CHAPTER – IV

RESULTS AND INTERPRETATION

4.1 INTRODUCTION

The study focused on finding out the effect of intervention based on music on listening and reading competencies of primary school students. This chapter presents detailed analysis of the data collected through different tools on Listening and Reading competencies followed by interpretation of the same. Quantitative analysis of the data collected is analyzed by using different statistical procedures. The formulated hypotheses were as follows:

The Investigator used intervention using music to find out its effect on Language competencies (Kannada) among Under Achievers and Low Achievers. As mentioned earlier both the experimental and controlled groups were matched in terms of intelligence scores and pretest scores.

The data collected on the language competencies both at pre and post tests was analyzed to find out effect of music. Results are analyzed both qualitatively and quantitatively, so that it helps teachers and parents realize the importance of music in teaching and also help the stakeholders of education to know the importance of music in language teaching. Mean, Standard Deviation and t-test were used to analyze the data. Results presented in the following sections.

4.2 Effect of intervention based on music on Listening competencies of Under Achievers.

4.3 Effect of intervention based on music on Reading competencies of Under Achievers.
4.4 Effect of intervention based on music on Listening competencies of Low Achievers.

4.5 Effect of intervention based on music on Reading competencies of Low Achievers.

4.6 Effect of intervention based on music on Listening competencies of Low and Under Achievers.

4.7 Effect of intervention based on music on Reading competencies of Low and Under Achievers.

4.8 Effect of intervention based on music on Listening competencies of boys and girls (comparison).

4.9 Effect of intervention based on music on Reading competencies of boys and girls (comparison).

4.10 Effect of intervention based on music on Overall Listening competencies of Experimental and Controlled groups.

4.11 Effect of intervention based on music on Overall Reading competencies of Experimental and Controlled groups.

4.2 EFFECT OF INTERVENTION BASED ON MUSIC ON LISTENING COMPETENCIES OF UNDER ACHIEVERS

The listening competencies include the sum of sub-competencies viz., recognition of letters, words and comprehension. This section gives detailed description of interpretation of results of under Achievers.

The hypothesis formulated to know the effect of music on listening competencies of Under Achievers was as follows.
Hypothesis 1: There is no significant difference in listening competencies between under achievers who taught with MBLT strategy and those attended regular class teaching.

The hypothesis is tested by formulating sub-hypothesises on listening competencies. The hypotheses on sub-competencies and interpretations of results presented respectively.

4.2.1 Listening to Letters

Sub-hypothesis 1: There is no significant difference in listening to letters between under achievers who taught with MBLT strategy and those attended regular class teaching.

In order to test above hypothesis ‘t’ test was used. The summary of t-test is given in the following table.

**Table 4.1: Summary of t-test for Listening to Letters with regard to under achievers**

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>Control</td>
<td>4.600</td>
<td>0.100</td>
<td>0.5164</td>
<td>0.429</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>4.500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Test</td>
<td>Control</td>
<td>4.800</td>
<td>4.500</td>
<td>1.1352</td>
<td>9.618</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>9.300</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table has given the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of under achievers on competencies of recognizing letters.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and ‘t’ value of pre-test shows that there was no difference between the under achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention using music and controlled group attended the regular classroom teaching. Experimental group showed
improvement than controlled group. It indicates that music has positive effect on the competency of recognizing letters. Hence the music can be meaningful to teach listening skills.

The ‘t’ value is significant at 0.01 level. Hence the above sub-hypothesis gets rejected.

**Figure 4.1: Summary of t-test for Listening to Letters with regard to under achievers**

The above given figure also verifies the difference between experimental and controlled groups on recognizing letters. The difference on post-test is more than double of controlled group.
4.2.2 Listening to Words

Sub-hypothesis 2: There is no significant difference in competency of listening to words between under-achievers who taught with MBLT strategy and those attended regular class teaching.

In order to test the above hypothesis ‘t’ test was used.

**Table 4.2: Summary of t-test for Listening to Words with regard to under achievers**

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>5.100</td>
<td>0.100</td>
<td>0.567</td>
<td>0.361</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>5.000</td>
<td></td>
<td>0.666</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>5.200</td>
<td>4.700</td>
<td>0.788</td>
<td>13.760</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>9.900</td>
<td></td>
<td>0.737</td>
<td></td>
</tr>
</tbody>
</table>

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of under achievers on competency on recognizing words.

The table shows that both experimental and controlled groups were similar in their mean scores before intervention on pre test and also the mean, SD and t’ value of pre-test showed that there was no difference between the under-achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention by using music and controlled group attended the regular classroom teaching. Experimental group showed improvement more than controlled group. It is found out that music play positive role in teaching recognizing words correctly.

The ‘t’ value of 13.76 is greater than the table value at 0.01 level. Therefore formulated hypothesis gets rejected.
There is a lot of improvement in recognizing words than letters. So it may be further assumed that music will help students to recognize words. Hence the music can be used to teaching reading words correctly.

**Figure 4.2: Summary of t-test for Listening to Words with regard to underachievers**

From the figure it can be ascertained that the performance of experimental group on post-test is much higher than the controlled group on the value is 9.9 for experimental group and 5.2 is for controlled group. It can be concluded that use of music certainly help students at primary level to learn to recognise words properly.
4.2.3 Listening Comprehension

Sub-hypothesis 3: There is no significant difference in listening comprehension between under achievers who taught with MBLT strategy and those attended regular class teaching.

Table 4.3: Summary of t-test for Listening Comprehension with regard to under achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>3.700</td>
<td>0.100</td>
<td>0.674</td>
<td>0.305</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>3.800</td>
<td></td>
<td>0.788</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>4.300</td>
<td>1.600</td>
<td>1.059</td>
<td>3.919</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>5.900</td>
<td></td>
<td>0.737</td>
<td></td>
</tr>
</tbody>
</table>

The table shows that both experimental and controlled groups were similar in their mean scores before intervention i.e., in pre test and also the mean, SD and t’ value of pre-test showed that there was no difference between the under achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention for both experimental and controlled groups. The experimental group was given intervention by using music and controlled group attended the regular classroom teaching. Experimental group showed improvement more than controlled group. It seems from the table that music has effect on the competency of recognizing words.

The ‘t’ value is significant at 0.01 level. Therefore formulated hypothesis gets rejected.
The figure indicates that under achievers from experimental group have gained on post-test in comparison to controlled group. Hence it can be stated that music has helped in improving listening conversion with better understanding.
4.2.4 Listening Competencies

Sub-hypothesis 4: There is no significant difference on listening competencies of under achievers who taught with MBLT strategy and those attended regular class teaching.

To test this hypothesis ‘t’ test was employed.

Table 4.4: Summary of t-test for Listening Competencies with regard to under achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>13.400</td>
<td>0.100</td>
<td>1.173</td>
<td>0.178</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>13.300</td>
<td></td>
<td>1.337</td>
<td></td>
</tr>
<tr>
<td>Pre Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>14.300</td>
<td>10.800</td>
<td>1.888</td>
<td>14.637</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>25.100</td>
<td></td>
<td>1.370</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table shows that both experimental and controlled groups were similar in their mean scores in listening competencies. The mean, SD and t’ value of pre-test showed that there was no difference between the under achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention to both experimental and controlled groups. The experimental group was given intervention by using music and controlled group attended the regular classroom teaching. Experimental group showed improvement more than controlled group. It indicates that music has effect on listening competencies as a whole.

The ‘t’ value 14.63 is greater than the table value at 0.01 level. Therefore formulated hypothesis has been rejected.
The above figure shows that experimental group has done better than the controlled groups. It means use of music has enhanced performance of under achievers from experimental groups.
4.3 EFFECT OF INTERVENTION BASED ON MUSIC ON READING COMPETENCIES OF UNDER ACHIEVERS

The hypothesis formulated to know the effect of music on reading competencies of Under Achievers. The formulated hypothesis was as follows:

**Hypothesis 2:** There is no significant difference in reading competencies between under achievers who taught with MBLT strategy and those attended regular class teaching.

This hypothesis is tested by formulating sub-hypotheses on reading competencies. The hypotheses on sub-competencies and interpretations of results presented respectively.

4.3.1 Reading Aloud Syllables

**Sub-hypothesis 1:** There is no significant difference between reading aloud syllables by under achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>11.100</td>
<td>0.000</td>
<td>1.286</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>11.100</td>
<td></td>
<td>1.728</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>11.000</td>
<td>3.100</td>
<td>2.108</td>
<td>4.122</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>14.100</td>
<td></td>
<td>1.100</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of under achievers on Reading aloud syllables. There was no significant difference on pre tests scores of experimental and controlled groups.
The table has given the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of under achievers on reading aloud syllables competencies.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the under achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. The experimental group showed improvement than controlled group. It indicates that music has effect on learning to reading aloud syllables. Hence the music is found to be effective for developing listening skills.

The ‘t’ value of 4.122 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.
From the figure, it can be seen that at pre-test there is no difference between experimental and controlled groups but there is difference at post-test.
4.3.2 Reading Words Aloud

Sub-hypothesis 2: There is no significant difference between Reading Words Aloud by under achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.6: Summary of t-test for Reading Words Aloud with regard to under achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>11.400</td>
<td>0.100</td>
<td>1.429</td>
<td>0.178</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>11.300</td>
<td></td>
<td>1.059</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>11.600</td>
<td>4.400</td>
<td>1.264</td>
<td>9.731</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>16.600</td>
<td></td>
<td>0.666</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

Table presented the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of under achievers on Reading Words Aloud scores. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of under achievers on competencies of Reading Words Aloud.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the under achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group
attended the regular classroom teaching. The experimental group showed improvement than controlled group. It indicates that music has effect on learning to read aloud words.

The ‘t’ value is significant at 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.6: Summary of t-test for Reading Words Aloud with regard to under achievers**

From the figure it can be stated that at pre-test both groups performed same level but at post-test experimental group has shown improvement. The use of music has positive effect on reading aloud clearly.
4.3.3 Reading Minimal Pairs Aloud

Sub-hypothesis 3: There is no significant difference between Reading Minimal Pairs Aloud by underachievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.7: Summary of t-test for Reading Minimal Pairs Aloud with regard to under achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>20.300</td>
<td>0.100</td>
<td>1.059</td>
<td>0.180</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>20.200</td>
<td></td>
<td>1.398</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>20.300</td>
<td>7.300</td>
<td>1.337</td>
<td>12.540</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>27.600</td>
<td></td>
<td>1.264</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table gives detailed of mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of under achievers on Reading Minimal Pairs Aloud. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of under achievers on competency of Reading Minimal Pairs Aloud.

The table shows that both experimental and controlled groups were same in their performance in pre-test. The mean, SD and t-value of pre test shows that there was no difference between the under achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group
attended the regular classroom teaching. The experimental group showed progress in learning reading than controlled group. It aloud correctly with the help of music pronunciation can be enhanced and difference can be appreciated.

The ‘t’ value of 12.540 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.7: Summary of t-test for Reading Minimal Pairs Aloud with regard to under achievers**

The figure shows that the performance of controlled and experimental groups is same on pre-test. The controlled group did not show any difference but experimental group should significant improvement.
4.3.4 Reading Competencies Aloud (Total)

Sub-hypothesis 4: There is no significant difference between Reading Competencies Aloud (Total) by underachievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.8: Summary of t-test for Reading Competencies Aloud (Total) with regard to underachievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>42.800</td>
<td>0.200</td>
<td>2.299</td>
<td>0.224</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>42.600</td>
<td></td>
<td>1.646</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>42.900</td>
<td>14.800</td>
<td>2.183</td>
<td>19.661</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>57.700</td>
<td></td>
<td>0.948</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table gives details on mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of underachievers on Reading Competencies Aloud (Total). There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of underachievers on Reading Competencies Aloud.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the underachievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out its influence of music. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. The
experimental group found to be doing better than controlled group. It applies that with the use of music Reading Competencies Aloud can be improved and music has positive effect. Hence the music can be used to teach listening skills.

The ‘t’ value of 19.661 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.8: Summary of t-test for Reading Competencies Aloud (Total) with regard to under achievers**

![Graph showing mean scores](image)

The figure shows that the performance on controlled groups is almost same both on pre- and post-test, but experiment group showed greater improvement on post-test on the value is 57.7 on post-test and on pre-test it is 42.6. Music is found to be facilitating learning to read aloud correctly.
4.3.5 Reading Passage with Pauses Aloud

Sub-hypothesis 5: There is no significant difference between reading passage with pauses aloud by under achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.9: Summary of t-test for Reading Passage with Pauses Aloud with regard to under achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>14.300</td>
<td>0.300</td>
<td>2.584</td>
<td>0.244</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>14.000</td>
<td></td>
<td>2.905</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>16.200</td>
<td>8.500</td>
<td>4.049</td>
<td>4.228</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>24.700</td>
<td></td>
<td>4.900</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table shows the mean scores and standard deviations of the pre and post tests for controlled and experimental groups of under achievers on Reading passage with pauses aloud. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of under achievers on competency of reading passage with pauses aloud.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the under achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the influence of intervention on both experimental and controlled groups. The experimental group was given intervention by using music and controlled group
attended the regular classroom teaching. The experimental group found to be doing better than controlled group. It implies that music has positive effect on learning to read aloud pauses.

The ‘t’ value of 4.228 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.9: Summary of t-test for Reading Passage with Pauses Aloud with regard to under achievers**

![Figure 4.9: Summary of t-test for Reading Passage with Pauses Aloud with regard to under achievers](image)

The figure shows that the experimental group after the intervention has done better than controlled group. It proved that music facilities learning reading aloud passage with appropriate pauses.
4.3.6 Reading Comprehension

Sub-hypothesis 6: There is no significant difference between reading comprehension by under achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.10: Summary of t-test for Reading Comprehension with regard to under achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>14.600</td>
<td>0.400</td>
<td>1.776</td>
<td>0.507</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>14.200</td>
<td></td>
<td>1.751</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>15.000</td>
<td>10.800</td>
<td>1.154</td>
<td>13.054</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>25.800</td>
<td></td>
<td>2.347</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

From the details of table on the mean scores and standard deviations of the pre and post tests of the controlled and experimental groups of under achievers on Reading Comprehension. It can be stated that at pre-test there is no significant difference on the pre tests scores between both the groups.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of under achievers on competency of reading comprehension.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-values of pre test shows that there was no difference between the under achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group
attended the regular classroom teaching. The experimental group found to be performing better than controlled group. It applies that music has effect on learning on reading comprehension.

The ‘t’ value of 13.054 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.10: Summary of t-test for Reading Comprehension with regard to under achievers**

The figure shows that on reading comprehension the experimental group has done better than controlled group as the values for experimental group 25.8 and 15 respectively. Music facilitates learning reading with comprehension.
4.4 EFFECT OF INTERVENTION BASED ON MUSIC ON LISTENING COMPETENCIES OF LOW ACHIEVERS

This section gives detailed description of interpretation of results of low achievers in detail. Hypothesis formulated to know the effect of music on listening competencies of low achievers. The formulated hypothesis was as follows.

**Hypothesis 3**: There is no significant difference in listening competencies between students of low achievers instructed with music based learning teaching strategy and those taught using traditional classroom teaching method.

This hypothesis is tested by formulating sub-hypotheses on listening competencies. The hypotheses on sub-competencies and interpretations of results presented respectively.

4.4.1 Listening to Letters

**Sub-hypothesis 1**: There is no significant difference in listening to letters between low achievers who taught with MBLT strategy and those attended regular class teaching.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

**Table 4.11: Summary of t-test for Listening to Letters with regard to Low Achievers**

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>2.700</td>
<td>0.200</td>
<td>0.674</td>
<td>0.632</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>2.900</td>
<td></td>
<td>0.737</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>3.000</td>
<td>2.300</td>
<td>0.816</td>
<td>5.811</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>5.300</td>
<td></td>
<td>0.948</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table gives details on the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of low achievers on Listening to Letters. There was no significant difference on the pre tests scores.
The table has given the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on listening competency of recognizing letters.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based music and controlled group attended regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on competency of recognizing letters. Hence the music can be used to teach listening skills.

The ‘t’ value of 5.811 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

Figure 4.11: Summary of t-test for Listening to Letters with regard to Low Achievers

<table>
<thead>
<tr>
<th>Mean scores</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Control group</th>
<th>Experimental group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>2.7</td>
<td>2.9</td>
<td>3</td>
<td>5.3</td>
</tr>
<tr>
<td>Post-Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.4.2 Listening to Words

Sub-hypothesis 2: There is no significant difference in listening to words between low achievers who taught with MBLT strategy and those attended regular class teaching.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.12: Summary of t-test for Listening to Words with regard to low achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>2.700</td>
<td>0.200</td>
<td>0.823</td>
<td>0.632</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>2.900</td>
<td></td>
<td>0.567</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>2.600</td>
<td>2.200</td>
<td>0.843</td>
<td>5.578</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>4.800</td>
<td></td>
<td>0.918</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table gives mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of low achievers on Listening to Words. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on listening competency of recognizing words.

The table indicates that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group
attended the regular classroom teaching. The experimental group was found to be doing better implies that music has effect on competency of recognizing letters.

The ‘t’ value of 5.578 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.12: Summary of t-test for Listening to Words with regard to low achievers**

The figure gives details on the performance of controlled and experimental group. The values shown indicate that experimental group has done double time better than controlled group. Use of music certainly helps in learning to listen words correctly.
4.4.3 Listening Comprehension

Sub-hypothesis 3: There is no significant difference in listening comprehension of understanding between low achievers who taught with MBLT strategy and those attended regular class teaching.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.13: Summary of t-test for Listening Comprehension with regard to low achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>1.500</td>
<td>0.100</td>
<td>0.527</td>
<td>0.361</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>1.400</td>
<td>0.699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>1.700</td>
<td>1.800</td>
<td>1.059</td>
<td>4.191</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>3.500</td>
<td></td>
<td>0.849</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of low achievers on Listening Comprehension with understanding are given in the above table. There was no significant difference on the pre tests scores between experimental and controlled groups.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on listening competency of understanding conversation.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out
the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. The experimental group was found to be doing better than controlled group. It indicates that music has facilitated learning understanding of letters. Hence it can be concluded that music has positive effect.

The ‘t’ value of 4.191 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.13: Summary of t-test for Listening Comprehension with regard to low achievers**

![Bar chart showing mean scores for pre-test and post-test for control and experimental groups](image)

Figure on listening competencies with regard to understanding conversion based on listening, the experiment group has done better as the score is 3.5 and score for controlled group is 1.7.
4.4.4 Listening Competencies (Total)

Sub-hypothesis 4: There is no significant difference in listening competencies (total) between low achievers who taught with MBLT strategy and those attended regular class teaching.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.14: Summary of t-test for Listening Competencies (Total) with regard to low achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>6.900</td>
<td>0.300</td>
<td>1.449</td>
<td>0.553</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>7.200</td>
<td></td>
<td>0.918</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>7.300</td>
<td>6.300</td>
<td>1.766</td>
<td>8.410</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>13.600</td>
<td></td>
<td>1.577</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table gives the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of low achievers on Listening Competencies (Total) scores. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on listening with understanding competencies.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out its influence on both experimental and controlled groups. The experimental group
was given intervention based on music and controlled group attended the regular classroom teaching. The result showed that the experimental group performed better than controlled group. Hence implies the use of music helps in understanding the listened matter.

The ‘t’ value of 8.410 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.14: Summary of t-test for Listening Competencies (Total) with regard to low achievers**

![Bar chart showing mean scores](image)

Figure gives details on listening competencies (total). The figure indicates that experimental group has gained in performing on post-test as the value is 13.6 for experimental group and 7.3 for controlled group. It can be stated that music has influence in enhancing listening competencies of low achievers.
4.5 EFFECT OF INTERVENTION BASED ON MUSIC ON READING COMPETENCIES OF LOW ACHIEVERS

This section gives detailed description of interpretations of results of low achievers. The following hypothesis was formulated to know the effect of music on reading competencies of low achievers.

**Hypothesis 4:** There is no significant difference in reading competencies between students of low achievers instructed with music based learning teaching strategy and those taught using traditional classroom teaching method.

To test the above hypothesis, the results of the sub-competencies of reading aloud of low achievers of controlled and experimental groups are presented as follows in detail.

**4.5.1 Reading Aloud Syllables**

**Sub-hypothesis 1:** There is no significant difference between reading aloud syllables of low achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>5.700</td>
<td>0.100</td>
<td>1.494</td>
<td>0.168</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>5.800</td>
<td></td>
<td>1.135</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>6.800</td>
<td>1.800</td>
<td>0.918</td>
<td>3.486</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>8.600</td>
<td></td>
<td>1.349</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

Table has given details on the mean scores and standard deviations of pre and post tests for controlled and experimental groups of low achievers on Reading aloud syllables scores. There was no significant difference on the pre tests scores.

The table has given the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on competency of reading aloud syllables.
The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. The experimental group has shown improvement. It means that music has effect on learning to reading letters loudly. Hence it can be concluded that music is an effective tool to teach listening skills.

The ‘t’ value of 3.486 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.15: Summary of t-test for Reading Aloud Syllables with regard to low achievers**

Figure shows that the use of music helped in reading syllables aloud on experimental group in comparison to controlled group has got higher values.
4.5.2 Reading Words Aloud

Sub-hypothesis 2: There is no significant difference between reading words aloud by low achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.16: Summary of t-test for Reading Words Aloud with regard to low achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>6.300</td>
<td>0.2000</td>
<td>0.823</td>
<td>0.535</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>6.500</td>
<td></td>
<td>0.849</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>8.200</td>
<td>2.200</td>
<td>1.135</td>
<td>3.077</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>10.400</td>
<td></td>
<td>1.955</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of low achievers on Reading Words Aloud scores. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post tests of the controlled and experimental groups of low achievers on competency of Reading Words Aloud.

The table shows that both experimental and controlled groups were found as same on pre-test. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. The experimental group was found to be performing better
than controlled group. It indicates that music has effect on learning to read words aloud. Hence music has facilitated learning to read words aloud correctly.

The ‘t’ value of 3.077 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.16: Summary of t-test for Reading Words Aloud with regard to low achievers**

The above given figure also indicates the same results as shown in table 4.16. The experiment groups found to be performing better on post-test. Hence music has positive effect on learning to read words aloud correctly.
4.5.3 Reading Minimal Pairs Aloud

Sub-hypothesis 3: There is no significant difference between Reading Minimal Pairs Aloud of low achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.17: Summary of t-test for Reading Minimal Pairs Aloud with regard to low achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>11.90</td>
<td>0.200</td>
<td>2.424</td>
<td>0.224</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>12.100</td>
<td>1.449</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>13.50</td>
<td>8.200</td>
<td>2.223</td>
<td>7.204</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>21.700</td>
<td>2.830</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table shows that the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of low achievers on Reading Minimal Pairs Aloud. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on competency of Reading Minimal Pairs Aloud.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. The experimental group found to be
learning to read minimal pairs aloud correctly than controlled group. It proves that music is facilitating learning to read minimal pairs aloud correctly.

The ‘t’ value of 7.204 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.17: Summary of t-test for Reading Minimal Pairs Aloud with regard to low achievers**

![Graph showing mean scores for control and experimental groups pre-test and post-test.]

The above given figure is also in agreement to the above statements that experimental groups did better on post-test than controlled group. Hence it can be stated that music has positive effect on the competency.
4.5.4 Reading Competencies Aloud

Sub-hypothesis 4: There is no significant difference between Reading Competencies Aloud by low achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.18: Summary of t-test for Reading Competencies Aloud with regard to low achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>23.900</td>
<td>0.500</td>
<td>2.846</td>
<td>0.486</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>24.400</td>
<td></td>
<td>1.577</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>28.500</td>
<td>12.200</td>
<td>2.953</td>
<td>7.170</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>40.700</td>
<td></td>
<td>4.498</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

In the table the details are given on the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups of low achievers on Reading Competencies Aloud (total) scores. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on competency of Reading Competencies Aloud.

The table indicated that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group
attended the regular classroom teaching. The experimental group showed improvement in learning the total reading competencies than controlled group. It indicates that music helped in learning to read competencies aloud correctly. Hence the music can be used to teach listening skills.

The ‘t’ value of 7.710 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.18: Summary of t-test for Reading Competencies Aloud with regard to low achievers**

![Bar chart showing mean scores of control and experimental groups before and after music intervention.](image)

The above given figure shows that experimental group did better on all reading competencies than the controlled group. Music facilitated reading aloud more correctly. Hence music has positive influence on learning reading aloud.
4.5.5 Reading Passage with Pauses Aloud

Sub-hypothesis 5: There is no significant difference between reading passage with pauses aloud by low achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.19: Summary of t-test for Reading Passage with Pauses Aloud with regard to low achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>13.500</td>
<td>0.400</td>
<td>3.472</td>
<td>0.283</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>13.900</td>
<td></td>
<td>2.806</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>14.500</td>
<td>3.900</td>
<td>1.779</td>
<td>4.523</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>18.400</td>
<td></td>
<td>2.065</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the pre and post tests for controlled and experimental groups of low achievers on Reading Passage with Pauses Aloud. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on the competency.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group
attended the regular classroom teaching. The experimental group was found to be
performing better than controlled group. It indicates that music has effect on
competency of reading passage with pauses aloud. Hence the music can be used to
teach listening skills.

The ‘t’ value of 4.523 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.19: Summary of t-test for Reading Passage with Pauses Aloud with regard to low achievers**

![Bar Chart]

The above given figure also confirms that experimental group did better
than the controlled group. The use of music help low achievers from experimental
group learning reading passage with pauses correctly.
4.5.6 Reading Comprehension

Sub-hypothesis 6: There is no significant difference between reading comprehension of low achievers of experimental and controlled groups those who were given intervention based on music and who attended regular class teaching.

Table 4.20: Summary of t-test for Reading Comprehension with regard to low achievers

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Control</td>
<td>10.800</td>
<td>0.700</td>
<td>1.032</td>
<td>1.353</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>11.500</td>
<td></td>
<td>1.269</td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>10.800</td>
<td>2.900</td>
<td>1.032</td>
<td>3.394</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>13.700</td>
<td></td>
<td>2.496</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean and standard deviations scores of the pre and post tests for the controlled and experimental groups of low achievers on Reading Comprehension Competencies. There was no significant difference on the pre tests scores.

Above mentioned table presented the mean scores and standard deviations of the pre and post test of the controlled and experimental groups of low achievers on competency of reading comprehension.

The table shows that both experimental and controlled groups were comparable before intervention. The mean, SD and t-value of pre test shows that there was no difference between the low achievers of both experimental and controlled groups. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group...
attended the regular classroom teaching. The experimental group showed improvement than controlled group. It indicates that music has effect on competency of reading comprehension. Hence the music can be used to teach listening skills.

The ‘t’ value of 3.394 is also greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.20: Summary of t-test for Reading Comprehension with regard to low achievers**

Figure is also in agreement with the result given in table 4.20 that experimental group does better than the controlled group on reading comprehension competencies.
4.6 EFFECT OF INTERVENTION BASED ON MUSIC ON LISTENING COMPETENCIES OF LOW AND UNDER ACHIEVERS

This section gives detailed description of interpretation of results of low and under achievers in detail. Hypothesis formulated to know the effect of music on listening competencies of low and under achievers. The formulated hypothesis was as follows.

Hypothesis 5: There is no significant difference in listening competencies between students of low achievers and under achievers who were given intervention with music based learning teaching strategy.

To test the hypothesis, the results of the listening competencies scores of experimental group students of low and under achievers are presented as shown in the following tables.

4.6.1 Listening to Letters

Sub-hypothesis 1: There is no significant difference in listening to letters between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.21: Summary of t-test for Listening to Letters with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>5.300</td>
<td>4.000</td>
<td>0.948</td>
<td>9.428</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>9.300</td>
<td></td>
<td>0.948</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

Table has given the mean scores, standard deviations and t-value of post test scores between the experimental group students of low and under achievers.
The values mentioned in the above table clearly indicate that both under and low achievers have shown improvement but the improvement shown by under achievers is more in comparison to low achievers. This variation may be due to different intelligence levels. On the basis of t-value it can be stated that there is significant difference in performance of under achievers and low achievers experimental groups.

The ‘t’ value of 9.428 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.21: Summary of t-test for Listening to Letters with regard to low and under achievers**

![Bar chart showing mean scores for low and under achievers](image)

Figure indicates that the under achievers have performed better than low achievers though both groups given intervention by using music but their performance on listening to letters test varies. It may be due to poor grasp of low achievers because of their lower degree of intelligence. Under achievers performed better than low achievers.
4.6.2 Listening to Words

Sub-Hypothesis 2: There is no significant difference in listening to words between low and under achievers who were given intervention by using music with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.22: Summary of t-test for Listening to Words with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>4.800</td>
<td>5.100</td>
<td>0.918</td>
<td>13.685</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>9.900</td>
<td></td>
<td>0.737</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group students of low and under achievers on Listening to Words scores.

The values mentioned in the above table clearly show that they have improved in listening the words correctly. The performance of under achievers on listening to words is better than low achievers. Both the groups are experimental groups and have been given intervention by using music. The variation in their performance may be different due to the level of intelligence memory power and greater attention span, etc.

The ‘t’ value of 13.685 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.
Above given figure shows that under achievers from experimental group performed better than the low achievers from experimental group on listening to words.
4.6.3 Listening Comprehension

Sub-hypothesis 3: There is no significant difference in listening comprehension between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.23: Summary of t-test for Listening Comprehension with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>2.400</td>
<td>0.849</td>
<td>6.743</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>5.900</td>
<td>0.737</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group students of low and under achievers on Listening comprehension.

The values mentioned in the above table clearly indicate that both the groups shown improvement in understanding the under achievers have done better than the low achievers and the difference is significant at 0.01 level.

The ‘t’ value of 6.743 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.
From the above figure, it is clear that under achievers have done better on listening comprehension with understanding than the low achievers as the value for under achievers is 5.9 and 3.5 for low achievers. But it is clear that music has positive effect on both the experimental groups though there is variation in their performance.
4.6.4 Listening Competencies (Total)

Sub-hypothesis 4: There is no significant difference on listening competencies (total) between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.24: Summary of t-test for Listening Competencies with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>13.600</td>
<td>11.500</td>
<td>1.577</td>
<td>17.403</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>25.100</td>
<td>11.500</td>
<td>1.370</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group students of low and under achievers on Listening Competencies (Total) scores.

The values mentioned in the above table clearly indicate that they have improved in listening competencies in their own pace according to their level of intelligence.

The ‘t’ value of 17.403 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.
Figure 4.24: Summary of t-test for Listening Competencies with regard to low and under achievers

From the above figure it is clear that under achievers have done better on all the listening competencies in comparison to low achievers inspite of attending the same intervention the low achievers are behind. This may be due to variation in intelligence.
4.7 EFFECT OF INTERVENTION BASED ON MUSIC ON READING COMPETENCIES OF LOW AND UNDER ACHIEVERS

This section gives detailed description of interpretation of results of low and under achievers in detail. Hypothesis formulated to know the effect of music on reading competencies of low and under achievers. The formulated hypothesis was as follows.

Hypothesis 6: There is no significant difference in reading competencies between students of low achievers and under achievers who were given intervention with music based learning teaching strategy.

To test the hypothesis, the results of the reading competencies scores of experimental group students of low achievers and under achievers are presented as shown in the following tables.

4.7.1 Reading Aloud Syllables

Sub-hypothesis 1: There is no significant difference in reading aloud syllables between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.25: Summary of t-test for Reading aloud syllables with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>8.600</td>
<td>5.500</td>
<td>1.349</td>
<td>9.986</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>14.100</td>
<td></td>
<td>1.100</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group students of low and under achievers on Reading aloud syllables.
The values mentioned in the above table clearly indicate that they have improved in recognizing reading aloud of letters in their own phases according to their level of intelligence. By this we can assume that music effects on intelligence. For further research work this particular area can be taken.

The ‘t’ value of 9.986 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.

**Figure 4.25: Summary of t-test for Reading aloud syllables with regard to low and under achievers**

![Bar chart showing mean scores for low achievers and under achievers.](image)

The under achievers have done better on the value is 14.1 and 8.6 for low achievers on reading syllables aloud. Reading skill requires proper scanning of letter, recognising and processing in time may be low achievers could not do it fast due to variation in their ability recall, recognise and read aloud according to the time given.
4.7.2 Reading Words Aloud

Sub-hypothesis 2: There is no significant difference in reading words aloud between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.26: Summary of t-test for Reading Words Aloud with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>10.400</td>
<td>5.600</td>
<td>1.955</td>
<td>8.573</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>16.000</td>
<td></td>
<td>0.666</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group students of low and under achievers on Reading Words Aloud.

The values mentioned in the above table clearly indicate that they have improved in reading words aloud in their own pace according to their level of intelligence. The t-value is significant so there is difference between the performance of under achievers and low achievers.

The ‘t’ value of 8.573 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.
Figure 4.26: Summary of t-test for Reading Words Aloud with regard to low and under achievers

From the figure it seems again that the under achievers have done better than low achievers even on reading words aloud.
4.7.3 Reading Minimal Pairs Aloud

Sub-hypothesis 3: There is no significant difference in reading minimal pairs aloud between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.27: Summary of t-test for Reading Minimal Pairs Aloud with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>21.700</td>
<td>5.900</td>
<td>2.830</td>
<td>6.018</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>21.600</td>
<td></td>
<td>1.264</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group students of low and under achievers on Reading Minimal Pairs Aloud.

The values mentioned in the above table clearly indicate that they have improved in recognizing reading aloud of minimal pairs in their own pace according to their level of intelligence.

The ‘t’ value of 6.018 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.
The figure also indicates that under achievers have done slightly better than low achievers on reading minimal pairs aloud.
4.7.4 Reading Competencies Aloud

Sub-hypothesis 4: There is no significant difference in reading competencies aloud between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.28: Summary of t-test for Reading Competencies Aloud with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>40.700</td>
<td>17.000</td>
<td>4.498</td>
<td>11.694</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>57.700</td>
<td></td>
<td>0.948</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group students of low and under achievers on Reading Competencies Aloud (Total).

The values mentioned in the above table clearly indicate that they have improved in recognizing reading aloud of competencies in their own phases according to their level of intelligence. By this we can assume that music effects on intelligence. For further research work this particular area can be taken.

The ‘t’ value of 11.694 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.
The figure also indicates that under achievers have done better than low achievers on reading competencies aloud.
4.7.5 Reading Passage with Pauses Aloud

Sub-hypothesis 5: There is no significant difference in reading passage with pauses aloud between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.29: Summary of t-test for Reading Passage with Pauses Aloud with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>18.400</td>
<td>6.300</td>
<td>2.065</td>
<td>3.746</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>24.740</td>
<td></td>
<td>4.900</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The values mentioned in the above table clearly indicate that they have improved in recognizing reading aloud of pauses in their own pace according to their level of intelligence.

The ‘t’ value of 3.746 is greater than the table value of 0.01 level. Therefore formulated hypothesis is rejected.
Figure 4.29: Summary of t-test for Reading Passage with Pauses Aloud with regard to low and under achievers

![Bar chart showing mean scores for low and under achievers.]

From the above figure, it is clear that under achievers have done better than low achievers on reading passage with pauses aloud.
4.7.6 Reading Comprehension

Sub-hypothesis 6: There is no significant difference in reading comprehension between low and under achievers who were given intervention with music based learning teaching strategy.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.30: Summary of t-test for Reading Comprehension with regard to low and under achievers

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td>13.700</td>
<td>12.100</td>
<td>2.496</td>
<td>11.165</td>
</tr>
<tr>
<td>Under Achievers</td>
<td>25.800</td>
<td>2.347</td>
<td>2.347</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group students of low and under achievers on Reading Comprehension scores.

The values mentioned in the above table clearly indicate that they have improved in reading comprehension. Both the groups have been given intervention based on music inspite of attending intervention low achievers have done poorly in comparison to under achievers.

The ‘t’ value of significant at 0.01 level and it is greater than the table value. Hence the formulated hypothesis gets rejected.
From the above figure, it is clear that under achievers have done better than the low achievers. Even on reading comprehension under achievers have done better on the value is 25.8 and for low achievers it is 13.7.
4.8 EFFECT OF INTERVENTION BASED ON MUSIC ON LISTENING COMPETENCIES OF BOYS AND GIRLS (COMPARISON)

This section gives detailed description of interpretation of results under genderwise comparison in detail. Hypothesis formulated to know the effect of music on listening competencies under genderwise comparison. The formulated hypothesis was as follows.

**Hypothesis 7**: There is no significant difference in Listening Competencies between boys and girls attending intervention with music based learning teaching strategy.

To test the hypothesis, the results of the listening competencies scores of experimental group boys and girls are presented as shown in the following tables.

4.8.1 Listening to Letters

**Sub-hypothesis 1**: There is no significant difference in listening to letters between boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

**Table 4.31: Summary of t-test for Listening to Letters with regard to boys and girls (comparison)**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean Difference</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>0.000</td>
<td>7.300</td>
<td>2.110</td>
<td>0.000</td>
</tr>
<tr>
<td>Girls</td>
<td>0.000</td>
<td>7.300</td>
<td>2.496</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Listening to Letters.

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in
competency recognizing letters. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music.

The ‘t’ value of 0.000 is less than the table value of 0.05 level. Therefore formulated hypothesis is accepted.

**Figure 4.31: Summary of t-test for Listening to Letters with regard to boys and girls (comparison)**

![Bar chart showing mean scores for boys and girls in listening to letters test]

From the figure it can be seen that boys and girls have performed better on post test on listening letters. There is no significant difference found between the two groups. There is no difference in their performance.
4.8.2 Listening to Words

Sub-hypothesis 2: There is no significant difference in listening to words between boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.32: Summary of t-test for Listening to Words with regard to boys and girls (comparison)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>7.300</td>
<td>2.830</td>
<td>0.079</td>
</tr>
<tr>
<td>Girls</td>
<td>7.400</td>
<td>2.796</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Listening to Words.

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in competency recognizing words. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music.

The ‘t’ value of 0.079 is less than the table value of 0.05 level. Therefore formulated hypothesis is accepted.
From the figure it can be seen that boys and girls gained in performance on post-test. But there is no significant difference between the two groups.
4.8.3 Listening Comprehension

Sub-hypothesis 3: There is no significant difference in listening comprehension between boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.33: Summary of t-test for Listening Comprehension with regard to boys and girls (comparison)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>4.600</td>
<td>0.200</td>
<td>1.712</td>
<td>0.300</td>
</tr>
<tr>
<td>Girls</td>
<td>4.800</td>
<td></td>
<td>1.229</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Listening Comprehension.

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in competency recognizing conversation. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music.

The ‘t’ value of 0.300 is lesser than the table value of 0.05 level. Therefore formulated hypothesis is accepted.
The figure given above shows that both boys and girls from experimental groups have shown progress on post-test, yet there is no significant difference between the groups.
4.8.4 Listening Competencies (Total)

Sub-hypothesis 4: There is no significant difference in listening competencies (total) between boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

**Table 4.34: Summary of t-test for Listening Competencies with respect to boys and girls (comparison)**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>19.200</td>
<td>0.300</td>
<td>6.303</td>
<td>0.108</td>
</tr>
<tr>
<td>Girls</td>
<td>19.500</td>
<td></td>
<td>6.168</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Listening Competencies (Total).

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in competency recognizing competencies. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music.

The ‘t’ value of 0.108 is lesser than the table value of 0.05 level. Therefore formulated hypothesis is accepted.
The figure also verifies that both boys and girls have shown progress in improving listening competencies but there is no significant difference found between the groups.
4.9 EFFECT OF INTERVENTION BASED ON MUSIC ON READING COMPETENCIES OF BOYS AND GIRLS (COMPARISON)

This section gives detailed description of interpretation of results under genderwise comparison in detail. Hypothesis formulated to know the effect of music on reading competencies under genderwise comparison. The formulated hypothesis was as follows.

**Hypothesis 8:** There is no significant difference in Reading Competencies between boys and girls attending intervention with music based learning teaching strategy.

To test the hypothesis, the results of the reading competencies scores of experimental group boys and girls are presented as shown in the following tables.

### 4.9.1 Reading Aloud Syllables

**Sub-hypothesis 1:** There is no significant difference in reading aloud syllables between boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

**Table 4.35: Summary of t-test for Reading aloud syllables with regard to boys and girls (comparison)**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>11.200</td>
<td>0.300</td>
<td>2.898</td>
<td>0.213</td>
</tr>
<tr>
<td>Girls</td>
<td>11.500</td>
<td>0.300</td>
<td>3.374</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Reading aloud syllables.

The table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in
competency recognizing letters. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music.

The ‘t’ value of 0.213 is lesser than the table value of 0.05 level. Therefore formulated hypothesis is accepted.

**Figure 4.35: Summary of t-test for Reading aloud syllables with regard to boys and girls (comparison)**

From the figure it can be stated that both boys and girls have shown improvement in learning to read letters aloud but there is no significant difference found between both the groups.
4.9.2 Reading Words Aloud

Sub-hypothesis 2: There is no significant difference in reading words aloud between boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.36: Summary of t-test for Reading Words Aloud with regard to boys and girls (comparison)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>13.00</td>
<td>0.400</td>
<td>3.299</td>
<td>0.272</td>
</tr>
<tr>
<td>Girls</td>
<td>13.40</td>
<td>0.400</td>
<td>3.272</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Reading Words Aloud.

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in competency recognizing words. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music.

The ‘t’ value of 0.272 is lesser than the table value of 0.05 level. Therefore formulated hypothesis is accepted.
The figure also reveals that boys and girls have shown improvement in learning read words aloud on post-test, yet there is no significant difference found between boys and girls after the intervention.
4.9.3 Reading Minimal Pairs Aloud

Sub-hypothesis 3: There is no significant difference in Reading Minimal Pairs Aloud between boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.37: Summary of t-test for Reading Minimal Pairs Aloud with regard to boys and girls (comparison)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>24.500</td>
<td>0.300</td>
<td>4.170</td>
<td>0.176</td>
</tr>
<tr>
<td>Girls</td>
<td>24.800</td>
<td></td>
<td>3.932</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Reading Minimal Pairs Aloud.

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in competency recognizing minimal pairs. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music.

The ‘t’ value of 0.176 is lesser than the table value of 0.05 level. Therefore formulated hypothesis is accepted.
The figure also reveals that boys and girls have shown improvement in learning reading minimal pairs aloud on post-test, yet there is no significant difference found between boys and girls after the intervention.
4.9.4 Reading Competencies Aloud (Total)

Sub-hypothesis 4: There is no significant difference in reading competencies aloud (total) of boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.38: Summary of t-test for Reading Competencies Aloud (Total) with regard to boys and girls (comparison)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>48.700</td>
<td>1.000</td>
<td>9.775</td>
<td>0.235</td>
</tr>
<tr>
<td>Girls</td>
<td>49.700</td>
<td></td>
<td>9.250</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Reading Competencies Aloud (Total).

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in competency recognizing competencies. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music

The ‘t’ value of 0.235 is lesser than the table value of 0.05 level. Therefore formulated hypothesis is accepted.
The figure also reveals that boys and girls have shown improvement in learning reading competencies aloud (total) on post-test, yet there is no significant difference found between boys and girls after the intervention.
4.9.5 Reading Passage with Pauses Aloud

Sub-hypothesis 5: There is no significant difference in Reading Passage with Pauses Aloud between boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.39: Summary of t-test for Reading Passage with Pauses Aloud with regard to boys and girls (comparison)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>20.300</td>
<td>2.500</td>
<td>3.267</td>
<td>1.155</td>
</tr>
<tr>
<td>Girls</td>
<td>22.800</td>
<td></td>
<td>6.014</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Reading Passage with Pauses Aloud.

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in competency recognizing pauses. t-value shows that there is no significant difference between boys and girls of experimental group who were given intervention based on music.

The ‘t’ value of 1.155 is lesser than the table value of 0.05 level. Therefore formulated hypothesis is accepted.
The figure also reveals that boys and girls have shown improvement in learning reading passage with pauses aloud on post-test, yet there is no significant difference found between boys and girls after the intervention.
4.9.6 Reading Comprehension

Sub-hypothesis 6: There is no significant difference in Reading Comprehension of boys and girls of experimental groups who were given intervention by using music.

In order to test above hypothesis, ‘t’ test was used. The summary of ‘t’ test was given as follows.

Table 4.40: Summary of t-test for Reading Comprehension with respect to boys and girls (comparison)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>19.700</td>
<td>0.100</td>
<td>6.976</td>
<td>0.033</td>
</tr>
<tr>
<td>Girls</td>
<td>19.800</td>
<td></td>
<td>6.663</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.09; **Significant at 0.01 level; Tab ‘t’=2.86

The table has given the mean scores and standard deviations of the post test scores between the experimental group boys and girls on Reading Comprehension.

The above table shows that there is no differences between boys and girls who were given intervention using music. Both boys and girls are improved in reading comprehension, but the t-value shows that there is no significant. Hence there is no difference between boys and girls of experimental group who were given intervention by using music.

The ‘t’ value of 0.033 is lesser than the table value of 0.05 level. Therefore formulated hypothesis is accepted.
The figure also reveals that boys and girls have shown improvement in learning reading comprehension on post-test, yet there is no significant difference found between boys and girls after the intervention.
4.10 EFFECT OF INTERVENTION BASED ON MUSIC ON LISTENING COMPETENCIES OF EXPERIMENTAL AND CONTROLLED GROUPS

This section gives detailed description of interpretation of results of experimental and controlled groups in detail. Hypothesis formulated to know the effect of music on listening competencies of experimental and controlled groups. The formulated hypothesis was as follows.

**Hypothesis 9:** There is no significant difference in Listening Competencies between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

To test the hypothesis, the results of the overall listening competencies scores of experimental and controlled groups are presented as shown in the following tables.

### 4.10.1 Listening to Letters

**Sub-hypothesis 1:** There is no significant difference in listening to letters between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

**Table 4.41: Summary of t-test for Listening to Letters with regard to experimental and controlled groups**

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>3.900</td>
<td>3.400</td>
<td>1.333</td>
<td>5.813</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>7.300</td>
<td></td>
<td>2.250</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on Listening to Letters scores. There was no significant difference on the pre tests scores.
The table shows that both experimental and controlled groups were comparable before intervention. The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on competency of listening letters. Hence the music found to be having positive effect on this competency.

There is a difference between both groups as the t-value is significant at 0.01 level. Hence the above statement is rejected.

**Figure 4.41: Summary of t-test for Listening to Letters with regard to experimental and controlled groups**

![Figure 4.41: Summary of t-test for Listening to Letters with regard to experimental and controlled groups](image)

The above figure also confirms that the experimental group has done better than the controlled group.
4.10.2 Listening to Words

Sub-hypothesis 2: There is no significant difference in listening to words between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

Table 4.42: Summary of t-test for Listening to Words with regard to experimental and controlled groups on post-test

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>3.900</td>
<td>3.450</td>
<td>1.552</td>
<td>4.900</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>7.350</td>
<td></td>
<td>2.739</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on Listening to Words scores. There was no significant difference on the pre tests scores.

The table shows that both experimental and controlled groups were comparable before intervention. The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on competency of listening words. Hence the music can be used to teach listening skills.

There is a significant difference as the t-value is significant at 0.01 level. Hence the above statement is rejected.
Figure 4.42: Summary of t-test for Listening to Words with regard to experimental and controlled groups

From the figure also it is clear that experimental group have done better than the controlled groups.
4.10.3 Listening Comprehension

Sub-hypothesis 3: There is no significant difference in listening comprehension between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

Table 4.43: Summary of t-test for Listening Comprehension with regard to experimental and controlled groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>3.000</td>
<td>1.700</td>
<td>1.685</td>
<td>3.414</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>4.700</td>
<td></td>
<td>1.454</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on Listening Comprehension scores. There was no significant difference on the pre tests scores.

The table shows that both experimental and controlled groups were comparable before intervention. The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on competency of recognizing conversations.

Since the t-value is significant at 0.01 level, it can be concluded that music has positive effect on listening to conversation with understanding. The t-value is greater than the table value. Hence the hypothesis gets rejected.
Figure 4.43: Summary of t-test for Listening Comprehension with regard to experimental and controlled groups

From the figure also it can be concluded that experimental group (total) have done better than the controlled group (total).
4.10.4 Listening Competencies (Total)

Sub-hypothesis 4: There is no significant difference in listening competencies (total) between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

Table 4.44: Summary of t-test for Listening Competencies (Total) with regard to experimental and controlled groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>10.800</td>
<td></td>
<td>4.007</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>19.350</td>
<td>8.550</td>
<td>6.072</td>
<td>5.255</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘$t$’=2.02; **Significant at 0.01 level; Tab ‘$t$’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on listening competencies (total) scores. There was no significant difference on the pre tests scores.

The table shows that both experimental and controlled groups were comparable before intervention. But after the intervention the post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on competency of recognizing competencies. Hence the music can be used to teach listening skills.

There is a significant difference as the t-value is significant at 0.01 level. Hence the above hypothesis is rejected.
Figure 4.44: Summary of t-test for Listening Competencies (Total) with regard to experimental and controlled groups

From the figure, it is clear that experimental group have done better than the controlled group on listening competencies in total.
4.11 EFFECT OF INTERVENTION BASED ON MUSIC ON READING COMPETENCIES OF EXPERIMENTAL AND CONTROLLED GROUPS

This section gives detailed description of interpretation of results of experimental and controlled groups in detail. Hypothesis formulated to know the effect of music on reading competencies of experimental and controlled groups. The formulated hypothesis was as follows.

**Hypothesis 10**: There is no significant difference in Reading Competencies between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

To test the hypothesis, the results of the Reading Competencies Aloud of controlled and experimental groups are presented as shown in the following tables.

4.11.1 Reading Aloud Syllables

**Sub-hypothesis 1**: There is no significant difference in Reading Aloud Syllables between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

**Table 4.45**: Summary of t-test for Reading Aloud Syllables with regard to experimental and controlled groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>8.900</td>
<td>2.450</td>
<td>2.673</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>11.350</td>
<td></td>
<td>3.065</td>
<td>2.694</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the post-test for the controlled and experimental groups on Reading aloud syllables scores.
The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on Reading aloud syllables.

The ‘t’ value of 2.694 is greater than the table value of 0.05 level. Therefore formulated hypothesis is rejected.

Figure 4.45: Summary of t-test for Reading Aloud Syllables with regard to experimental and controlled groups

![Bar graph showing mean scores for control and experimental groups.](image)

From the figure also it is clear that experimental groups in total have done better than the controlled group at the values are 11.35 and 8.9 respectively.
4.11.2 Reading Words Aloud

Sub-hypothesis 2: There is no significant difference in Reading Words Aloud between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

Table 4.46: Summary of t-test for Reading Words Aloud with regard to experimental and controlled groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>9.900</td>
<td>3.300</td>
<td>2.100</td>
<td>3.851</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>13.200</td>
<td></td>
<td>3.205</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on Reading Words Aloud scores. There was no significant difference on the pre tests scores.

The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on competency of recognizing Reading Words Aloud.

The t-value is significant at 0.01 level. Hence the above hypothesis is rejected.
Figure 4.46: Summary of t-test for Reading Words Aloud with regard to experimental and controlled groups

From the figure it can be concluded that experimental group have done better than the controlled group.
4.11.3 Reading Minimal Pairs Aloud

Sub-hypothesis 3: There is no significant difference in Reading Minimal Pairs Aloud by experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

Table 4.47: Summary of t-test for Reading Minimal Pairs Aloud with regard to experimental and controlled groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>16.900</td>
<td>7.750</td>
<td>3.918</td>
<td>6.428</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>24.650</td>
<td></td>
<td>3.703</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on Reading Minimal Pairs Aloud.

The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on Reading Minimal Pairs Aloud.

The t-value is significant at 0.01 level. Hence the above hypothesis is rejected.
Figure 4.47: Summary of t-test for Reading Minimal Pairs Aloud with regard to experimental and controlled groups

Figure shows that the experimental groups were found to be doing better than the controlled groups on reading minimal pairs at post-test.
4.11.4 Reading Competencies Aloud (Total)

Sub-hypothesis 4: There is no significant difference in reading competencies aloud (total) between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

Table 4.48: Summary of t-test for Reading Competencies Aloud (Total) with regard to experimental and controlled groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>35.70</td>
<td>13.500</td>
<td>7.807</td>
<td>4.979</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>49.20</td>
<td></td>
<td>9.277</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on Reading Competencies Aloud (Total).

The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention based on music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on competency of recognizing reading aloud to competencies.

There is a significant difference between the groups. The t-value is significant at 0.01 level. Hence the above hypothesis is rejected.
From the figure it can be seen that experimental groups both together low and under achievers have shown better performance than the total controlled group of low and under achievers as the value shown are 49.2 and 35.7 respectively.
4.11.5 Reading Passage with Pauses Aloud

Sub-hypothesis 5: There is no significant difference in Reading Passage with Pauses Aloud between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

Table 4.49: Summary of t-test for Reading Passage with Pauses Aloud with regard to experimental and controlled groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>15.350</td>
<td>6.200</td>
<td>3.166</td>
<td>4.882</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>21.550</td>
<td></td>
<td></td>
<td>4.764</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on Reading Passage with Pauses Aloud.

The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention by using music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on competency of recognizing reading aloud to pauses.

There is a significant difference between two groups at the t-value at 0.01 level. Hence the above hypothesis is rejected.
Figure 4.49: Summary of t-test for Reading Passage with Pauses Aloud with regard to experimental and controlled groups

From the figure it can be concluded that experimental groups in total has done better than the controlled group (total).
4.11.6 Reading Comprehension

Sub-hypothesis 6: There is no significant difference in Reading Comprehension between experimental and controlled groups who were given intervention with music and those who were attended regular classroom teaching.

Table 4.50: Summary of t-test for Reading Comprehension with regard to experimental and controlled groups

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean Difference</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>Control</td>
<td>12.900</td>
<td>2.403</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>19.750</td>
<td>6.850</td>
<td>6.640</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.338</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level; Tab ‘t’=2.02; **Significant at 0.01 level; Tab ‘t’=2.71

The table has given the mean scores and standard deviations of the pre and post tests for the controlled and experimental groups on reading comprehension.

The post test was conducted to find out the effect of intervention on both experimental and controlled groups. The experimental group was given intervention by using music and controlled group attended the regular classroom teaching. Experimental group showed improvement than controlled group. It indicates that music has effect on the competency.

There is significant difference between the two groups as the t-value is significant at 0.01 level. Since the t-value is greater than the table value. Hence the hypothesis is rejected.
From the figure, it can be stated that experimental groups of low and under achievers have done better than controlled groups (total).
4.12 EFFECT OF MBLT STRATEGY ON INTONATIONS
(RISING AND FALLING OF PITCH)

The investigator particularly wanted to see the effect of music based language teaching strategy on intonation in their reading alouds. To get the spectrographs investigator loaded the digitally recorded reading alouds of students into praat speech analysis software and got the spectrographs. Later the comparison made between experimental and controlled groups in terms of pitch and intensity in their spectrographs.

The spectrographs of controlled and experimental groups were comparable in terms of pitch and intensity and similar in the shape and rising and falling of voice in their pre test readings. But after intervention intonations were analysed in both experimental and controlled groups. Experimental group showed improvement in intonation and controlled groups intonation were very much similar to the pretest intonations. The spectrographs showed no deviations in their intonations. The shape of the pitch level was almost flat. Whereas the experimental group students’ pitch and intensity levels increased.

There was no rising and falling of voice and pitch in controlled group. Whereas experimental groups students read with rising and falling of voice and they enjoyed their reading aloud.

The experimental group not only improved in intonations but also scored better in reading letters, words and passages.

When comparison made between under and low achievers of Experimental group the Under achievers spectrographs showed significant improvement in their pitch and intensity levels. Here few spectrographs of both experimental and controlled groups presented.
The above spectrograph represents the model intonation of interrogative sentence of Kannada language. The interrogative sentences in Kannada end with rising voice (Manjula, R., 1997) so the model intonation is said to be standard one.

Here compared one of the under achiever’s pre test and post test spectrographs analysed in detail. The said student of experimental group was not aware of intonation of questioning. This can be seen in the given pre test spectrograph. Instead of use of rising pitch in the end, student wrongly read used falling tone. The following spectrograph shows the wrong intonation.

**Student No. 1 (Under Achiever)**

The pre-test spectrograph shows that there is a flat line of pitch and intensity levels, which shows that the student was not aware of the pitch variations
in reading aloud. The repetition of the same words, wrong pronunciation can be seen from the above spectrograph when compare to model spectrograph.

But after the intervention the pitch level of the student had improved, means it is according to the standard use of interrogative sentence. See the given Spectrograph which not only give information on pitch level but also pronunciation time taken for uttering the sentence, etc. were explained in the following post test spectrograph.

The spectrograph shows that there is improvement in intonation. The blue coloured line is pitch and yellow one is intensity which are not flat as compare to pre test, it indicates that there is variation in pitch taken place. The interrogative sentence read as interrogative sentence only, means the pitch of questioning should end with raising voice in the end the improvement in intonation. The spectrogram also shows the improvement in pronunciation and time taken for uttering sentence was also reduced.

The same way few spectrographs of experimental group were presented as follows. They show improvement in terms of pronunciation, time taken to read the sentence, rising and falling of pitch.
Student No. 2 (Experimental Group)

The faulty use of intonation can be seen. The pitch is not matching to the model reading instead is a looks like a straight line in pre test.

Controlled Group

Controlled group students not improved in use of correct intonation pattern. In the following lines one of the students’ spectrographs of pre and post tests presented and discussed.

Student No. 1 (Under achiever)

The following spectrograph shows the wrong pitch levels. The pitch level is looks like a flat line. The blue colored line indicates the pitch level. There is no rising and falling of voice in pre test.
The presented post test spectrograph of the student No. 1 of controlled group looks similar to his pre test spectrograph. It indicates that there is no rising and falling of the voice after post test. The standard pitch was not used neither in pre test nor in post test. Hence the student did not learn the correct intonation pattern.

Conclusion

By analyzing the above spectrographs, it is clear that experimental students learnt correct usage of rising and falling of voice according to the standard Kannada speaking. Especially under achievers performed better than low achievers, it may be due to music effects on intelligence also. Listening to Mozart has effect on spatial intelligence (Nantais, 1997; Rauscher, Shaw & Ky, 1993).

Hence music based language teaching strategy enhanced competency of using correct Intonation pattern.