CHAPTER-IV
ANALYSIS INTERPRETATION AND DISCUSSION

Researcher has tried out to find the result with the help of collected data and their proper statistics in this chapter. After it, tables are formed based on objectives of the study and the hypothesis were tested with theoretical discussion.

Determined objectives are explained as follows-

1. to study the social freedom of female teachers.
2. to study the risk taking behaviour of female teachers.
3. to study the classroom teaching behaviour of female teachers.
4. to study comparatively the classroom teaching behaviour of female teachers with high and low social freedom.
5. to study comparatively the classroom teaching behaviour of female teachers with high and low risk taking behaviour.

4.1 Objective-1: In this study, 1st objective was determined "to study the social freedom of female teachers". For achieving the
objective, null hypothesis was framed "There is no significant difference between the social freedom of female teachers on the basis of subject and locality".

Following analytical table 4.1 is prepared and tested for above hypothesis.

In order to analyse social freedom factor, table no. 4.1 is subdivided into two-4.1.1 Locality based women social freedom analysis table and 4.1.2 subject based women social freedom analysis table.

4.1 **Women Social Freedom**

**TABLE NO.-4.1.1**

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>200</td>
<td>12.25</td>
<td>3.389</td>
<td>1.045</td>
<td>0.622</td>
</tr>
<tr>
<td>Urban</td>
<td>200</td>
<td>12.9</td>
<td>3.226</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=**1.96**

From the above table it is clear that the social freedom of 400 female teachers on the basis of different locality (200 urban and 200
Rural), the value for Mean for rural area is obtained as 12.25 and for urban area it is 12.9 and therefore the value obtained for Standard Deviation are 3.389 and 3.226 respectively. From the values of Standard Deviation, the value of Standard Error of Deviation is calculated as 1.045 and thus the value of C.R. Value is computed as 0.622, which is ultimately less than df (398) at .05 level of significance and thus the null hypothesis is accepted which finally supports that there is no significant difference between the social freedom of female teachers with different locality.

The diagrammatical representation shows that there exist no difference between the social freedom of female teachers with different locality.
**TABLE NO.--4.1.2**

Subject based Women Social Freedom (WSF) analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>200</td>
<td>12.366</td>
<td>3.611</td>
<td>1.053</td>
<td>0.792</td>
</tr>
<tr>
<td>Science</td>
<td>200</td>
<td>13.2</td>
<td>2.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

From the above table it is clear that the social freedom of 400 female teachers on the basis of different subject (200 Art and 200 Science), the value for Mean for Art subject is obtained as 12.366 and for science subject it is 13.2 and therefore the value for Standard Deviation obtained are 3.611 and 2.6 respectively. From the values of Standard Deviation, the value of Standard Error of Deviation is calculated as 1.053 and thus the value of C.R. Value is computed as 0.792, which is comparatively less than df (398) at .05 level of significance i.e., 1.96 and thus the null hypothesis is accepted which finally supports that there is no significant difference between the social freedom of female teachers with different subjects.
The diagrammatical representation shows that there exist no difference between the social freedom of female teachers with different subject.

4.2. Objective-2: In this study, 2\textsuperscript{nd} objective was determined "to study the risk taking behaviour of female teachers". For achieving the objective, null hypothesis was framed "There is no significant difference between the risk taking behaviour of female teachers on the basis of subject and locality".

Following analytical table no. 4.2 is prepared and tested for above hypothesis.

In order to analyze risk taking behaviour factor, table no. 4.2 is sub-divided into two-4.2.1 Locality based risk taking behaviour
analysis table and 4.2.2 subject based risk taking behaviour analysis table.

4.2. Risk Taking Behaviour

**TABLE NO.- 4.2.1**

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S. Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>200</td>
<td>136.7</td>
<td>26.109</td>
<td>8.095</td>
<td>.605</td>
</tr>
<tr>
<td>Urban</td>
<td>200</td>
<td>131.8</td>
<td>25.079</td>
<td>.</td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

From the above table, it is clear that the Risk Taking Behaviour of 400 female teachers on the basis of different locality (200 Urban and 200 Rural), the value for Mean for rural area is obtained as 136.7 and for urban area it is 131.8 and therefore the value obtained for Standard Deviation are 26.109 and 25.079 respectively. From the values of Standard Deviation, the value of Standard Error of Deviation is calculated as 8.095 and thus the value of C.R. Value is computed as 0.605, which is ultimately less than df (398) at .05 level of significance and thus the null hypothesis is accepted which finally supports that
there is no significant difference between the Risk Taking Behaviour of female teachers with different locality.

The diagrammatical representation shows that there exist no difference between the Risk Taking Behaviour of female teachers with different locality.

**TABLE NO. 4.2.2**

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>200</td>
<td>132.533</td>
<td>28.649</td>
<td>32.446</td>
<td>0.211</td>
</tr>
<tr>
<td>Science</td>
<td>200</td>
<td>139.4</td>
<td>19.617</td>
<td>31.452</td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

From the above table it is clear that the Risk Taking Behaviour of 400 female teachers on the basis of different subjects (200 Art and
200 Science), the value for Mean for Art subject teachers is obtained as 132.533 and Mean for science subject teachers is 139.4 where as Standard Deviation for the same obtained as 28.649 and 19.617 respectively. Thus when Standard Error of Deviation is calculated using the formula $\sqrt{\frac{\delta_1^2}{N_1} + \frac{\delta_2^2}{N_2}}$, it is 32.446, and thus the C.R. Value is computed as 0.211 by using the formula $\frac{M_1 - M_2}{S. Ed.}$, which is again less than df (398) at .05 level of significance and thus the null hypothesis is accepted which again supports that there is no significant difference between the Risk Taking Behaviour of female teachers with different subjects.
The diagrammatical representation shows that there exist no difference between the Risk Taking Behaviour of female teachers with different subjects.

4.3. **Objective-3:** In this study 3rd objective was determined "to study the classroom teaching behaviour of female teachers". For achieving the objective, null hypothesis was framed "There is no significant difference between the classroom teaching behaviour of female teachers on the basis of subject and locality".

Following analytical table 4.3 is prepared, and tested for above hypothesis.

**4.3 Class Room Teaching Behaviour**

In order to analyse classroom teaching behaviour, table no. 4.3 is sub-divided into five-

4.3.1 Direct Teacher Talk (DTT)

4.3.2 Indirect Teacher Talk (ITT)

4.3.3 Indirect to Direct Teacher Talk ratio (I/D)

4.3.4 Teacher Question Ratio (TQR)
4.3.5. Student Initiation Ratio (SIR)

4.3.1 Direct Teacher Talk (DTT)

In order to analyse Direct Teacher Talk aspect of classroom teaching behaviour, table no. 4.3.1 is again sub-divided, into two-

4.3.1.1 Locality based Direct Teacher Talk analysis table, and

4.3.1.2 Subject based Direct Teacher Talk analysis table.

**TABLE NO.-4.3.1.1**

Locality based Direct Teacher Talk (DTT) analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>200</td>
<td>48.03</td>
<td>21.32</td>
<td>7.072</td>
<td>0.657</td>
</tr>
<tr>
<td>Urban</td>
<td>200</td>
<td>43.38</td>
<td>23.37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

According to the third hypothesis, the term 'Classroom Teaching Behaviour, is sub-divided into five by the researcher for her convenience (i.e. Direct Teacher Talk, Indirect Teacher Talk, The ratio between Indirect to Direct Teacher Talk, Teacher Question Ratio and Students Initiation Ratio).
Thus the table no. 4.3.1.1 shows the locality based Direct Teacher Talk analysis.

In this table, 400 female teachers were divided into two groups with 200 female teachers from rural and 200 female teachers from urban area; the Mean calculated for the female teachers from rural area is 48.03 and for female teachers from urban area is 43.38 whereas Standard Deviation calculated for teachers from rural and urban areas are 21.32 and 23.37 respectively. The value calculated for Standard Error of Deviation is 7.072 and the value for C.R. value is 0.657, which is less than df (398) at .05 level of significance i.e., 1.96. Thus the null hypothesis is accepted that means there is no significant difference between the Classroom Teaching Behaviour (Direct Teacher Talk) of female teachers with different locality.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (DTT) with different locality.

**TABLE NO.-4.3.1.2**

Subject based Direct Teacher Talk (DTT) analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>200</td>
<td>45.75</td>
<td>23.74</td>
<td>8.13</td>
<td>0.51</td>
</tr>
<tr>
<td>Science</td>
<td>200</td>
<td>41.55</td>
<td>21.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

Table no. 4.3.1.2 shows the subject wise Direct Teacher Talk analysis of 400 female teachers.

For the analysis, 400 female teachers were divided into two (i) 200 female teachers of Art subject and (ii) 200 female teachers of science subject.

The value for Mean i.e. \( \frac{\sum X}{N} \) calculated for Art female teachers is 45.75 and for science female teachers is 41.55 where as the Standard Deviation for Art female teachers is 23.74 and for science female
teachers is 21.78. Thus the value for Standard Error of Deviation calculated is as 8.13 and the value for C.R. value is 0.51, which again less than df (398) at .05 level of significance i.e., 1.96, so the null hypothesis is accepted i.e. there is no significant difference between the Classroom Teaching Behaviour (Direct Teacher Talk) of female teachers with different subjects.

![Bar chart showing Direct Teacher Talk (DTT) for Art Subject and Science Subject]

The diagrammatical representation shows that there exist no difference between the Classroom Teaching Behaviour (DTT) of female teachers with different subjects.

**4.3.2 Indirect Teacher Talk (ITT)**

In order to analyse Indirect Teacher Talk aspect of classroom teaching behaviour, table no. 4.3.2. is again sub-divided into two-
4.3.2.1 Locality based Indirect Teacher Talk analysis table and

4.3.2.2 Subject based Indirect Teacher Talk analysis table.

**TABLE NO.-4.3.2.1**

Locality based Indirect Teacher Talk analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>200</td>
<td>15.43</td>
<td>11.47</td>
<td></td>
<td>0.92</td>
</tr>
<tr>
<td>Urban</td>
<td>200</td>
<td>12.73</td>
<td>6.17</td>
<td>2.91</td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

Table no. 4.3.2.1 shows the locality based Indirect Teacher Talk analysis of 400 female teachers at secondary level classes.

200 female teachers were from Rural area and 200 female teachers from Urban area.

The Mean value for Indirect Teacher Talk of Rural locality is 15.43 and the Mean value for Indirect Teacher Talk of Urban locality is 12.73 from which the value for Standard Deviation is obtained as 11.47 (for Rural area) and 6.17 (for Urban area). Thus, the value for Standard Error of Deviation obtained as 2.91 from the above values. Hence, C.R. Value
calculated as 0.92 which is less than df (398) at .05 level of significance i.e., 1.96, so the null hypothesis is accepted, i.e. there is no significant difference between the Classroom Teaching Behaviour (Indirect Teacher Talk) of female teachers with different locality.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (ITT) of female teachers with different locality.

**TABLE NO.-4.3.2.2**

Subject based Indirect Teacher Talk analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>200</td>
<td>12.6</td>
<td>7.63</td>
<td>3.76</td>
<td>1.57</td>
</tr>
<tr>
<td>Science</td>
<td>200</td>
<td>18.52</td>
<td>11.06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=**1.96**
Table no. 4.3.2.2 shows the subject based Indirect Teacher Talk analysis of 400 female teachers at secondary level classes.

200 female teachers were selected from Art subject and 200 female teachers were selected from science subject.

The value for Mean obtained for female teachers of Art subject is 12.6 and the same is for female teachers of science subject is 18.52.

The value for Standard Deviation of female teachers of Art subject is 7.63 and female teachers of science subject is 11.06, thus the value calculated for Standard Error of Deviation is 3.76 and the value obtained for C.R. value is 1.57, which is less than df (398) at .05 level of significance i.e., 1.96, so the null hypothesis is accepted, i.e., there is no significant difference between the classroom teaching behaviour (Indirect Teacher Talk) of female teachers with different subjects.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (ITT) of female teachers with different subjects.

4.3.3 **Indirect Teacher Talk to Direct Teacher Talk ratio (I/D)**

In order to analyse I/D aspect of classroom teaching behaviour, table no.4.3.3. is again classified into two-

4.3.3.1 **Locality based I/D analysis table and**

4.3.3.2 **Subject based I/D analysis table.**

**TABLE NO.-4.3.3.1**

**Locality based I/D analysis table**

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>200</td>
<td>0.484</td>
<td>0.389</td>
<td></td>
<td>0.127</td>
</tr>
<tr>
<td>Urban</td>
<td>200</td>
<td>0.357</td>
<td>0.337</td>
<td>0.109</td>
<td></td>
</tr>
</tbody>
</table>

\(df (398)\) at .05 level of significance=1.96

Table no. 4.3.3.1 shows the locality based Indirect Teacher Talk/Direct Teacher Talk (i.e. I/D) analysis of 400 female teachers at secondary level classes.
Out of 400 female teachers, 200 female teachers were selected from Rural area and 200 female teachers were selected from schools located in Urban area.

The Mean value for I/D, of those teachers who were from Rural area is 0.484 and the same is for those teachers who were from Urban area is 0.357, thus, the value for Standard Deviation are 0.389 and 0.337 respectively.

Hence, the value for Standard Error of Deviation is calculated as 0.109 and in continuation the value for C.R. value is determined as 0.127, which is less than df (398) at .05 level of significance i.e., 1.96, so the null hypothesis is accepted, that means there is no significant difference between the classroom teaching behaviour (I/D) of female teachers with respect to their different locality.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (I/D) of female teachers with reference to their different locality.

**TABLE NO.-4.3.3.2**

Subject based I/D analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>200</td>
<td>0.366</td>
<td>0.342</td>
<td>0.137</td>
<td>1.395</td>
</tr>
<tr>
<td>Science</td>
<td>200</td>
<td>0.557</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

Table no. 4.3.3.2 shows the subject based I/D analysis.

The Mean value for 200 female teachers, teaching Art subjects is 0.366 and the Mean value for 200 female teachers teaching science subject is 0.557.

The value for Standard Deviation for Art female teachers is 0.342 and the same for science female teachers is 0.4, from these two values of Standard Deviation, the value for Standard Error of Deviation is calculated as 0.137 and thus the C.R. Value obtained as
1.395 which is again less than df (398) at .05 level of significance i.e.,
1.96, so the null hypothesis is accepted, and hence it is clear that
there is no significant difference between the classroom teaching
behaviour (I/D) of female teachers of secondary classes with respect
to their different subjects.

The diagrammatical representation shows that there exist no
difference between the classroom teaching behaviour (I/D) of female
teachers with reference to their different subjects.

4.3.4 Teacher Question Ratio (TQR)

In order to analyse Teacher Question Ratio aspect of classroom
teaching behaviour, table no. 4.3.4 is also sub-divided into two-
4.3.4.1  Locality based Teacher Question Ratio analysis table.

4.3.4.2  Subject based Teacher Question Ratio analysis table.

**TABLE NO.-4.3.4.1**

Locality based Teacher Question Ratio analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>200</td>
<td>26.694</td>
<td>22.381</td>
<td>8.961</td>
<td>0.895</td>
</tr>
<tr>
<td>Urban</td>
<td>200</td>
<td>34.716</td>
<td>33.246</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

Table no. 4.3.4.1 shows the locality based Teacher Question Ratio analysis.

Out of 400 female teachers, 200 female teachers were selected from Rural area and 200 female teachers were selected from Urban area.

The Mean value for TQR of female teachers who were selected from Rural area, with N=200, is 26.694 and the Mean value for female teachers from Urban area is 34.716.
The value for Standard Deviation for Rural teachers is obtained as 22.381 and the value for the same for Urban teachers is obtained as 33.246.

Thus, the value for Standard Error of Deviation calculated from the value of Standard Deviation of both the teachers i.e., Rural and Urban is calculated as 8.961 and thus the value for C.R. Value is 0.895, which is less than df (398) at .05 level of significance i.e., 1.96, so the null hypothesis is accepted, thus, there is no significant difference between the Classroom Teaching Behaviour (TQR) of female teachers of secondary classes with respect to their different locality.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (TQR) of female teachers with different locality.

**TABLE NO.-4.3.4.2**

Subject based Teacher Question Ratio analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>200</td>
<td>132.533</td>
<td>28.649</td>
<td>32.446</td>
<td>0.211</td>
</tr>
<tr>
<td>Science</td>
<td>200</td>
<td>139.4</td>
<td>19.617</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

Table no. 4.3.4.2 shows the subject based Teacher Question Ratio analysis.

The Mean value for 200 female teachers, teaching Art subjects is 132.533 and the Mean value for 200 female teachers teaching science subject is 139.4.

The value for Standard Deviation for Art female teachers is 28.649 and the same for science female teachers is 19.617, from these two values of Standard Deviation, the value for Standard Error
of Deviation is calculated as 32.446 and thus the value for C.R. value obtained as 0.211, which is again less than df (398) at .05 level of significance i.e., 1.96, so the null hypothesis is accepted, and hence it is clear that there is no significant difference between the classroom teaching behaviour (TQR) of female teachers of secondary classes with respect to their different subjects.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (TQR) of female teachers with respect to their different subjects.

4.3.5 Student Initiation Ratio (SIR)

Inorder to analyse Student Initiation Ratio aspect of classroom teaching behaviour, table no. 4.3.5 is also sub-divided into two-
4.3.5.1 Locality based Student Initiation Ratio analysis table and

4.3.5.2 Subject based Student Initiation Ratio analysis table.

**TABLE NO.-4.3.5.1**

Locality based Student Initiation Ratio analysis table

<table>
<thead>
<tr>
<th>Group</th>
<th>Number (N)</th>
<th>Mean (M)</th>
<th>Standard Deviation (S.D.)</th>
<th>Standard Error of Deviation (S.Ed.)</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>200</td>
<td>49.63</td>
<td>32.21</td>
<td></td>
<td>9.0</td>
</tr>
<tr>
<td>Urban</td>
<td>200</td>
<td>34.37</td>
<td>24.20</td>
<td></td>
<td>1.69</td>
</tr>
</tbody>
</table>

df (398) at .05 level of significance=1.96

Table no. 4.3.5.1 shows the locality based Student Initiation Ratio analysis.

Out of 400 female teachers 200 female teachers were selected from Rural area and 200 female teachers were selected from Urban area.

The Mean value for SIR of female teachers who were selected from Rural area, with N=200, is 49.63 and the Mean value for female teachers from Urban area is 34.37.
The value for Standard Deviation for Rural teachers is obtained as 32.21 and the value for the same for Urban teachers is obtained as 24.20.

Thus, the value for Standard Error of Deviation calculated from the value of Standard Deviation of both the teacher i.e. Rural and Urban is calculated as 9.0 and thus the value of C.R. Value is obtained as 1.69, which is less than df (398) at .05 level of significance i.e., 1.96, so the null hypothesis is accepted, thus there is no significant difference between the classroom teaching behaviour (SIR) of female teachers of secondary classes with respect to their different locality.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (SIR) of female teachers with different locality.
Table no. 4.3.5.2 shows the subject based Student Initiation Ratio analysis.

The Mean value for 200 female teachers, teaching Art subjects is 42.69 and the Mean value for 200 female teachers teaching science subject is 39.92.

The value for Standard Deviation for Art female teachers is 29.9 and the same for science female teachers is 26.99, from these two values of Standard Deviation, the value for Standard Error of Deviation is calculated as 10.13 and thus the value for C.R. value obtained as 0.002; which is again less than df (398) at .05 level of significance i.e., 1.96, so the null hypothesis is accepted, and hence it
is clear that there is no significant difference between the classroom teaching behaviour (SIR) of female teachers of secondary classes with respect to their different subjects.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (SIR) of female teachers with respect to their different subjects.

4.4 **Objective 4:** In this study 4\textsuperscript{th} objective was determined "to study comparatively the classroom teaching behaviour of female teachers with high and low social freedom".

For achieving the objective, null hypothesis was framed "There is no significant difference between the classroom teaching behaviour of female teachers with high and low social freedom".
Following analytical table 4.4 is prepared and tested for above hypothesis.

For the objective, the researcher formulated the locality and subject based four criteria of classroom teaching behaviour with high and low social freedom for-

4.4.1 Science female teachers.
4.4.2 Art female teachers.
4.4.3 Female teachers teaching in urban locality.
4.4.4 Female teachers teaching in rural locality.

4.4.1 **Classroom Teaching Behaviour with high and low social freedom for science female teachers.**

Classroom teaching behaviour with reference to science subject is classified based on five sub-criteria-

(i) DTT, (ii) ITT, (iii) I/D, (iv) TQR and (v) SIR; based on social freedom.

Analysis were done separately as follows-
TABLE NO.-4.4.1.1

DTT based analysis table for Science female teacher

<table>
<thead>
<tr>
<th>Group</th>
<th>Direct Teacher Talk</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social Freedom</td>
<td>N</td>
<td>M</td>
<td>S.D.</td>
<td>S.Ed.</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>20</td>
<td>26.875</td>
<td>0.122</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>20</td>
<td>35.5</td>
<td>28.749</td>
<td></td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance=2.02

From the above table, the classroom teaching behaviour (Direct Teacher Talk) with reference to social freedom of female teachers of secondary level were tabulated.

20 Science female teachers were found to be high scorer for DTT and 20 science female teachers were of low scorer.

The Mean (M) value for DTT with reference to high social freedom is 16.875 and the Mean value for DTT with reference to low social freedom is 35.5.

Similarly, the value of Standard Deviation (S.D.) for DTT with reference to high social freedom is 0.122 and the S.D. value for DTT with reference to low social freedom is 28.749.
The value for Standard Error of Deviation (S.Ed.) thus found to be 20.328 and the C.R. value calculated as 0.424 which is ultimately less than df (38) at .05 level of significance i.e., 2.02. Thus the null hypothesis that there is no significant difference between the DTT aspect of classroom teaching behaviour for science female teachers with high and low social freedom is accepted.

Thus, it is concluded that there exist no difference between DTT aspect of classroom teaching behaviour of science female teachers with high and low social freedom.

The diagrammatical representation shows that for DTT value there is no significant difference between the values of M and S.D. of high social freedom and low social freedom respectively.
TABLE NO.-4.4.1.2

ITT based analysis table for Science Female Teacher

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect Teacher Talk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Freedom</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>20</td>
</tr>
<tr>
<td>Low</td>
<td>20</td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance = 2.02

From the above table, the classroom teaching behaviour (Indirect Teacher Talk) with reference to social freedom of female teachers of secondary level were tabulated.

20 Science female teachers were found to be high scorer for ITT and 20 science female teachers were of low scorers.

The Mean value for ITT with reference to high social freedom is 34.75 and the Mean value for ITT with reference to low social freedom is 14.0.

Similarly, the value of Standard Deviation (S.D.) for ITT with reference to high social freedom is 2.249 and the value for Standard Deviation for ITT with reference to low social freedom is 10.249.
The value for Standard Error of Deviation (S.Ed.) thus found to be 10.371 and the C.R. value calculated as 2.00 which is ultimately less than df (38) at .05 level of significance i.e. 2.02. Thus the null hypothesis that there is no significant difference between the ITT aspect of classroom teaching behaviour of science female teachers with high and low social freedom is accepted.

Thus, it is concluded that there exist no difference between ITT aspect of classroom teaching behaviour of female teachers with high and low social freedom.

The diagrammatical representation shows that for ITT value there is no significant difference between the values of Mean and Standard Deviation of high social freedom and low social freedom respectively.
From the above table, the classroom teaching behaviour (I/D) with reference to social freedom of female teachers of secondary level were tabulated.

20 Science female teachers were found to be high scorer for I/D and 20 science female teachers were of low scorer.

The Mean (M) value for I/D with reference to high social freedom is 1.293 and the Mean (M) value for I/D with reference to low social freedom is 0.466.

Similarly, the value of Standard Deviation (S.D.) for I/D with reference to high social freedom is 0.089 and the value for Standard Deviation for I/D with reference to low social freedom is 0.083.
The value for Standard Error of Deviation (S.Ed.) thus found to be 0.077 and the C.R. value calculated as 10.740, which is ultimately more than df (38) at .05 level of significance i.e., 2.02.

Thus, the null hypothesis that there is no significant difference between the I/D aspect of classroom teaching behaviour of science female teachers with high and low social freedom is rejected.

Thus, there is difference between I/D aspect of classroom teaching behaviour of female teachers with high and low social freedom.

The diagrammatical representation shows that for I/D value there exist a remarkable difference between the values of Mean and Standard Deviation of high social freedom and low social freedom.
Table No.-4.4.1.4

TQR based analysis table for Science Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Teacher Question Ratio</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Freedom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td>20</td>
<td>51.670</td>
<td>2.820</td>
<td>11.039</td>
<td>0.951</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>20</td>
<td>41.163</td>
<td>15.356</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance=2.02

In the above table the classroom teaching behaviour (TQR) with reference to social freedom of female teachers at secondary level were tabulated.

20 Science female teachers were found to be high scorer for TQR and 20 science female teachers were of low scorers.

The Mean (M) value for TQR with reference to high social freedom is 51.670 and the Mean (M) value for TQR with reference to low social freedom is 41.163.

Similarly, the value of Standard Deviation (S.D.) for TQR with reference to high social freedom is 2.820 and the value for Standard Deviation (S.D.) for TQR with reference to low social freedom is 15.356.
The value for Standard Error of Deviation (S.Ed.) thus found to be 11.039 and the C.R. value calculated as 0.951 which is ultimately less than df (38) at .05 level of significance i.e., 2.02.

Thus, the null hypothesis that there is no significant difference between the TQR aspect of classroom teaching behaviour of science female teachers with high and low social freedom is accepted; which explains that there exist no difference between TQR aspect of classroom teaching behaviour with high and low social freedom.

The diagrammatical representation shows that for TQR value there exist no difference between the values of Mean and Standard Deviation of high social freedom and low social freedom.
In the above table the classroom teaching behaviour (SIR) with reference to social freedom of science female teachers at secondary level were tabulated.

20 Science female teachers were found to be high scorer for SIR and 20 science female teachers were of low scorer.

The Mean (M) value for SIR with reference to high social freedom is 32.328 and the Mean value for SIR with reference to low social freedom is 79.655.

Similarly, the value of Standard Deviation (S.D.) for SIR with reference to high social freedom is 7.671 whereas the value for S.D. for SIR with reference to low social freedom is 0.344.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>20</td>
<td>32.328</td>
<td>7.671</td>
<td></td>
<td>5.429</td>
</tr>
<tr>
<td>Low</td>
<td>20</td>
<td>79.655</td>
<td>0.344</td>
<td></td>
<td>8.717</td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance=2.02
Thus Standard Error of Deviation found to be 5.429 and the value for C.R. value is calculated as 8.717 which is comparatively more than df (38) at .05 level of significance and thus, null hypothesis is rejected, i.e., there is a significant difference between the SIR aspect of classroom teaching behaviour with reference to high and low social freedom.

The diagrammatical representation shows that for SIR value there exist a remarkable difference between values of Mean and Standard Deviation with reference to high and low social freedom.
4.4.2 Classroom Teaching Behaviour with High and Low Social freedom for Art female teachers.

Classroom teaching behaviour of female teachers with reference to Art subject is classified based on five sub-criteria -

(i) DTT  (ii) ITT  (iii) I/D
(iv) TQR  (v) SIR; based on social freedom.

Analysis were done separately as follows-

**TABLE NO.-4.4.2.1**

DTT based analysis table for Art Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Direct Teacher Talk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Social Freedom</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
</tr>
</tbody>
</table>

df (41) at .05 level of significance = **2.02**

In the above table, the classroom teaching behaviour (DTT) with reference to social freedom of art female teachers of secondary level were tabulated.

30 Art female teachers were found to be high scorer for DTT with reference to high social freedom and 13 Art female teacher were found to be low scorer.
The Mean (M) value for DTT with reference to high social freedom is 43.916 and the Mean value for DTT with reference to low social freedom is 39.125.

Similarly, the value of Standard Deviation (S.D.) for DTT with reference to high social freedom is 28.597 and the value for Standard Deviation (S.D.) for DTT with reference to low social freedom is 15.867.

Thus, the value for Standard Error of Deviation (S.Ed.) is found as 12.401 and the C.R. value is calculated as 0.386, which is ultimately less than df (41) at .05 level of significance i.e., 2.02. Hence the null hypothesis is accepted and is concluded that there exist no difference between the DTT aspect of classroom teaching behaviour of Art female teachers with high and low social freedom.
The diagrammatical representation shows that for DTT value there is no difference between the values of Mean and Standard Deviation with reference to high and low social freedom.

**TABLE NO.-4.4.2.2**

**ITT based analysis table for Art Female Teachers**

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect Teacher Talk</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Freedom</td>
<td>N</td>
<td>M</td>
<td>S.D.</td>
<td>S.Ed.</td>
<td>C.R. Value</td>
</tr>
<tr>
<td>High</td>
<td>30</td>
<td>14.347</td>
<td>10.583</td>
<td>5.398</td>
<td>0.133</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>13.625</td>
<td>8.172</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (41) at .05 level of significance=2.02

In the above table, the classroom teaching behaviour (ITT) with reference to high & low social freedom of art female teachers of secondary level were tabulated.

30 Art female teachers were found to be high scorer for ITT with reference to high social freedom and 13 Art female teachers were found to be low scorer.

The Mean (M) value for ITT with reference to high social freedom is 14.347 and the Mean (M) value for ITT with reference to low social freedom is 13.625.
Similarly, the value for Standard Deviation (S.D.) for ITT with reference to high social freedom is 10.583 and the value for Standard Deviation (S.D.) for ITT with reference to low social freedom is 8.172.

The value for Standard Error of Deviation (S.Ed.) is found to be 5.398 whereas the value for C.R. value is calculated as 0.133, which is ultimately less than df (41) at .05 level of significance i.e. 2.02, which shows that the null hypothesis that there is no significant difference between classroom teaching behaviour (ITT) of Art female teachers with high and low social freedom is accepted.

Which indicates that though female teachers teaching Art subject possessing high and low social freedom, doesn’t have any impact on their (ITT) class room teaching behaviour.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (ITT) with reference to high and low social freedom.

**TABLE NO.-4.4.2.3**

*I/D based analysis table for Art Female Teachers*

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect to Direct Teacher Talk ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Freedom</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
</tr>
</tbody>
</table>

df (41) at .05 level of significance=**2.02**

In the above table the classroom teaching behaviour (I/D) of art female teachers with reference to high and low social freedom is tabulated.

30 Art female teachers were found to be high scorer for I/D with reference to high social freedom and 13 Art female teachers were found to be low scorer for ITT with reference to low social freedom.

The Mean value for I/D with reference to high social freedom is 0.356 and the Mean value for I/D with reference to low social freedom is 0.387.
Similarly, the value for Standard Deviation of I/D with reference to high social freedom is 0.094 and the value for Standard Deviation for I/D with reference to low social freedom is 0.031.

The value obtained for Standard Error of Deviation is 0.033 and the C.R. value obtained is 0.939; which is rather less than df (41) at .05 level of significance i.e. 2.02, thus, the respective null hypothesis is accepted, which indicates that there is no difference between classroom teaching behaviour (I/D) of female teachers teaching art subject with high and low social freedom.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (I/D) with reference to high and low social freedom.
TABLE NO.-4.4.2.4

TQR based analysis table for Art Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Teacher Question Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Social Freedom</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
</tr>
</tbody>
</table>

df (41) at .05 level of significance=2.02

In the above table the classroom teaching behaviour (TQR) of art female teachers with reference to high and low social freedom is tabulated.

30 Art female teachers were found to be high scorer for TQR with reference to high social freedom and 13 Art female teachers were found to be low scorer with reference to low social freedom.

The Mean value for TQR with reference to high social freedom is 32.016 and the Mean value for TQR with reference to low social freedom is 40.971.

Similarly, the value for Standard Deviation for TQR with reference to high social freedom is 27.798 and the value for Standard Deviation for TQR with reference to low social freedom is 34.989.
The value for Standard Error of Deviation is obtained as 19.796 and the value for C.R. value is calculated as 0.452, which is comparatively less than df (41) at .05 level of significance i.e., 2.02, hence the null hypothesis is accepted, which indicates that there is no difference between the classroom teaching behaviour (TQR) of art female teachers with reference to high and low social freedom.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (TQR) with reference to high and low social freedom.
TABLE NO.-4.4.2.5
SIR based analysis table for Art Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>30</td>
<td>36.823</td>
<td>27.625</td>
<td>15.742</td>
<td>0.42</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>43.45</td>
<td>25.537</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (41) at .05 level of significance=2.02

In the above table, the classroom teaching behaviour (SIR) of art female teachers with reference to high and low social freedom is tabulated.

30 Art female teachers were found to be high scorer for SIR with reference to high social freedom and 13 Art female teachers were found to be low scorer for SIR with reference to low social freedom.

The Mean value for SIR with reference to high social freedom is 36.823 and the Mean value for SIR with reference to low social freedom is 43.45.
Similarly, the value for Standard Deviation for high social freedom is 27.625 and the value for Standard Deviation for low social freedom is 25.537.

The value for Standard Error of Deviation is found to be 15.742 and the C.R. value is calculated as 0.42, which is comparatively less than df (41) at .05 level of significance i.e., 2.02, hence the null hypothesis i.e., there is no significant difference between classroom teaching behaviour (SIR) with reference to high and low social freedom is accepted.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (SIR) with reference to high and low social freedom.
**4.4.3 Classroom Teaching Behaviour with high and low Social freedom of female teachers teaching in Urban Area.**

Classroom teaching behaviour of female teachers were classified as-

(i) DTT,  
(ii) ITT,  
(iii) I/D  
(iv) TQR  
(v) SIR

Analysis for each is done separately-

**TABLE NO.-4.4.3.1**

**DTT based analysis table for Female Teachers in Urban area**

<table>
<thead>
<tr>
<th>Group</th>
<th>Direct Teacher Talk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Social Freedom</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>50</td>
</tr>
</tbody>
</table>

df (78) at .05 level of significance=1.99

In the above table, the classroom teaching behaviour (DTT) of female teachers teaching in Urban area, with high and low social freedom is tabulated.

The high scorer value for DTT with reference to high social freedom is 30 and the low scorer for DTT with reference to low social freedom is 50.
The Mean value for DTT with reference to high social freedom is 75.166 and the Mean value for DTT with reference to low social freedom is 12.4.

Similarly, for Standard Deviation the value obtained for high social freedom is 6.795 and the Standard Deviation for low social freedom is 6.739.

The value for Standard Error of Deviation obtained is 4.946 and the C.R. value calculated as 12.69, which is comparatively higher than df (78) at .05 level of significance i.e., 1.99.

Thus the respective null hypothesis is rejected and it is concluded that there is difference between the classroom teaching behaviour (DTT) of female teachers teaching in schools situated in Urban area with reference to high and low social freedom.
The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour (DTT) with reference to high and low social freedom.

**TABLE NO.-4.4.3.2**

**ITT based analysis table for Female Teachers in Urban area**

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect Teacher Talk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Social Freedom</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>50</td>
</tr>
</tbody>
</table>

df (78) at .05 level of significance=1.99

In the above table the classroom teaching behaviour (ITT) of female teachers teaching in Urban area, with reference to high and low social freedom is tabulated.

30 female teachers were found to be high scorer for the high social freedom and 50 female teachers were found to be of low scorers.

The Mean value for DTT with reference to high social freedom is 7.293 and the Mean value for DTT with reference to low social freedom is 13.89.
Similarly the value for Standard Deviation for ITT with reference to high social freedom is 5.423 and the value for Standard Deviation for DTT with reference to low social freedom is 7.680.

Thus, the value for Standard Error of Deviation is obtained as 4.647 and the C.R. value is calculated as 1.419; which is comparatively less than df (78) at .05 level of significance i.e., 1.99, hence the null hypothesis is accepted i.e, there exist no difference between the classroom teaching behaviour (ITT) of female teachers teaching in Urban area with reference to high and low social freedom.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (ITT) of female
teachers teaching in urban area with reference to high and low social freedom.

**TABLE NO.-4.4.3.3**

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect to Direct Teacher Talk ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Freedom</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>50</td>
</tr>
</tbody>
</table>

df (78) at .05 level of significance=2.02

In the above table, the classroom teaching behaviour (I/D) of female teachers teaching in Urban area, with reference to their high and low social freedom is tabulated.

30 female teachers were found to be high scorer with reference to high social freedom, and 50 female teachers were found to be low scorer with reference to low social freedom.

The Mean (M) value for I/D with reference to high social freedom is 0.095 and the Mean value for I/D with reference to low social freedom is 0.727.
Similarly, the value for Standard Deviation for I/D with reference to high social freedom is 0.073 and the value for Standard Deviation for I/D with reference to low social freedom is 0.465.

Thus, the value for Standard Error of Deviation is obtained as 0.465 and the value for C.R. value is 1.359, which is comparatively less than df (78) at .05 level of significance i.e. 2.02, hence the respective null hypothesis is accepted which means there is no significant difference between the classroom teaching behaviour (I/D) of teachers teaching in Urban area with reference to high and low social freedom.
The diagrammatical representation shows that there is no
difference between the classroom teaching behaviour (I/D) with
reference to high and low social freedom.

**TABLE NO.-4.4.3.4**

**TQR based analysis table for Female Teachers in Urban area**

<table>
<thead>
<tr>
<th>Group</th>
<th>Teacher Question Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Freedom</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>50</td>
</tr>
</tbody>
</table>

df (78) at .05 level of significance=\textbf{2.02}

In the above table, the classroom teaching behaviour (TQR) of
female teachers teaching in urban area with reference to their high
and low social freedom is tabulated.

30 female teachers were found to be high scorer with
reference to high social freedom and 50 female teachers were found
to be low scorer with reference to low social freedom.

The Mean value for TQR with reference to high social freedom
is 12.301 and the Mean value for TQR with reference to low social
freedom is 79.154.
Similarly, the value for Standard Deviation for TQR with reference to high social freedom is 5.038 and the value for Standard Deviation for TQR with reference to low social freedom is 17.609.

Thus, the value for Standard Error of Deviation is obtained as 86.394 and the C.R. value is calculated as 7.964 which is comparatively higher than df (78) at .05 level of significance i.e, 2.02 hence the respective hypothesis is rejected and so it is concluded that there exist difference between the classroom teaching behaviour (TQR) of female teachers teaching in urban area with reference to high and low social freedom.
The diagrammatical representation shows that there exist a remarkable difference between classroom teaching behaviour (TQR) with reference to high and low social freedom.

**TABLE NO.-4.4.3.5**

**SIR based analysis table for Female Teachers in Urban area**

<table>
<thead>
<tr>
<th>Group</th>
<th>Social Freedom</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>30</td>
<td>22.133</td>
<td>0.950</td>
<td>3.622</td>
<td>4.320</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>50</td>
<td>37.782</td>
<td>28.682</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (78) at .05 level of significance=2.02

In the above table, the classroom teaching behaviour (SIR) of female teachers teaching in urban area with reference to high and low social freedom.

30 female teachers were found to be high scorer for SIR with reference to high social freedom and 50 female teachers were found to be low scorer for SIR with reference to low social freedom.

The Mean value for SIR with reference to high social freedom is 22.133 and the Mean value for SIR with reference to low social freedom is 37.782.
Similarly, the value for Standard Deviation for SIR with reference to high social freedom is 0.950 and the value for Standard Deviation for SIR with reference to low social freedom is 28.682.

Thus the value for Standard Error of Deviation is obtained as 3.622 and the C.R. value is calculated as 4.320 which is comparatively greater than df (78) at .05 level of significance i.e, 2.02 and hence the respective null hypothesis is rejected which can be explained as there is difference between the classroom teaching behaviour (SIR) with reference to high and low social freedom.

The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour (SIR) with reference to high and low social freedom.
4.4.4 Classroom teaching behaviour with high and low social freedom of female teachers teaching in Rural area.

Classroom teaching behaviour of female teachers were classified as:

(i) DTT,
(II) ITT,
(III) I/D,
(IV) TQR
(V) SIR.

Analysis for each is done separately.

**TABLE NO.-4.4.4.1**

DTT based analysis table for Female Teachers in Rural area

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>46</td>
<td>77.625</td>
<td>5.501</td>
<td>2.839</td>
<td>24.612</td>
</tr>
<tr>
<td>Low</td>
<td>25</td>
<td>7.75</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (69) at .05 level of significance=2.00

In the above table, the classroom teaching behaviour (DTT) of female teachers teaching in rural areas with reference to high and low social freedom is tabulated.

46 female teachers were found to be high scorer for DTT with reference to high social freedom and 25 female teachers were found to be low scorer with reference to low social freedom is 7.75.
The Mean value for DTT with high Social freedom is 77.625 & the mean value for DTT with low social freedom is 7.75.

Similarly, the value for Standard Deviation for DTT with reference to high social freedom is 5.50 and the value for Standard Deviation for DTT with reference to low social freedom is 1.

Thus, the value for Standard Error of Deviation is obtained as 2.839 and the C.R. Value is calculated as 24.612, which is comparatively much greater than df (69) at .05 level of significance i.e, 2.00, hence the null hypothesis is again rejected and is explained as the classroom teaching behaviour (DTT) is with significant difference with high and low social freedom.
The diagrammatical representation shows that there is a significant difference between the classroom teaching behaviour (DTT) with reference to high and low social freedom.

**TABLE NO.-4.4.4.2**

**ITT based analysis table for Female Teachers in Rural area**

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect Teacher Talk</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Freedom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td>46</td>
<td>5.25</td>
<td>2.639</td>
<td>1.934</td>
<td>0.258</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>25</td>
<td>5.75</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (69) at .05 level of significance=2.00

In the above table, the classroom teaching behaviour (ITT) of female teachers teaching in rural areas with reference to high and low social freedom is tabulated.

46 female teachers were found to be high scorer for ITT with reference to high social freedom and 25 female teachers were found to be low scorer with reference to low social freedom.

The value for Mean (M) for ITT with reference to high social freedom is 5.25 and the value for Mean for ITT with reference to low social freedom is 5.75
Similarly, the value for Standard Deviation for ITT with reference to high social freedom is 2.639 and the same value for ITT with reference to low social freedom is 2.00.

Thus, the value for Standard Error of Deviation is obtained as 1.934 and the value for C.R. value is calculated as 0.258; which is comparatively less than df(69) at .05 level of significance i.e, 2.00, for which null hypothesis is accepted.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (ITT) with reference to high and low social freedom.
In the above table, the classroom teaching behaviour (I/D) of female teachers teaching in rural areas with reference to high and low social freedom is tabulated.

46 female teachers were found to be high scorer with reference to high social freedom and 25 female teachers were found to be low scorer with reference to low social freedom.

The value for Mean for I/D with reference to high social freedom is 0.247 and the value for Mean for I/D with reference to low social freedom is 0.72.
Similarly, the value for Standard Deviation for I/D with reference to high social freedom is 0.315 and the value for Standard Deviation for I/D with reference to low social freedom is 0.164.

Thus, the value for Standard Error of Deviation is obtained as 0.192 and the C.R. value is calculated as 2.463; which is comparatively more than df(69) at .05 level of significance i.e, 2.00, hence the respective null hypothesis is rejected and can be explained as there is difference between classroom teaching behaviour (I/D) with reference to high and low social freedom.

![Bar chart showing the comparison of Indirect to Direct Teacher Talk ratio (I/D) for Female Teachers Teaching in Rural area with High and Low Social Freedom.](chart.png)
The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour of female teachers (I/D) with reference to high and low social freedom.

**TABLE NO.-4.4.4.4**

**TQR based analysis table for Female Teachers in Rural area**

<table>
<thead>
<tr>
<th>Group</th>
<th>Teacher Question Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Freedom</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>46</td>
</tr>
<tr>
<td>Low</td>
<td>25</td>
</tr>
</tbody>
</table>

df (69) at .05 level of significance=2.00

In the above table, the classroom teaching behaviour (TQR) of female teachers teaching in rural areas with reference to high and low social freedom is tabulated.

46 female teachers were found to be high scorer for TQR with reference to high social freedom and 25 female teachers were found to be low scorer for TQR with reference to low social freedom.

The value for Mean (M) for TQR with reference to high social freedom is 3.005 and the value for Mean for TQR with reference to low social freedom is 59.371.
Similarly, the value for Standard Deviation for TQR with reference to high social freedom is 1.524 and the value for Standard Deviation for TQR with reference to low social freedom is 2.850.

Thus, the value for Standard Error of Deviation for TQR is obtained as 2.154 and the C.R. value is calculated as 26.168 which is comparatively much greater than df(69) at .05 level of significance i.e, 2.00, hence it is explained as the null hypothesis is rejected showing that there exist difference between the classroom teaching behaviour (TQR) with reference to high and low social freedom.

The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour (TQR) of female teachers teaching in rural area with their high and low social freedom.
In the above table, the classroom teaching behaviour (SIR) of female teachers teaching in rural areas with reference to high and low social freedom.

46 female teachers were found to be high scorer for SIR with reference to high social freedom and 25 female teachers were found to be low scorer for SIR with reference to low social freedom.

The Mean value for SIR with reference to high social freedom is 83.32 and the Mean value for SIR with reference to low social freedom is 71.575.

Similarly, the value for Standard Deviation for SIR with reference to high social freedom is 13.839 and the value for Standard Deviation for SIR with reference to low social freedom is 8.424.
Thus, the value for Standard Error of Deviation is obtained as 9.130 and the value for C.R. value is calculated as 1.286 which is comparatively less than df(69) at .05 level of significance i.e, 2.00, hence the respective null hypothesis is accepted and is explained as the classroom teaching behaviour (SIR) is in no difference with high and low social freedom of female teachers.

The diagrammatical representation shows that there is no difference between the classroom teaching behaviour (SIR) of female teachers teaching in rural area with reference to high and low social freedom.
4.5 **Objective 5:** In this study 5th objective was determined "to study comparatively the classroom teaching behaviour of female teachers with high and low Risk Taking Behaviour ".

For achieving the objective, null hypothesis was framed "There is no significant difference between the classroom teaching behaviour of female teachers with high and low Risk Taking Behaviour ".

Following analytical table 4.5 is prepared and tested for above hypothesis.

For the objective, the researcher formulated the locality and subject based four criteria of classroom teaching behaviour with high and low Risk Taking Behaviour for-

4.5.1 Science female teachers.

4.5.2 Art female teachers.

4.5.3 Female teachers teaching in urban locality.

4.4.4 Female teachers teaching in rural locality.
4.5.1 Classroom Teaching Behaviour with high and low Risk Taking Behaviour for Science Female Teachers.

Classroom teaching behaviour with reference to science subject is classified based on five sub-criteria-

(i) DTT,   (ii) ITT,   (iii) I/D,

(iv) TQR and   (v) SIR,  based on Risk Taking Behaviour.

Analysis were done separately as follow-

**TABLE NO.-4.5.1.1**

DTT based analysis table for Science Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Direct Teacher Talk</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>S.D.</td>
<td>S.Ed.</td>
<td>C.R. Value</td>
</tr>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>36</td>
<td>45.25</td>
<td>19</td>
<td>14.694</td>
<td>0.181</td>
</tr>
<tr>
<td>Low</td>
<td>29</td>
<td>42.58</td>
<td>8.419</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (63) at .05 level of significance=2.00

In the above table the classroom teaching behaviour of female teachers teaching science subject with reference to high and low risk taking behaviour is tabulated.
36 female teachers were found to be high scorer for DTT with reference to high Risk Taking Behaviour and 29 female teachers were found to be low scorer with reference to low Risk Taking Behaviour.

The Mean value for DTT with reference to high Risk Taking Behaviour is 45.25 and the value for Mean for DTT with reference to low Risk Taking Behaviour is 42.58.

Similarly, the value for Standard Deviation for DTT with reference to high Risk Taking Behaviour is 19.0 and the value for Standard Deviation for DTT with reference to low Risk Taking Behaviour is 8.419.

Thus the value for Standard Error of Deviation is obtained as 14.694 and the value for C.R. value is calculated as 0.181; which is comparatively less than df (63) at .05 level of significance i.e. 2.00, hence the respective null hypothesis is accepted that means there exist no difference between the classroom teaching behaviour (DTT) with reference to high and low Risk Taking Behaviour.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (DTT) of female teachers teaching science subject with reference to high and low social freedom.

**TABLE NO.-4.5.1.2**

ITT based analysis table for Science Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect Teacher Talk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>36</td>
</tr>
<tr>
<td>Low</td>
<td>29</td>
</tr>
</tbody>
</table>

df (63) at .05 level of significance=2.00
In the above table the classroom teaching behaviour (ITT) of female teachers teaching science subject with reference to high and low risk taking behaviour is tabulated.

36 female teachers were found to be high scorer for ITT with reference to high Risk Taking Behaviour and 29 female teachers were found to be low scorer for ITT with reference to low Risk Taking Behaviour.

The Mean value for ITT with reference to high Risk Taking Behaviour is 20.125 and the Mean value for ITT with reference to low Risk Taking Behaviour is 23.0.

Similarly, the value for Standard Deviation for ITT with reference to high Risk Taking Behaviour is 4.124 and the value for Standard Deviation for ITT with reference to low Risk Taking Behaviour is 4.749.

Thus, the value for Standard Error of Deviation is obtained as 4.447 and the C.R.value is calculated as 0.646; which is comparatively less than df (63) at .05 level of significance i.e., 2.00 hence the respective null hypothesis is accepted.
From the diagrammatical representation it is clear that there is no difference between the classroom teaching behaviour (ITT) of female teachers teaching science subject with reference to their high and low Risk Taking Behaviour.

**TABLE NO.-4.5.1.3**

I/D based analysis table for Science Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect to Direct Teacher Talk ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>36</td>
</tr>
<tr>
<td>Low</td>
<td>29</td>
</tr>
</tbody>
</table>

df (63) at .05 level of significance=2.00
In the above table the classroom teaching behaviour (I/D) of female teachers teaching science subject with the reference to high and low risk taking behaviour is tabulated.

36 female teachers were found to be high scorer with reference to high Risk Taking Behaviour and 29 female teachers were found to be low scorer with reference to low Risk Taking Behaviour of female teachers.

The Mean value for I/D with reference to high Risk Taking Behaviour is 0.493 and the Mean value for I/D with reference to low Risk Taking Behaviour is 0.409.

Thus, the value for Standard Deviation for I/D with reference to high Risk Taking Behaviour is 0.114 and the value for Standard Deviation for I/D with reference to low Risk Taking Behaviour is 0.132.

Thus the value for Standard Error of Deviation is obtained as 0.118 and the C.R.value is calculated as 0.711; which is comparatively less than df (63) at .05 level of significance i.e., 2.00 hence the respective null hypothesis is accepted.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (I/D) of female teachers teaching science subject with reference to their high and low Risk Taking Behaviour.

**TABLE NO.-4.5.1.4**

TQR based analysis table for Science Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>36</td>
<td>28.974</td>
<td>3.167</td>
<td>12.128</td>
<td>0.093</td>
</tr>
<tr>
<td>Low</td>
<td>29</td>
<td>27.838</td>
<td>16.857</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (63) at .05 level of significance=2.00
In the above table the classroom teaching behaviour (TQR) of female teachers teaching science subject with high and low risk taking behaviour is tabulated.

36 female teachers were found to be high scorer for TQR with reference to high Risk Taking Behaviour and 29 female teachers were found to be low scorer with reference to low Risk Taking Behaviour.

The Mean value for TQR with reference to high Risk Taking Behaviour is 28.974 and the Mean value for TQR with reference to low Risk Taking Behaviour is 27.838.

Similarly, the value for Standard Deviation for TQR with reference to high Risk Taking Behaviour is 3.167 and the value for Standard Deviation for TQR with reference to low Risk Taking Behaviour is 16.857.

Thus, the value for Standard Error of Deviation is obtained as 12.128 and the C.R.value for TQR is obtained as 0.093; which is comparatively less than df (63) at .05 level of significance i.e., 2.00 hence the respective null hypothesis is accepted.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (TQR) with reference to high and low Risk Taking Behaviour of female teachers teaching science subject.

**TABLE NO.-4.5.1.5**

**SIR based analysis table for Science Female Teachers**

<table>
<thead>
<tr>
<th>Group</th>
<th>Student Initiation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>36</td>
</tr>
<tr>
<td>Low</td>
<td>29</td>
</tr>
</tbody>
</table>

df (63) at .05 level of significance=**2.00**
In the above table, the classroom teaching behaviour (SIR) of female teachers teaching science subject with reference to high and low risk taking behaviour is tabulated.

36 female teachers were found to be high scorer for high Risk Taking Behaviour and 29 female teachers were found to be low scorer with reference to low Risk Taking Behaviour.

The Mean value for SIR with reference to high Risk Taking Behaviour is 51.305 and the Mean value for SIR with reference to low Risk Taking Behaviour is 12.125.

Similarly, the value for Standard Deviation for SIR with reference to high Risk Taking Behaviour is 28.006 and the value for Standard Deviation for SIR with reference to low Risk Taking Behaviour is 5.784.

Thus the value for Standard Error of Deviation is obtained as 20.221 and the value for C.R.Value is calculated as 1.937; which is comparatively less than df (63) at .05 level of significance i.e., 2.00 hence the respective null hypothesis is accepted.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (SIR) of female teachers teaching science subject with their high and low Risk Taking Behaviour.

4.5.2 Classroom Teaching Behaviour with reference to high and low Risk Taking Behaviour for Art female teachers.

Classroom teaching behaviour with reference to Art subject is classified based on five sub-criteria-

(i) DTT,
(ii) ITT,
(iii) I/D,
(iv) TQR and
(v) SIR, based on Risk Taking Behaviour.

Analysis were done separately as follows-
**TABLE No. 4.5.2.1**

DTT based analysis table for Science Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>17</td>
<td>40.1</td>
<td>12.680</td>
<td>9.109</td>
<td>0.649</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>34.187</td>
<td>14.260</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (28) at .05 level of significance = **2.05**

In the above table, the classroom teaching behaviour (DTT) of female teachers teaching Art subject with reference to high and low Risk Taking Behaviour is tabulated.

17 female teachers were found to be high scorer with reference to high Risk Taking Behaviour and 13 female teachers were found to be low scorers with reference to low Risk Taking Behaviour.

The Mean value for DTT with reference to high Risk Taking Behaviour is 40.1 and the Mean value for DTT with reference to low Risk Taking Behaviour is 34.187.

The value for Standard Deviation for DTT with reference to high Risk Taking Behaviour is 12.680 and the value for Standard Deviation for DTT with reference to low Risk Taking behaviour is 14.260.
Thus, the value for Standard Error of Deviation is obtained as 9.109 and the value for C.R. value is calculated as 0.649, which is comparatively less than df(28) at .05 level of significance i.e, 2.05, hence the respective null hypothesis is accepted.

The diagrammatical representation shows that, there exist no difference between the classroom teaching behaviour (DTT) of female teachers teaching Art subject with reference to high and low Risk Taking Behaviour.
TABLE NO. 4.5.2. 2
ITT based analysis table for Art Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>17</td>
<td>10.85</td>
<td>3.438</td>
<td>4.642</td>
<td>1.244</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>16.625</td>
<td>8.762</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (28) at .05 level of significance = 2.05

In the above table, the classroom teaching behaviour (ITT) for female teachers teaching Art subject with reference to high and low Risk Taking Behaviour is tabulated.

17 female teachers were found to be high scorer for ITT with reference to high Risk Taking Behaviour and 13 female teachers were found to be low scores for ITT with reference to low Risk Taking Behaviour.

The Mean value for ITT with reference to high Risk Taking Behaviour is 10.85 and the Mean value for ITT with reference to low Risk Taking Behaviour is 16.625.
Similarly, the value for Standard Deviation for ITT with reference to high Risk Taking Behaviour is 3.438 and the value for Standard Deviation for ITT with reference to low Risk Taking Behaviour is 8.762.

Thus, the value for Standard Error of Deviation is obtained as 4.642 and the C.R.value is calculated as 1.244, which is comparatively less than df (28) at .05 level of significance i.e., 2.05, hence the respective null hypothesis is accepted.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (ITT) of female teachers with high and low Risk Taking Behaviour.
TABLE NO. 4.5.2.3

I/D based analysis table for Art Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.Ed.</th>
<th>C.R. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>17</td>
<td>0.331</td>
<td>0.208</td>
<td>0.126</td>
<td>1.460</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>0.515</td>
<td>0.189</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (28) at .05 level of significance = 2.05

In the above table, the classroom teaching behaviour (I/D) of female teachers teaching Art subject with high and low Risk Taking Behaviour is tabulated.

17 female teachers were found to be high scorers with reference to high Risk Taking Behaviour and 13 female teachers were found to be low scorers with reference to low Risk Taking Behaviour.

The Mean value for I/D with reference to high Risk Taking Behaviour is 0.331 and the Mean value for I/D with reference to low Risk Taking Behaviour is 0.515.

Similarly, the value for Standard Deviation for I/D with reference to high Risk Taking Behaviour is 0.208 and the value for
Standard Deviation for I/D with reference to low Risk Taking Behaviour is 0.189.

Thus, the value for Standard Error of Deviation is obtained as 0.126 and the value for C.R.value is calculated as 1.460, which is comparatively less than df (28) at .05 level of significance i.e., 2.05, hence the respective null hypothesis is accepted.

The diagrammatical representation shows that, there exist no difference between the classroom teaching behaviour (I/D) of female teachers teaching Art subject with reference to high and low Risk Taking Behaviour.
In the above table, the classroom teaching behaviour (TQR) of female teachers teaching Art subject with reference to high and low Risk Taking Behaviour is tabulated.

17 female teachers were found to be high scorer with reference to high Risk Taking Behaviour and 13 female teachers were found to be low scorer for TQR with reference to low Risk Taking Behaviour.

The Mean value for TQR with reference to high Risk Taking Behaviour is 22.229 and the Mean value for TQR with reference to low Risk Taking Behaviour is 51.109.
The value for Standard Deviation for TQR with reference to high Risk Taking Behaviour is 23.589 and the value for Standard Deviation for TQR with reference to low Risk Taking Behaviour is 33.494.

Thus, the value for Standard Error of Deviation is obtained as 19.792 and the C.R. value is calculated as 1.459, which is comparatively less than df (28) at .05 level of significance i.e., 2.05 hence the respective null hypothesis is accepted.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (TQR) of female teachers teaching Art subject with reference to high and low Risk Taking Behaviour.
TABLE NO. 4.5.2.5
SIR based analysis table for Art Female Teachers

<table>
<thead>
<tr>
<th>Group</th>
<th>Student Initiation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>17</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
</tr>
</tbody>
</table>

df (28) at .05 level of significance = **2.05**

In the above table, the classroom teaching behaviour (SIR) of female teachers teaching Art subject with reference to high and low Risk Taking behaviour is tabulated.

17 female teachers were found to be high scorer with reference to high Risk Taking Behaviour and 13 female teachers were found to be low scorers with reference to low Risk Taking Behaviour.

The Mean value for SIR with reference to high Risk Taking Behaviour is 34.951 and the Mean value for SIR with reference to low Risk Taking Behaviour is 26.16.

Similarly, the value for Standard Deviation for SIR with reference to high Risk Taking Behaviour is 23.702 and the value for
Standard Deviation for SIR with reference to low Risk Taking Behaviour is 30.048.

Thus, the value for Standard Error of Deviation for SIR is obtained as 18.386 and the value for C.R. value is calculated as 0.478, which is comparatively less than df (28) at .05 level of significance i.e., 2.05 hence the respective null hypothesis is accepted.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (SIR) of female teachers teaching Art subject with reference to their high and low Risk Taking Behaviour.
4.5.3 Classroom Teaching Behaviour with reference to high and low Risk Taking Behaviour of female teachers teaching in Urban area.

Classroom teaching behaviour with reference to Risk taking behaviour of female teachers teaching in urban area are classified into five categories-

(i) DTT, (ii) ITT, (iii) I/D,
(iv) TQR and (v) SIR, based on Risk Taking Behaviour.

Analysis were done separately as follows -

**TABLE NO-4.5.3.1**

DTT based analysis table for Female Teachers Teaching in Urban area

<table>
<thead>
<tr>
<th>Group</th>
<th>Direct Teacher Talk</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td>N</td>
<td>M</td>
<td>S.D.</td>
<td>S.Ed.</td>
<td>C.R. Value</td>
</tr>
<tr>
<td>High</td>
<td>25</td>
<td>37.25</td>
<td>25.675</td>
<td>14.101</td>
<td>2.062</td>
</tr>
<tr>
<td>Low</td>
<td>15</td>
<td>66.333</td>
<td>14.180</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance = 2.02
In the above table, the classroom teaching behaviour (DTT) of female teachers teaching in Urban area, with reference to high and low Risk Taking Behaviour is tabulated.

25 female teachers were found to be high scorer for DTT with reference to high Risk Taking Behaviour and 15 female teachers were found to be low scorers for DTT with reference to low Risk Taking Behaviour.

The Mean value for DTT with reference to high Risk Taking Behaviour is 37.25 and the Mean value for DTT with reference to low Risk Taking Behaviour is 66.333.

Similarly, the value for Standard Deviation for DTT with reference to high Risk Taking Behaviour is 25.675 and the value for Standard Deviation for DTT with reference to low Risk Taking Behaviour is 14.180.

Thus, the value for Standard Error of Deviation is obtained as 14.101 and the C.R.Value is calculated as 2.062 which is comparatively more than df (38) at .05 level of significance i.e., 2.02, hence the respective null hypothesis is rejected.
Direct Teacher Talk (DTT) for Female Teachers Teaching in Urban area

The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour (DTT) of female teachers teaching in Urban area with reference to their high and low Risk Taking Behaviour.

**TABLE NO-4.5.3.2**

ITT based analysis table for Female Teachers Teaching in Urban area

<table>
<thead>
<tr>
<th>Group</th>
<th>Direct Teacher Talk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>High</td>
<td>25</td>
<td>11.126</td>
</tr>
<tr>
<td>Low</td>
<td>15</td>
<td>13.916</td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance = 2.02
In the above table, the classroom teaching behaviour (ITT) of female teachers teaching in Urban area with reference to high and low Risk Taking Behaviour is tabulated.

25 female teachers were found to be high scorer for ITT with reference to high Risk Taking Behaviour and 15 female teacher were found to be low scorer for ITT with reference to low Risk Taking Behaviour.

The Mean value for ITT with reference to high Risk Taking Behaviour is 11.126 and the Mean value for ITT with reference to low Risk Taking Behaviour is 13.916.

Similarly, the value for Standard Error of Deviation for ITT with reference to high Risk Taking Behaviour is 7.317 and the value for Standard Deviation for ITT with reference to low Risk Taking behaviour is 4.053.

Hence, the value for Standard Error of Deviation for ITT is obtained as 4.022 and the C.R. Value is calculated as 0.693, which is comparatively less than df (38) at .05 level of significance i.e. 2.02, therefore, the respective null hypothesis is accepted.
The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour (DTT) of female teachers teaching in Urban area with reference to high and low Risk Taking Behaviour.

<table>
<thead>
<tr>
<th>TABLE NO-4.5.3.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/D based analysis table for Female Teachers Teaching in Urban area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect to Direct Teacher Talk ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>25</td>
</tr>
<tr>
<td>Low</td>
<td>15</td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance = 2.02
In the above table, the classroom teaching behaviour (I/D) of female teachers teaching in Urban area with reference to high and low Risk Taking Behaviour is tabulated.

25 female teachers were found to be high scorer for I/D with reference to high Risk Taking Behaviour and 15 female teachers were found to be low scorer for I/D with reference to low Risk Taking Behaviour.

The Mean value for I/D with reference to high Risk Taking Behaviour is 0.324 and the Mean value for I/D with reference to low Risk Taking Behaviour is 0.227.

Similarly, the value for Standard Deviation for I/D with reference to high Risk Taking Behaviour is 0.254 and the value for Standard Deviation for I/D with reference to low Risk Taking Behaviour is 0.089.

Hence, the value for Standard Error of Deviation for I/D is obtained as 0.118 and the C.R.Value is calculated as 0.822 which is comparatively less than df (38) at .05 level of significance i.e., 2.02, therefore, hence the respective null hypothesis is accepted.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (I/D) of female teachers teaching in Urban area with reference to high and low Risk Taking Behaviour.

**TABLE NO-4.5.3.4**

<table>
<thead>
<tr>
<th>Group</th>
<th>Teacher Question Ratio</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td>N</td>
<td>M</td>
<td>S.D.</td>
<td>S.Ed.</td>
</tr>
<tr>
<td>High</td>
<td>25</td>
<td>39.582</td>
<td>32.354</td>
<td>19.042</td>
</tr>
<tr>
<td>Low</td>
<td>15</td>
<td>31.812</td>
<td>21.443</td>
<td></td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance = **2.02**
In the above table, the classroom teaching behaviour (TQR) of female teachers teaching in Urban area, with reference to high and low Risk Taking Behaviour is tabulated.

25 female teachers were found to be high scorers for TQR with reference to high Risk Taking Behaviour and 15 female teachers were found to be low scorers for TQR with reference to low Risk Taking Behaviour.

The Mean value for TQR with reference to high Risk Taking Behaviour is 39.582 and the Mean value for TQR with reference to low Risk Taking Behaviour is 31.812.

Similarly, the value for Standard Deviation for TQR with reference to high Risk Taking Behaviour is 32.354 and the value for Standard Deviation for TQR with reference to low Risk Taking Behaviour is 21.443.

Thus, the value for Standard Error of Deviation is obtained as 19.042 and the value for C.R. Value is calculated as 0.408 which is comparatively less than df (38) at .05 level of significance i.e., 2.02, hence the respective null hypothesis is accepted.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (TQR) with reference to high and low Risk Taking Behaviour.

**TABLE NO-4.5.3.5**

SIR based analysis table for Female Teachers Teaching in Urban area

<table>
<thead>
<tr>
<th>Group</th>
<th>Student Initiation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>25</td>
</tr>
<tr>
<td>Low</td>
<td>15</td>
</tr>
</tbody>
</table>

df (38) at .05 level of significance = **2.02**
In the above table, the classroom teaching behaviour (SIR) of female teachers teaching in Urban area, with reference to high and low Risk Taking Behaviour is tabulated.

25 female teachers were found to be high scorers for SIR with reference to high Risk Taking Behaviour and 15 female teachers were found to be low scorers SIR with reference to low Risk Taking Behaviour.

The Mean value for SIR with reference to high Risk Taking Behaviour is 36.796 and the Mean value for SIR with reference to low Risk Taking Behaviour is 37.873.

Similarly, the value for Standard Deviation for SIR, with reference to high Risk taking behaviour is 22.339 and the value for Standard Deviation for SIR with reference to low Risk Taking Behaviour is 15.941.

Thus, the value for Standard Error of Deviation is obtained as 13.583 and the value for C.R. Value is calculated as 0.079 which is comparatively less than the df (38) at .05 level of significance i.e. 2.02 hence the respective null hypothesis is accepted.
The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (SIR) of female teachers teaching in Urban area with reference to high and low Risk Taking Behaviour.

4.5.4 Classroom Teaching Behaviour with reference to high and low Risk Taking Behaviour of female teachers teaching in Rural area.

Classroom teaching behaviour with reference to Risk Taking Behaviour of female teachers teaching in rural area are classified into five categories-

(i) DTT, (ii) ITT, (iii) I/D,
(iv) TQR and (v) SIR based on Risk Taking behaviour.

Analysis were done separately as follows:-

**TABLE NO-4.5.4.1**

**DTT based analysis table for Female Teachers Teaching in Rural area**

<table>
<thead>
<tr>
<th>Group</th>
<th>Direct Teacher Talk</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td>N</td>
<td>M</td>
<td>S.D.</td>
<td>S.Ed.</td>
<td>C.R. Value</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>15</td>
<td>34.833</td>
<td>8.011</td>
<td>9.431</td>
<td>2.549</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>10</td>
<td>58.875</td>
<td>11.624</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df (23) at .05 level of significance = 2.07

In the above table, the classroom teaching behaviour (DTT) of female teachers teaching in rural area, with reference to high and low Risk Taking Behaviour is tabulated.

15 female teachers were found to be high scorers for DTT with reference to high Risk Taking Behaviour and 10 female teachers were found to be low scorer for DTT with reference to low Risk Taking Behaviour.

The Mean value for DTT with reference to high Risk Taking Behaviour is 34.833 and the Mean value for DTT with reference to low Risk Taking Behaviour is 58.875.
Similarly, the value for Standard Deviation of DTT with reference to high Risk taking behaviour is 8.011 and the value for Standard Deviation of DTT with reference to low Risk Taking Behaviour is 11.624.

Thus, the value for DTT for Standard Error of Deviation is obtained as 9.431 and the value for C.R. Value is calculated as 2.549; which is comparatively more than the df (23) at .05 level of significance i.e., 2.07, hence the respective null hypothesis is rejected.

The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour
(DTT) of female teachers teaching in rural area with reference to high and low Risk Taking Behaviour.

**TABLE NO-4.5.4.2**

ITT based analysis table for Female Teachers Teaching in Rural area

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect Teacher Talk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>15</td>
</tr>
<tr>
<td>Low</td>
<td>10</td>
</tr>
</tbody>
</table>

df (23) at .05 level of significance = **2.07**

In the above table, the classroom teaching behaviour (ITT) with reference to high and low Risk Taking Behaviour is tabulated.

15 female teachers were found to be high scorers for ITT with reference to high Risk Taking Behaviour and 10 female teachers were found to be low scorers for ITT with reference to low Risk Taking Behaviour.

The Mean value for ITT with reference to high Risk Taking Behaviour is 28.916 and the Mean value for ITT with reference to low Risk Taking Behaviour is 10.0
Similarly, the value for Standard Deviation for ITT with reference to high Risk taking behaviour is 5.824 and the value for Standard Deviation for ITT for low Risk Taking Behaviour is 0.749.

Thus, the value for Standard Error of Deviation for ITT is obtained as 3.403 and the C.R. Value is calculated as 5.558 which is again comparatively more than the df (23) at .05 level of significance i.e. 2.07, hence the respective null hypothesis is rejected.

The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour (ITT) of female teachers teaching in rural area with reference to high and low Risk Taking Behaviour.
I/D based analysis table for Female Teachers Teaching in Rural area

<table>
<thead>
<tr>
<th>Group</th>
<th>Indirect to Direct Teacher Talk ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Risk Taking Behaviour</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>15</td>
</tr>
<tr>
<td>Low</td>
<td>10</td>
</tr>
</tbody>
</table>

df (23) at .05 level of significance = 2.07

In the above table, the classroom teaching behaviour (I/D) of female teachers teaching with reference to high and low Risk Taking Behaviour is tabulated.

15 female teachers were found to be high scorers for I/D with reference to high Risk Taking Behaviour and 10 female teachers were found to be low scorer with reference to low Risk Taking Behaviour.

The Mean value for I/D for female teachers with reference to high Risk Taking Behaviour is 0.896 and the Mean value for I/D with reference to low Risk Taking Behaviour is 0.179.
Similarly, the value for Standard Deviation for I/D with reference to high Risk taking behaviour is 0.349 and the value for Standard Deviation for I/D with reference to low Risk Taking Behaviour is 0.044.

Thus, the value for Standard Error of Deviation is obtained as 0.626 and the value for C.R. value is calculated as 1.145, which is less than df (23) at .05 level of Significance, hence the null hypothesis is accepted.

The diagrammatical representation shows that there exist no difference between the classroom teaching behaviour (I/D) with reference to high and low Risk Taking Behaviour.
TABLE NO-4.5.4.4

TQR based analysis table for Female Teachers Teaching in Rural area

<table>
<thead>
<tr>
<th>Group</th>
<th>Teacher Question Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>15</td>
</tr>
<tr>
<td>Low</td>
<td>10</td>
</tr>
</tbody>
</table>

df (28) at .05 level of significance = **2.07**

In the above table, the classroom teaching behaviour (TQR) with reference to high and low Risk Taking Behaviour of female teachers teaching in rural area is tabulated.

15 female teachers were found to be high scorers with reference to high Risk Taking Behaviour and 10 female teachers were found to be low scorer with reference to low Risk Taking Behaviour.

The Mean value for TQR with reference to high Risk Taking Behaviour is 48.161 and the Mean value for TQR with reference to low Risk Taking Behaviour is 6.684.

Similarly, the value for Standard Deviation for TQR with reference to high Risk taking behaviour is 12.120 and the value for
Standard Deviation for TQR with reference to low Risk Taking Behaviour is 3.57

Thus, the value for Standard Error of Deviation is obtained as 7.439 and the value for C.R. value is calculated as 5.575, which is more than df (23) at .05 level of Significance i.e., 2.07, hence the respective null hypothesis is rejected.

The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour (TQR) of female teachers teaching in rural area with reference to high and low Risk Taking Behaviour.
TABLE NO-4.5.4.5

SIR based analysis table for Female Teachers Teaching in Rural area

<table>
<thead>
<tr>
<th>Group</th>
<th>Student Initiation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking Behaviour</td>
<td>N</td>
</tr>
<tr>
<td>High</td>
<td>15</td>
</tr>
<tr>
<td>Low</td>
<td>10</td>
</tr>
</tbody>
</table>

df (23) at .05 level of significance = 2.07

In the above table, the classroom teaching behaviour (SIR) of female teachers teaching in rural area with reference to high and low Risk Taking Behaviour, is tabulation.

15 female teachers were found to be high scorers with reference to high Risk Taking Behaviour and 10 female teachers were found to be low scorer for low Risk Taking Behaviour.

The Mean value for SIR with reference to high Risk Taking Behaviour is 23.58 and the Mean value for SIR with reference to low Risk Taking Behaviour is 56.707.

Similarly, the value for Standard Deviation for SIR with reference to high Risk taking behaviour is 14.418 and the value for
Standard Deviation for SIR with reference to low Risk Taking Behaviour is 43.292.

Thus, the value for Standard Error of Deviation is obtained as 7.596 and the value for C.R. value is calculated as 4.361, which is comparatively more than df (23) at .05 level of Significance i.e., 2.07, hence the respective null hypothesis is rejected.

The diagrammatical representation shows that there exist a remarkable difference between the classroom teaching behaviour (SIR) of female teachers teaching in rural area with reference to high and low Risk Taking Behaviour.