CHAPTER-V
ANALYSIS AND INTERPRETATIONS

Statistics is the science of collection, analysis, presentation of data and interpretation or explanation. It has wide usage in the field of research. In fact, all the data collection and interpretation techniques used in research are part of statistics. It makes use of descriptive statistics for collection of data and inferential statistics for drawing inferences from this set of data. Statistical methods and analyses are often used to communicate research findings and to support hypotheses and give credibility to research methodology and conclusions. It is important for researchers to understand statistics so that they can be informed, evaluate the credibility and usefulness of information, and make appropriate decisions. The present chapter analyses in detail the data collected by the investigator for the present research and the interpretations of the analyses are also given in detail.

5.1. INTRODUCTION

The present study is to find out the effectiveness of Comprehensive Strategy (CS) to improve English Language Teaching of B.Ed. Teacher Trainees. The experimental method was adopted in the study. Pre-Test, Post-Test Two Equivalent Group design was followed in the study. The collected data were analysed using the statistical techniques and presented in five parts. Part-I deals with the background characteristics of the sample, Part-II deals with mean difference analysis, Part-III deals with gain score analysis, Part-IV deals with co-variate analysis and Part-V deals with correlational analysis.
5.2. PART-I -BACKGROUND CHARACTERISTICS OF THE SAMPLE

Preliminary analysis of the scores was done to see the nature of the data related to the English Language Proficiency and English Language Teaching of the B.Ed. Teacher Trainees of the experimental group, control group and for the total sample. To ensure equivalence of the groups before treatment, the variables were matched with regard to the Pre-English Language Proficiency. Important statistical constants such as mean, median, mode, standard deviation, skewness and kurtosis were computed for the experimental group, control group and for the total sample. The summary of the statistical details are given in table 5.1 and 5.2 respectively.

5.2.1. Pre and Post-Assessment of English Language Proficiency of Experimental Group and Control Group B.Ed. Teacher Trainees

The objective was to calculate the Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of pre and post-assessment of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees. The data were analysed and the results are given in table 5.1.
Table 5.1.
Summary of Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis
of pre-assessment and post-assessment of English Language Proficiency of
Experimental group and Control group B.Ed. Teacher Trainees

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>40.09</td>
<td>39.00</td>
<td>36.82</td>
<td>7.76</td>
<td>0.40</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>65.89</td>
<td>67.00</td>
<td>69.22</td>
<td>8.19</td>
<td>-0.33</td>
<td>1.66</td>
</tr>
<tr>
<td>Control group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>39.71</td>
<td>39.00</td>
<td>37.58</td>
<td>7.03</td>
<td>0.23</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>40.57</td>
<td>40.00</td>
<td>38.86</td>
<td>7.11</td>
<td>0.30</td>
<td>0.21</td>
</tr>
</tbody>
</table>

From the table 5.1, the mean, median and mode of the English Language Proficiency scores of experimental group B.Ed. teacher trainees is 40.09, 39.00, 36.82 and for the control group is 39.71, 39.00, 37.58 in the pre-assessment respectively. The mean values of experimental group and control group in the pre-assessment reveals that there is no remarkable difference between the experimental group and control group in their English Language Proficiency. Thus, we can infer that both the groups do not differ in their English Language Proficiency at the pre-assessment stage.

The mean, median and mode of the English Language Proficiency scores of experimental group B.Ed. teacher trainees is 65.89, 67.00, 69.22 and for the control group is 40.57, 40.00, 38.86 in the post-assessment respectively. The mean values of experimental group and control group in the post-assessment reveals that there is a remarkable difference exists between the experimental group and control group in their English Language Proficiency. Thus, we can infer that both the groups differ in their English Language Proficiency at the post-assessment stage.
The values obtained for skewness and kurtosis in the pre-assessment of the experimental group are 0.40, 0.53 and for the control group 0.23, -0.03 respectively. The post-assessment values of skewness and kurtosis of the experimental group is -0.33, 1.66 and for the control group -0.30, 0.21 respectively. The pre-assessment-post-assessment values of the experimental group and control group indicate that the distribution of scores deviate slightly from normality and they are positively skewed (mean>median>mode), except for the post-assessment of the experimental group. The values of skewness indicate that most of the scores of the data are massed at the low end of the scale and are spread out more gradually towards the high end. The values of kurtosis of the above data indicate that both the curves of the experimental group are said to be platy kurtic and both the curves of the control group are lepto kurtic. To sum up, the background characteristics of the sample demonstrated that, both the experimental group and control group were found to be equal based on statistical analysis/norms.

5.2.2. Pre and Post-Assessment of English Language Teaching of Experimental Group and Control Group B.Ed. Teacher Trainees

The objective was to calculate the Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of pre and post assessment of English Language Teaching of experimental group and control group B.Ed. Teacher Trainees. The data were analysed and the results are given in table 5.2.
Table 5.2.
Summary of Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of pre-assessment and post-assessment of English Language Teaching of Experimental group and Control group B.Ed. Teacher Trainees

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>60.29</td>
<td>58.00</td>
<td>53.42</td>
<td>6.10</td>
<td>0.17</td>
<td>-1.16</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>71.43</td>
<td>70.00</td>
<td>67.14</td>
<td>5.08</td>
<td>0.20</td>
<td>-1.20</td>
</tr>
<tr>
<td>Control group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>61.23</td>
<td>60.00</td>
<td>57.54</td>
<td>5.49</td>
<td>0.10</td>
<td>-1.08</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>63.09</td>
<td>62.00</td>
<td>59.82</td>
<td>5.60</td>
<td>-0.10</td>
<td>-0.41</td>
</tr>
</tbody>
</table>

From the table 5.2, the mean, median and mode of the English Language Teaching scores of experimental group B.Ed. teacher trainees is 60.29, 58.00, 53.42 and for the control group is 61.23, 60.00, 57.54 in the pre-assessment respectively. The mean values of experimental group and control group in the pre-assessment reveals that there is no remarkable difference between the experimental group and control group in their English Language Teaching. Thus, we can infer that both the groups do not differ in their English Language Teaching at the pre-assessment stage.

But it has been observed that, the mean, median and mode of the English Language Teaching scores of experimental group B.Ed. teacher trainees is 71.43, 70.00, 67.14 and for the control group is 63.09, 62.00, 59.82 in the post-assessment respectively. The mean values of experimental group and control group in the post-assessment reveals that there is a remarkable difference exists between the experimental group and control group in their English Language Teaching. Thus, we can infer that both the groups differ in their English Language Teaching at the post-assessment stage.
The values obtained for skewness and kurtosis in the pre-assessment of the experimental group are 0.17, -1.16 and for the control group 0.10, -1.08 respectively. The post-assessment values of skewness and kurtosis of the experimental group is 0.20, -1.20 and for the control group –0.10, -0.41 respectively. The pre-assessment-post-assessment values of the experimental group and control group indicate that the distribution of scores deviate slightly from normality and they are positively skewed (mean>median>mode), except for the post-assessment of the control group. The values of skewness indicate that most of the scores of the data are massed at the low end of the scale and are spread out more gradually towards the high end. The values of kurtosis of the above data indicate that all the curves are said to be platy kurtic (the obtained value is greater than the tabled value of 0.263). To sum up, the background characteristics of the sample demonstrated that both the experimental group and control group were found to be equal based on statistical analysis/norms.

5.3 PART-II: MEAN DIFFERENCE ANALYSIS

5.3.1 Analysis based on Variables

5.3.1.1 Comparison of Mean Scores of English Language Proficiency of Experimental Group and Control Group B.Ed. Teacher Trainees in the Pre-Assessment Stage

The objective was to compare the Mean, Standard Deviation and ’t’ value of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees in the pre-assessment stage. The data were analysed and the results are given in table 5.3.
Hypothesis

“There is no significant difference in the mean scores of the English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees in the pre-assessment stage”.

Table 5.3.
Mean, Standard Deviation and ‘t’ value of English Language Proficiency of Experimental group and Control group B.Ed. Teacher Trainees in the pre-assessment stage

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Assessment</td>
<td>Experimental</td>
<td>35</td>
<td>40.09</td>
<td>7.76</td>
<td>@ 0.21</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>35</td>
<td>39.71</td>
<td>7.03</td>
<td></td>
</tr>
</tbody>
</table>

@ indicates value is not significant

From the table 5.3, the obtained ‘t’ value 0.21 is less than the table value. It reveals that the experimental group and control group do not differ in their English Language Proficiency at pre-assessment stage. Thus, the hypothesis, “There is no significant difference in the mean scores of the English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees in the pre-assessment stage” is accepted.

To conclude, there is no significant difference between the experimental group and control group English Language Proficiency at the pre-assessment stage. Thus, the experimental group and control group are statistically proved to be equivalent in their English Language Proficiency before treatment.
5.3.1.2 Comparison of Mean Scores of English Language Proficiency of Experimental Group and Control Group B.Ed. Teacher Trainees in the Post-Assessment Stage

The objective was to compare the Mean, Standard Deviation and ‘t’ value of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees in the post-assessment stage. The data were analysed and the results are given in table 5.4.

Hypothesis

“There is a significant difference in the mean scores of the English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees in the post-assessment stage”.

Table 5.4.
Mean, Standard Deviation and ‘t’ value of English Language Proficiency of Experimental group and Control group B.Ed. Teacher Trainees in the post-assessment stage

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Assessment</td>
<td>Experimental group</td>
<td>35</td>
<td>65.89</td>
<td>8.19</td>
<td>13.81**</td>
</tr>
<tr>
<td></td>
<td>Control group</td>
<td>35</td>
<td>40.57</td>
<td>7.11</td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level

From the table 5.4, it is evinced that, the obtained ‘t’ value 13.81 is significant at 0.01 level. Thus, the stated hypothesis, “There is a significant difference in the mean scores of the English Language Proficiency of B.Ed. Teacher Trainees of experimental group and control group in the post-assessment stage” is accepted. The result reveals that the mean score of experimental group 65.89 is higher than the
control group (40.57) and it is evident that the English Language Proficiency of experimental group is certainly improved by the implementation of the “Comprehensive Strategy (CS)”.

To conclude, there exists a significant difference in the mean scores of the English Language Proficiency of the experimental group and control group B.Ed. Teacher Trainees in the post-assessment stage.

### 5.3.1.3 Comparison of Mean Scores of English Language Teaching of Experimental Group and Control Group B.Ed. Teacher Trainees in the Pre-Assessment Stage

The objective was to compare the Mean, Standard Deviation and ‘t’ value of English Language Teaching of experimental group and control group B.Ed. Teacher Trainees in the pre-assessment stage. The data were analysed and the results are given in table 5.5.

**Hypothesis**

“There is no significant difference in the mean scores of the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees in the pre-assessment stage”.
Table 5.5
Mean, Standard Deviation and ‘t’ value of English Language Teaching of Experimental group and Control group B.Ed. Teacher Trainees in the pre-assessment stage

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Assessment</td>
<td>Experimental group</td>
<td>35</td>
<td>60.29</td>
<td>6.10</td>
<td>@ 0.68</td>
</tr>
<tr>
<td></td>
<td>Control group</td>
<td>35</td>
<td>61.23</td>
<td>5.49</td>
<td></td>
</tr>
</tbody>
</table>

@ indicates value is not significant

From the table 5.5, it can be observed that, the obtained ‘t’ value 0.68 is not significant. Therefore, the hypothesis, “There is no significant difference in the mean scores of the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees in the pre-assessment stage” is accepted. Thus, it is statistically proved that both experimental group and control group are more or less same in the English Language Teaching in the pre-assessment stage.

To sum up, there is no significant difference in the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees at the pre-assessment stage.

5.3.1.4 Comparison of Mean Scores of English Language Teaching of Experimental Group and Control Group B.Ed. Teacher Trainees in the Post-Assessment Stage

The objective was to compare the Mean, Standard Deviation and ‘t’ value of English Language Teaching of experimental group and control group B.Ed. Teacher Trainees in the post-assessment stage. The data were analysed and the results are given in table 5.6.
Hypothesis

“There is a significant difference in the mean scores of the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees in the post-assessment stage”.

Table 5.6
Mean, Standard Deviation and ‘t’ value of English Language Teaching of Experimental group and Control group B.Ed. Teacher Trainees in the post-assessment stage

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Assessment</td>
<td>Experimental group</td>
<td>35</td>
<td>71.43</td>
<td>5.08</td>
<td>6.53**</td>
</tr>
<tr>
<td></td>
<td>Control group</td>
<td>35</td>
<td>63.09</td>
<td>5.60</td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level

Table 5.6 reveals that, the obtained ‘t’ value 6.53 is significant at 0.01 level. It shows that the experimental group and control group B.Ed. Teacher Trainees differ in their English Language Teaching in the post-assessment stage. Thus, the hypothesis, “There is a significant difference in the mean scores of the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees in the post-assessment stage” is accepted. It is obvious that the mean score of the experimental group 71.43 is higher than the control group mean score 63.09 resulted because of the treatment given by the investigator to the experimental group.

To conclude, there is a significant difference in the mean scores of the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees in the post-assessment stage.
5.3.1.5 Comparison of Mean Scores of English Language Proficiency of Experimental Group B.Ed. Teacher Trainees in the Pre and Post-Assessment Stages

The objective was to compare the Mean, Standard Deviation, Correlation and Correlated ‘t’ value of English Language Proficiency of experimental group B.Ed. Teacher Trainees in the pre and post assessment stages. The data were analysed and the results are given in table 5.7.

Hypothesis

“There is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees in the pre and post-assessment stages”.

Table 5.7
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of English Language Proficiency of Experimental group B.Ed. Teacher Trainees in the pre and post-assessment stages

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>40.09</td>
<td>7.76</td>
<td>0.78</td>
<td>28.67**</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>65.89</td>
<td>8.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level

From the table 5.7, it is observed that, the obtained ‘t’ value 28.67 is significant at 0.01 level. It shows that the English Language Proficiency of the experimental group differ in their pre and post-assessment stages. Therefore, the hypothesis, “There is a significant difference in the mean scores of the English
Language Proficiency of experimental group B.Ed. Teacher Trainees in the pre and post-assessment stages” is accepted.

Further, the post-assessment mean score 65.89 is higher than the pre-assessment mean score 40.09 of experimental group. The improvement in the English Language Proficiency of experimental group is due to the adaptation of the “Comprehensive Strategy (CS)”.

To sum up, there is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees in the pre and post-assessment stages.

5.3.1.6 Comparison of Mean Scores of English Language Proficiency of Control Group B.Ed. Teacher Trainees in the Pre and Post-Assessment Stages

The objective was to compare the Mean, Standard Deviation, Correlation and Correlated ‘t’ value of English Language Proficiency of control group B.Ed. Teacher Trainees in the pre and post assessment stages. The data were analysed and the results are given in table 5.8.

**Hypothesis**

“There is no significant difference in the mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees in the pre and post-assessment stages”.
Table 5.8
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of English Language Proficiency of Control group B.Ed. Teacher Trainees in the pre and post-assessment stages

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>39.71</td>
<td>7.03</td>
<td>0.88</td>
<td>1.49</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>40.57</td>
<td>7.11</td>
<td>@</td>
<td></td>
</tr>
</tbody>
</table>

@ indicates value is not significant

From the table 5.8, it is observed that, the obtained ‘t’ value 1.49 is not significant. Thus, the hypothesis, “There is no significant difference in the mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees in the pre and post-assessment stages” is accepted.

To sum up, there is no significant difference in the English Language Proficiency of the control group B.Ed. Teacher Trainees at the pre and post-assessment stages.

5.3.1.7 Comparison of Mean Scores of English Language Teaching of Experimental Group B.Ed. Teacher Trainees in the Pre and Post-Assessment Stages

The objective was to compare the Mean, Standard Deviation, Correlation and Correlated ‘t’ value of English Language Teaching of experimental group B.Ed. Teacher Trainees in the pre and post assessment stages. The data were analysed and the results are given in table 5.9.
Hypothesis

“There is a significant difference in the mean scores of the English Language Teaching of experimental group B.Ed. Teacher Trainees in the pre and post-assessment stages”.

Table 5.9

Mean, Standard Deviation, Correlation and Correlated ‘t’ value of English Language Teaching of Experimental group B.Ed. Teacher Trainees in the pre and post-assessment stages

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>60.29</td>
<td>6.10</td>
<td>0.96</td>
<td>35.96**</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>71.43</td>
<td>5.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level

From the table 5.9, it is evinced that, the obtained ‘t’ value 35.96 is significant at 0.01 level. It shows that the English Language Teaching of the experimental group differ in their pre and post-assessment stages. Hence, the stated hypothesis, “There is a significant difference in the mean scores of the English Language Teaching of Experimental Group B.Ed. Teacher Trainees in the pre and post-assessment stages” is accepted.

Further, the mean score of English Language Teaching of experimental group at pre and post-assessment stage is 60.29 and 71.43 respectively. The analyses of the mean scores reveal that there is a significant difference between the pre and post-assessment stages of their English Language Teaching of experimental group B.Ed. Teacher Trainees. Therefore, it is evident that the experimental group has improved in
their English Language Teaching with the implementation of “Comprehensive Strategy (CS)” when compared with the control group.

To conclude, there exists a significant difference between the pre and post-assessment of English Language Teaching of experimental group B.Ed. Teacher Trainees.

5.3.1.8 Comparison of Mean Scores of English Language Teaching of Control Group B.Ed. Teacher Trainees in the Pre and Post-Assessment Stages

The objective was to compare the Mean, Standard Deviation, Correlation and Correlated ‘t’ value of English Language Teaching of control group B.Ed. Teacher Trainees in the pre and post assessment stages. The data were analysed and the results are given in table 5.10.

Hypothesis

“There is no significant difference in the mean scores of the English Language Teaching of control group B.Ed. Teacher Trainees in the pre and post-assessment stages”.

Table 5.10
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of English Language Teaching of Control group B.Ed. Teacher Trainees in the pre and post-assessment stages

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>61.23</td>
<td>5.49</td>
<td>0.92</td>
<td>4.97**</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>63.09</td>
<td>5.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level
From the table 5.10, it can be seen that, the obtained ‘t’ value 4.97 is significant at 0.01 level. It reflects that there is significant difference in the English Language Teaching of the control group B.Ed. Teacher Trainees at the Pre and post assessment stages. It revealed that the control group B.Ed. Teacher Trainees differ in their English Language Teaching at the pre and post-assessment stages. Thus, the hypothesis, “There is no significant difference in the mean scores of the English Language Teaching of Control group B.Ed. Teacher Trainees in the pre and post-assessment stages” is rejected. But as it is evident that, only slight difference exists between the pre and post-assessment mean scores of English Language Teaching of control group at pre and post-assessment stage (61.23, 63.09) and the improvement may be due to the peer group, that is, the influence of the Experimental group B.Ed. Teacher Trainees.

To sum up, there exists a minimal improvement in the English Language Teaching of Control group B.Ed. teacher-trainees in the pre and post-assessment stages and the improvement may be due to the peer group influence.

5.3.2 Analysis Based on English Language Skills - LSRW - Listening, Speaking, Reading and Writing

5.3.2.1 Comparison of Mean Scores of Pre and Post-Assessment of English Language Proficiency of Experimental Group B.Ed. Teacher Trainees based on Listening Skill

The objective was to study and compare the mean scores of the pre and post-Assessment of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on Listening Skill. The data were analyzed with the help of correlated t-test and results are given in table 5.11.
Hypothesis

“There is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees based on the Listening Skill in the pre and post-assessment stages”.

Table 5.11
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of pre and post-assessment of English Language Proficiency of Experimental group B.Ed. Teacher Trainees based on Listening Skill

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>17.06</td>
<td>2.63</td>
<td>0.47</td>
<td>5.26**</td>
</tr>
<tr>
<td>group</td>
<td>Post-Assessment</td>
<td>35</td>
<td>19.34</td>
<td>2.36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** indicates significant at 0.01 level

From the table 5.11, it is observed that, the obtained ‘t’ value 5.26 is significant at 0.01 level. It shows that the English Language Proficiency of the experimental group B.Ed. Teacher Trainees based on their Listening Skill differ in their pre and post-assessment stages. Thus, the stated hypothesis, “There is a significant difference in the mean scores of the English Language Proficiency of Experimental group B.Ed. Teacher Trainees based on the Listening Skill in the pre and post-assessment stages” is accepted.

Further, the mean scores of English Language Proficiency of experimental group at pre and post-assessment stages 17.06 and 19.34 reveals that there is a significant difference between the pre and post-assessment stages of their English Language Proficiency of experimental group B.Ed. Teacher Trainees based on their Listening Skill. Therefore, it is evident that the experimental group has improved in
their English Language Proficiency especially in the Listening Skill with the implementation of “Comprehensive Strategy” when compared with the control group.

The results are in agreement with the study done by Mahendran (2004) by which it is observed that the significant mean difference between pre/post-test listening behaviour through Listening Self-Assessment with reference to the components of empathy, respect in special English at revealed that the effective use of the Attention Activating Strategies to facilitate listening comprehension among the B.Ed. Optional-I English Teacher Trainees Flanders system. Effective strategies could be used to develop English by B.Ed. training.

To conclude, there exists a significant difference between the pre and post-assessment of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on their Listening Skill.

5.3.2.2 Comparison of Mean Scores of Pre and Post-Assessment of English Language Proficiency of Control Group B.Ed. Teacher Trainees based on Listening Skill

The objective was to study and compare the mean scores of the pre and post-assessment of English Language Proficiency of Control group B.Ed. Teacher Trainees based on Listening Skill. The data were analyzed with the help of correlated t-test and results are given in table 5.12.

Hypothesis

“There is no significant difference in mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees based on the Listening Skill in the pre and post-assessment stages”.

160
Table 5.12
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of pre and post-assessment of English Language Proficiency of Control group B.Ed. Teacher Trainees based on Listening Skill

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>13.34</td>
<td>3.70</td>
<td>0.34</td>
<td>@</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>13.46</td>
<td>4.51</td>
<td>0.14</td>
<td></td>
</tr>
</tbody>
</table>

@indicates the value is not significant

From the table 5.12, it is to be concluded that, the obtained ‘t’ value 0.14 is not significant at 0.01 level. It reflects that there is no significant difference in the English Language Proficiency of the control group B.Ed. Teacher Trainees based on their Listening Skill at the pre and post-assessment stages. Thus, the hypothesis, “There is no significant difference in the mean scores of the English Language Proficiency of Control group B.Ed. Teacher Trainees based on the Listening Skill in the pre and post-assessment stages” is accepted.

To sum up, there is no significant difference between the English Language Proficiency of control group B.Ed. Teacher Trainees based on their Listening Skill in the pre and post-assessment stages.

5.3.2.3 Comparison of Mean Scores of Pre and Post-Assessment of English Language Proficiency of Experimental Group B.Ed. Teacher Trainees based on Speaking Skill

The objective was to study and compare the mean scores of the pre and post-assessment of English Language Proficiency of experimental group based on Speaking Skill. The data were analyzed with the help of correlated t-test and results are given in table 5.13.

161
Hypothesis

“There is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees based on the Speaking Skill in the pre and post-assessment stages”.

Table 5.13
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of pre and post-assessment of English Language Proficiency of Experimental group B.Ed. Teacher Trainees based on Speaking Skill

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>6.54</td>
<td>2.48</td>
<td>0.79</td>
<td>31.95**</td>
</tr>
<tr>
<td>group</td>
<td>Post-Assessment</td>
<td>35</td>
<td>16.29</td>
<td>2.92</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** indicates significant at 0.01 level

From the table 5.13, it is observed that, the obtained ‘t’ value 31.95 is significant at 0.01 level. It shows that the English Language Proficiency of the experimental group B.Ed. Teacher Trainees differ in their pre and post-assessment stages on their Speaking Skill. Thus, the stated hypothesis, “There is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees based on the Speaking Skill in the pre and post-assessment stages” is accepted.

Further, the mean score of English Language Proficiency of experimental group at pre and post-assessment stages are 6.54 and 16.29 respectively. The analyses of the mean scores reveal that there is significant difference between the pre and post-assessment stages of their English Language Proficiency of experimental group B.Ed. Teacher Trainees in their Speaking Skill. Therefore, it is evident that the experimental
group has improved in their English Language Proficiency especially in the Speaking Skill with the implementation of “Comprehensive Strategy (CS)” when compared with the control group.

To conclude, there exists a significant difference between the pre and post-assessment of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on their Speaking Skill.

5.3.2.4 Comparison of Mean Scores of Pre and Post-Assessment of English Language Proficiency of Control Group B.Ed. Teacher Trainees based on Speaking Skill

The objective was to study and compare the mean scores of the pre and post-assessment of English Language Proficiency of control group based on Speaking Skill. The data were analyzed with the help of correlated t-test and results are given in table 5.14.

Hypothesis

“There is no significant difference in mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees based on the Speaking Skill in the pre and post-assessment stages”.

163
Table 5.14
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of pre and post-assessment of English Language Proficiency of Control group B.Ed. Teacher Trainees based on Speaking Skill

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>8.97</td>
<td>2.24</td>
<td>-0.09</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>9.37</td>
<td>2.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

@ indicates the value is not significant

From the table 5.14, it is to be concluded that, the obtained ‘t’ value 0.71 which is not significant at 0.01 level. It reflects that there is no significant difference in the English Language Proficiency of the control group B.Ed. Teacher Trainees based on their Speaking Skill at the pre and post assessment stages. It revealed that the control group B.Ed. Teacher Trainees do not differ in their English Language Proficiency based on their Speaking Skill at the pre and post-assessment stages. Thus, the hypothesis, “There is no significant difference in the mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees based on the Speaking Skill in the pre and post-assessment stages” is accepted.

To sum up, there is no significant difference between the English Language Proficiency of control group B.Ed. Teacher Trainees based on their Speaking Skill in the pre and post-assessment stages.

5.3.2.5 Comparison of Mean Scores of Pre and Post-Assessment of English Language Proficiency of Experimental Group B.Ed. Teacher Trainees based on Reading Skill
The objective was to study and compare the mean scores of the pre and post-assessment of English Language Proficiency of experimental group based on Reading Skill. The data were analyzed with the help of correlated t-test and results are given in table 5.15.

**Hypothesis**

“There is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees based on the Reading Skill in the pre and post-assessment stages”.

**Table 5.15**

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>6.06</td>
<td>2.47</td>
<td>0.13</td>
<td>8.68**</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>13.54</td>
<td>4.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level**

From the table 5.15, it is evinced that, the obtained ‘t’ value 8.68 is significant at 0.01 level. It shows that the English Language Proficiency of the experimental group B.Ed. Teacher Trainees based on their Reading Skill differ in their pre and post-assessment stages. Thus, the stated hypothesis, “There is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees based on the Reading Skill in the pre and post-assessment stages” is accepted.
Further, the mean scores of English Language Proficiency of experimental group at pre and post-assessment stage are 6.06 and 13.54 respectively. The analyses of the mean scores reveal that there is significant difference between the pre and post-assessment stages of their English Language Proficiency of experimental group B.Ed. Teacher Trainees based on their Reading Skill. Therefore, it is evident that the experimental group has improved in their English Language Proficiency especially in the Reading Skill with the implementation of “Comprehensive Strategy (CS)” when compared with the control group.

To conclude, there exists a significant difference between the pre and post-assessment of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on their Reading Skill.

5.3.2.6 Comparison of Mean Scores of Pre and Post-Assessment of English Language Proficiency of Control Group B.Ed. Teacher Trainees based on Reading Skill

The objective was to study and compare the mean scores of the pre and post-assessment of English Language Proficiency of control group based on Reading Skill. The data were analyzed with the help of correlated t-test and results are given in table 5.16.

Hypothesis

“There is no significant difference in the mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees based on the Reading Skill in the pre and post-assessment stages”.
Table 5.16
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of pre and post-assessment of English Language Proficiency of Control group B.Ed. Teacher Trainees based on Reading Skill

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>8.77</td>
<td>2.58</td>
<td>0.24</td>
<td>@0.43</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>8.54</td>
<td>2.51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

@indicates the value is not significant

From the table 5.16, it is to be concluded that, the obtained ‘t’ value 0.43 is not significant at 0.01 level. It reflects that there is no significant difference in the English Language Proficiency of the control group B.Ed. Teacher Trainees based on their Reading Skill at the Pre and post assessment stages. It revealed that the control group B.Ed. Teacher Trainees do not differ in their English Language Proficiency based on their Reading Skill at the pre and post-assessment stages. Thus, the hypothesis, “There is no significant difference in the mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees based on the Reading Skill in the pre and post-assessment stages” is accepted.

To sum up, there is no significant difference between the English Language Proficiency of control group B.Ed. Teacher Trainees based on their Reading Skill in the pre and post-assessment stages.

5.3.2.7 Comparison of Mean Scores of Pre and Post-Assessment of English Language Proficiency of Experimental Group B.Ed. Teacher Trainees based on Writing Skill
The objective was to study and compare the mean scores of the pre and post-assessment of English Language Proficiency of experimental group based on Writing Skill. The data were analyzed with the help of correlated t-test and results are given in table 5.17.

**Hypothesis**

“There is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees based on the Writing Skill in the pre and post-assessment stages”.

**Table 5.17**

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>10.43</td>
<td>2.44</td>
<td>0.73</td>
<td>22.23**</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>16.71</td>
<td>1.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level**

From the table 5.17, it is evinced that, the obtained ‘t’ value 22.23 is significant at 0.01 level. It shows that the English Language Proficiency of the experimental group B.Ed. Teacher Trainees based on their Writing Skill differ in their pre and post-assessment stages. Thus, the stated hypothesis, “There is a significant difference in the mean scores of the English Language Proficiency of experimental group B.Ed. Teacher Trainees in their Writing Skill in the pre and post-assessment stages” is accepted.
Further, the mean scores of English Language Proficiency of experimental group at pre and post-assessment stage are 10.43 and 16.71 respectively. The analyses of the mean scores reveal that there is a significant difference between the pre and post-assessment stage of their English Language Proficiency of experimental group B.Ed. Teacher Trainees based in their Writing Skill. Therefore, it is evident that the experimental group has improved in their English Language Proficiency especially in the Writing Skill with the implementation of “Comprehensive Strategy (CS)”. The result reminds the study conducted by Gupta (2006) as the strategies improve syntax knowledge among children of seventh standard. The successful interventions always included frequent feedback to the students on the quality of their overall writing, strength and missing elements.

To conclude, there exists a significant difference between the pre and post-assessment of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on their Writing Skill.

5.3.2.8 Comparison of Mean Scores of Pre and Post-Assessment of English Language Proficiency of Control Group B.Ed. Teacher Trainees based on Writing Skill

The objective was to study and compare the mean scores of the pre and post-assessment of English Language Proficiency of control group based on Writing Skill. The data were analyzed with the help of correlated t-test and results are given in table 5.18.

Hypothesis

“There is no significant difference in the mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees based on the Writing Skill in the pre and post-assessment stages”.

169
Table 5.18
Mean, Standard Deviation, Correlation and Correlated ‘t’ value of pre and post-assessment of English Language Proficiency of Control group B.Ed. Teacher Trainees based on Writing Skill

<table>
<thead>
<tr>
<th>Group</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>Correlated ‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>Pre-Assessment</td>
<td>35</td>
<td>8.63</td>
<td>2.76</td>
<td>0.14</td>
<td>@ 1.91</td>
</tr>
<tr>
<td></td>
<td>Post-Assessment</td>
<td>35</td>
<td>9.86</td>
<td>3.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

@indicates the value is not significant

From the table 5.18, it is to be concluded that, the obtained ‘t’ value 1.91 is not significant at 0.01 level. It reflects that there is no significant difference in the English Language Proficiency of the control group B.Ed. Teacher Trainees in their Writing Skill at the pre and post assessment stages. It revealed that the control group B.Ed. Teacher Trainees do not differ in their English Language Proficiency in their Writing Skill at the pre and post-assessment stages. Thus, the hypothesis, “There is no significant difference in the mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees based on the Writing Skill in the pre and post-assessment stages” is accepted.

To sum up, there is no significant difference between the English Language Proficiency of control group B.Ed. Teacher Trainees based on their Writing Skill in the pre and post-assessment stages.

To conclude, the hypothesis, “There is a significant difference in the mean scores of the English Language Proficiency of Experimental group B.Ed. Teacher Trainees based on the skills – LSRW – Listening, Speaking, Reading and Writing Skills in the pre and post-assessment stages” and “There is no significant difference in mean scores of the English Language Proficiency of control group B.Ed. Teacher Trainees based on the Writing Skill in the pre and post-assessment stages.” is accepted.
Trainees based on the skills – LSRW – Listening, Speaking, Reading and Writing Skills in the pre and post-assessment stages” are accepted.

The results of the study relates with the study of Cem Alptekin and Sibel Tatar (2011), as the research characterizes the most common interests of academics and practitioners in the following areas: foreign language teaching and teachers, foreign language learning and learners, foreign language teacher education, the four language skills, measurement and evaluation, and the relationship between language and culture.

5.4 PART-III: GAIN SCORE ANALYSIS

5.4.1 Comparison of Mean Gain Scores of English Language Proficiency of Experimental Group and Control Group B.Ed. Teacher Trainees

The objective was to compare the mean gain scores of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees. The data were analysed with the help of independent sample t-test and results are given in table 5.19.

Hypothesis

“There is a significant difference in the mean gain scores of the English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees”.

171
Table 5.19
Gain Score Analysis of English Language Proficiency of Experimental and Control group B.Ed. Teacher Trainees

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Gain Scores</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental gain</td>
<td>35</td>
<td>25.80</td>
<td>5.32</td>
<td>24.18**</td>
</tr>
<tr>
<td>Control gain</td>
<td>35</td>
<td>1.51</td>
<td>2.64</td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level

From the table 5.19, it has been observed that the obtained ‘t’ value 24.18 is significant at 0.01 level. It is reveals that there is a significant difference in the mean gain scores of the English Language Proficiency of experimental and control group B.Ed. teacher trainees. It ascertains that, the experimental group has improved because of the treatment to the remarkable extent than the control group. Thus, the hypothesis “There is a significant difference in the mean gain scores of the English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees” is accepted.

Further, the mean gain scores of English Language Proficiency of experimental and control group are 25.80 and 1.51 respectively. It is obvious from the gain score difference of the experimental and control group reveals that there is a significant difference between the mean gain scores of experimental and control group B.Ed. Teacher Trainees after treatment.

To sum up, there exists a significant difference between the mean gain scores of the English Language Proficiency of experimental and control group B.Ed. Teacher Trainees.
5.4.2 Comparison of Mean Gain Scores of English Language Teaching of Experimental Group and Control Group B.Ed. Teacher Trainees

The objective was to compare the mean gain scores of English Language Teaching of experimental group and control group. The data were analysed with the help of independent sample t-test and results are given in table 5.20.

Hypothesis

“There is a significant difference in the mean gain scores of the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees”.

Table 5.20
Gain Score Analysis of English Language Teaching of Experimental group and Control group B.Ed. Teacher Trainees

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Gain Scores</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental gain</td>
<td>35</td>
<td>11.14</td>
<td>1.83</td>
<td>19.12**</td>
</tr>
<tr>
<td>Control gain</td>
<td>35</td>
<td>1.86</td>
<td>2.21</td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level

Table 5.20 reveals that the obtained ‘t’ value 19.12 is significant at 0.01 level. It is evinced that, there is a significant difference in the mean gain scores of the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees. It shows that, the experimental group has improved their English Language Teaching by the implementation of “Comprehensive Strategy (CS)” when compared to the control group. Thus, the hypothesis, “There is a significant difference in the mean gain scores of the English Language Teaching of experimental group and control group B.Ed. Teacher Trainees” is accepted.
Further, the mean gain scores of English Language Teaching of experimental group and control group are 11.14 and 1.86 respectively. Thus, it is observed that the mean gain score difference of the experimental group is very high than the control group which infers that the implementation of “Comprehensive Strategy (CS)” is very effective.

To conclude, there exists a significant difference between the mean gain scores of the English Language Teaching of experimental group and control group B.Ed. teacher trainees.

5.5 PART-IV: CO-VARIATE ANALYSIS

5.5.1 Comparison of Adjusted Mean Scores of English Language Proficiency of Experimental Group and Control Group B.Ed. Teacher Trainees by taking Pre-English Language Proficiency as Covariate

The objective was to compare the adjusted mean scores of English Language Proficiency of experimental group and control group by considering Pre-English Language Proficiency as Covariate. The data were analysed with the help of One Way ANCOVA by considering Pre-English Language Proficiency as Covariate. The results are given in Table 5.21.

Hypothesis

“There is a significant difference in the adjusted mean scores of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees by taking Pre-English Language Proficiency as covariate”.
Table 5.21
Summary of One Way ANCOVA of English Language Proficiency by taking Pre-English Language Proficiency of B.Ed. Teacher Trainees as Covariate

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares (SSy.x)</th>
<th>Mean Square of Variance (MSSy.x)</th>
<th>Fy.x</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>10358.932</td>
<td>10358.932</td>
<td>615.609**</td>
<td>p&lt;0.01</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>1127.418</td>
<td>16.827</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>14523.271</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**indicates significant at 0.01 level

Table 5.21 (a)
Summary of Adjusted Mean Scores of English Language Proficiency by taking Pre-English Language Proficiency of B.Ed. Teacher Trainees as Covariate

<table>
<thead>
<tr>
<th>Group</th>
<th>Adjusted Mean Scores of English Language Proficiency</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>65.726</td>
<td>0.693</td>
</tr>
<tr>
<td>Control Group</td>
<td>41.388</td>
<td>0.693</td>
</tr>
</tbody>
</table>

Note: Pre-English Language Proficiency is 39.90.

From Table 5.21, it has been evinced that, the adjusted F-Value (MSSy.x of Treatment/error) 615.609 is significant at 0.01 level with df= 1/67. It reveals that the adjusted mean scores of English Language Proficiency of experimental group and control group differ significantly. Thus the hypothesis that, “There is a significant difference in the adjusted mean scores of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees by taking Pre-English Language Proficiency as covariate” is accepted.
Further from the table 5.21 (a) it is observed that the adjusted mean score of English Language Proficiency of experimental group is 65.726 which is significantly higher than the mean scores 41.388. It certainly reveals that the implementation of “Comprehensive Strategy (CS) on the experimental group resulted positively and a vast difference has been observed between the adjusted mean scores of English Language Proficiency of experimental and control group B.Ed. Teacher Trainees.

To sum up, there is a significant difference in the adjusted mean scores of English Language Proficiency of experimental and control B.Ed. Teacher Trainees.

5.5.2 Comparison of Adjusted Mean Scores of English Language Teaching of Experimental Group and Control Group B.Ed. Teacher Trainees by taking Pre-English Language Teaching as Covariate

The objective was to compare the adjusted mean scores of English Language Teaching of experimental group and control group by considering Pre-English Language Teaching as Covariate. The data were analysed with the help of One Way ANCOVA by considering Pre-English Language Teaching as Covariate. The results are given in Table 5.22.

Hypothesis

“There is a significant difference in the adjusted mean scores of English Language Teaching of experimental group and control group B.Ed. Teacher Trainees by taking Pre-English Language Teaching as covariate”.
Table 5.22
Summary of One Way ANCOVA of English Language Teaching by taking Pre-English Language Teaching of B.Ed. Teacher Trainees as Covariate

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares (SSy.x)</th>
<th>Mean Square of Variance (MSSy.x)</th>
<th>Fy.x</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>1403.388</td>
<td>1403.388</td>
<td>110.88**</td>
<td>p&lt;0.01</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>847.972</td>
<td>12.656</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>3103.371</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** indicates significant at 0.01 level

Table 5.22 (a)
Summary of Adjusted Mean Scores of English Language Teaching by taking Pre-English Language Teaching of B.Ed. Teacher Trainees as Covariate

<table>
<thead>
<tr>
<th>Group</th>
<th>Adjusted Mean Scores of English Language Proficiency</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>71.750</td>
<td>0.602</td>
</tr>
<tr>
<td>Control Group</td>
<td>62.764</td>
<td>0.602</td>
</tr>
</tbody>
</table>

Note: Pre-English Language Teaching is 60.76.

From the table 5.22, it has been evinced that, the adjusted F-Value (MSSy.x of Treatment/error) 110.88 is significant at 0.01 level with df= 1/67. It reveals that the adjusted mean scores of English Language Teaching of experimental group and control group differ significantly. Thus the hypothesis that, “There is a significant difference in the adjusted mean scores of English Language Teaching of experimental group and control group B.Ed. Teacher Trainees by taking Pre-English Language Teaching as covariate” is accepted.
Further from the table 5.22 (a) it is observed that the adjusted mean score of English Language Teaching of experimental group 71.750 which is significantly higher than the mean score 62.764 of control group. It certainly reveals that the implementation of “Comprehensive Strategy (CS)” on the experimental group resulted positively and a vast difference has been observed between the adjusted mean scores of English Language Teaching of experimental and control group B.Ed. Teacher Trainees.

To sum up, there is a significant difference in the adjusted mean scores of English Language Teaching of experimental and control B.Ed. Teacher Trainees.

5.6 PART-V: CORRELATIONAL ANALYSIS

5.6.1 Relationship between the English Language Proficiency and English Language Teaching of Experimental Group B.Ed. Teacher Trainees

The objective was to study the relationship between the English Language Proficiency and English Language Teaching of the experimental group B.Ed. Teacher Trainees before and after the treatment separately. The data were analysed with the help of Product Moment Correlation and the results are given in Table 5.23.

Hypothesis

“There is a significant relationship between English Language Proficiency and English Language Teaching of B.Ed. Teacher Trainees”.

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Table 5.23
Correlation between the English Language Proficiency and English Language Teaching of Experimental group B.Ed. Teacher Trainees before and after the treatment separately

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation Coefficient (r) (Before Treatment)</th>
<th>% of commonness (r²x100)</th>
<th>Correlation Coefficient (r) (After Treatment)</th>
<th>% of commonness (r²x100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language Proficiency &amp; English Language Teaching</td>
<td>0.347*</td>
<td>12.04</td>
<td>0.514**</td>
<td>26.42</td>
</tr>
</tbody>
</table>

* indicates significant at 0.05 level  
** indicates significant at 0.01 level

From Table 5.23, it can be observed that, the correlation coefficients between the English Language Proficiency and English Language Teaching of B.Ed. Teacher Trainees before and after the Treatment are 0.347 and 0.514 respectively which are significant at 0.05 and 0.01 level with df=167. It reflects that both English Language Proficiency and English Language Teaching were positively and significantly related to each other, both before as well as after the treatment. In this context, the declarative hypothesis that, “There is a significant relationship between English Language Proficiency and English Language Teaching of B.Ed. Teacher Trainees” is accepted.

Further, the percentage of commonness between English Language Proficiency and English Language Teaching before and after the treatment was found to be 12.04% and 26.42% respectively. It reflects that there was 14.38% change in the commonness shared between English Language Proficiency and English Language Teaching after the treatment. The raise of the percentage of commonness shows the
influence of “Comprehensive Strategy (CS)” on the experimental group with a greater significance at 0.01 level.

The result reminds the study conducted by Butler and Castellon-Wellington (2000) who compared the student content performance to concurrent performance on a language proficiency test. This study established a correlation relationship between English language proficiency and performance on standardized achievement tests in English.

**To sum up**

1. The mean scores of English Language Proficiency of experimental group B.Ed. Teacher Trainees at the pre and post-assessment stages differ significantly (t-value=28.67). This reveals that the experimental group B.Ed. Teacher Trainees are improved through the treatment of the implementation of the “Comprehensive Strategy (CS)”.

2. The mean scores of English Language Proficiency of control group B.Ed. Teacher Trainees do not differ significantly at the pre and post-assessment stages (t-value = 1.49). This shows that the conventional method of English Language Teaching could not make any difference in the level of English Language Proficiency of control group B.Ed. Teacher Trainees.

3. The mean scores of English Language Teaching of experimental group B.Ed. Teacher Trainees at the pre and post-assessment stages differ significantly (t-value=35.96). This reveals that the experimental group B.Ed. Teacher Trainees improved their English Language Teaching through the implementation of the “Comprehensive Strategy (CS)”.

4. The mean scores of English Language Teaching of control group B.Ed. Teacher Trainees differ slightly at the pre and post-assessment stages
(t-value=4.97). It is evident that the control group is not improved more when compared to the experimental group which received the treatment. Also, the slight difference in the result between the pre and post-assessment may be due to the strong influence of the peer interaction. But it is proved that, the conventional method of English Language Teaching could not make any major difference in the level of English Language Proficiency of control group B.Ed. Teacher Trainees.

5. The mean scores of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees at the pre-assessment stage do not differ significantly (t-value=0.21). This reveals that the experimental group and control group B.Ed. Teacher Trainees are statistically proved as both are equivalent groups before treatment.

6. The mean scores of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees at the post-assessment stages differ significantly (t-value=13.81). This reveals that the experimental group B.Ed. Teacher Trainees improved with the implementation of the “Comprehensive Strategy (CS)” and the control group has not improved due to the absence of the treatment.

7. The mean scores of English Language Teaching of experimental group and control group B.Ed. Teacher Trainees at the pre-assessment stage do not differ significantly (t-value=0.68). This reveals that the experimental group and control group B.Ed. Teacher Trainees are statistically proved as both are equivalent groups before treatment in their English Language Teaching.
8. The mean scores of English Language Teaching of experimental group and control group B.Ed. Teacher Trainees at the post-assessment stages differ significantly (t-value=6.53). This reveals that the experimental group B.Ed. Teacher Trainees had improved by the implementation of “Comprehensive Strategy (CS)” and the control group has not improved due to the absence of the treatment.

9. The mean scores of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on Listening Skill at the pre and post-assessment stages differ significantly (t-value=5.26). This reveals that the experimental group B.Ed. Teacher Trainees improved in their Listening Skill through the treatment of the implementation of the “Comprehensive Strategy (CS)”.

10. The mean scores of English Language Proficiency of control group B.Ed. Teacher Trainees based on Listening Skill do not differ significantly at the pre and post-assessment stages (t-value=0.14). This shows that the conventional method of English Language Teaching could not make any difference in the level of English Language Proficiency of control group B.Ed. Teacher Trainees and the control group is not improved in their Listening Skill due to the absence of treatment.

11. The mean scores of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on Speaking Skill at the pre and post-assessment stages differ significantly (t-value=31.95). This reveals that the experimental group B.Ed. Teacher Trainees improved in their Speaking Skill through the treatment of the implementation of “Comprehensive Strategy (CS)”.

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12. The mean scores of English Language Proficiency of control group B.Ed. Teacher Trainees based on Speaking Skill do not differ significantly at the pre and post-assessment stages (t-value=0.71). This shows that the conventional method of English Language Teaching could not make any difference in the level of English Language Proficiency of control group B.Ed. Teacher Trainees and the control group is not improved in their Speaking Skill due to the absence of treatment.

13. The mean scores of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on Reading Skill at the pre and post-assessment stages differ significantly (t-value=8.68). This reveals that the experimental group B.Ed. Teacher Trainees have improved in their Reading Skill through the treatment of the implementation of “Comprehensive Strategy (CS)”.

14. The mean scores of English Language Proficiency of control group B.Ed. Teacher Trainees based on Reading Skill do not differ significantly at the pre and post-assessment stages (t-value=0.43). This shows that the conventional method of English Language Teaching could not make any difference in the level of English Language Proficiency of control group B.Ed. Teacher Trainees and the control group is not improved in their Reading Skill due to the absence of treatment.

15. The mean scores of English Language Proficiency of experimental group B.Ed. Teacher Trainees based on Writing Skill at the pre and post-assessment stages differ significantly (t-value=22.23). This reveals that the experimental group B.Ed. Teacher Trainees are improved in their Writing
18. The mean scores of English Language Proficiency of control group B.Ed. Teacher Trainees based on Writing Skill do not differ significantly at the pre and post-assessment stages (t-value=1.91). This shows that the conventional method of English Language Teaching could not make any difference in the level of English Language Proficiency of control group B.Ed. Teacher Trainees and the control group is not improved in their Writing Skill due to the absence of treatment.

17. The mean gain scores of English Language Proficiency of experimental group and control group B.Ed. Teacher Trainees differ significantly (Critical Ratio=24.18). This reveals that the experimental group and control group B.Ed. Teacher Trainees differ significantly at the pre and post-assessment stages. This gain score analysis showed the effectiveness of comprehensive strategy.

18. The mean gain scores of English Language Teaching of experimental group and control group B.Ed. Teacher Trainees differ significantly (Critical Ratio=19.12). This reveals that the experimental group and control group B.Ed. Teacher Trainees differ significantly at the pre and post-assessment stages evinced the gain scores are due to the implementation of “Comprehensive Strategy (CS)”.

19. The adjusted mean scores of English Language Proficiency of experimental group and control group differ significantly (F ratio=615.609). The implementation of “Comprehensive Strategy (CS)” could significantly enhance the English Language Proficiency of the B.Ed.
Teacher Trainees in comparison to the conventional method when Pre-
English Language Proficiency was considered as covariate.

20. The adjusted mean scores of English Language Teaching of experimental
group and control group differ significantly (F ratio=110.88). The
application of “Comprehensive Strategy (CS)” could significantly enhance
the English Language Teaching of the B.Ed. Teacher Trainees in
comparison to the conventional method when Pre-English Language
Teaching was considered as covariate.

21. Correlation Analysis revealed that, the English Language Proficiency and
English Language Teaching were positively and significantly related to
each other, both before and after the treatment. The percentage of
commonness between English Language Proficiency and English
Language Teaching before and after the treatment was found to be 12.04%
and 26.42% respectively. It reflects that there was 14.38% change in the
commonness shared between English Language Proficiency and English
Language Teaching after the treatment. The raise of the percentage of
commonness shows the influence of the application of the
“Comprehensive Strategy (CS)” treatment applied on the experimental
group B.Ed. Teacher Trainees.

5.7 CONCLUSION

The results obtained from the present study on the “Effectiveness of
Comprehensive Strategy to improve English Language Teaching of B.Ed. Teacher
Trainees” shows that the Comprehensive Strategy (CS) designed by the investigator is
proved to be effective in improving both the English Language Proficiency and
English Language Teaching of the experimental group B.Ed. Teacher Trainees. Of
course, the control group B.Ed. Teacher Trainees have not improved in their English Language Proficiency and English Language Teaching to a significant level as they were not given chance to undergo the treatment with the help of “Comprehensive Strategy (CS)”. The English Language Proficiency and English Language Teaching of B.Ed. Teacher Trainees are related to each other both before and after treatment. The independent variables like Listening, Speaking, Reading and Writing Skills are found to be playing a vital role in improving the English Language Proficiency and English Language Teaching of the B.Ed. Teacher Trainees. The overall analysis revealed that the experimental group B.Ed. Teacher Trainees have remarkably improved by the implementation of the “Comprehensive Strategy (CS)”.

Summary and suggestions are given in the next chapter.

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