence significant at .01 level. This has shown that there is significant difference between the two groups of students. The rural students of Hindu have higher scientific temper concerning aversion to superstitions than the rural students of Muslim.

Dimension III- A Set of Attitudes:

The table has indicated that the mean and S. D. of the rural students of Hindu and the rural students of Muslim have obtained 4.23 and 1.37 and 4.97 and 1.47 respectively. The 'CR' value was found to be 3.70 which is higher than the value 2.58, hence significant at .01 level. This has indicated that there is significant difference between the
two groups of students. The rural students of Muslim possess higher scientific temper than the rural students of Hindu concerning a set of attitudes.

**Dimension IV - A World View Perspective:**

The above table has indicated that the mean and S. D. of the rural students of Hindu and the rural students of Muslim have obtained 4.98 and 1.62 and 4.47 and 1.59 respectively. This difference has indicated that there is significant difference between the two groups of students. The rural students of Hindu possess higher scientific temper concerning a world view perspective than the rural students of Muslim.

**5.13 Responses of Urban Students of Hindu and Muslim on Scientific Temper Scale**

**TABLE 5.12**

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Urban Hindu Students (N=483)</th>
<th>Urban Muslim Students (N=317)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean &amp; S. D.</td>
<td>Mean &amp; S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>41.13 &amp; 4.36</td>
<td>39.91 &amp; 5.35</td>
<td>3.39 &lt; .01</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>22.27 &amp; 2.78</td>
<td>20.14 &amp; 2.97</td>
<td>10.14 &lt; .01</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>8.17 &amp; 1.67</td>
<td>8.04 &amp; 2.08</td>
<td>0.93 &gt; .05</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.62 &amp; 1.34</td>
<td>4.99 &amp; 1.45</td>
<td>3.70 &lt; .01</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>5.88 &amp; 1.43</td>
<td>5.16 &amp; 1.69</td>
<td>6.00 &lt; .01</td>
</tr>
</tbody>
</table>
Discussion:

The above table has indicated that the mean and S. D. of the urban students of Hindu and urban students of Muslim have obtained 41.13 and 4.36 and 39.91 and 5.35 respectively. The 'CR' value was found to be 3.39 which is higher than the value 2.58, hence significant at .01 level. This has indicated that the urban students of Hindu possess higher scientific temper than the urban students of Muslim.

Dimension I- Value Perspective:

The table has indicated that the students from urban areas of Hindu and Muslim have obtained mean and S. D. of 22.27 and 2.78 and 20.14 and 2.97 respectively. The 'CR' value was found to be 10.14 which is higher than the value 2.58, hence significant at .01 level. This has indicated that the urban students of Hindu possess higher scientific temper concerning Value Perspective.

Dimension II- Aversion to Superstitions:

The table has indicated that the mean and S. D. of the urban students of Hindu and the urban students of Muslim have obtained 8.17 and 1.67 and 8.04 and 2.08 respectively. The 'CR' value was found to be 0.93 which is less than the 'CR' value 1.96, hence not significant at .05 level. This has indicated that there is no significant difference between urban students of Hindu and Muslim on scientific temper concerning aversion to superstitions.
Dimension III - A Set of Attitudes:

The above table has indicated that the mean and S. D. of the urban students of Hindu and the urban students of Muslim have obtained 4.62 and 1.34 and 4.99 and 1.45 respectively. The 'CR' value was found to be 3.70 which is higher than the value 2.58, hence significant at .01 level. This has indicated that the urban students of Muslim have higher scientific temper than the urban students of Hindu concerning a set of attitudes.

Dimension IV - A World View Perspective:

The table has indicated that the mean and S. D. of the urban students of Hindu and the urban students of Muslim have obtained 5.88 and 1.43 and 5.16 and 1.69 respectively. The 'CR' value was found to be 6.00 which is higher than the value 2.58, hence significant at .01 level. This has indicated that the urban students of Hindu possess higher scientific temper than the urban students of Muslim concerning a world view perspective.

Contd....
5.14 Responses of Government School Students of Hindu and Muslim on Scientific Temper Scale

TABLE 5.13

MEAN, S. D. AND CRITICAL RATIO OF GOVERNMENT SCHOOL STUDENTS OF HINDU AND MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Government School Hindu Students (N=400)</th>
<th>Government School Muslim Students (N=350)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S. D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Total Score</td>
<td>38.93</td>
<td>4.35</td>
<td>38.67</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>20.91</td>
<td>2.98</td>
<td>20.49</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>7.92</td>
<td>1.93</td>
<td>7.19</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.57</td>
<td>1.31</td>
<td>4.76</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>5.45</td>
<td>1.29</td>
<td>5.41</td>
</tr>
</tbody>
</table>

Discussion:

The above table has indicated that the Hindu and Muslim students from Government schools have mean and S. D. 38.93 and 4.35 and 38.67 and 5.55 respectively. The 'CR' value was found to be 0.70 which is less than the value 1.96, hence not significant at .05 level. This difference has indicated that there is no significant difference between the two groups of students in scientific temper scale.

Dimension I- Value Perspective:

The above table has indicated that the mean and S. D. of the
Hindu and Muslim students from Govt. Schools are 20.91 and 2.98 and 
20.49 and 3.37 respectively. The 'CR' value was found to be 1.83 which 
is less than the value 1.96, hence not significant at .05 level. This has 
indicated that there is no significant difference between the two groups 
of students of Hindu and Muslim students from Government Schools 
concerning value perspective in scientific temper scale.

Dimension II- Aversion to Superstitions:

The table has indicated that the mean and S. D. of the Hindu 
and Muslim students from Govt. Schools have 7.92 and 1.93 and 7.19 
and 2.03 respectively. The 'CR' value was found to be 4.87 which is 
more than the value 2.58, hence significant at .01 level. This has indicated 
that there is significant difference between the Hindu and Muslim 
students from Government schools concerning aversion to superstitions. 
The Hindu students from Govt. schools possess less superstitions.

Dimension III- A Set of Attitudes:

The above table has indicated that the mean and S. D. of the 
Hindu and Muslim from Government schools have 4.57 and 1.31 and 4.76 and 1.32 respectively. The 'CR' value was found to be 1.90 which is 
less than the value 1.96, hence not significant at .05 level. This has 
inferred that there is no significant difference between Hindu and Muslim 
students from Govt. schools in a set of attitudes, concerning scientific 
temper.
Dimension IV - A World View Perspective:

The above table has indicated that the mean and S. D. of the Hindu and Muslim students from Government school are 5.45 and 1.29 and 5.41 and 1.35 respectively. The 'CR' value was found to be 0.40 which is less than the value 1.96, hence not significant at .05 level. This has indicated that there is no significant difference between the Hindu and Muslim students from Government schools concerning a world view perspective of scientific temper.

5.15 Responses of Private School Students of Hindu and Muslim on Scientific Temper Scale

TABLE 5.14

MEAN, S. D. AND CRITICAL RATIO OF PRIVATE SCHOOL STUDENTS OF HINDU AND MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Private School Hindu Students (N=200)</th>
<th>Private School Muslim Students (N=50)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean     S. D.</td>
<td>Mean     S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>38.73    4.36</td>
<td>41.21    4.13</td>
<td>3.76 &lt; .01</td>
</tr>
<tr>
<td>Dimensions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>20.79    2.98</td>
<td>22.48    2.73</td>
<td>5.28 &lt; .01</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>7.98   1.87</td>
<td>8.74    1.99</td>
<td>2.45 &lt; .05</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.57    1.15</td>
<td>5.12    1.16</td>
<td>3.05 &lt; .01</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>5.45  1.29</td>
<td>5.43    1.67</td>
<td>0.40 &gt; .05</td>
</tr>
</tbody>
</table>
Discussion:

The above table has indicated that the mean and S. D. of private school students of Hindu and Muslim are 38.73 and 4.36 and 41.21 and 4.13 respectively. The 'CR' value was found to be 3.76 which is higher than the value 2.58 at .01 significant level. This difference has indicated that there is significant difference between the two groups of students. The private students of Muslim have higher scientific temper than the private students of Hindu.

Dimension I- Value Perspective:

The table indicated that the mean and S. D. of private schools students of Hindu and Muslim have obtained 20.79 and 2.98 and 22.48 and 2.73 respectively. The 'CR' value was found to be 5.28 which is higher than the value 2.58 at .01 significant level. This difference has indicated that there is significant difference between the two groups. The private schools students of Muslim possess higher scientific temper than the private students of Hindu concerning Value Perspective.

Dimension II- Aversion to Superstitions:

The table indicated that the mean and S. D. of the private school students of Hindu and Muslim are 7.98 and 1.87 and 8.74 and 1.99 respectively. The 'CR' value was found to be 2.45 which is higher than the value 1.96 at .05 significant level. This difference has indicated that there is significant difference between the students of two religion.
The private school students of Muslim have higher scientific temper than the private school students of Hindu concerning Aversion to Superstitions.

**Dimension III - A Set of Attitudes:**

The above table has indicated that the mean and S. D. of the private school students of Hindu and Muslim have found to be 4.57 and 1.15 and 5.12 and 1.16 respectively. The 'CR' value was found to be 3.05 which is higher than the value 2.58 at .01 significant level. This difference has indicated that there is significant difference between the two groups of students. The private school students of Muslim were found to higher in scientific temper than the private students of Hindu.

**Dimension IV - A World View Perspective:**

The above table has indicated that the mean and S. D. of the private school students of Hindu and Muslim have found to be 5.45 and 1.29 and 5.43 and 1.67 respectively. The 'CR' value was found to be 0.08 which is less than the value 1.96 at .05 significant level. This difference has indicated that there is no significant difference between the two groups of students on scientific temper scale in a world view perspective.
5.16 Responses of 9th and 10th class students of Hindu on Scientific Temper Scale

TABLE 5.15

MEAN, S.D. AND CRITICAL RATIO OF 9TH AND 10TH CLASS STUDENTS OF HINDU ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>9th class Hindu Students (N=410) Mean S. D.</th>
<th>10th class Hindu Students (N=190) Mean S. D.</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>37.73 4.47 41.53 4.34</td>
<td>10.00 &lt; .01</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>21.31 2.98 23.48 2.16 10.33 &lt; .01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>7.54 1.47 7.85 1.38 2.58 &lt; .01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>3.81 1.17 3.68 1.21 1.18 &gt; .05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>5.18 1.24 5.43 1.16 2.50 &lt; .05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion:

The above table indicated that the 9th class and 10th class students of Hindu have obtained mean and S. D. as 37.73 and 4.47 and 41.53 and 4.34 respectively. The 'CR' value was found to be 10.00 which is higher than the value 2.58, hence significant at .01 level. This has inferred that there is significant difference between the two groups of students. The 10th class students of Hindu have higher scientific temper than the 9th class students of Hindu.

Dimension I- Value Perspective:

The table indicated that the mean and S. D. of 9th class and
10th class students of Hindu are 21.31 and 2.98 and 23.48 and 2.16 respectively. The 'CR' value was found to be 10.33 which is higher than the value 2.58, hence significant at .01 level. This difference indicated that the 10th class students of Hindu possess better scientific temper than the 9th class students concerning value perspective.

**Dimension II - Aversion to Superstitions:**

The table indicated that the mean and S. D. of 9th class and 10th class students of Hindu are 7.54 and 1.47 and 7.85 and 1.38 respectively. The 'CR' value was found to be 2.58 which is equivalent to the value 2.58, hence significant at .01 level. This difference has inferred that the 10th class students are higher than 9th class students in scientific temper concerning aversion to superstitions.

**Dimension III - A Set of Attitudes:**

The table shows that the mean and S. D. of 9th and 10th class students of Hindu are 3.81 and 1.17 and 3.68 and 1.21 respectively. The 'CR' value was found to be 1.18, which is less than the value 1.96 at .05 significant level. This has inferred that there is no significant difference between 9th and 10th class students of Hindu in scientific temper concerning a set of attitudes.

**Dimension IV - A World View Perspective:**

The above table indicated that the mean and S. D. of 9th class and 10th class students of Hindu are 5.18 and 1.24 and 5.43 and 1.16 respectively. The 'CR' value was found to be 2.50 which is higher than
the value 1.96 at .05 significant level. This difference has inferred that the 10th class students of Hindu have higher scientific temper than the 9th class students concerning a world view perspective.

5.17 Responses of 9th and 10th class students of Muslim on Scientific Temper Scale

TABLE 5.16

MEAN, S. D. AND CRITICAL RATIO OF 9TH AND 10TH CLASS STUDENTS OF MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>9th class</th>
<th>10th class</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslim Students (N=250)</td>
<td>Mean</td>
<td>S. D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Total Score</td>
<td>34.92</td>
<td>5.87</td>
<td>37.91 5.49</td>
</tr>
</tbody>
</table>

Dimensions:

I- Value Perspective     | 19.06     | 2.99       | 21.14 3.32     | 6.30 < .01 |
II- Aversion to Superstitions | 6.69     | 2.19       | 7.98 2.11     | 5.86 < .01 |
III- A Set of Attitudes   | 4.86      | 1.67       | 4.98 1.23     | 0.80 > .05 |
IV- A World View Perspective | 4.65      | 1.58       | 4.82 1.37     | 1.13 > .05 |

Discussion:

The table indicated that the 9th class and 10th class students of Muslim have have their mean and S. D. as 34.92 and 5.87 and 37.91 and 5.49 respectively. The 'CR' value was found to be 5.16 which is higher than the value 2.58, hence significant at .01 level. This has inferred that the 10th class students of Muslim are higher in scientific temper than the 9th class students of Muslim.
Dimension I- Value Perspective:

The table indicated that the mean and S. D. of 9th class and 10th class students of Muslim are 19.06 and 2.99 and 21.14 and 3.32 respectively. The 'CR' value was found to be 6.30 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the 10th class students of Muslim students have higher scientific temper than the 9th class muslim students concerning value perspective.

Dimension II- Aversion to Superstitions:

The table indicated that the mean and S. D. of 9th class and 10th class students of Muslim are 6.69 and 2.19 and 7.98 and 2.11 respectively. The 'CR' value was found to be 5.86 which is higher that the value 2.58, hence significant at .01 level. This has inferred that the 10th class students of Muslim have higher scientific temper than the 9th class students concerning aversion to superstitions.

Dimension III- A Set of Attitudes:

The table indicated that the mean and S. D. of 9th class and 10th class students of Muslim are 4.86 and 1.67 and 4.98 and 1.23 respectively. The 'CR' value was found to be 0.80 which is less than the value 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the Muslim students of 9th class and 10th class on scientific temper scale concerning a set of attitudes.
Dimension IV - A World View Perspective:

The table indicated that the mean and S. D. of 9th class and 10th class students of Muslim are 4.65 and 1.58 and 4.82 and 1.37 respectively. The 'CR' value was found to be 1.13 which is less than the 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between 9th class and 10th class Muslim students in scientific temper concerning a world view perspective.

5.18 Responses of Male Students and Female students of Hindu on Scientific Temper Scale

TABLE 5.17

MEAN, S. D. AND CRITICAL RATIO OF MALE STUDENTS AND FEMALE STUDENTS OF HINDU ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Male Hindu Students (N=367) Mean</th>
<th>S. D.</th>
<th>Female Hindu Students (N=233) Mean</th>
<th>S. D.</th>
<th>Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>39.43</td>
<td>5.35</td>
<td>39.47</td>
<td>5.46</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Dimensions:

I- Value Perspective     21.64  3.24  21.86  3.18  0.81  > .05
II- Aversion to Superstitions 7.86  1.89  7.57  1.91  1.81  > .05
III- A Set of Attitudes     4.27  1.34  4.31  1.31  0.36  > .05
IV- A World View Perspective 5.24  1.46  5.78  1.36  4.50  < .01

Discussion:

The table indicated that the mean and S. D. of male students
and female students of Hindu were found to be 39.43 and 5.35 and 39.47 and 5.46 respectively. The 'CR' value was found to be 0.09 which is less than 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the male and the female students of Hindu in scientific temper.

**Dimension I- Value Perspective :**

The table has indicated that the male and female students of Hindu have mean and S. D. as 21.64 and 3.24 and 21.86 and 3.18 respectively. The 'CR' value was 0.81 which is less than 1.96, hence not significant at .05 level. This has indicated that there is no significant difference between the Hindu male students and Hindu female students in scientific temper concerning value perspective.

**Dimension II- Aversion to Superstitions :**

The table indicated that the mean and S. D. of male and female students of Hindu have found to be 7.86 and 1.89 and 7.57 and 1.91 respectively. The 'CR' value was found to be 1.81 which is less than 1.90, hence not significant at .05 level. This has indicated that there is no significant difference between Hindu male students and Hindu female students in scientific temper concerning aversion to superstitions.

**Dimension III- A Set of Attitudes :**

The above table showed that the male students and female students of Hindu have obtained mean and S. D. as 4.27 and 1.34 and
4.31 and 1.31 respectively. The 'CR' value was found to be 0.36 which is less than 1.96, hence not significant at .05 level. This significant difference has inferred that there is no significant difference between the male and female Hindu in scientific temper concerning a set of attitudes.

**Dimension IV - A World View Perspective:**

The above table indicated that the male students and female students of Hindu have obtained mean and S. D. 5.24 and 1.46 and 5.78 and 1.36 respectively. The 'CR' value was found to be 4.50 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the female students of Hindu have higher scientific temper than the male students of concerning a world view perspective.

Contd....
5.19 Responses of Male and Female Students of Muslim on Scientific Temper Scale

TABLE 5.18

MEAN, S. D. AND CRITICAL RATIO OF MALE AND FEMALE STUDENTS OF MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Male</th>
<th>Female</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Muslim Students (N=233)</td>
<td>Muslim Students (N=167)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean S. D.</td>
<td>Mean S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>36.52</td>
<td>6.25</td>
<td>36.73</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>20.97</td>
<td>3.87</td>
<td>20.98</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>7.76</td>
<td>2.14</td>
<td>7.37</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.91</td>
<td>1.43</td>
<td>4.98</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>4.94</td>
<td>1.68</td>
<td>5.29</td>
</tr>
</tbody>
</table>

Discussion:

The table indicated that the mean and S. D. of male students and female students of Muslim were found to be 36.52 and 6.25 and 36.73 and 6.72 respectively. The 'CR' value was found to be 0.32, which is less than the value 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the male students and female students of Muslim in scientific temper.

Dimension I- Value Perspective:

The table indicated that the mean and S. D. of male and female
students of Muslim were found to be 20.97 and 3.87 and 20.98 and 3.99 respectively. The 'CR' value was found to be 0.03, which is less than the value 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the male and female students of Muslim in scientific temper concerning Value perspective.

**Dimension II - Aversion to Superstitions:**

The table has indicated that the mean and S. D. of male and female students of Muslim were found to be 7.76 and 2.14 and 7.37 and 2.03 respectively. The 'CR' value was found to be 1.86 which is less than the value 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the male students of Muslim in scientific temper concerning aversion to superstitions.

**Dimension III - A Set of Attitudes:**

The table indicated that the mean and S. D. of male and female students of Muslim were found to be 4.91 and 1.43 and 4.98 and 1.35 respectively. The 'CR' value was found to be 0.50 which is less than the value 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the male and female students of Muslim in scientific temper scale on a set of attitudes.

**Dimension IV - A World View Perspective:**

The table indicated that the mean and S. D. of male and female Muslim students were found to be 4.94 and 1.68 and 5.29 and 1.78
respectively. The 'CR' value was found to be 1.94, which is less than the value 1.96, hence significant at .05 level. This has inferred that there is significant difference between the male and female students of Muslim in scientific temper scale on a world view perspective. The Muslim female students have more world view perspective concerning scientific temper scale.

5.20 Responses of Rural Students and Urban Students of Hindu on Scientific Temper Scale

TABLE 5.19

<table>
<thead>
<tr>
<th>Scientific temper Scale</th>
<th>Rural Hindu Students (N=117)</th>
<th>Urban Hindu Students (N=483)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S. D.</td>
<td>Mean S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>33.49 5.47</td>
<td>39.62 4.93</td>
<td>11.14 &lt;.01</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>18.85 3.44</td>
<td>22.21 2.89</td>
<td>9.88 &lt; .01</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>6.89 2.14</td>
<td>7.72 1.71</td>
<td>3.95 &lt; .01</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.23 1.27</td>
<td>4.55 1.24</td>
<td>2.46 &lt; .05</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>4.93 1.62</td>
<td>5.92 1.35</td>
<td>6.19 &lt; .01</td>
</tr>
</tbody>
</table>

Discussion:

The table indicated that the rural students and urban students of Hindu have their mean and S. D. as 33.49 and 5.47 and 39.62 and
4.93 respectively. The 'CR' value was found to be 11.14 which is higher than the value 2.58, hence not significant at .01 level. This significant difference has inferred that the Hindu urban students have higher scientific temper than the Hindu rural students.

**Dimension I- Value Perspective:**

The table indicated that the mean and S. D. of the rural students and urban students of Hindu have found to be 18.85 and 3.44 and 22.21 and 2.89 respectively. The 'CR' value was found to be 9.88 which is less than the value 2.58, significant at .01 level. This significant difference has inferred that the urban students of Hindu have higher scientific temper than the rural students of Hindu on value perspective.

**Dimension II- Aversion to Superstitions:**

The table has indicated that the mean and S. D. of the rural students and urban students of Hindu were found to be 6.89 and 2.14 and 7.72 and 1.71 respectively. The 'CR' value was found to be 3.95 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the urban students of Hindu have higher scientific temper than the rural students of Hindu regarding aversion to superstitions.

**Dimension III- A Set of Attitudes:**

The table indicated that the rural students and urban students of Hindu have their mean and S. D. as 4.23 and 1.27 and 4.55 and 1.24
respectively. The 'CR' value was found to be 2.46 which is higher than the value 1.96, hence significant at .05 level. This significant difference has inferred that the Hindu urban students possess higher scientific temper on a set of attitudes than the Hindu rural students.

**Dimension IV - A World View Perspective:**

The table indicated that the rural students and urban students of Hindu have their mean and S. D. as 4.93 and 1.62 and 5.92 and 1.35 respectively. The 'CR' value was found to be 6.19 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the urban students of Hindu have higher scientific temper than the rural students of Hindu regarding a world view perspective.

Contd...
5.21 Responses of Rural Students and Urban Students of Muslim on Scientific Temper Scale

TABLE 5.20

MEAN, S. D. AND CRITICAL RATIO OF RURAL STUDENTS AND URBAN STUDENTS OF MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Rural Muslim Students (N=837)</th>
<th>Urban Muslim Students (N=317)</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean  S. D.</td>
<td>Mean  S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>35.27  6.87</td>
<td>37.98  6.36</td>
<td>3.26 &lt; .01</td>
</tr>
<tr>
<td>Dimensions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>20.34  3.74</td>
<td>20.46  3.58</td>
<td>0.26 &gt; .05</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>5.18  2.58</td>
<td>7.24  2.17</td>
<td>6.64 &lt; .01</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>4.92  1.47</td>
<td>4.83  1.35</td>
<td>0.50 &gt; .05</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>4.48  1.59</td>
<td>5.13  1.57</td>
<td>3.42 &lt; .01</td>
</tr>
</tbody>
</table>

Discussion:

The above table has indicated that the mean and S. D. of rural students and urban students of Muslim have obtained 35.27 and 6.87 and 37.98 and 6.36 respectively. The 'CR' value was found to be 3.26 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the urban students of Muslim have higher scientific temper than the rural students of Muslim.
Dimension I- Value Perspective:

The table has indicated that the mean and S. D. of Muslim rural students and urban students are 20.34 and 3.74 and 20.46 and 3.58 respectively. The 'CR' value was found to be 0.26 which is less than the value 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the rural students and urban students of Muslim on scientific temper scale concerning value perspective.

Dimension II- Aversion to Superstitions:

The table has indicated that the mean and S. D. of the rural students and urban students of Muslim are 5.18 and 2.58 and 7.24 and 2.17 respectively. The 'CR' value was 6.64, which is higher than the value 2.58, hence significant at .01 level. This difference has inferred that there is higher scientific temper among the students of urban area of Muslim regarding aversion to superstitions.

Dimension III- A Set of Attitudes:

The above table has indicated that the mean and S. D. of rural students and urban students of Muslim are 4.92 and 1.47 and 4.83 and 1.35 respectively. The 'CR' value was found to be 0.50 which is less than the value 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the rural students and urban students of Muslim in scientific temper scale regarding a set of attitudes.
Dimension IV - A World View Perspective:

The above table has indicated that the mean and S. D. of rural students and urban students of Muslim are 4.48 and 1.59 and 5.13 and 1.57 respectively. The 'CR' value was found to be 3.42, which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that there is significant difference between the rural students and urban students of Muslim in scientific temper scale concerning a world view perspective.

5.22 Responses of Government School Students and Private School Students of Hindu on Scientific Temper Scale

TABLE 5.21

MEAN, S. D. AND CRITICAL RATIO OF GOVERNMENT SCHOOL STUDENTS AND PRIVATE SCHOOL STUDENTS OF HINDU ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Government Schools Hindu Students (N=400) Mean</th>
<th>S. D.</th>
<th>Private Schools Hindu Students (N=200) Mean</th>
<th>S. D.</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>38.39 4.94</td>
<td></td>
<td>40.67 4.29</td>
<td></td>
<td>5.85 &lt;.01</td>
</tr>
</tbody>
</table>

Dimensions:

I- Value Perspective 20.71 2.78 22.57 2.28 8.86 < .01

II-Aversion to Superstitions 7.79 1.98 8.18 1.47 2.79 < .01

III- A Set of Attitudes 4.15 1.41 4.13 1.43 0.17 > .05

IV- A World View Perspective 4.95 1.49 5.71 1.27 6.33 < .01
Discussion:

The table has indicated that the Government school students and Private school students of Hindu have their mean and S. D. as 38.39 and 4.94 and 40.67 and 4.29 respectively. The 'CR' value was found to be 5.85 which is higher than the value 2.58, hence significant at .01 level. This has indicated that the Private school Hindu students have higher scientific temper than the Government school Hindu students.

Dimension I- Value Perspective:

The table indicated that the Government school students and Private school students of Hindu have their mean and S. D. as 20.71 and 2.78 and 22.57 and 2.28 respectively. The 'CR' value was found to be 8.86 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the private school students of Hindu have higher scientific temper on value perspective than the Government school students.

Dimension II- Aversion to Superstitions:

The table indicated that the students of Government school and private school students of Hindu have their mean and S. D. as 7.79 and 1.98 and 8.18 and 1.47 respectively. The 'CR' value was 2.79 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the private school students of Hindu have higher scientific temper than the Government school concerning aversion to superstitions.
Dimension III - A Set of Attitudes:

The table shows that the mean and S. D. of Government school students and private school students of Hindu were found to be 4.15 and 1.41 and 4.13 and 1.43 respectively. The 'CR' value was found to be 0.17 which is less than the value 1.96, hence not significant at .05 level. This has inferred that there is no significant difference between the Government school students and private school students of Hindu in scientific temper scale on a set of attitudes.

Dimension IV - A World View Perspective:

The table shows that the mean and S. D. of Government school students and private school students of Hindu were found to be 4.95 and 1.49 and 5.71 and 1.27 respectively. The 'CR' value was found to be 6.33 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the private school students of Hindu have higher scientific temper than the Government school students of Hindu concerning a world view perspective.

Contd....
5.23 Responses of Government School Students and Private School Students of Muslim on Scientific Temper Scale

**TABLE 5.22**

MEAN, S. D. AND CRITICAL RATIO OF GOVERNMENT SCHOOL STUDENTS AND PRIVATE SCHOOL STUDENTS OF MUSLIM ON SCIENTIFIC TEMPER SCALE AND ITS DIMENSIONS

<table>
<thead>
<tr>
<th>Scientific Temper Scale</th>
<th>Government Schools</th>
<th>Private Schools</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (N=350)</td>
<td>Mean (N=50)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S. D.</td>
<td>S. D.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>38.47 5.96</td>
<td>40.42 4.73</td>
<td>2.64 &lt;.01</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I- Value Perspective</td>
<td>20.92 3.73</td>
<td>22.08 2.74</td>
<td>2.64 &lt; .01</td>
</tr>
<tr>
<td>II- Aversion to Superstitions</td>
<td>6.98   2.36</td>
<td>8.81 2.13</td>
<td>5.55 &lt; .01</td>
</tr>
<tr>
<td>III- A Set of Attitudes</td>
<td>5.12   1.53</td>
<td>5.26 1.41</td>
<td>0.64 &gt; .05</td>
</tr>
<tr>
<td>IV- A World View Perspective</td>
<td>4.88   1.72</td>
<td>4.99 1.86</td>
<td>0.39 &gt; .05</td>
</tr>
</tbody>
</table>

**Discussion:**

The table has indicated that the Government school students and private school students of Muslim have obtained their mean and S. D. as 38.47 and 5.96 and 40.42 and 4.73 respectively on scientific temper scale. The 'CR' value was found to be 2.64 which is higher than the value 2.58, hence significant at .01 level. This significant difference has inferred that the private school students of Muslim have higher scientific temper than the Government school students.
**Dimension I- Value Perspective**:

The table indicated that the Government school students of Muslim have obtained their mean and S. D. as 20.92 and 3.73 and 22.08 and 2.74 respectively. The 'CR' value was found to be 2.64, which is higher than the value 2.58, hence significant at .01 level. This has inferred that the private school students of Muslim have higher scientific temper than the Government school students regarding Value Perspective.

**Dimension II- Aversion to Superstitions**:

The table indicated that the Government school students and private school students of Muslim have obtained their mean and S. D. as 6.98 and 2.36 and 8.81 and 2.13 respectively. The 'CR' value was found to be 5.55 which is higher than the value 2.58, hence significant at .01 level. This has inferred that the private school students of Muslim have higher scientific temper than the Government school students in aversion to superstitions.

**Dimension III- A Set of Attitudes**:

The table has indicated that the mean and S. D. of Government school Muslim students and Private school Muslim students were found to be 5.12 and 1.53 and 5.26 and 1.41 respectively. The 'CR' value has found to be 0.64 which is less than the value 1.96, hence not significant at .05 level. This significant difference has inferred that there is no
significant difference between the Government school Muslim students and private school Muslim students in scientific temper scale on a set of attitudes.

**Dimension IV - A World View Perspective:**

The table has indicated that the mean and S. D. of Government school Muslim students and private school Muslim students were found to be 4.88 and 1.72 and 4.99 and 1.86 respectively in scientific temper scale. The 'CR' value was found to be 0.39 which is less than the value 1.96, hence not significant at .05 level. This difference has inferred that there is no significant difference between the Muslim students of Government school and private school in the scientific temper scale concerning a world view perspective.

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