Chapter-5

Analysis of data, interpretation and discussion of results
CHAPTER-5

ANALYSIS OF DATA, INTERPRETATION AND DISCUSSION OF RESULTS

The present study was designed with the objectives to find the relationship between the organizational climate with the job stress, job satisfaction and adjustment of senior secondary school teachers and also to compare the job stress, job satisfaction and adjustment of these teachers working in different organizational climate.

For this purpose collected data was analyzed with the help of computer. In the present chapter, analysis of data along its interpretation has been presented. Discussion of result has also been presented side by side in order to get the true picture of the relationship of all the above variables. For the analysis of data statistical techniques of Pearson’s product moment of correlation and t-ratio were used.

SECTION - I

(Co-efficient of Correlation)

The term correlation indicates the relationship between two such variables in which with the changes in the values of one variable, the values of the other variable also change. Here the word relationship has been used in the sense of mutual dependence. Correlation can be either positive or negative when the values of two variables move in the same direction so that an increase in the value one variable is associated with an increase in the value of the
other variable also and decrease in the value of one variable is associated with the decrease in the value of the other variable also, the correlation is said to be positive. If on the other hand the values of two variables move in different directions, so that with an increase in the value of one variable the value of the other variable decrease and with the decrease in the value of one variable the value of the other variable increases, correlation is said to be negative.

Coefficient of correlation is calculated to study the extent or degree of correlation between two variables. If the relationship between the two variables is such that with an increase in the value of one, the value of the other increases or decreases in the fixed proportion, correlation between them is said to be perfect. If both the series move in the same direction and the variations are proportionate, there would be perfect positive correlation between them. If on the other hand, the two series move in reverse directions and the variations in their values are always proportionate, it is an example of perfect negative correlation. Coefficient of correlation varies between the two limits of +1 and -1. When there is perfect positive correlation, its value is +1 and when there is perfect negative correlation, its value is -1. Its mid point is 0, which indicates absence of correlation. As the value of this correlation decreases from the upper limit of +1, the extent of positive correlation between the two variables also declines. When it reaches the value of 0 it indicates complete absence of correlation and when it goes further down in negative values (less than zero), it indicates
negative correlation. When it reaches the other limit of −1 there is evidence of perfect negative correlation between the two series.

In the present chapter statistical technique of coefficient of correlation was used in order to test the following hypotheses:

1. There would be significant correlation between the job stress of the teachers and richness of organizational climate.
2. There would be significant correlation between the job satisfaction of teachers and richness of organizational climate.
3. There would be significant correlation between the adjustment of teachers and the richness of organizational climate.

Values of coefficient of correlation have been given in table 5.1.

**Relationship between Job-stress and Organizational Climate**

From the results of table 5.1 it was observed that significant negative correlation existed between the job stress and school organizational climate as the value of coefficient of correlation was found to be −.181, which was significant at .01 level of significance. In other words, more rich the school organizational climate is, less will be the job stress among the teachers.

The reasons for the above mentioned results may be that as rich climate of the school could be attributed towards better service conditions in terms of democratic functioning of the school head, tension management, teamwork, cordial relationship among the
<table>
<thead>
<tr>
<th>Va. No.</th>
<th>School Organizational Climate</th>
<th>School Org. Climate</th>
<th>Job-Satisfaction</th>
<th>Occ. Stress</th>
<th>Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td>.171</td>
<td>-.184*</td>
<td>.118*</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Job-satisfaction 8.171*</td>
<td>1.00</td>
<td>-.226**</td>
<td>.066</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Occ. Stress -.181**</td>
<td>-.226**</td>
<td>1.00</td>
<td>-.142**</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Adjustment .118*</td>
<td>.066</td>
<td>-.142*</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at .01 level**

TABLE 5.1.

Table showing values of co-efficient of correlation between independent variable of school organizational climate and dependent variables
teachers, obedient and well disciplined students, favourable support and attitude of parents of the students and environment facilities etc. Now all these factors may be helpful to the teachers in reducing their level of job stress.

Results of the present study were in agreement with the results of Synder (1985), Green (1992), Sharma (2000) and Pal (2001).

Therefore, hypothesis 1 that there would be significant correlation between the job stress of the teachers and richness of organizational climate was accepted.

**Relationship between Job-satisfaction and Organizational Climate**

Results of table 5.1 revealed that significant positive correlation existed between the job satisfaction of teachers and organizational climate as obtained value of coefficient of correlation was significant ($r = .171$) at .01 level of significance. This implies that rich school organization climate positively contributes towards the job-satisfaction of teachers. More rich school organizational climate is, more will be the job-satisfaction of teachers.

Probably the reasons for the above positive correlation between the job satisfaction and school organizational climate may be because of satisfaction organization job security, rational load of timetable, even distribution of job responsibilities and impartial approach of authorities in a rich organizational climate. These factors may be responsible in enhancing the job-satisfaction of teachers.
Above results were in line with the results of Pestonjee (1973), Clifford (1994), Goyal (1980), Sundarajan and Rajasekar (1989), Gupta and Kaur (1996).

Thus hypothesis 2 that there would be significant correlation between the job satisfaction of teachers and richness of organizational climate was retained here.

**Relationship between Adjustment of Teachers and Organizational Climate**

Significant positive correlation was obtained between the adjustment of teachers and school organizational climate as value of coefficient of correlation was more than the required value ($r = .118$), vide table 5.1. Above results clearly indicated that there was some association between the adjustment of the teachers and school organizational climate and the association was significant. In other words, as per the results of the present study, school organizational climate does effect the adjustment level of its teachers and the effect was noteworthy.

Positive significant correlation between the adjustment of the teachers and school organizational climate may be explained on the basis of characteristics of the rich school organizational climate due to which there is conducive atmosphere and more work efficiency among teachers. Secondly rich school climate may be helpful in good school results and better results may have created individual worth and identity, social acceptance, respect for students, colleagues, head of the institution, school authorities and as a matter of fact for each and every person. Now all these factors may
have helped the teachers working in rich school climate to adjust well in all areas of adjustment.

Results of the present study were in agreement with the results of Kumari (1988), Sharma (2000) and Pal (2001).

Hence, hypothesis 3 that there would be significant correlation between the adjustment of the teachers and richness of organizational climate was accepted.

SECTION – II

(t-ratio technique)

Present section deals with the statistical treatment of the data along with interpretation with the help of t-ratio technique. For this data was analysed with the help of computer in order to see the difference in the job stress, job satisfaction and adjustment of teachers due to rich and poor school organizational climate.

Along this, some situational variables were also considered in the present study. These variables were sex-differences and institution-wise differences. Sex was varied at two levels i.e. male and female; institutional difference was varied at two levels i.e. Government and private schools. Differences were seen in the job-stress, job-satisfaction and adjustment of teachers due to difference in their sex and institution (namely private and government) in which they were working.

t-ratio is a technique where we see the solution of the problem by using sample means of two samples and their standard deviation. The formula for standard error of difference is
and formula for t-ratio is

\[ t = \frac{M_1 - M_2}{\sigma M} \]

Two confidence intervals are generally seen and accepted as standard by almost all the statisticians. Based on the knowledge of normal distribution 95% of the cases in a normal distribution fall within the limits \( M \pm 1.96 \sigma M \) and that 99% fall within limits \( M \pm 2.58 \sigma M \). If we take the limits specified by \( M \pm 1.96 \sigma M \) we define an interval for which the level of confidence is 0.95. Based on our judgement as to the size of the population on these limits we stand to be right 95% of the time and wrong 5. For greater accuracy we may take the interval defined by limits \( M \pm 2.58 \sigma M \) and hence we stand to be right 99% of the time and wrong 1%. In this way the primary objective of statistical inference becomes to make generalization from a sample to some large population.

t-ratio technique in the present study was employed to test the following hypotheses.

4. There would be significant difference in the job stress of teachers teaching in different organizational climate.

5. There would be significant difference in the job satisfaction of teachers teaching in different organizational climate.

6. There would be significant difference in the adjustment of teachers teaching in different organizational climate.
7. There would be significant difference in the job-stress of teachers due to their sex-difference.

8. There would be significant difference in the job satisfaction of teachers due to sex-difference.

9. There would be significant difference in the adjustment of teachers due to sex-difference.

10. There would be significant difference in the job-stress of teachers working in government and private school.

11. There would be significant difference in the job satisfaction of teachers working in government and private schools.

12. There would be significant difference in the adjustment of teachers working in government and private schools.

Value of mean, SD and t-ratio have been shown from t-value 5.2 to 5.10.

Job-stress of teachers due to difference in Organizational Climate

As per the results of table 5.2, significant difference was obtained in the job stress of teachers between the rich and poor school organizational climate as obtained t-ratio (t = 3.18) was significant at .01 level of significance. When their mean scores were compared, it was found that mean scores of teachers on job stress were less (M = 108.93) under rich school organizational climate as compared to the mean job-stress scores under poor school organizational climate (mean = 125.48). In other words, the obtained results of the present study showed that more rich the
### TABLE 5.2.

Table showing values of means, SD and t-ratio to locate difference in the occupational stress of teachers working in rich and poor school organizational climate

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>School Organizational Climate</td>
<td>Rich</td>
<td>27</td>
<td>108.93</td>
<td>18.34</td>
<td>46</td>
<td>3.18**</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>21</td>
<td>125.48</td>
<td>17.19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 5.3.

Table showing values of mean, SD and t-ratio to locate difference in the Job-satisfaction of teachers working in rich and poor school organizational climate

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School Organizational Climate</td>
<td>Rich</td>
<td>27</td>
<td>78.37</td>
<td>10.05</td>
<td>46</td>
<td>4.103**</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>21</td>
<td>64.52</td>
<td>13.34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The t-ratio values indicate a significant difference at the .01 level of significance.
### TABLE 5.4.

Table showing values of mean, SD and t-ratio to locate difference in the adjustment level of teachers working in rich and poor school organizational climate

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>School Organizational Climate</td>
<td>Rich</td>
<td>27</td>
<td>364.87</td>
<td>52.15</td>
<td>46</td>
<td>1.99*</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>21</td>
<td>332.11</td>
<td>60.01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TABLE 5.5.**

Table showing values of mean, SD and t-ratio to locate difference in the occupational stress of teachers due to sex differences

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Sex-difference</td>
<td>Male</td>
<td>55</td>
<td>121.85</td>
<td>18.86</td>
<td>258</td>
<td>1.99**</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>205</td>
<td>117.33</td>
<td>13.84</td>
<td></td>
<td>.</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 5.6.

Table showing values of mean, SD and t-ratio to locate difference in the Job-satisfaction of teachers due to sex-differences

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sex-difference</td>
<td>Male</td>
<td>55</td>
<td>74.45</td>
<td>10.84</td>
<td>258</td>
<td>1.34</td>
<td>Not Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>205</td>
<td>72.14</td>
<td>11.48</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 5.7.

Table showing values of mean, SD and t-ratio to locate difference in the adjustment of teachers due to sex-difference

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sex-difference</td>
<td>Male</td>
<td>55</td>
<td>361.22</td>
<td>73.65</td>
<td>258</td>
<td>.44</td>
<td>Not Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>205</td>
<td>356.78</td>
<td>63.89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 5.8.

Table showing values of mean, SD and t-ratio to locate difference in the adjustment of teachers due to sex-difference

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type of Institution</td>
<td>Govt.</td>
<td>977</td>
<td>118.90</td>
<td>13.30</td>
<td>258</td>
<td>0.49</td>
<td>Not Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>167</td>
<td>117.94</td>
<td>16.07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 5.9

Table showing values of mean, SD and t-ratio to locate difference in the Job-satisfaction of teachers due to working in different type of Institution

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Type of Institution</td>
<td>Govt.</td>
<td>93</td>
<td>73.45</td>
<td>9.48</td>
<td>258</td>
<td>0.87</td>
<td>Not Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>167</td>
<td>72.17</td>
<td>12.30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 5.10.

Table showing values of mean, SD and t-ratio to locate difference in the adjustment of teachers due to working in different type of institution

<table>
<thead>
<tr>
<th>Va. No.</th>
<th>Independent Variable</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-ratio</th>
<th>Level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type of Institution</td>
<td>Govt.</td>
<td>93</td>
<td>364.61</td>
<td>70.12</td>
<td>258</td>
<td>1.25</td>
<td>Not Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>167</td>
<td>353.88</td>
<td>63.41</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

school organizational climate, less will be the job-stress to teachers.

Now the reasons for the above results may be the better working conditions in the rich school climate which may have provided more liking to the teachers for their profession. Ressee (1986), Alikah (1995) and Grewal (2004) also obtained similar results.

Thus, hypothesis 4 that there would be significant difference in the job-stress of teachers teaching in different organizational climate was accepted.

**Job-satisfaction of teachers due to difference in Organizational Climate**

From the results of table 5.3, significant difference was found between the job satisfaction of teachers due to rich and poor school organizational climate due to significant t-value ($t = 4.103$) at .01 level of significance. Also from their mean score values, it was found that job-satisfaction of teachers under rich school organizational climate was more (mean = 73.37) as compared under poor school organizational climate (mean = 64.52).

In other words, teachers enjoy more job satisfaction under such school organizational climate as compared to poor school climate.

Logic behind the higher job-satisfaction of teachers under rich organizational climate may be the working conditions training, orientation opportunities for professional development, individual liking facilities for recreational activities, and inspiring attitude of head.
Present results of this study were in line with the results of Friendlay (1976), Franers (1986), Biswas and Tinku (1984) and Grewal (2004).

Therefore, hypothesis 5 that there would be significant difference in the job satisfaction of teachers teaching in different organizational climate was retained here.

**Adjustment of teachers due to difference in the Organizational Climate**

Table 5.4 depicted significant difference in the adjustment level of teachers working in rich and poor school organizational climate as t-ratio (t = 1.99) was significant at .05 level of significance and the results were in favour of the teachers working in rich school organizational climate (mean = 364.87) as compared to the adjustment of teachers working in poor organizational climate (mean = 332.11). Thus, results clearly revealed that teachers in the rich school organizational climate were more adjusted as compared to poor school organizational climate.

Reasons for the above results in favour of the rich school organizational climate may be high salary structure, infrastructure facilities in the school, a stimulations type of working condition and helpful attitude of the head and authorities.

Similar results were obtained by Gill (1990) and Pal (2001).

Hence, hypothesis 6 that there would be significant difference in the adjustment of teachers teaching in different organizational climate was also accepted in the present study.
Job-stress of teachers due to sex-difference

From the results of table 5.5 it was observed that there was insignificant difference in the job-stress of teachers due to their sex-difference as obtained t-value \((t = 1.39)\) was insignificant at .05 level of significance. Mean scores of both the groups also revealed not much difference in the job stress of male and female teachers. In other words, sex-difference did not play any role in the level of job-stress of teachers as per the findings of the present study.

Findings of the present study may be explained on the basis of nature of job and nature of work of both the sexes. More or less both the sexes have to perform almost similar duties under similar conditions.

Findings of the present study were in line with the findings of Grewal (2004).

Therefore, hypothesis 7 that there would be significant difference in the job stress of teachers due to their sex-difference was not accepted here.

Job-satisfaction of teachers due to sex-difference

From the results of table 5.6, it was shown that insignificant difference existed between the job satisfaction of teachers due to their sex-difference as obtained t-value \((t = 1.34)\) was insignificant at .05 level of significance. From their mean scores also it was shown that very narrow difference existed between the mean job-satisfaction scores of male and female, meaning thereby that sex-difference has not much influence on the job-satisfaction of teachers.
Insignificant difference in the job satisfaction of teachers due to their sex-difference may be that both the groups get equal privilege and status and work under almost similar conditions.

Findings of present study were in line with the findings of Mantia (1970), Goyal (1980) and Grewa (2004).

Thus hypothesis 8 that there would be significant difference in the job satisfaction of teachers due to their sex-difference was not accepted in the present inquiry.

**Adjustment of teachers due to their sex-difference**

Results of the present study, as entered in table 57 revealed insignificant difference in the adjustment level of male and female teachers due to insignificant t-ratio (t = 0.44) at .05 level of significance. Mean scores of male and female teachers on the variable of adjustment also came out with similar results. Put it in other way, teachers' adjustment level was independent of their sex-differences.

Above mentioned results in which there was no significant difference in the adjustment level of male and female teachers may be a matter of their personal attitude towards life, towards job and working conditions.

Above results of the present study were contrary to the results of Gill (199) and Pal (2001).

Therefore, hypothesis 9 that there would be significant difference in the adjustment of teachers due to sex-difference was not accepted here.
Job-stress due to institutional difference

Insignificant difference existed between the job-stress of teachers due to their institutional differences. Also there was very narrow gap between the mean scores of teachers on occupational stress index due to their institutional difference. In other words whether the teachers are working in government or in private schools, it hardly effect their level of job stress as per the results of the present study.

Although it was expected that significant difference in the job stress of teachers must have been obtained due to difference in their institution, may be due to the nature of job, nature of activities performed by the teachers in both the institutions.

Above results were dissimilar to the results of Simpson (1980), Resse (1986) and Sharma (2000).

Therefore, hypothesis 10 that there would be significant difference in the job-stress of teachers working in government and private schools was not accepted in the present study.

Job-satisfaction and institutional difference:

On the variable of job-satisfaction insignificant difference was obtained in the mean scores of teachers due to their institutional difference and that is why insignificant t-value was obtained (t = 0.87 ,vide table 5.9).

Probably the reasons for insignificant difference in the mean scores of job satisfaction scale may be that similar type of activities are performed by teachers and more or less except salary other
factors which contribute towards the job satisfaction of teachers are more or less same.

Results of the present study were not in line with the results of Anjaneyulu (1974), Chopra (1977), Biswas and Tinku (1994), and Kaur (2001).

Therefore, hypothesis 11 that there would be significant difference in the job-satisfaction of teachers working in government and private schools was also not accepted.

Adjustment of teachers and institutional differences:

t-value \( t = 1.25 \) as entered in table 5.10 revealed insignificant difference in the adjustment level of teachers working in government and private schools. Also there was not much difference in the mean scores of teachers on adjustment inventory working in government and private schools.

Above results may be explained on the basis of attitude of teachers towards their job which may be irrespective of the institutional differences.

Results of the present study were not supported by the results of Gill (1990), Sharma (2000) and Pal (2001).

Hence, hypothesis 12 that there would be significant difference in the adjustment of teachers working in government and private schools was also not retained in the present study.