Chapter - V

ANALYSIS AND INTERPRETATION OF DATA

5.1 SUMMARY OF THE ANALYSIS CARRIED OUT

5.2 DESCRIPTIVE ANALYSIS OF EMOTIONAL INTELLIGENCE

5.3 DESCRIPTIVE ANALYSIS OF TEACHER EFFECTIVENESS

5.4 OBJECTIVE-WISE ANALYSIS
Analysis of data refers to the study of the organised material with an intention to find out inherent facts. It involves a number of interrelated operations that are performed to obtain answers to objectives of the research.

Analysis means categorising, ordering, manipulating and summarising of data, to obtain answers to research questions. The purpose of analysis is “to reduce data to intelligible and interpretable form so that the relations of research problems can be studied and tested” (Kerlinger, 1995, p. 125).

The data collected are to be processed and analysed for scientific conclusions and for ensuring that all relevant data are used for making contemplated comparisons and analysis. Processing of data involves editing, coding, classification and tabulation of collected data so that they are amenable to analysis. The term analysis refers to the computation of certain measures together with searching for pattern of relationship among data groups. Without appropriate analysis, the collected data have no value and importance.

Interpretation of data refers to that vital part of the investigation, which is associated with the drawing of inferences from the collected facts after the analytical study. It is the process of establishing relationships between variables. The task of analysis is incomplete without interpretation.

Analysis and interpretation are complementary to each other. The end product of analysis is the setting up of certain general conclusions, while interpretation deals with what these conclusions really mean.

5.1 SUMMARY OF THE ANALYSIS CARRIED OUT

The purpose of the present study was to assess the extent of emotional intelligence as well as teaching effectiveness of primary school teachers and to find out the relationship between these two variables. In addition to these objectives,
the study was intended to find out the attitude of students towards their teachers and its relationship to the emotional intelligence and the effectiveness of primary school teachers. The sample for the study consists of 756 primary school teachers, taken randomly from 150 schools from various districts of Kerala. Besides, data were collected from students of standard V, VI, and VII from these schools so as to get a mean attitude of 10 students towards each teacher. For the collection of the data, devices such as Emotional Intelligence Inventory (EII) and Kulsum Teacher Effectiveness Scale (KTES) - both meant for teachers, and a Likert type attitude scale - meant for pupils were employed. The collected data were consolidated, analysed and interpreted for the realisation of the objectives of the study which are restated below.

1. To find out the emotional intelligence of primary school teachers in Kerala State for the total sample and relevant sub samples.

2. To find out the emotional intelligence of primary school teachers with respect to the components such as personal efficacy, interpersonal efficacy and intrapersonal efficacy for the total sample and relevant sub samples.

3. To assess the teacher effectiveness of primary school teachers in Kerala State for the total sample and relevant sub samples.

4. To assess the teacher effectiveness of primary school teachers with respect to the components such as preparation and planning for teaching, class room management, knowledge of subject matter, teacher characteristics and interpersonal relations for the total sample and relevant sub samples.
5. To find out the relationship between emotional intelligence and teacher effectiveness of primary school teachers in Kerala State for the total sample and relevant sub samples.

6. To find out the relationship between different components of emotional intelligence such as personal efficacy, interpersonal efficacy and intrapersonal efficacy and teacher effectiveness of primary school teachers in Kerala State for the total sample and relevant sub samples.

7. To find out the prediction equation for teacher effectiveness using the best predictors of emotional intelligence.

8. To find out the relationship between different components of teacher effectiveness such as preparation and planning for teaching, class room management, knowledge of subject matter, teacher characteristics and interpersonal relations and emotional intelligence.

9. To find out the prediction equation for emotional intelligence using the best predictors of teacher effectiveness.

10. To find out the relationship between emotional intelligence of primary school teachers and pupils’ attitude towards their teachers for the total sample and relevant sub samples.

11. To find out the relationship between teacher effectiveness of primary school teachers and pupils’ attitude towards their teachers for the total sample and relevant sub samples.

According to the basis of the objectives the following major hypotheses were formulated for the study
HYPOTHESES OF THE STUDY

1. There is significant difference in emotional intelligence among the primary school teachers in Kerala State.

2. There is significant difference in emotional intelligence among the primary school teachers in Kerala State with reference to the components such as personal efficacy, interpersonal efficacy and intrapersonal efficacy.

3. There is significant difference in teacher effectiveness among the primary school teachers in Kerala State.

4. There is significant difference in teacher effectiveness among the primary school teachers in Kerala State with reference to the components such as preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics and interpersonal relations.

5. There is significant relationship between emotional intelligence and teacher effectiveness of primary school teachers in Kerala State for the total sample and relevant sub samples.

6. There is significant relationship between different components of emotional intelligence such as personal efficacy, interpersonal efficacy and intrapersonal efficacy and teacher effectiveness of primary school teachers in Kerala State for the total sample and relevant sub samples.

7. There is significant relationship between different components of teacher effectiveness such as preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics and interpersonal relations and emotional intelligence of primary school teachers in Kerala State for the total sample and relevant sub samples.
8. There is significant relationship between emotional intelligence of primary school teachers and pupils’ attitude towards their teachers for the total sample and relevant sub samples.

9. There is significant relationship between teacher effectiveness of primary school teachers and pupils’ attitude towards their teachers for the total sample and relevant sub samples.

5.2 DESCRIPTIVE ANALYSIS OF EMOTIONAL INTELLIGENCE

For getting a general idea about the distribution of emotional intelligence a preliminary analysis was carried out by estimating the basic statistics of the whole sample and various sub samples based on gender, type of management of the school, locality of the school, teaching experience, and educational qualifications of the teachers. Also the statistical constants were estimated separately for each of the three components for the whole sample and sub samples.

5.2.1 EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS IN KERALA STATE FOR THE TOTAL SAMPLE

To study the emotional intelligence of the primary school teachers, the investigator administered an Emotional Intelligence Inventory to a sample of 756 teachers randomly selected from 150 primary schools in Kerala. The Emotional Intelligence Inventory consisted of 50 items related to three variables. The maximum score that can be obtained by a respondent for the Emotional Intelligence Inventory is 250 (50x5), minimum score is 50 (50x1), and the middle score is 150 (50x3). The filled up scales were collected and scored.
### Table 5.1

**Statistical Constants of Emotional Intelligence Scores of Primary School Teachers for the Total Sample**

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Emotional intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>160.1</td>
</tr>
<tr>
<td>Median</td>
<td>162.5</td>
</tr>
<tr>
<td>Mode</td>
<td>167.3</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>36.01</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.199</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.183</td>
</tr>
</tbody>
</table>

Table 5.1 shows that the mean score of emotional intelligence for the whole sample is 160.1, median is 162.5 and mode is 167.3. The standard deviation is 36.01; skewness -0.199; and kurtosis 0.183.

As the measure of central tendencies (mean, median and mode) cluster around nearer scores, it can be seen that the distribution of emotional intelligence scores for the whole sample is almost normal. The negative skewness (-0.199) suggests the concentration of frequencies is around the higher scores. The index of kurtosis is lower than .263, the score of peakedness of a normal distribution (Garrett, 1966, p. 102). It shows that the distribution of emotional intelligence scores for the total sample is slightly leptokurtic. Graphical representation of the distribution of emotional intelligence scores for the total sample is presented in figure 5.1.
5.2.2 EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS IN KERALA STATE WITH RESPECT TO VARIOUS COMPONENTS

The Emotional Intelligence Inventory consisted of 50 items that are given under various components such as personal efficacy, interpersonal efficacy and intrapersonal efficacy. The filled up scales were scored separately for each factor. The analysis of emotional intelligence scores with respect to each of these components is given below.

5.2.2.1. EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO THE FACTOR PERSONAL EFFICACY

Twenty six items were included in the Emotional Intelligence Inventory under the variable personal efficacy. The maximum score that can be obtained by a respondent for this factor is 130 (26x 5), minimum score 26 (26x 1), and the middle score is 78 (26x 3).
Table 5.2

Statistical Constants of Personal Efficacy Scores of Primary School Teachers for the Total Sample

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Personal efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>86.28</td>
</tr>
<tr>
<td>Median</td>
<td>87.53</td>
</tr>
<tr>
<td>Mode</td>
<td>89.88</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>19.86</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.187</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.201</td>
</tr>
</tbody>
</table>

Table 5.2 shows that the mean score of personal efficacy for the whole sample as 86.28, median as 87.53 and mode as 89.88. The standard deviation is 19.86, skewness -0.187 and kurtosis 0.201.

As the measure of central tendencies (mean, median and mode) cluster around nearer scores, it can be seen that the distribution of personal efficacy scores for the whole sample is almost normal. The negative skewness (-0.187) suggests that the concentration of frequencies is around the higher scores. The index of kurtosis is lower than 0.263, the score of peakedness of a normal distribution. It shows that the distribution of personal efficacy scores for the whole sample is slightly leptokurtic. Graphical representation of the distribution of personal efficacy scores for the total sample is presented in figure 5.2.
Figure 5.2. Distribution of Personal Efficacy Scores of the Total Sample

5.2.2.2 EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO THE FACTOR INTERPERSONAL EFFICACY

The Emotional Intelligence Inventory consisted of eleven items under the variable interpersonal efficacy. The maximum score that can be obtained by a respondent for this factor is 55 (11x 5), minimum score 11 (11x 1), and the middle score is 33 (11x 3).

Table 5.3

Statistical Constants of Interpersonal Efficacy Scores of Primary School Teachers for the Total Sample

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Interpersonal efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>33.62</td>
</tr>
<tr>
<td>Median</td>
<td>34.00</td>
</tr>
<tr>
<td>Mode</td>
<td>34.68</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.19</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.158</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.161</td>
</tr>
</tbody>
</table>
Table 5.3 shows that the mean score of interpersonal efficacy for the whole sample as 33.62, median as 34.00 and mode as 34.68. The standard deviation is 7.19, skewness -0.158 and kurtosis 0.161.

As the measure of central tendencies (mean, median and mode) cluster around nearer scores, it can be seen that the distribution of interpersonal efficacy scores for the whole sample is almost normal.

The negative skewness (-0.158) suggests that the concentration of frequencies is around the higher scores. The value of kurtosis is less than 0.263, the score of peakedness of a normal distribution. It shows that the distribution of interpersonal efficacy scores for the whole sample is slightly leptokurtic. Graphical representation of the distribution of interpersonal efficacy scores for the total sample is presented in figure 5.3.

**Figure 5.3. Distribution of Interpersonal Efficacy Scores of the Total Sample**

5.2.2.3 EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO THE FACTOR INTRAPERSONAL EFFICACY
Under the variable intrapersonal efficacy, 13 items were included in the Emotional Intelligence Inventory. The maximum score that can be obtained by a respondent for this factor is 65 (13 x 5), minimum score is 13 (13 x 1), and the middle score is 39 (13 x 3).

Table 5.4

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Intrapersonal efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>40.24</td>
</tr>
<tr>
<td>Median</td>
<td>40.59</td>
</tr>
<tr>
<td>Mode</td>
<td>41.29</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>8.99</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.116</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.108</td>
</tr>
</tbody>
</table>

Table 5.4 shows that the mean score of intrapersonal efficacy for the whole sample as 40.24, median as 40.59 and mode as 41.29. The standard deviation is 8.99, skewness is -0.116 and kurtosis is 0.108. As the measure of central tendencies (mean, median and mode) cluster around nearer scores, it can be seen that the distribution of intrapersonal efficacy scores for the whole sample is almost normal.

The negative skewness (-0.116) suggests that the concentration of frequencies is around the higher scores. The values of kurtosis is lower than 0.263, the score of peakedness of a normal distribution. It shows that the distribution of intrapersonal efficacy scores for the whole sample is slightly leptokurtic. Graphical representation of the distribution of intrapersonal efficacy scores for the total sample is presented in figure 5.4.
From the preliminary analysis, it was found that the statistical indices of mean, median and mode of the distributions of emotional intelligence and its various components for the total sample are slightly leptokurtic. The statistical indices of standard deviation, skewness, and kurtosis of the distributions of emotional intelligence and various components go along with the properties of normal distribution.

5.3 DESCRIPTIVE ANALYSIS OF TEACHER EFFECTIVENESS

To get a general idea about the teacher effectiveness among primary school teachers a preliminary analysis was carried out by estimating the basic statistics of the whole sample and various subsamples. The statistical constants were estimated separately for each of the six dimensions for teacher effectiveness.

5.3.1 TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS IN KERALA STATE FOR THE TOTAL SAMPLE

In order to study the teacher effectiveness of the primary school teachers, the investigator administered the Kulsum Teacher Effectiveness Scale to the
sample of 756 teachers. The teacher effectiveness scale consisted of 60 statements with five variables. The maximum score that can be obtained by a respondent for the teacher effectiveness scale is 600, i.e. (60 x 10), minimum score is zero, i.e. (60 x 0) and the middle score is 300, i.e. (60 x 5). The descriptive statistics of the distribution of scores are presented in table 5.5.

**Table 5.5**

*Statistical Constants of Teacher Effectiveness Scores of Primary School Teachers for the Total Sample*

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Teacher effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>448.90</td>
</tr>
<tr>
<td>Median</td>
<td>451.00</td>
</tr>
<tr>
<td>Mode</td>
<td>455.40</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>47.16</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.133</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.198</td>
</tr>
</tbody>
</table>

Table 5.5 shows the mean score of teacher effectiveness for the whole sample as 448.90, median as 451.00 and mode as 455.4. The standard deviation is 47.16, skewness -0.133 and kurtosis 0.198.

As the measure of central tendencies (mean, median and mode) cluster around nearer scores, it can be seen that the distribution of teacher effectiveness scores for the whole sample is almost normal.

The negative skewness (-0.133) suggests that the concentration of frequencies is around the higher scores. The value of kurtosis is less than 0.263, the score of a normal distribution. It shows that the teacher effectiveness scores for the whole sample are leptokurtic. Graphical
representation of the distribution of teacher effectiveness scores of total sample is presented in figure 5.5.

Figure 5.5. Distribution of Teacher Effectiveness Scores of the Total Sample

5.3.2 TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS IN KERALA STATE WITH RESPECT TO ITS VARIOUS COMPONENTS

The teacher effectiveness scale consisted of 60 items that are given under various components such as preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics as well as interpersonal relations. The filled up scales were scored separately for each area. The analysis of teacher effectiveness scores with respect to each of these components is given below.

5.3.2.1 TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO THE FACTOR - PREPARATION AND PLANNING FOR TEACHING

Eleven statements were included in the teacher effectiveness scale under ‘preparation and planning for teaching.’ The maximum score that can be obtained
by a respondent for this factor is 110 (11x10), minimum score zero (11x0) and the middle score is 55 (11x5).

**Table 5.6**

*Statistical Constants of Preparation and Planning for Teaching Scores of Primary School Teachers for the Total Sample*

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Preparation and planning for teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>90.63</td>
</tr>
<tr>
<td>Median</td>
<td>91.08</td>
</tr>
<tr>
<td>Mode</td>
<td>91.98</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>9.95</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.135</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.248</td>
</tr>
</tbody>
</table>

Table 5.6 shows that the mean score of preparation and planning for teaching the whole sample is 90.63; median is 91.08; and mode 91.98. The standard deviation is 9.95, skewness -0.135 and kurtosis 0.248.

As the measure of central tendencies (mean, median and mode) cluster around nearer scores, it can be inferred that the distribution of preparation and planning for teaching scores for the whole sample is almost normal.

The negative skewness (-0.135) suggests that the concentration of frequencies is around the higher scores. The index of kurtosis is less than 0.263, the score of a normal distribution. It means that the distribution of preparation and planning for teaching scores for the total sample is leptokurtic. Graphical representation of preparation and planning scores of total sample is presented in figure 5.6.
Figure 5.6. Distribution of Preparation and Planning for Teaching Scores of the Total Sample

5.3.2.2 TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO THE FACTOR - CLASSROOM MANAGEMENT

Fourteen statements were included in the teacher effectiveness scale to assess ‘classroom management.’ The maximum score that can be obtained by a respondent for this factor is 140 (14x10), minimum score zero (14x0) and the middle score is 70 (14x5). The descriptive statistics of the distribution of scores are presented in table 5.7.
Table 5.7

Statistical Constants of Classroom Management Scores of Primary School Teachers for the Total Sample

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Classroom management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>95.86</td>
</tr>
<tr>
<td>Median</td>
<td>95.98</td>
</tr>
<tr>
<td>Mode</td>
<td>96.22</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>10.07</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.036</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.163</td>
</tr>
</tbody>
</table>

From the table 5.7 it is seen that the mean score of classroom management for the whole sample is 95.86, median is 95.98 and mode is 96.22. The standard deviation is 10.07, skewness is -0.036 and kurtosis is 0.163.

As the measure of central tendencies (mean, median and mode) cluster around nearer scores, it can be inferred that the distribution of classroom management scores for the whole sample is almost normal.

The negative skewness -0.036 suggests that the concentration of frequencies is around the higher scores. The index of kurtosis is lower than 0.263, the score of peakedness of distribution. It shows that the distribution of classroom management scores for the whole sample is leptokurtic. Graphical representation of the distribution of classroom management scores of total sample is presented in figure 5.7.
Figure 5.7. Distribution of Class Room Management Scores of the Total Sample

5.3.2.3 TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO THE FACTOR - KNOWLEDGE OF SUBJECT MATTER

There are seven statements in the teacher effectiveness scale related to the factor ‘knowledge of subject matter.’ The maximum score that can be obtained by a respondent for this factor is 70 (7x10), minimum score zero (7x0) and the middle score is 35 (7x5). The descriptive statistics of the distribution of scores are presented in table 5.8.

Table 5.8
**Statistical Constants of Knowledge of Subject Matter Scores of Primary School Teachers for the Total Sample**

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Knowledge of subject matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>48.37</td>
</tr>
<tr>
<td>Median</td>
<td>48.69</td>
</tr>
<tr>
<td>Mode</td>
<td>49.01</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.84</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.198</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.223</td>
</tr>
</tbody>
</table>
From the table 5.8 it is found that the mean score of knowledge of subject matter for the whole sample is 48.37, median is 48.69 and mode is 49.01. It is also found that the standard deviation is 4.84; skewness is -0.198; and kurtosis is 0.223.  

As the measures of central tendencies (mean, median and mode) cluster around nearer scores, it can be understood that the distribution of knowledge of subject matter scores for the whole sample is almost normal. The negative skewness (-0.198) suggests that concentration of frequencies is around the higher scores. The index of kurtosis is less than 0.263, the score of a normal distribution. So the distribution of knowledge of subject matter scores for the whole sample can be considered as leptokurtic. Graphical representation of the distribution of knowledge of subject matter scores of total sample is presented in figure 5.8.

![Graphical representation of the distribution of knowledge of subject matter scores of total sample](image)

*Figure 5.8. Distribution of Knowledge of Subject Matter Scores of the Total Sample*
5.3.2.4 TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO THE FACTOR - TEACHER CHARACTERISTICS

There are seventeen statements in the teacher effectiveness scale related to the factor ‘teacher characteristics.’ The maximum score that can be obtained by a respondent for this factor is 170 (17x10), minimum score zero (17x0) and the middle score is 85 (17x5). The descriptive statistics of the distribution of scores are presented in table 5.9.

Table 5.9

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Teacher characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>123.14</td>
</tr>
<tr>
<td>Median</td>
<td>123.59</td>
</tr>
<tr>
<td>Mode</td>
<td>124.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>12.70</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.106</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.277</td>
</tr>
</tbody>
</table>

From the table 5.9 it can be seen that the mean score of teacher characteristics for the whole sample as 123.14, median as 123.59 and mode as 124.50. The standard deviation is 12.70, skewness is -0.106 and kurtosis is 0.277.

As the measure of central tendencies (mean, median and mode) cluster around nearer scores, it can be inferred that the distribution of teacher characteristics scores for the whole sample is almost normal. The negative skewness (-0.106) suggests that the concentration of frequencies is around the
higher scores. The value of kurtosis is slightly higher than 0.263, the score of peakedness of a normal distribution. So the distribution is slightly platykurtic and the change in the frequencies of the distribution is not so rapid. It indicates that the distribution of teacher characteristics scores for the whole sample is platykurtic. Graphical representation of the distribution of teacher characteristics scores of total sample is presented in figure 5.9.

![Figure 5.9: Distribution of Teacher Characteristics Scores of the Total Sample](image)

**Figure 5.9.** Distribution of Teacher Characteristics Scores of the Total Sample

### 5.3.2.5 TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO THE FACTOR - INTERPERSONAL RELATIONS

There are eleven statements in the teacher effectiveness scale related to the factor ‘interpersonal relations.’ The maximum score that can be obtained by a respondent for this factor is 110 (11x10), minimum score zero (11x0), and the middle score is 55 (11x5). The descriptive statistics of the distribution of scores are presented in table 5.10.
Table 5.10

Statistical Constants of Interpersonal Relations Scores of Primary School Teachers for the Total Sample

<table>
<thead>
<tr>
<th>Statistics constants</th>
<th>Interpersonal relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>90.90</td>
</tr>
<tr>
<td>Median</td>
<td>91.25</td>
</tr>
<tr>
<td>Mode</td>
<td>92.18</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>9.90</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.106</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.288</td>
</tr>
</tbody>
</table>

From the table 5.10 it is seen that the mean score of interpersonal relations for the whole sample as 90.90, median as 91.25 and mode as 92.18. The standard deviation is 9.90, skewness is -0.106 and kurtosis is 0.288.

As the measure of central tendencies cluster around nearer scores, it can be said that the distribution of interpersonal relations scores for the total sample is almost normal. The negative skewness (-0.106) suggests that the concentration of frequencies is around the higher scores. The kurtosis is slightly greater than 0.263, the score corresponding to a normal distribution. So the distribution is slightly platykurtic and the change in the frequencies of the distribution is not so rapid. It shows that the distribution of interpersonal relations scores for the total sample is slightly platykurtic. Graphical representation of the distribution of interpersonal relations scores of total sample is presented in figure 5.10.
5.4 OBJECTIVE WISE ANALYSIS

The data collected were analysed employing appropriate statistical procedures. The results and interpretations on the basis of the objectives of the study are detailed below.

5.4.1 TO FIND OUT THE EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS IN KERALA STATE FOR THE TOTAL SAMPLE AND RELEVANT SUB SAMPLES

5.4.1.1 THE EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS IN KERALA STATE FOR THE TOTAL SAMPLE

To find out the levels of emotional intelligence among primary school teachers, the sample is classified into three groups - high, average and low. For this, the conventional procedure of one standard deviation ($\sigma$) distance from mean ($M$) was employed. The mean and standard deviation of the emotional intelligence scores of the total sample are 160.1 and 36.01 respectively. The mean score of low group is 98.48, average group is 159.57 and high group is 211.93. The score of standard deviation of low group is 13.61, average group is 23.28 and high group is 8.71. The teachers having high emotional intelligence
are those who obtained scores equal to and greater than M+\(\sigma\). The teachers having low emotional intelligence are those who obtained scores equal to and less than M-\(\sigma\) and the teachers having average emotional intelligence level are those who obtained score in between M+\(\sigma\) and M-\(\sigma\). Details are shown on the table 5.11.

**Table 5.11**

*Number and Percentage of Levels of Emotional Intelligence among Primary School Teachers in Kerala State*

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Average</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>101</td>
<td>532</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td>13.4</td>
<td>70.4</td>
<td>16.3</td>
</tr>
</tbody>
</table>

Table 5.11 shows the level of emotional intelligence among the primary school teachers in Kerala State. It is clear that 70.4% percentages of primary school teachers in Kerala State have average level of emotional intelligence, 13.4% have low emotional intelligence and 16.3% of teachers have high level of emotional intelligence. Graphical representation of the distribution of percentage levels of emotional intelligence among primary school teachers in Kerala in figure 5.11.

*Figure 5.11. Distribution of Percentage of Levels of Emotional Intelligence among Primary School Teachers in Kerala State*
5.4.1.1 DIFFERENCE AMONG THE LEVELS OF EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS IN KERALA STATE FOR THE TOTAL SAMPLE

For the present study 756 primary school teachers were selected as the sample. Among them 101 were found to be belonged to low level of emotional intelligence, 532 belonged to average level and the rest 123 belonged to high level of emotional intelligence.

To ascertain whether there exist any significant differences among the mean scores of these three categories (high, average and low) analysis of variance (ANOVA), the one way classification technique is found to be the appropriate statistical procedure and was employed. Details are presented in table 5.12.

Table 5.12

**Summary of Analysis of Variance for the Levels of Emotional Intelligence Scores of Primary School Teachers in Kerala State**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>714064.472</td>
<td>2</td>
<td>357032.236</td>
<td>1002.10*</td>
</tr>
<tr>
<td>Within groups</td>
<td>268279.671</td>
<td>753</td>
<td>356.281</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>982344.143</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

The table 5.12 is noticed that the calculated $F$ value is 1002.10 at (2, 753) degrees of freedom and the value exceeds the $F$ critical value 4.63 at .01 level of significance. This implies that there exist significant differences in the emotional intelligence among the three groups compared. However, to pinpoint the differences in a pair wise way, the Scheffe’s post-hoc analysis was used. The details are shown in table 5.13.
Table 5.13

Scheffe’s Post-Hoc Analysis for Knowing the Difference among the Groups

<table>
<thead>
<tr>
<th>Levels</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>101</td>
<td>98.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>532</td>
<td></td>
<td>159.57</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>123</td>
<td></td>
<td></td>
<td>211.93</td>
</tr>
</tbody>
</table>

Table 5.13 shows the mean differences of three groups (high, average and low). It derive that the mean score of the low group (98.48) is differ from the average group mean (159.57) and the low and average group mean is differ from the high group mean (211.93). This implies that there exist pair wise differences in the emotional intelligence scores of high, average and low emotionally intelligent teachers. The high group teachers having high emotional intelligence compare to low and average group. The mean plot is given in figure 5.12 shows it clearly.

Figure 5.12. Mean Plot of Emotional Intelligence of Primary School Teachers in Kerala State
5.4.1.2 EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS IN KERALA STATE FOR THE SUB SAMPLES

5.4.1.2.1 EMOTIONAL INTELLIGENCE AMONG PRIMARY SCHOOL TEACHERS BASED ON LOCALE

The sample for the present study consisted of 756 primary school teachers; out of which 380 were taken from rural areas while the rest, 376, from urban areas. The responses of both categories were scored separately and comparisons were made. The details of the analysis carried out are given in table 5.14.

Table 5.14

<table>
<thead>
<tr>
<th>Variable</th>
<th>Locale</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional intelligence</td>
<td>Rural</td>
<td>380</td>
<td>144.71</td>
<td>36.35</td>
<td>13.04*</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>175.59</td>
<td>28.25</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

Table 5.14 shows that the mean score of emotional intelligence of rural teachers is 144.71 and standard deviation is 36.35. Urban teachers have the mean score of 175.59 and standard deviation of 28.25. The critical ratio calculated (13.04) is greater than the table value (2.58) at .01 level of significance. So the hypothesis is accepted.

Therefore, it can be interpreted that there exists a significant difference between the mean score of emotional intelligence of rural primary school teachers and that of urban primary school teachers. The mean scores show that the urban teachers have high emotional intelligence than the rural teachers.
5.4.1.2.2 EMOTIONAL INTELLIGENCE AMONG PRIMARY SCHOOL TEACHERS BASED ON GENDER

Out of the total sample (756) for the present study 300 respondents were male teachers and the rest 456 were female teachers. The responses of both categories were scored separately and comparisons were made. The summary of analysis carried out in this regard is shown in table 5.15.

Table 5.15
The Test of Significance of the Difference between the Mean Scores of Overall Emotional Intelligence with Respect to Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional</td>
<td>Female</td>
<td>456</td>
<td>159.62</td>
<td>35.73</td>
<td>0.97</td>
</tr>
<tr>
<td>Intelligence</td>
<td>Male</td>
<td>300</td>
<td>162.26</td>
<td>37.16</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.15 shows that the mean score of emotional intelligence of male teachers is 162.26 and standard deviation is 37.16. Female teachers have the mean score of 159.62 and standard deviation of 35.73. The critical ratio calculated (0.97) is less than the table value (1.96) at .05 level of significance. So the hypothesis is rejected.

Therefore, it can be interpreted that there exists no significant difference between the mean score of emotional intelligence of male primary school teachers and that of female primary school teachers. It implies that the male teachers and female teachers do not differ significantly regarding their emotional intelligence.

5.4.1.2.3 EMOTIONAL INTELLIGENCE AMONG PRIMARY SCHOOL TEACHERS BASED ON EDUCATIONAL QUALIFICATION

The total sample of 756 respondents was categorised in to two on the basis of possession of educational qualifications. Thus a group of 428 primary teachers
with TTC or equivalent qualifications was compared with a group of 328 teachers having B.Ed or higher qualifications. The responses of both categories were scored separately and subjected to statistical procedures of comparison. Details of analysis are presented in table 5.16.

Table 5.16

*The Test of Significance of the Difference between the Mean Scores of Overall Emotional Intelligence with Respect to their Educational Qualification*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Educational Qualification</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Intelligence</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>162.30</td>
<td>36.64</td>
<td>2.16*</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>156.64</td>
<td>34.92</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

Table 5.16 shows that the mean score of emotional intelligence of teachers having the educational qualification of TTC or equivalent is 162.30 and standard deviation is 36.64. Teachers having the educational qualification B.Ed or above, the mean score is 156.64 and standard deviation of 34.92. The critical ratio calculated (2.16) is above the table value (1.96) at .05 level of significance. So the hypothesis is accepted.

Therefore, it can be interpreted that there exists significant difference between the mean score of emotional intelligence of teachers having the educational qualification of TTC or equivalent and that of teachers having the educational qualification B.Ed or above. It shows that the teachers having the educational qualification of TTC or equivalent have high emotional intelligence than the teachers having the educational qualification B.Ed or above.
5.4.1.2.4 EMOTIONAL INTELLIGENCE AMONG PRIMARY SCHOOL TEACHERS BASED ON EXPERIENCE

For the present study the sample was 756 primary teachers. This sample was categorised on the basis of teaching experience. Thus a group of 402 teachers having 15 or more years of experience and a group of 354 teachers having below 15 years of experience were considered for the study. The responses of both categories were scored separately and subjected to statistical procedures of comparison. Details of analysis are shown in table 5.17.

Table 5.17

<table>
<thead>
<tr>
<th>Variable</th>
<th>Teaching Experience</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Intelligence</td>
<td>Below 15 years</td>
<td>354</td>
<td>157.82</td>
<td>34.47</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 years or above</td>
<td>402</td>
<td>164.32</td>
<td>38.43</td>
<td>2.45**</td>
</tr>
</tbody>
</table>

** p < .05

Table 5.17 shows that the mean score of emotional intelligence of teachers having teaching experience of 15 years or above is 164.32 and standard deviation is 38.43. Teachers with below 15 years of teaching experience, the mean score are 157.82 and standard deviation of 34.47. The critical ratio calculated (2.45) is above the table value (1.96) at .05 level of significance.

Therefore, the hypothesis is accepted and it can be interpreted that the primary teachers differ significantly in their emotional intelligence with respect to experience. Also it is concluded that the teachers having teaching experience of 15 years or above have higher emotional intelligence than the teachers with below 15 years of teaching experience.
5.4.1.2.5 EMOTIONAL INTELLIGENCE AMONG PRIMARY SCHOOL TEACHERS BASED ON TYPE OF SCHOOL MANAGEMENT

For the present study 756 primary school teachers were selected as the sample. Among them 252 were belonged to government schools, 248 belonged to aided schools and the rest 256 belonged to unaided schools. The responses of each category were scored separately.

To ascertain whether there exist any significant differences among the mean scores of these three categories, analysis of variance (ANOVA), the one way classification technique is found to be the appropriate statistical procedure and was employed. Details are presented in table 5.18

Table 5.18
Summary of Analysis of Variance for the Emotional Intelligence Scores of Primary School Teachers of Different Types of School Management

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1378.260</td>
<td>2</td>
<td>689.130</td>
<td>2.579</td>
</tr>
<tr>
<td>Within groups</td>
<td>201130.222</td>
<td>753</td>
<td>267.105</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>202508.482</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the table 5.18 it is noticed that the calculated $F$ value (2.579) does not exceed the $F$ critical value 3.00 at (2, 753) degrees of freedom at .05 level of significance. So the hypothesis is rejected. This implies that there exists no significant difference in the emotional intelligence among the three groups compared. Thus it can be interpreted that the primary school teachers from different types of management do not differ significantly in their emotional intelligence.
5.4.2 TO FIND OUT THE EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO VARIOUS COMPONENTS

5.4.2.1 COMPARISON OF VARIOUS COMPONENTS OF EMOTIONAL INTELLIGENCE OF RURAL AND URBAN TEACHERS

The mean scores obtained by the rural primary teachers for the three components - personal efficacy, interpersonal efficacy, and intrapersonal efficacy - were compared with that of urban teachers. The result of the analysis carried out is presented in table 5.19.

Table 5.19

<table>
<thead>
<tr>
<th>Variable</th>
<th>Locale</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal efficacy</td>
<td>Rural</td>
<td>380</td>
<td>77.75</td>
<td>19.92</td>
<td>13.06*</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>94.80</td>
<td>15.73</td>
<td></td>
</tr>
<tr>
<td>Interpersonal efficacy</td>
<td>Rural</td>
<td>380</td>
<td>30.46</td>
<td>7.22</td>
<td>13.47*</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>36.79</td>
<td>5.60</td>
<td></td>
</tr>
<tr>
<td>Intrapersonal efficacy</td>
<td>Rural</td>
<td>380</td>
<td>36.33</td>
<td>9.05</td>
<td>13.29*</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>44.16</td>
<td>7.02</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

From the table 5.19, it is clear that there exists significant difference between the mean scores of personal efficacy, interpersonal efficacy and intrapersonal efficacy of the comparison groups - rural and urban teachers, since all the critical ratios obtained (13.06 and 13.47 and 13.29 respectively) exceed the table value 2.58 at .01 level of significance. So the hypothesis relating the components is accepted.

The urban teachers’ mean scores of personal efficacy (94.80), interpersonal efficacy (36.79) and intrapersonal efficacy (44.16) are greater than that of rural teachers. Thus it can be interpreted that the urban teachers
significantly differ from rural teachers with regard to various components of emotional intelligence such as personal efficacy, interpersonal efficacy and intrapersonal efficacy.

5.4.2.2 COMPARISON OF VARIOUS COMPONENTS OF EMOTIONAL INTELLIGENCE OF MALE AND FEMALE TEACHERS

The mean scores obtained by the male primary teachers for the three components - personal efficacy, interpersonal efficacy, and intrapersonal efficacy - were compared with that of female teachers. The result of the analysis carried out is presented in table 5.20.

Table 5.20
The Test of Significance of the Difference between the Mean Scores of Various Components of Emotional Intelligence with Respect to Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal efficacy</td>
<td>Female</td>
<td>456</td>
<td>85.74</td>
<td>19.73</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>300</td>
<td>87.08</td>
<td>20.36</td>
<td></td>
</tr>
<tr>
<td>Interpersonal efficacy</td>
<td>Female</td>
<td>456</td>
<td>33.01</td>
<td>7.13</td>
<td>2.87*</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>300</td>
<td>34.56</td>
<td>7.45</td>
<td></td>
</tr>
<tr>
<td>Intrapersonal efficacy</td>
<td>Female</td>
<td>456</td>
<td>39.71</td>
<td>8.92</td>
<td>1.89</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>300</td>
<td>41.01</td>
<td>9.26</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

The mean scores of male teachers and that of female teachers for the components personal efficacy as well as intrapersonal efficacy show no significant difference since the critical ratios obtained (0.88 and 1.89 respectively) are less than 1.96, at .05 level of significance. Thus it may be interpreted that male and female teachers do not differ significantly regarding the components of emotional intelligence such as personal efficacy and intrapersonal efficacy.

However for the factor interpersonal efficacy the male and female teachers differ significantly since the critical ratio obtained (2.87) exceeds the table value of
2.58 at .01 level of significance. Therefore, it can be interpreted that the primary
teachers differ significantly in the factor interpersonal efficacy of emotional
intelligence with respect to gender.

It is also revealed from table 5.20 that the male and female teachers have
same personal and intrapersonal efficacy, whereas the male teachers have higher
interpersonal efficacy than female teachers.

5.4.2.3 COMPARISON OF VARIOUS COMPONENTS OF EMOTIONAL
INTELLIGENCE OF PRIMARY SCHOOL TEACHERS POSSESSING
DIFFERENT EDUCATIONAL QUALIFICATIONS

The mean scores obtained by the primary teachers with TTC or equivalent
qualifications for the three components - personal efficacy, interpersonal efficacy, and
intrapersonal efficacy - were compared with that of teachers with B.Ed or above
qualifications. The result of the analysis carried out is presented in table 5.21.

Table 5.21
The Test of Significance of the Difference between the Mean Scores of Various
Components of Emotional Intelligence with Respect to Educational
Qualifications

<table>
<thead>
<tr>
<th>Variable</th>
<th>Educational Qualification</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal efficacy</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>87.92</td>
<td>20.22</td>
<td>2.63*</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>84.14</td>
<td>19.22</td>
<td></td>
</tr>
<tr>
<td>Interpersonal efficacy</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>34.06</td>
<td>7.35</td>
<td>1.75</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>33.15</td>
<td>6.93</td>
<td></td>
</tr>
<tr>
<td>Intrapersonal efficacy</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>40.37</td>
<td>9.18</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>40.17</td>
<td>8.68</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

The mean scores of teachers with TTC or equivalent qualifications and that
of teachers with B.Ed or above qualifications for the factor personal efficacy differ
significantly since the critical ratio obtained (2.63) exceeds the table value of 2.58
at .01 level of significance. Therefore, it can be interpreted that the primary school
teachers differ significantly in the factor personal efficacy of emotional intelligence with respect to educational qualifications. Table 5.19 also explained that the personal efficacy is higher for teachers with the educational qualification TTC or equivalent.

However in the cases of interpersonal efficacy as well as intrapersonal efficacy, the two compared groups do not show significant difference since the critical ratios obtained (1.75, 0.31 respectively) are less than 1.96, the table value required for .05 level of significance. Thus it may be interpreted that the two categories of teachers possessing different qualifications do not differ significantly regarding components such as interpersonal efficacy and intrapersonal efficacy of emotional intelligence.

5.4.2.4 COMPARISON OF VARIOUS COMPONENTS OF EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS WITH RESPECT TO EXPERIENCE

The mean scores obtained by the primary teachers with below 15 years experience for the three components - personal efficacy, interpersonal efficacy, and intrapersonal efficacy - were compared with that of teachers with above 15 years of teaching experience. The result of the analysis carried out is presented in table 5.22.

Table 5.22
The Test of Significance of the Difference between the Mean Scores of Various Components of Emotional Intelligence with Respect to Experience

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experience</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal efficacy</td>
<td>Below 15 years</td>
<td>354</td>
<td>84.10</td>
<td>18.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 years or above</td>
<td>402</td>
<td>88.19</td>
<td>21.49</td>
<td>2.78*</td>
</tr>
<tr>
<td>Interpersonal efficacy</td>
<td>Below 15 years</td>
<td>354</td>
<td>33.43</td>
<td>6.88</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>15 years or above</td>
<td>402</td>
<td>33.82</td>
<td>7.69</td>
<td></td>
</tr>
<tr>
<td>Intrapersonal efficacy</td>
<td>Below 15 years</td>
<td>354</td>
<td>40.18</td>
<td>8.61</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>15 years or above</td>
<td>402</td>
<td>40.31</td>
<td>9.60</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01
Table 5.22 shows that there is significant difference between the mean scores of teachers with 15 years or above experience and teachers having below 15 years experience, for the factor - personal efficacy, as the critical ratio obtained (2.78) is greater than 2.58, the table value required for a .01 level of significance. Therefore, it can be interpreted that the primary teachers differ significantly in factor personal efficacy of emotional intelligence with respect to experience. Also the teachers with 15 or above experience have higher personal efficacy than the teachers with below 15 years of experience.

But in the cases of interpersonal efficacy and intrapersonal efficacy, the two compared groups do not show significant difference since the critical ratios obtained (0.66 and 0.20 respectively) are less than 1.96, the table value required for .05 level of significance. Thus it may be interpreted that the two categories of teachers possessing different experience do not differ significantly regarding components such as interpersonal efficacy and intrapersonal efficacy of emotional intelligence.

5.4.2.5 COMPARISON OF VARIOUS COMPONENTS OF EMOTIONAL INTELLIGENCE AMONG TEACHERS OF DIFFERENT TYPES OF SCHOOL MANAGEMENT

To compare the scores obtained by primary teachers of government, aided and unaided schools, for various components of emotional intelligence, the scores were subjected to Analysis of Variance. The details of analysis carried out are presented in table 5.23.

Table 5.23

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>252.228</td>
<td>2</td>
<td>126.114</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>57588.532</td>
<td>753</td>
<td>76.479</td>
<td>1.649</td>
</tr>
<tr>
<td>Total</td>
<td>57840.760</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the table 5.23 it is found that the calculated $F$ value (1.649) does not exceed the $F$ critical value 3.00 with (2, 753) degrees of freedom at .05 level of significance. This implies that there exists no significant difference among the mean scores of the three groups compared. Thus it may be interpreted that the primary school teachers of different types of management do not differ significantly regarding the factor personal efficacy of emotional intelligence.

**Table 5.24**

*Summary of Analysis of Variance for the Interpersonal Efficacy Scores of Emotional Intelligence of Primary School Teachers of Different Types of School Management*

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>227.316</td>
<td>2</td>
<td>113.658</td>
<td>2.863</td>
</tr>
<tr>
<td>Within groups</td>
<td>29893.741</td>
<td>753</td>
<td>39.699</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30121.057</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.24 shows that the calculated $F$ value (2.863) does not exceed the $F$ critical value 3.00 with degrees of freedom (2, 753) at .05 level of significance. This implies that there exists no significant difference between the mean scores of the three groups compared. Thus it can be interpreted that the primary school teachers of different types of management - government, aided and unaided schools - do not differ significantly regarding the factor interpersonal efficacy of emotional intelligence.

**Table 5.25**

*Summary of Analysis of Variance for the Intrapersonal Efficacy Scores of Emotional Intelligence of Primary School Teachers of Different Types of School Management*

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>74.544</td>
<td>2</td>
<td>37.272</td>
<td>0.873</td>
</tr>
<tr>
<td>Within groups</td>
<td>32148.747</td>
<td>753</td>
<td>42.694</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32223.291</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.25 shows that the calculated $F$ value (0.873) does not exceed the table value 3.00 with (2, 753) degrees of freedom at .05 level of significance. This implies that there exists no significant difference between the mean scores of the three groups compared. Thus it can be interpreted that the primary school teachers of different types of management - government, aided and unaided schools - do not differ significantly regarding the factor intrapersonal efficacy of emotional intelligence.

5.4.3 TO ASSESS THE TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS IN KERALA STATE FOR THE TOTAL SAMPLE

For finding out the levels of teacher effectiveness, the sample is classified into three groups - high, average and low. For this, the conventional procedure of one standard deviation ($\sigma$) distance from mean (M) was employed. The mean and standard deviation of the teacher effectiveness scores of the total sample are 448.90 and 47.16 respectively. The mean score of low group is 367.78, average group is 448.89 and high group is 512.46. The score of standard deviation of low group is 22.60, average group is 25.32 and high group is 14.74. The teachers having high teacher effectiveness are those who obtained scores greater than $M+\sigma$. The teachers having low teacher effectiveness are those who obtained scores less than $M-\sigma$ and the teachers having average teacher effectiveness are those who obtained score in between $M+\sigma$ and $M-\sigma$. Details are shown on the table 5.26.

Table 5.26

<table>
<thead>
<tr>
<th>Low</th>
<th>Average</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>108</td>
<td>14.3</td>
<td>510</td>
</tr>
</tbody>
</table>
Table 5.26 shows the level of teacher effectiveness among the primary school teachers in Kerala State. It is clear that 67.5% of primary school teachers in Kerala State have average level of teacher effectiveness, 14.3% have low teacher effectiveness and 18.3% of teachers have high level of teacher effectiveness. So it is inferred that primary school teachers in Kerala State have average level of teacher effectiveness. Graphical representation of the distribution of percentage levels of teacher effectiveness among primary school teachers of Kerala in figure 5.13.

![Distribution Pie Chart]

*Figure 5.13. Distribution of Percentage of Levels of Teacher Effectiveness among Primary School Teachers in Kerala State*

**5.4.3.1 LEVEL OF TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS IN KERALA STATE FOR THE TOTAL SAMPLE**

For the present study 756 primary school teachers were selected as the sample. Among them 108 were found to be belonged to low level of teacher effectiveness, 510 belonged to average level and the rest 138 have high teacher effectiveness.

To ascertain whether there exist any significant differences among the mean scores of these three categories (high, average and low), analysis of variance
(ANOVA), the one way classification technique is found to be the appropriate statistical procedure and was employed. Details are presented in table 5.27.

**Table 5.27**

*Summary of Analysis of Variance for the Levels of Teacher Effectiveness Scores of Primary School Teachers in Kerala State*

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1268169.641</td>
<td>2</td>
<td>634084.821</td>
<td>1162.288*</td>
</tr>
<tr>
<td>Within groups</td>
<td>410798.310</td>
<td>753</td>
<td>545.549</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1678967.951</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .01

From the table 5.27 it is noticed that the calculated $F$ value (1162.288) exceeds the $F$ critical value 4.63 with (2, 753) degrees of freedom at .01 level of significance. So the hypothesis is accepted. This implies that there exist significant differences among the teacher effectiveness scores of the three groups (high, low and average) compared. However, to pinpoint the differences in a pair wise way, the Scheffe’s post-hoc analysis was used. The details are shown in table 5.28.

**Table 5.28**

*Scheffe’s Post-Hoc Analysis for Knowing the Difference among the Groups*

<table>
<thead>
<tr>
<th>Levels</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>108</td>
<td>367.7778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>510</td>
<td></td>
<td>448.8863</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>138</td>
<td></td>
<td></td>
<td>512.4565</td>
</tr>
</tbody>
</table>

Table 5.28 shows the mean differences of three groups (high, average and low). It derive that the mean score of the low group (367.7778) is differ from the average group mean (448.8863) and the low and average group mean is differ from the high group mean (512.4565). This implies that there exist pair wise differences in
the teacher effectiveness scores of high, average and low emotionally intelligent teachers. The high group teachers having high teacher effectiveness compare to low and average group. The mean plot is given in figure 5.14, shows it clearly.

\[\text{Figure 5.14. Mean Plot of Teacher Effectiveness of Primary School Teachers in Kerala State}\]

5.4.3.2 TO ASSESS THE TEACHER EFFECTIVENESS OF PRIMARY SCHOOLS TEACHERS WITH RESPECT TO THE COMPONENTS SUCH AS PREPARATION AND PLANNING FOR TEACHING, CLASS ROOM MANAGEMENT, KNOWLEDGE OF SUBJECT MATTER, TEACHER CHARACTERISTICS AND INTERPERSONAL RELATIONS FOR THE TOTAL SAMPLE AND RELEVANT SUB SAMPLES

The scores for teacher effectiveness of primary school teachers of different locale, school management, gender, educational qualifications and experience were found out and comparisons were made. The details are presented below.
5.4.3.2.1 TEACHER EFFECTIVENESS AMONG PRIMARY SCHOOL TEACHERS OF DIFFERENT LOCALE

The sample for the present study consisted of 756 primary school teachers; out of which 380 were taken from rural areas while the rest 376, from urban areas. The responses of both categories were scored separately and comparisons were made. The details of the analysis carried out are given in table 5.29.

Table 5.29
The Test of Significance of the Difference between the Mean Scores of Total Teacher Effectiveness with Respect to Locale

<table>
<thead>
<tr>
<th>Variable</th>
<th>Locale</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher effectiveness</td>
<td>Rural</td>
<td>380</td>
<td>434.45</td>
<td>42.55</td>
<td>8.84*</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>463.35</td>
<td>47.16</td>
<td></td>
</tr>
</tbody>
</table>

*<p <.01

Table 5.29 shows that the mean score of teacher effectiveness of rural teachers is 434.45 and standard deviation is 42.55. Urban teachers possess a mean score of 463.35 and standard deviation 47.16. The critical ratio calculated (8.84) exceeds the table value (2.58) at .01 level of significance. So the hypothesis is accepted. This indicates that there exists significant difference between the mean score of total teacher effectiveness of rural primary school teachers and that of urban primary school teachers. It is clear that the mean score of urban teachers (463.35) is greater than that of the mean score of rural teachers (434.45) so it is inferred that urban teachers have high teacher effectiveness score than rural primary school teachers.

5.4.3.2.2 TEACHER EFFECTIVENESS AMONG PRIMARY SCHOOL TEACHERS OF DIFFERENT GENDER

Out of the total sample (756) for the present study 300 respondents were male teachers and the rest 456 were female teachers. The responses of both
categories were scored separately and comparisons were made. The summary of analysis carried out in this regard is shown in table 5.30.

### Table 5.30

*The Test of Significance of the Difference between the Mean Scores of Teacher Effectiveness with Respect to Gender*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher effectiveness</td>
<td>Male</td>
<td>300</td>
<td>444.77</td>
<td>45.83</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>456</td>
<td>451.62</td>
<td>46.92</td>
<td>1.99**</td>
</tr>
</tbody>
</table>

**p < .05

Table 5.30 shows that the mean score of teacher effectiveness of male teachers is 444.77 and standard deviation is 45.83. Female teachers have the mean score of 451.62 and standard deviation of 46.92. The critical ratio calculated (1.99) exceeds the table value (1.96) at .05 level of significance. This indicates that there exists significant difference between the mean scores of total teacher effectiveness of male primary school teachers and that of female primary school teachers.

Thus it may be interpreted that the female primary teachers possess greater teacher effectiveness (mean 451.62) when compared to their male counterparts (mean 444.77).

### 5.4.3.2.3 TEACHER EFFECTIVENESS AMONG PRIMARY SCHOOL TEACHERS OF DIFFERENT EDUCATIONAL QUALIFICATIONS

The total sample of 756 respondents was categorised in to two on the basis of possession of educational qualifications. Thus a group of 428 primary teachers with TTC or equivalent qualifications was compared with a group of 328 teachers having B.Ed or higher qualifications. The responses of both categories were scored separately and subjected to statistical procedures of comparison. Details of analysis are presented in table 5.31.
Table 5.31

*The Test of Significance of the Difference between the Mean Scores of Teacher Effectiveness with Respect to Educational Qualifications*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Educational Qualifications</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher effectiveness</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>450.92</td>
<td>44.93</td>
<td>1.40</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>446.26</td>
<td>45.73</td>
<td></td>
</tr>
</tbody>
</table>

From the table 5.31 it is seen that the mean score of teacher effectiveness of teachers with TTC or equivalent qualifications is 450.92 and standard deviation is 44.93. Teachers with B.Ed or above qualifications have the mean score of 446.26 and standard deviation of 45.73. The critical ratio calculated (1.40) does not exceed the table value (1.96) at .05 level of significance. This indicates that there exists no significant difference between the mean scores compared.

Thus it can be interpreted that the primary school teachers having TTC or equivalent qualifications do not differ significantly from primary teachers having B.Ed or above qualifications with respect to total teacher effectiveness.

5.4.3.2.4 TEACHER EFFECTIVENESS AMONG PRIMARY SCHOOL TEACHERS OF DIFFERENT EXPERIENCE

The total sample was categorised on the basis of teaching experience. Thus a group of 402 teachers having 15 or more years of experience and a group of 354 teachers having below 15 years of experience were considered for the study. The responses of both categories were scored separately and subjected to statistical procedures of comparison. Details of analysis are shown in table 5.32.
Table 5.32

The Test of Significance of the Difference between the Mean Scores of Teacher Effectiveness with Respect to Experience

<table>
<thead>
<tr>
<th>Variable</th>
<th>Teaching Experience</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher effectiveness</td>
<td>15 years or above</td>
<td>402</td>
<td>451.76</td>
<td>47.01</td>
<td>1.82</td>
</tr>
<tr>
<td></td>
<td>below 15 years</td>
<td>354</td>
<td>445.65</td>
<td>45.12</td>
<td></td>
</tr>
</tbody>
</table>

From the table 5.32 it is seen that the mean score of total teacher effectiveness of teachers with 15 years or above experience is 451.76 and standard deviation is 47.01. Teachers with less than 15 years experience have the mean score of 445.65 and standard deviation of 45.12. The critical ratio calculated (1.82) does not exceed the table value (1.96) at .05 level of significance. This indicates that there exists no significant difference between the mean scores compared.

Thus it can be interpreted that the primary school teachers having 15 years or more teaching experience do not differ significantly from teachers having less than 15 years of experience in the extent of total teacher effectiveness.

5.4.3.2.5 TEACHER EFFECTIVENESS AMONG PRIMARY SCHOOL TEACHERS OF DIFFERENT TYPES OF SCHOOL MANAGEMENT

For the present study 756 primary school teachers were selected as the sample. Among them 252 were belonged to government schools, 248 belonged to aided schools and the rest 256 belonged to unaided schools. The responses of each category were scored separately.

To ascertain whether there exist any significant differences among the mean scores of these three categories, analysis of variance (ANOVA), the one way classification technique is found to be the appropriate statistical procedure and was employed. Details are presented in table 5.33.
Table 5.33

Summary of Analysis of Variance for the Teacher Effectiveness Scores of Primary School Teachers of Different Types of School Management

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1905.162</td>
<td>2</td>
<td>958.581</td>
<td>2.915</td>
</tr>
<tr>
<td>Within groups</td>
<td>246069.858</td>
<td>753</td>
<td>326.786</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>247975.020</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the table 5.33 it is found that the calculated $F$ value (2.915) does not exceed the $F$ critical value 3.00 with (2, 753) degrees of freedom at .05 level of significance. This indicates that there exist no significant differences among the mean scores of the three groups compared. Thus it can be interpreted that the primary school teachers of different types of management do not differ significantly in their total teacher effectiveness.

5.4.4 Comparison of Various Components of Teacher Effectiveness Among Various Sub Samples of Primary School Teachers

5.4.4.1 Comparison of Various Components of Teacher Effectiveness Among Primary School Teachers of Different Locale

The sample for the present study consisted of 756 primary school teachers. Out of these 380 were from rural areas and the remaining, 376 from urban areas. The responses of both categories were scored separately and comparisons were carried out. The details are presented in table 5.34.
Table 5.34

The Test of Significance of the Difference between the Mean Scores of Each of the Components of Teacher Effectiveness with Respect to Locale

<table>
<thead>
<tr>
<th>Variable</th>
<th>Locale</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation and planning for teaching</td>
<td>Rural</td>
<td>380</td>
<td>88.96</td>
<td>8.75</td>
<td>4.85*</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>92.31</td>
<td>10.21</td>
<td></td>
</tr>
<tr>
<td>Classroom management</td>
<td>Rural</td>
<td>380</td>
<td>95.99</td>
<td>10.02</td>
<td>0.36</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>95.72</td>
<td>10.64</td>
<td></td>
</tr>
<tr>
<td>Knowledge of subject matter</td>
<td>Rural</td>
<td>380</td>
<td>47.73</td>
<td>4.63</td>
<td>4.83*</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>49.42</td>
<td>5.02</td>
<td></td>
</tr>
<tr>
<td>Teacher characteristics</td>
<td>Rural</td>
<td>380</td>
<td>123.61</td>
<td>13.10</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>122.97</td>
<td>12.43</td>
<td></td>
</tr>
<tr>
<td>Interpersonal relations</td>
<td>Rural</td>
<td>380</td>
<td>89.52</td>
<td>9.61</td>
<td>2.61*</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>376</td>
<td>91.48</td>
<td>10.98</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

From the table 5.34 it is found that the mean score for ‘preparation and planning for teaching’ of rural teachers is 88.96 and standard deviation is 8.75. Urban teachers have the mean score of 92.31 and standard deviation of 10.21. The critical ratio calculated (4.85) exceeds the table value (2.58) at .01 level of significance. This indicates that there exists significant difference between the mean scores of preparation and planning of rural primary school teachers and that of urban primary school teachers.

Since the mean score for ‘preparation and planning for teaching’ of urban teachers is greater than that of rural teachers, and the difference is significant at .01 level, it can be interpreted that the urban teachers possess greater teacher effectiveness with respect to the factor ‘preparation and planning for teaching’ than that of rural teachers.
The mean scores of urban teachers and rural teachers for the components ‘class room management’ and ‘teacher characteristics’ do not differ significantly since the critical ratios obtained (0.36 and 0.74 respectively) are less than 1.96, the value needed for a significant difference at .05 level. This indicates that rural primary school teachers and urban primary school teachers do not differ significantly in their teacher effectiveness with respect to the components ‘class room management’ and ‘teacher characteristics.’

But in the case of the factor -‘knowledge of subject matter,’ teachers from rural and urban areas are differ significantly since the critical ratio obtained (4.83) exceeds 2.58, the table value at .01 level of significance. The greater value of mean score (49.42) of urban teachers over that of rural teachers (47.73) indicates that the urban primary school teachers are highly effective in terms of knowledge of subject matter compared to their rural counterparts.

When comparing the factor - interpersonal relations, it is found that the categories, urban teachers and rural teachers differ significantly since the critical ratio calculated (2.61) is greater than 2.58, the value corresponding to .01 level of significance. It also found that interpersonal relations are high among urban teachers (mean 91.48) than that of rural teachers (mean 89.52).

5.4.4.2 COMPARISON OF VARIOUS COMPONENTS OF TEACHER EFFECTIVENESS AMONG PRIMARY SCHOOL TEACHERS OF DIFFERENT GENDER

The sample for the present study consisted of 756 primary school teachers. Out of these 300 were male teachers and 456 were females. The responses of both categories were collected, scored separately and comparisons were made. The details are presented in table 5.35.
Table 5.35

*The Test of Significance of the Difference between the Mean Scores of Each of the Components of Teacher Effectiveness with Respect to Gender*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation and planning for teaching</td>
<td>Male</td>
<td>300</td>
<td>88.94</td>
<td>9.41</td>
<td>5.28*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>456</td>
<td>91.74</td>
<td>10.37</td>
<td></td>
</tr>
<tr>
<td>Class room management</td>
<td>Male</td>
<td>300</td>
<td>94.83</td>
<td>9.98</td>
<td>2.25**</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>456</td>
<td>96.54</td>
<td>10.74</td>
<td></td>
</tr>
<tr>
<td>Knowledge of subject matter</td>
<td>Male</td>
<td>300</td>
<td>47.34</td>
<td>4.97</td>
<td>4.52*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>456</td>
<td>49.04</td>
<td>5.14</td>
<td></td>
</tr>
<tr>
<td>Teacher characteristics</td>
<td>Male</td>
<td>300</td>
<td>123.98</td>
<td>12.73</td>
<td>1.47</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>456</td>
<td>122.58</td>
<td>12.96</td>
<td></td>
</tr>
<tr>
<td>Interpersonal relations</td>
<td>Male</td>
<td>300</td>
<td>89.65</td>
<td>9.73</td>
<td>3.91*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>456</td>
<td>91.72</td>
<td>9.99</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01, ** p < .05,

When the mean scores of male teachers and female teachers for various components of teacher effectiveness - preparation and planning for teaching, knowledge of subject matter, and interpersonal relations - are compared, all the respective critical ratios obtained i.e. 5.28, 4.52, and 3.91 are found to be greater than the table value 2.58 required for a .01 level of significance. This indicates that there exist significant differences between the mean scores compared.

Thus it can be interpreted that the female primary school teachers possess higher teacher effectiveness with respect to the components - preparation and planning for teaching, knowledge of subject matter, and interpersonal relations when compared to the male teachers since the mean scores are greater in all the cases.

When the mean scores of male teachers and female teachers for the factor class room management of teacher effectiveness are compared, it is found that there exists significant difference at .05 level since the critical ratio obtained 2.25 exceeds 1.96. Therefore it may be interpreted that the female primary school teachers possess greater
teacher effectiveness with respect to the factor classroom management of teacher effectiveness when compared to their male counterparts.

However, for the factor teacher characteristics male teachers and female teachers do not differ significantly since the critical ratio obtained (1.47) does not exceed 1.96. Thus it may be interpreted that the male and female primary teachers do not differ in their teacher characteristics.

### 5.4.4.3 COMPARISON OF TEACHER EFFECTIVENESS AND ITS VARIOUS COMPONENTS AMONG PRIMARY SCHOOL TEACHERS HAVING DIFFERENT EDUCATIONAL QUALIFICATIONS

Out of the total sample 428 primary teachers have TTC or equivalent qualifications and 328 teachers have B.Ed or higher qualifications. The responses of these two categories were collected, scored separately and comparisons were carried out. The details are presented in Table 5.36.

**Table 5.36**

*The Test of Significance of the Difference between the Mean Scores of each of the Components of Teacher Effectiveness with Respect to Educational Qualifications*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Educational Qualifications</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation and planning for teaching</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>91.06</td>
<td>9.97</td>
<td>1.38</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>90.07</td>
<td>9.64</td>
<td></td>
</tr>
<tr>
<td>Class room management</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>95.98</td>
<td>10.13</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>95.70</td>
<td>9.42</td>
<td></td>
</tr>
<tr>
<td>Knowledge of subject matter</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>48.96</td>
<td>5.04</td>
<td>4.03*</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>47.59</td>
<td>4.37</td>
<td></td>
</tr>
<tr>
<td>Teacher characteristics</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>123.24</td>
<td>12.18</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>123.01</td>
<td>13.11</td>
<td></td>
</tr>
<tr>
<td>Interpersonal relations</td>
<td>TTC or equivalent</td>
<td>428</td>
<td>91.67</td>
<td>9.64</td>
<td>2.69*</td>
</tr>
<tr>
<td></td>
<td>B.Ed or above</td>
<td>328</td>
<td>89.89</td>
<td>8.34</td>
<td></td>
</tr>
</tbody>
</table>

*p < .01*
When the mean scores for the components of teacher effectiveness - preparation and planning for teaching, classroom management, and teacher characteristics – obtained by teachers with TTC or equivalent qualifications and teachers with B.Ed or above qualifications are compared, all the calculated critical ratios i.e. 1.38, 0.39, and 0.25 respectively, are found to be less than the table value 1.96 required for a .05 level of significance. This indicates that there exists no significant difference between each pair of the mean scores compared.

Thus it can be interpreted that the teachers with TTC or equivalent qualifications do not differ significantly from the teachers with B.Ed or above qualifications in the extent of teacher effectiveness in terms of components such as preparation and planning for teaching, classroom management and teacher characteristics.

However in the cases of components such as knowledge of subject matter and interpersonal relations, teachers with TTC or equivalent qualifications and teachers with B.Ed or above qualifications differ significantly since the critical ratios (4.03 and 2.69 respectively) exceed the table value 2.58 at .01 level of significance. Hence it can be interpreted that the teachers with TTC or equivalent qualifications differ significantly from the teachers with B.Ed or above qualifications in the extent of teacher effectiveness in terms of components such as knowledge of subject matter and interpersonal relations.

**5.4.4.4 COMPARISON OF VARIOUS COMPONENTS OF TEACHER EFFECTIVENESS AMONG PRIMARY SCHOOL TEACHERS WITH RESPECT TO EXPERIENCE**

Out of the total sample, 402 teachers have 15 years or more teaching experience and 354 primary teachers have below 15 years teaching experience.
The responses of these two categories were collected, scored separately and comparisons were carried out. The details are presented in table 5.37.

**Table 5.37**

*The Test of Significance of the Difference between the Mean Scores of Each of Components of Teacher Effectiveness with Respect to Teaching Experience*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Teaching Experience</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation and planning for teaching</td>
<td>15 years or above</td>
<td>402</td>
<td>91.23</td>
<td>9.32</td>
<td>2.85*</td>
</tr>
<tr>
<td></td>
<td>Below 15 years</td>
<td>354</td>
<td>89.95</td>
<td>9.10</td>
<td></td>
</tr>
<tr>
<td>Class room management</td>
<td>15 years or above</td>
<td>402</td>
<td>96.84</td>
<td>9.99</td>
<td>4.09*</td>
</tr>
<tr>
<td></td>
<td>Below 15 years</td>
<td>354</td>
<td>94.75</td>
<td>9.57</td>
<td></td>
</tr>
<tr>
<td>Knowledge of subject matter</td>
<td>15 years or above</td>
<td>402</td>
<td>47.94</td>
<td>4.82</td>
<td>2.49**</td>
</tr>
<tr>
<td></td>
<td>Below 15 years</td>
<td>354</td>
<td>48.86</td>
<td>5.63</td>
<td></td>
</tr>
<tr>
<td>Teacher characteristics</td>
<td>15 years or above</td>
<td>402</td>
<td>124.56</td>
<td>13.73</td>
<td>4.45*</td>
</tr>
<tr>
<td></td>
<td>Below 15 years</td>
<td>354</td>
<td>121.53</td>
<td>12.06</td>
<td></td>
</tr>
<tr>
<td>Interpersonal relations</td>
<td>15 years or above</td>
<td>402</td>
<td>91.18</td>
<td>9.73</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Below 15 years</td>
<td>354</td>
<td>90.58</td>
<td>8.99</td>
<td></td>
</tr>
</tbody>
</table>

* * p < .01, ** p < .05

When the mean scores for various components of teacher effectiveness - preparation and planning for teaching, class room management and teacher characteristics – obtained by teachers with 15 or more years of experience and teachers with less than 15 years of experience are compared, all the calculated critical ratios i.e. 2.85, 4.09, and 4.45 respectively, are found to be greater than the table value 2.58 needed for a .01 level of significance. When the mean scores for the factor knowledge of subject matter are compared the critical ratio obtained is 2.49 indicative of significant difference of the means at .05 level of significance.

Thus it can be interpreted that the teachers having 15 years or more teaching experience differ significantly from teachers having less than 15 years of experience in the extent of teacher effectiveness in terms of various components.
such as preparation and planning for teaching, classroom management, knowledge of subject matter and teacher characteristics.

But for the comparison of mean scores for the factor interpersonal relations, the critical ratio obtained (0.87) is less than 1.96 indicating that the difference is not significant. Thus it may be interpreted that the teachers having 15 years or more teaching experience do not differ significantly from teachers having less than 15 years of experience in the extent of teacher effectiveness in terms of interpersonal relations.

**5.4.4.5 COMPARISON OF VARIOUS COMPONENTS OF TEACHER EFFECTIVENESS AMONG PRIMARY TEACHERS OF DIFFERENT TYPES OF SCHOOL MANAGEMENT**

Among the 756 primary school teachers selected as the sample for the present study 252 were from government schools, 248 from aided schools and the rest 256 from unaided schools. The responses of each category were scored separately.

In order to ascertain whether there exist any significant differences among the mean scores of these three categories, analysis of variance (ANOVA), the one way classification technique was employed. Details are presented in the table 5.38 below.

**Table 5.38**

*Summary of Analysis of Variance for the Scores of Teacher Effectiveness in Terms of the Factor – Preparation and Planning for Teaching of Primary School Teachers in Different Types of School Management*

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>976.265</td>
<td>2</td>
<td>488.133</td>
<td>5.623*</td>
</tr>
<tr>
<td>Within groups</td>
<td>65367.93</td>
<td>753</td>
<td>86.810</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>66344.195</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .01
Table 5.38 shows that the calculated $F$ value (5.623) exceeds the $F$ critical value 4.63 with (2, 753) degrees of freedom at .01 level of significance. This indicates that there exist significant differences among the mean scores of the three groups compared. Thus it may be interpreted that the primary school teachers of different types of management differ significantly in the factor - preparation and planning for teaching of teacher effectiveness.

### Table 5.39

**Scheffe’s Post-Hoc Analysis for Knowing Differences of the Types of School Management**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>252</td>
<td>400.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aided</td>
<td>248</td>
<td>454.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unaided</td>
<td>256</td>
<td></td>
<td>493.03</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.39 shows the mean differences of three groups (government, aided, and unaided). It is clear that the mean score government school teachers (400.70) is differ from the aided school teachers group mean (454.39) and the government school teachers and aided school teachers mean is differ from the unaided school teachers mean (493.03). The score of standard deviation of low group is 13.02, average group is 15.19 and high group is 20.18. This prove that unaided school teachers are teach their pupils very effectively than the government school teachers and aided school teachers. The mean plot is given in figure 5.15 shows it clearly.
Figure 5.15. Mean Plot of Teacher Effectiveness among Primary Teachers of Different Types of School Management

Table 5.40
Summary of Analysis of Variance for the Scores of Teacher Effectiveness in Terms of the Factor – Class Room Management of Primary School Teachers of Different Types of School Management

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>364.624</td>
<td>2</td>
<td>182.312</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>51784.563</td>
<td>753</td>
<td>68.771</td>
<td>2.651</td>
</tr>
<tr>
<td>Total</td>
<td>52149.187</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.40 shows that the calculated $F$ value (2.651) is less than $F$ critical value 3.00 with (2, 753) degrees of freedom at .05 level of significance. This implies that there exist no significant differences between the mean scores of the three groups compared. Thus it can be interpreted that the primary school teachers of different types of management - government, aided and unaided schools do not
differ significantly in the factor class room management of the variable teacher effectiveness.

**Table 5.41**

*Summary of Analysis of Variance for the Scores of Teacher Effectiveness in Terms of the Factor – Knowledge of Subject Matter of Primary School Teachers of Different Types of School Management*

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>359.067</td>
<td>2</td>
<td>179.534</td>
<td>2.738</td>
</tr>
<tr>
<td>Within groups</td>
<td>49375.129</td>
<td>753</td>
<td>65.571</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49734.196</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the table 5.41 it is clear that the calculated $F$ value (2.738) does not exceed the $F$ critical value 3.00 with (2, 753) degrees of freedom at .05 level of significance. This implies that there exist no significant differences among the mean scores of the three groups compared.

Thus it is interpreted that the primary school teachers of different types of school management do not differ significantly in the factor knowledge of subject matter of teacher effectiveness.

**Table 5.42**

*Summary of Analysis of Variance for the Scores of Teacher Effectiveness in Terms of the Factor – Teacher Characteristics of Primary School Teachers of Different Types of School Management*

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>264.221</td>
<td>2</td>
<td>132.111</td>
<td>2.397</td>
</tr>
<tr>
<td>Within groups</td>
<td>41501.595</td>
<td>753</td>
<td>55.115</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41765.816</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.42 shows that the calculated $F$ value (2.397) does not exceed the $F$ critical value 3.00 with (2, 753) specific degrees of freedom at .05 level of significance. This indicates that there exist no significant differences among the
mean scores of the three groups compared. Thus it may be interpreted that the primary school teachers of different types of management do not differ significantly in the factor – teacher characteristics of teacher effectiveness.

**Table 5.43**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>336.293</td>
<td>2</td>
<td>168.147</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>45365.238</td>
<td>753</td>
<td>60.246</td>
<td>2.791</td>
</tr>
<tr>
<td>Total</td>
<td>45701.531</td>
<td>755</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the table 5.43 it is found that the calculated $F$ value (2.791) at (2, 753) degrees of freedom, does not exceed the $F$ critical value 3.00 with specific degrees of freedom at .05 level of significance. This implies that there exist no significant differences among the mean scores of the three groups compared.

Thus it is interpreted that the primary school teachers of different types of school management do not differ significantly in the factor interpersonal relations of teacher effectiveness.

**5.4.5 RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS IN KERALA STATE**

**5.4.5.1 RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS FOR THE TOTAL SAMPLE**

To find out the extent of relationship between emotional intelligence and teacher effectiveness of primary school teachers, the scores of emotional intelligence (obtained by the Emotional Intelligence Inventory) and the scores of
teacher effectiveness (obtained by the Teacher Effectiveness Scale) of the total sample of primary school teachers were subjected to Pearson’s product-moment correlation test; the confidence interval tells how trustworthy the obtained correlations. The details are presented in table 5.44.

Table 5.44

<p>|r Value, SEr, Confidence Interval, Shared Variance, t Value, and Verbal Interpretation of Whole Sample for the Variable Emotional Intelligence and Teacher Effectiveness|</p>
<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>r value</th>
<th>t</th>
<th>SEr</th>
<th>Confidence interval</th>
<th>Share variance</th>
<th>Verbal interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.671</td>
<td>24.84</td>
<td>.019</td>
<td>(.6194, .7225)</td>
<td>45.02</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>

The co-efficient of correlation between emotional intelligence and teacher effectiveness for the whole sample is .671; this is higher than the value (.115) set for the significance at .01 level of significance. The obtained t value (24.84) is greater than the table value (2.58) at .01 level of significance with 754 degrees of freedom. Hence the obtained correlation is significant at .01 level and the confidence interval is (.6194, .7225).

The result implies that there exists a significant positive substantial relationship between emotional intelligence and teacher effectiveness. The relationship shows that there is a considerable dependence of variables in one another. Higher emotional intelligence of a teacher will influence the teacher effectiveness and vice versa. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 45.02%. This suggests that 45 of variation can be attributed between these two variables.
5.4.5.2 RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS FOR THE SUB SAMPLES

To find out the extent of relationship between emotional intelligence and teacher effectiveness among the sub samples of primary school teachers, the scores of emotional intelligence and the scores of teacher effectiveness of each sub sample were subjected to Pearson’s product-moment correlation test. The coefficients of correlation are presented in table 5.45.

Table 5.45

<table>
<thead>
<tr>
<th>Sample</th>
<th>N</th>
<th>r</th>
<th>t</th>
<th>S.Er</th>
<th>Confidence interval</th>
<th>Shared variance</th>
<th>Verbal interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>380</td>
<td>.445</td>
<td>9.66</td>
<td>.0411</td>
<td>(.3388, .5511)</td>
<td>19.80</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Urban</td>
<td>376</td>
<td>.715</td>
<td>19.77</td>
<td>.0252</td>
<td>(.6499, .7800)</td>
<td>51.12</td>
<td>Substantial correlation</td>
</tr>
<tr>
<td>Government</td>
<td>252</td>
<td>.533</td>
<td>9.96</td>
<td>.0450</td>
<td>(.0416, .6493)</td>
<td>28.40</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Aided</td>
<td>248</td>
<td>.604</td>
<td>11.88</td>
<td>.0403</td>
<td>(.4999, .7080)</td>
<td>36.48</td>
<td>Substantial correlation</td>
</tr>
<tr>
<td>Unaided</td>
<td>256</td>
<td>.512</td>
<td>9.49</td>
<td>.0461</td>
<td>(.3930, .6309)</td>
<td>26.21</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Male</td>
<td>300</td>
<td>.651</td>
<td>14.80</td>
<td>.0332</td>
<td>(.5651, .7368)</td>
<td>42.38</td>
<td>Substantial correlation</td>
</tr>
<tr>
<td>Female</td>
<td>456</td>
<td>.671</td>
<td>19.28</td>
<td>.0257</td>
<td>(.6045, .7374)</td>
<td>45.02</td>
<td>Substantial correlation</td>
</tr>
<tr>
<td>T.T.C or equivalent</td>
<td>428</td>
<td>.645</td>
<td>17.42</td>
<td>.0282</td>
<td>(.5721, .7178)</td>
<td>41.60</td>
<td>Substantial correlation</td>
</tr>
<tr>
<td>B.Ed or above</td>
<td>328</td>
<td>.745</td>
<td>20.16</td>
<td>.0245</td>
<td>(.6816, .8083)</td>
<td>55.50</td>
<td>Substantial correlation</td>
</tr>
<tr>
<td>15 years or more experience</td>
<td>402</td>
<td>.636</td>
<td>16.48</td>
<td>.0297</td>
<td>(.5593, .7126)</td>
<td>40.44</td>
<td>Substantial correlation</td>
</tr>
<tr>
<td>Below 15 years experience</td>
<td>354</td>
<td>.694</td>
<td>18.08</td>
<td>.0275</td>
<td>(.6229, .7650)</td>
<td>48.16</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>
From table 5.45 it is found that the values of co-efficient of correlation between emotional intelligence and teacher effectiveness for all the sub samples are significant at .01 level of significance.

In the case of rural teachers the coefficient of correlation is .445 and is greater than the table value .128 at .01 level of significance. The obtained t value (9.66) is greater than the table value (2.58) at .01 level of significance with 378 degrees of freedom. The r value lies in between the confidence interval (.3388, .5511).

The result shows that there exist a significant positive moderate relationship between emotional intelligence and teacher effectiveness of rural teachers. There is a considerable dependence of the two variables on one another. Higher emotional intelligence of a teacher will influence the teacher effectiveness and vice versa. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance of 19.80%. This suggests that around 19.80% of variation can be attributed between the two variables.

The coefficient of correlation between emotional intelligence scores and teacher effectiveness scores of urban teachers is found to be .715 and is greater than the table value .128 at .01 level of significance. The obtained t value (19.77) is greater than the table value (2.58) at .01 level of significance with 374 degrees of freedom. The r value lies in between the confidence interval (.6499, .7800).

The result shows that there exist a significant substantial relationship between emotional intelligence and teacher effectiveness of urban teachers. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’
has a shared variance 51.12%. This suggests that 51.12% of variation can be attributed between the two variables.

The coefficient of correlation between emotional intelligence scores and teacher effectiveness scores of government school teachers is found to be .533 and is greater than the table value .181 at .01 level of significance. The obtained t value (9.96) is greater than the table value (2.58) at .01 level of significance with 250 degrees of freedom. The r value lies in between the confidence interval (.4166, .6493).

The result shows that there exist a significant moderate relationship between emotional intelligence and teacher effectiveness of government school teachers. The relationship shows that there is a considerable dependence of variables in one another. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 28.40%. This suggests that around 28.40% of variation can be attributed between the two variables.

In the case of aided school teachers the correlation is .604 and the value exceeds the critical value of 0.181at .01 level of significance. The obtained t value (11.88) is greater than the table value (2.58) at .01 level of significance with 246 degrees of freedom. The r value lies in between the confidence interval (.4999, .7080).

The result shows that there exist a significant substantial relationship between emotional intelligence and teacher effectiveness of aided school teachers. The relationship shows that there is a considerable dependence of variables in one another. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 36.48%. This suggests that 36.48% of variation can be attributed between the two variables.
In the case of unaided school teachers the correlation is .512 and the value is greater than the critical value of 0.181 at .01 level of significance. The obtained t value (9.49) is greater than the table value (2.58) at .01 level of significance with 254 degrees of freedom. The r value lies in between the confidence interval (.3930, .6309).

The result shows that there exist a significant moderate relationship between emotional intelligence of unaided school teachers and their teacher effectiveness. The relationship shows that there is a considerable dependence of variables in one another. The obtained ‘r’ is positive; therefore any increase in emotional intelligence may cause a corresponding increase in teacher effectiveness. The obtained ‘r’ has a shared variance 26.21%. This suggests that 26.21% of variation can be attributed between the two variables.

The coefficient of correlation between emotional intelligence scores and teacher effectiveness scores of male teachers is found to be .651 and is greater than the table value .148 at .01 level of significance. The obtained t value (14.80) is greater than the table value (2.58) at .01 level of significance with 298 degrees of freedom. The r value lies in between the confidence interval (.5651, .7368).

The result shows that there exist a significant substantial relationship between emotional intelligence of male teachers and their teacher effectiveness. The obtained ‘r’ is positive, and therefore any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 42.38%. This suggests that 42.38% of variation can be attributed between the two variables.

In the case of female teachers the coefficient of correlation is .671 and the value is greater than the table value .128 at .01 level of significance. The obtained t value (19.28) is greater than the table value (2.58) at .01 level of significance with
454 degrees of freedom. The r value lies in between the confidence interval (.6045, .7374).

The result demonstrates a significant substantial relationship between emotional intelligence of female teachers and their teacher effectiveness. The obtained ‘r’ is positive, and therefore an increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 45.02%. This suggests that 45.02% of variation can be attributed between the two variables.

The coefficient of correlation between emotional intelligence scores and teacher effectiveness scores of TTC or equivalent qualified teachers is found to be .645 and is greater than the table value .128 at .01 level of significance. The obtained t value (17.42) is greater than the table value (2.58) at .01 level of significance with 426 degrees of freedom. The r value lies in between the confidence interval (.5721, .7178).

The result shows a significant substantial relationship between emotional intelligence and teacher effectiveness of TTC or equivalent qualified teachers. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 41.60%. This suggests that 41.60% of variation can be attributed between the two variables.

In the case of B.Ed or equivalent qualified teachers the coefficient of correlation between emotional intelligence scores and teacher effectiveness scores is .745 and the value is greater than the table value .148 at .01 level of significance. The obtained t value (20.16) is greater than the table value (2.58) at .01 level of significance with 326 degrees of freedom. The r value lies in between the confidence interval (.6816, .8083).
The result indicates a significant substantial relationship between emotional intelligence and teacher effectiveness of B.Ed or equivalent qualified teachers. The relationship shows that there is a considerable dependence of variables in one another. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 55.50%. This suggests that 55.50% of variation can be attributed between the two variables.

In the case of teachers having 15 years or more experience the correlation is .636 and the value exceeds the table value (.128) at .01 level of significance. The obtained t value (16.48) is greater than the table value (2.58) at .01 level of significance with 400 degrees of freedom. The r value lies in between the confidence interval (.5593, .7126).

The result shows a significant substantial relationship between emotional intelligence and teacher effectiveness of teachers having 15 years or more experience. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 40.44%. This suggests that 40.44% of variation can be attributed between the two variables.

The coefficient of correlation between emotional intelligence scores and teacher effectiveness scores of teachers having below 15 years experience is found to be .694 and is greater than the table value .148 at .01 level of significance. The obtained t value (18.08) is greater than the table value (2.58) at .01 level of significance with 352 degrees of freedom. The r value lies in between the confidence interval (.6229, .7650).

The result shows a significant substantial relationship between emotional intelligence and teacher effectiveness of teachers having below 15 years of
experience. The obtained ‘r’ is positive, and therefore any increase in emotional intelligence may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 48.16%. This suggests that 48.16% of variation can be attributed between the two variables.

**5.4.6 RELATIONSHIP BETWEEN VARIOUS COMPONENTS OF EMOTIONAL INTELLIGENCE AND TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS**

In order to find out the extent of relationship between various components of emotional intelligence such as personal efficacy, interpersonal efficacy and intrapersonal efficacy and the teacher effectiveness of primary school teachers, the scores for each of the three components obtained from the total sample of teachers and their teacher effectiveness scores were subjected to Pearson’s product moment coefficient of correlation.

**5.4.6.1 RELATIONSHIP BETWEEN THE FACTOR ‘PERSONAL EFFICACY’ OF EMOTIONAL INTELLIGENCE AND TEACHER EFFECTIVENESS**

The personal efficacy scores and teacher effectiveness scores obtained by total sample of primary school teachers were subjected to the test of correlation. The details are presented in table 5.46.

**Table 5.46**

*r Value, SEr, Confidence Interval, Shared Variance, t Value and Verbal Interpretation of Whole Sample for the Variable Personal Efficacy and Teacher Effectiveness*

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>r Value</th>
<th>t Value</th>
<th>SEr</th>
<th>Confidence Interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.667</td>
<td>24.58</td>
<td>.0201</td>
<td>(.6149, .7190)</td>
<td>44.48</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>
The co-efficient of correlation between personal efficacy and teacher effectiveness for whole sample is .667 and it is higher than the value .115 set for significance at .01 level. The obtained t value (24.58) is greater than the table value (2.58) at .01 level of significance with 754 degrees of freedom. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.6149, .7190).

The result indicates that there exists a significant substantial relationship between personal efficacy and teacher effectiveness. The relationship shows that there is a considerable dependence of variables in one another. Higher personal efficacy of a teacher will influence the teacher effectiveness and vice versa. Since the obtained ‘r’ is positive, any increase in personal efficacy may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 44.48%. This suggests that around 44.48% of variation can be attributed between the two variables.

### 5.4.6.2 RELATIONSHIP BETWEEN THE FACTOR ‘INTER PERSONAL EFFICACY’ OF EMOTIONAL INTELLIGENCE AND TEACHER EFFECTIVENESS

The inter-personal efficacy scores and teacher effectiveness score obtained by total sample of primary school teachers were subjected to test of correlation. The details are presented in table 5.47.

**Table 5.47**

<table>
<thead>
<tr>
<th>Sample</th>
<th>r Value</th>
<th>t</th>
<th>SE&lt;sub&gt;r&lt;/sub&gt;</th>
<th>Confidence interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>.661</td>
<td>24.188</td>
<td>.0204</td>
<td>(.6080, .7138)</td>
<td>43.69</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>

The co-efficient correlation between interpersonal efficacy and teacher effectiveness for whole sample is .661 and it is higher than the value .115 set for
the significance at .01 level. The obtained t value (24.18) is greater than the table value (2.58) at .01 level of significance with 754 degrees of freedom. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.6080, .7138).

The result implies that there exists a significant substantial relationship between interpersonal efficacy and teacher effectiveness. The obtained ‘r’ is positive, and therefore any increase in interpersonal efficacy may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 43.69%. This suggests that around 43.69% of variation can be attributed between the two variables.

5.4.6.3 RELATIONSHIP BETWEEN THE FACTOR ‘INTRAPERSONAL EFFICACY’ OF EMOTIONAL INTELLIGENCE AND TEACHER EFFECTIVENESS

The intrapersonal efficacy scores and teacher effectiveness score obtained by total sample of primary school teachers were subjected to test of correlation. The details are presented in table 5.48.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>r Value</th>
<th>T</th>
<th>SEr</th>
<th>Confidence Interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.662</td>
<td>24.243</td>
<td>.0204</td>
<td>(.6092, .7147)</td>
<td>43.82</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>

The co-efficient correlation between intrapersonal efficacy and teacher effectiveness for whole sample is .662 and the value exceeds the value .115 set for the significance at .01 level. The obtained t value (24.24) is greater than the table value (2.58) at .01 level of significance with 754 degrees of freedom. Hence the
obtained correlation is highly significant and the confidence interval is (.6092, .7147).

The result indicates that there exists a significant substantial relationship between intrapersonal efficacy and teacher effectiveness. The relationship shows that there is a considerable dependence of variables in one another. Since the obtained ‘r’ is positive, any increase in intrapersonal efficacy may cause a corresponding increase in the teacher effectiveness. The obtained ‘r’ has a shared variance 43.82%. This suggests that around 43.82% of variation can be attributed between the two variables.

5.4.6.4 STEPWISE REGRESSION ANALYSIS (ANOVA APPROACH) IN PREDICTING TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS USING CORRELATES OF EMOTIONAL INTELLIGENCE

To find out the relationship between different components of emotional intelligence such as personal efficacy, inter personal efficacy and intra personal efficacy on teacher effectiveness of primary school teachers in Kerala state for the total sample, the scores of teacher effectiveness and scores of components of emotional intelligence inventory of the total sample of primary school teachers were subjected to multiple correlation and regression. Stepwise regression analysis by ANOVA approach was carried out.

Step 1 Analysis

The analysis has been done with the help of SPSS (version 18) software and the details of result are presented in the following pages. The input data for the step wise regression analysis are the means and standard deviations of the variables (presented in table 5.49) and correlation matrix of the criterion variable with predictor variable (presented in table 5.50).
Table 5.49

*Mean and Standard Deviation of Teacher Effectiveness and the Correlates of Overall Emotional Intelligence*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criterion Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher effectiveness (y)</td>
<td>448.90</td>
<td>47.16</td>
</tr>
<tr>
<td><strong>Predictor Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal efficacy (X₁)</td>
<td>86.28</td>
<td>19.86</td>
</tr>
<tr>
<td>Interpersonal efficacy (X₂)</td>
<td>33.62</td>
<td>7.19</td>
</tr>
<tr>
<td>Intrapersonal efficacy (X₃)</td>
<td>40.24</td>
<td>8.99</td>
</tr>
</tbody>
</table>

Table 5.50

*Correlation Matrix of the Criterion Variable with Predictor Variables*

<table>
<thead>
<tr>
<th></th>
<th>Teacher effectiveness</th>
<th>Personal efficacy</th>
<th>Interpersonal efficacy</th>
<th>Intrapersonal efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criterion Variable</strong></td>
<td>1.000</td>
<td>.667</td>
<td>.661</td>
<td>.662</td>
</tr>
<tr>
<td>Teacher effectiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Predictor variables</strong></td>
<td>.667</td>
<td>1.000</td>
<td>.994</td>
<td>.994</td>
</tr>
<tr>
<td>Personal efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal efficacy</td>
<td>.661</td>
<td>.994</td>
<td>1.000</td>
<td>.998</td>
</tr>
<tr>
<td>Intrapersonal efficacy</td>
<td>.662</td>
<td>.994</td>
<td>.998</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The coefficients of correlation presented in the table 5.50 indicate the predictor variable personal efficacy (X₁) has the highest correlation (R = .667) with the criterion variable (y). Therefore personal efficacy was selected to enter first in the analysis. The result is shown in table 5.51.
Table 5.51

Result of Step 1 Regression Analysis

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
</tr>
<tr>
<td>.667</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Personal efficacy</td>
</tr>
</tbody>
</table>

Result of step 1 analysis given in the table 5.51 suggests that the percentage variance accounted by the variable personal efficacy in predicting teacher effectiveness is 44.4 and the obtained F value is 602.902 with (1, 754) degrees of freedom, which is greater than the table value 6.66 at .01 level of significance. The B coefficient of the variable personal efficacy in developing the regression equation is 1.583. This shows the relative contribution of the predictor variable personal efficacy to the dependent variable teacher effectiveness. And the standard error is .667. So the equation in this case is written as \( y = 1.58 x_1 + 312.35 \).

This equation suggests that for a unit increase in the predictor variable personal efficacy the dependent variable \( y \) increases by 1.58 units.
Step 2 Analysis

In order to see the increment in the percentage variation accounted by the predictor variable a second step analysis was taken up. The second input variable is the one which has the next highest value in partial correlation with the independent variable is intrapersonal efficacy. So this variable is entered in the second step analysis. The result is shown on the table 5.52.

Table 5.52

Result of Step 2 Regression Analysis

<table>
<thead>
<tr>
<th>Model Summary</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>.712</td>
<td>.507</td>
<td>50.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Sum of Squares df Mean Square F Sig.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression   746179.454 2 746003.110 301.179 .01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual     932788.497 753 1237.354</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total        1678967.951 755</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Personal efficacy</td>
<td>1.810</td>
<td>.606</td>
</tr>
<tr>
<td>Intrapersonal efficacy</td>
<td>0.505</td>
<td>1.339</td>
</tr>
<tr>
<td>Constant</td>
<td>264.063</td>
<td>6.008</td>
</tr>
</tbody>
</table>

Result of step 2 analysis given in the table 5.52 suggests that the index of predictability is 0.662 and also we can see that the percentage variance accounted by the variable personal efficacy \(x_1\) and intrapersonal efficacy \(x_3\) in predicting teacher effectiveness is 50.70. It is clear that the R, the index of prediction has changed from .667 to .712 and hence the percentage variance increased from 44.4 to 50.7.
The obtained $F$ value 301.179 with $(2, 753)$ degrees of freedom is greater than the table value 6.66 at .01 level of significance. This suggests that the predictor variable $x_3$ is also significant in predicting teacher effectiveness.

The $B$ coefficient of the variable personal efficacy and intrapersonal efficacy are 1.810 and 0.505; the standard error of $b_1$ and $b_3$ being 0.606 and 1.33 respectively. So the equation in this case is written as

$$y = 1.810 x_1 + 0.505 x_3 + 264.06$$

This equation suggests that for a unit increase in the predictor variable ($x_1$), $y$ increases by 1.810 units when the effect of $x_3$ is held constant and that for unit increase in $x_3$, $y$ Increases by 0.505 units only when the effect of variable $x_1$ is nullified.

The increment in percentage variance after step 2 analysis was found out and presented in table 5.53.

**Table 5.53**

*Increment in Percentage Variation after Step 2 Analysis*

<table>
<thead>
<tr>
<th>Step No</th>
<th>Variable</th>
<th>Percentage variance $(R^2 \times 100)$</th>
<th>Increment in the percentage variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Personal efficacy</td>
<td>44.4</td>
<td>6.3</td>
</tr>
<tr>
<td>2</td>
<td>Intrapersonal efficacy</td>
<td>50.7</td>
<td></td>
</tr>
</tbody>
</table>

**Step 3 Analysis**

By examining the regression of variables the next predictor input variable to be entered is interpersonal efficacy. Details of the step 3 analysis are shown in table 5.54.
Table 5.54

*Result of Step 3 Regression Analysis*

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple R</strong></td>
</tr>
<tr>
<td>0.755</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td><strong>B</strong></td>
</tr>
<tr>
<td>Personal efficacy (x_1)</td>
</tr>
<tr>
<td>Intrapersonal efficacy (x_3)</td>
</tr>
<tr>
<td>Interpersonal efficacy (x_2)</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
</tbody>
</table>

Result of step 3 analysis given in the table 5.54 suggests that the index of predictability is 0.755 and also we can see that the percentage variance accounted by the variable personal efficacy (x_1) and intrapersonal efficacy (x_3) and interpersonal efficacy (x_2) in predicting teacher effectiveness is 57.

The obtained f value 200.762 with (3, 752) degrees of freedom is greater than the table value 6.66 at .01 level of significance. This suggests that the predictor variable x_2 is also significant in predicting teacher effectiveness.
The B coefficient of the variable personal efficacy and intrapersonal efficacy and interpersonal efficacy are 1.929, .716 and 1.856 respectively. So the equation in this case is written as

\[ y = 1.929 x_1 + 0.716 x_3 + 1.856 x_2 + 216.09 \]

This equation suggests that for a unit increase in the predictor variable \( x_1 \), \( y \) increases by 1.929 units when the effect of \( x_3 \) and \( x_2 \) are held constant. For unit increase in \( x_3 \), \( y \) Increases by 0.716 when the effect of \( x_1 \) and \( x_2 \) are held constant. Also for a unit increase in \( x_2 \), \( y \) increases by 1.856 units when the effect when the effect of \( x_1 \) and \( x_3 \) are held constant. The increment in percentage variance after step 3 analysis was found out and presented in table 5.55.

**Table 5.55**

*Increment in Percentage Variation after Step 3 Analysis*

<table>
<thead>
<tr>
<th>Step No</th>
<th>Variable</th>
<th>Percentage Variance ((R^2 \times 100))</th>
<th>Increment in the Percentage Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Personal efficacy ((x_1))</td>
<td>44.4</td>
<td>6.3</td>
</tr>
<tr>
<td>2</td>
<td>Intrapersonal efficacy ((x_3))</td>
<td>50.7</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Interpersonal efficacy ((x_2))</td>
<td>57.0</td>
<td>6.3</td>
</tr>
</tbody>
</table>

**5.4.7 PREDICTION EQUATION FOR TEACHER EFFECTIVENESS USING THE BEST PREDICTORS OF EMOTIONAL INTELLIGENCE**

The criterion variable teacher effectiveness of primary school teachers in Kerala can be predicted using the three correlates of emotional intelligence. That is personal efficacy, intra personal efficacy and inter personal efficacy. From the regression weights calculated, the regression equation for predicting teacher effectiveness can be written as

\[ y = 1.929 x_1 + 0.716 x_3 + 1.856 x_2 + 216.09. \]
This equation for predicting teacher effectiveness shows that for every unit increase in $x_1$, $x_3$ and $x_2$, $y$ is increased by 1.929, 0.716 and 1.856 respectively. It may be inferred that improvement of each of the above predictor variables will result effectiveness of primary school teachers.

5.4.8 RELATIONSHIP BETWEEN VARIOUS COMPONENTS OF TEACHER EFFECTIVENESS AND EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS

In order to find out the extent of relationship between various components of teacher effectiveness such as preparation and planning for teaching, class room management, knowledge of subject matter, teacher characteristics and interpersonal relations and the emotional intelligence of primary school teachers, the scores for each of the five components obtained by the total sample of teachers and their emotional intelligence scores were subjected to Pearson’s product - moment correlation test.

5.4.8.1 RELATIONSHIP BETWEEN THE FACTOR ‘PREPARATION AND PLANNING FOR TEACHING’ OF TEACHER EFFECTIVENESS AND EMOTIONAL INTELLIGENCE

The ‘preparation and planning for teaching’ scores and emotional intelligence score obtained by total sample of primary school teachers were subjected to test of correlation. The details are presented in table 5.56

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>$r$ Value</th>
<th>$T$</th>
<th>$SE_r$</th>
<th>$Confidence$ $interval$</th>
<th>Shared $variance$</th>
<th>Verbal $interpretation$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.666</td>
<td>24.515</td>
<td>.0202</td>
<td>(.6137, .7182)</td>
<td>44.35</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>
The co-efficient of correlation between preparation and planning for teaching and emotional intelligence for whole sample is .666 and it is higher than the value .115 set for the significance at .01 level. The obtained t (24.51) value is greater than the table value (2.58) at .01 level of significance with degrees of freedom 754. Hence the obtained correlation is highly significant and the confidence interval is (.6137, .7182).

The result shows that there exists a significant substantial relationship between preparation and planning for teaching and emotional intelligence. The relationship shows that there is a considerable dependence of variables on one another. The obtained ‘r’ is positive, and therefore any increase in preparation and planning for teaching may cause a corresponding increase in the emotional intelligence. The obtained ‘r’ has a shared variance 44.35%. This suggests that around 44.35% of variation can be attributed between these two variables.

5.4.8.2 RELATIONSHIP BETWEEN THE FACTOR ‘CLASSROOM MANAGEMENT’ OF TEACHER EFFECTIVENESS AND EMOTIONAL INTELLIGENCE

The ‘classroom management’ scores and emotional intelligence score obtained by total sample of primary school teachers were subjected to the test of correlation. The details are presented in table 5.57.

Table 5.57

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>r Value</th>
<th>T Value</th>
<th>SEr</th>
<th>Confidence Interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.634</td>
<td>22.5117</td>
<td>.0217</td>
<td>(.5778, .6901)</td>
<td>40.19</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>
The coefficient of correlation between classroom management and emotional intelligence for whole sample is .634. This value is greater than the value .115 set for significance at .01 level. The obtained $t$ (22.51) value is greater than the table value (2.58) at .01 level of significance with degrees of freedom 754. Hence the obtained correlation is highly significant in .01 level and the confidence interval is (.5778, .6901).

The result shows a substantial relationship between classroom management and emotional intelligence. The relationship shows that there is a considerable dependence of variables in one another. Since the obtained ‘$r$’ is positive, any increase in classroom management may cause a corresponding increase in the emotional intelligence. The obtained ‘$r$’ has a shared variance 40.19%. This suggests that around 40.19% of variation can be attributed between these two variables.

5.4.8.3 RELATIONSHIP BETWEEN THE FACTOR ‘KNOWLEDGE OF SUBJECT MATTER’ OF TEACHER EFFECTIVENESS AND EMOTIONAL INTELLIGENCE

The scores obtained by total sample of primary school teachers for the factor knowledge of subject matter of teacher effectiveness and emotional intelligence were subjected to the test of correlation. The details are given in table 5.58.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>$r$ Value</th>
<th>$t$</th>
<th>$SE_r$</th>
<th>Confidence interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.641</td>
<td>22.932</td>
<td>.0214</td>
<td>(.5857, .6962)</td>
<td>41.09</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>

Table 5.58
r Value, $SE_r$, Confidence Interval, Shared Variance, $t$ Value, and Verbal Interpretation of Whole Sample for the Variable Knowledge of Subject Matter and Emotional Intelligence
The co-efficient of correlation between knowledge of subject matter and emotional intelligence for whole sample is .641 and it is higher than the value .115 set for significance at .01 level. The obtained t (22.93) value is greater than the table value (2.58) at .01 level of significance with degrees of freedom 754. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.5857, .6962).

The result indicates a substantial relationship between knowledge of subject matter and emotional intelligence. The obtained ‘r’ is positive, and therefore any increase in knowledge of subject matter may cause a corresponding increase in the emotional intelligence. The obtained ‘r’ has a shared variance 41.09%. This suggests that around 41.09% of variation can be attributed between these two variables.

5.4.8.4 RELATIONSHIP BETWEEN THE FACTOR ‘TEACHER CHARACTERISTICS’ OF TEACHER EFFECTIVENESS AND EMOTIONAL INTELLIGENCE

The scores obtained by total sample of primary school teachers for the factor teacher characteristics of teacher effectiveness and emotional intelligence was subjected to the test of correlation. The details are shown in table 5.59.

Table 5.59

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>r Value</th>
<th>t Value</th>
<th>SEr</th>
<th>Confidence Interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.698</td>
<td>26.765</td>
<td>.0186</td>
<td>(.6498, .7461)</td>
<td>48.72</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>
The co-efficient of correlation between teacher characteristics and emotional intelligence for whole sample is .698 and the value is higher than the value .115 set for the significance at .01 level. The obtained t (26.76) value is greater than the table value (2.58) at .01 level of significance with degrees of freedom 754. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.6498, .7461).

The result shows a substantial relationship between teacher characteristics and emotional intelligence. The obtained ‘r’ is positive. Therefore any increase in teacher characteristics may cause a corresponding increase in the emotional intelligence. The obtained ‘r’ has a shared variance of 48.72%. This suggests that around 48.72% of variation can be attributed between these two variables.

5.4.8.5 RELATIONSHIP BETWEEN THE FACTOR ‘INTERPERSONAL RELATIONS’ OF TEACHER EFFECTIVENESS AND EMOTIONAL INTELLIGENCE

The scores obtained by total sample of primary school teachers for the factor interpersonal relations of teacher effectiveness and emotional intelligence was subjected to the test of correlation. The details are presented in table 5.60.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>r</th>
<th>t</th>
<th>SEr</th>
<th>Confidence Interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.670</td>
<td>24.782</td>
<td>.0200</td>
<td>(.6182, .7217)</td>
<td>44.89</td>
<td>Substantial correlation</td>
</tr>
</tbody>
</table>

The co-efficient of correlation between interpersonal relations and emotional intelligence for whole sample is .670. The value is higher than the value
.115 set for significance at .01 level. The obtained t (24.78) value is greater than the table value (2.58) at .01 level of significance with degrees of freedom 754. Hence the obtained correlation is highly significant at .01 and the confidence interval is (.6182, .7217).

The result shows a substantial relationship between interpersonal relations and teacher effectiveness. The obtained ‘r’ is positive, and therefore any increase in interpersonal relations may cause a corresponding increase in the emotional intelligence. The obtained ‘r’ has a shared variance of 44.89%. This suggests that around 44.89% of variation can be attributed between these two variables.

### 5.4.8.6 STEPWISE REGRESSION ANALYSIS (ANOVA APPROACH) IN PREDICTING EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS USING CORRELATES OF TEACHER EFFECTIVENESS

To find out the influence of different components of teacher effectiveness such as preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics and interpersonal relations on emotional intelligence of primary school teachers in Kerala State for the total sample, the scores of teacher effectiveness (obtained by the Teacher Effectiveness Scale) and score of emotional intelligence (obtained by the Emotional Intelligence Inventory) of the total sample were subjected to multiple correlation and regression. Stepwise regression analysis by ANOVA approach was carried out for this purpose.

#### Step 1 Analysis

The analysis has been done with the help of SPSS software and the details of result are presented in the following pages. The input data for the step wise regression analysis are means and standard deviations of the variables (presented in
table 5.61) and correlation matrix of the criterion variable with predictor variable (presented in table 5.62).

**Table 5.61**

*Mean and Standard Deviation of Emotional Intelligence and the Components of Teacher Effectiveness*

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Criterion Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>y Emotional intelligence</td>
<td>160.15</td>
<td>36.01</td>
</tr>
<tr>
<td></td>
<td><strong>Predictor variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x&lt;sub&gt;1&lt;/sub&gt;</td>
<td>Preparation and planning for teaching</td>
<td>90.63</td>
<td>9.95</td>
</tr>
<tr>
<td>x&lt;sub&gt;2&lt;/sub&gt;</td>
<td>Classroom management</td>
<td>95.86</td>
<td>10.07</td>
</tr>
<tr>
<td>x&lt;sub&gt;3&lt;/sub&gt;</td>
<td>Knowledge of subject matter</td>
<td>48.37</td>
<td>4.84</td>
</tr>
<tr>
<td>x&lt;sub&gt;4&lt;/sub&gt;</td>
<td>Teacher characteristics</td>
<td>123.14</td>
<td>12.70</td>
</tr>
<tr>
<td>x&lt;sub&gt;5&lt;/sub&gt;</td>
<td>Interpersonal relations</td>
<td>90.90</td>
<td>9.904</td>
</tr>
</tbody>
</table>

**Table 5.62**

*Correlation Matrix of the Criterion Variable with Predictor Variables*

<table>
<thead>
<tr>
<th>Criterion Variable</th>
<th>Emotional intelligence</th>
<th>Preparation and planning for teaching</th>
<th>Classroom management</th>
<th>Knowledge of subject matter</th>
<th>Teacher characteristics</th>
<th>Interpersonal relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y Emotional Intelligence</td>
<td>1.000</td>
<td>0.666</td>
<td>0.634</td>
<td>0.641</td>
<td>0.698</td>
<td>0.670</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Emotional intelligence</th>
<th>Preparation and planning for teaching</th>
<th>Classroom management</th>
<th>Knowledge of subject matter</th>
<th>Teacher characteristics</th>
<th>Interpersonal relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>X&lt;sub&gt;1&lt;/sub&gt;</td>
<td>Preparation and Planning for Teaching</td>
<td>0.666</td>
<td>1.000</td>
<td>0.994</td>
<td>0.983</td>
<td>0.983</td>
</tr>
<tr>
<td>X&lt;sub&gt;2&lt;/sub&gt;</td>
<td>Classroom Management</td>
<td>0.634</td>
<td>0.994</td>
<td>1.000</td>
<td>0.986</td>
<td>0.968</td>
</tr>
<tr>
<td>X&lt;sub&gt;3&lt;/sub&gt;</td>
<td>Knowledge of Subject matter</td>
<td>0.641</td>
<td>0.983</td>
<td>0.986</td>
<td>1.000</td>
<td>0.968</td>
</tr>
<tr>
<td>X&lt;sub&gt;4&lt;/sub&gt;</td>
<td>Teacher Characteristics</td>
<td>0.698</td>
<td>0.983</td>
<td>0.981</td>
<td>0.968</td>
<td>1.000</td>
</tr>
<tr>
<td>X&lt;sub&gt;5&lt;/sub&gt;</td>
<td>Interpersonal Relations</td>
<td>0.670</td>
<td>0.991</td>
<td>0.991</td>
<td>0.982</td>
<td>0.975</td>
</tr>
</tbody>
</table>
The coefficients of correlation presented in the table 5.62 indicate that the predictor variable teacher characteristics \((x_4)\) has the highest correlation \((r = 0.698)\) with the criterion variable \((y)\). Therefore ‘teacher characteristics’ was selected to enter first in the analysis. The result is shown in the table 5.63.

**Table 5.63**

*Result of Step 1 Analysis*

<table>
<thead>
<tr>
<th>Model Summary</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.698</td>
<td>0.487</td>
<td>48.4</td>
<td>25.815</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Sum of Squares</td>
<td>Df</td>
<td>Mean Square</td>
<td>(F)</td>
</tr>
<tr>
<td>Regression</td>
<td>476676.674</td>
<td>1</td>
<td>476676.674</td>
<td>715.279</td>
</tr>
<tr>
<td>Residual</td>
<td>502481.436</td>
<td>754</td>
<td>666.421</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>979158.110</td>
<td>755</td>
<td>715.279</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>83.46</td>
<td>9.157</td>
</tr>
<tr>
<td>Teacher</td>
<td>1.978</td>
<td>0.074</td>
</tr>
</tbody>
</table>

Result of step 1 analysis given in the table 5.63 suggests that the percentage variance accounted by the variable teacher characteristics in predicting emotional intelligence is 48.4 and the obtained \(F\) value, 715.279 with \((1, 754)\) degrees of freedom is greater than the table value 6.66 at .01 level of significance.

The B coefficient of the variable teacher character in the development of the regression equation is 1.978. This shows the relative contribution of the predictor variable teacher character to the dependent variable emotional intelligence. The
The standard error of the coefficient is 0.074. So the equation in this case is written as:

\[ y = 1.978 \times_4 + 83.46 \]

This equation suggests that for a unit increase in the predictor variable teacher characteristics, the dependent variable y increases by 1.978 units.

**Step 2 Analysis**

In order to see the increment in the percentage variation accounted by the predictor variable, a second step analysis was taken up. The second input variable is the one which has the second highest value in partial correlation with the criterion variable and is interpersonal relations (\(x_5\)). So this variable is entered in the second step analysis. The result is shown in the table 5.64.

**Table 5.64**

*Result of Step 2 Regression Analysis*

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Multiple R</th>
<th>(R^2)</th>
<th>(R^2 \times 100)</th>
<th>Standard error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.770</td>
<td>0.593</td>
<td>59.3</td>
<td>22.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>(F)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>508116.617</td>
<td>2</td>
<td>254058.309</td>
<td>406.134</td>
<td>.01</td>
</tr>
<tr>
<td>Residual</td>
<td>471041.493</td>
<td>753</td>
<td>625.553</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>979158.110</td>
<td>755</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>81.35</td>
<td>8.94</td>
</tr>
<tr>
<td>Teacher characteristics ((x_4))</td>
<td>4.212</td>
<td>0.323</td>
</tr>
<tr>
<td>Interpersonal relations ((x_5))</td>
<td>2.939</td>
<td>0.415</td>
</tr>
</tbody>
</table>
Result of step 2 analysis given in the table 5.64 suggests that the index of predictability is 0.770 and also we can see that the percentage variance accounted by the variable teacher characteristics \((x_4)\) and interpersonal relations \((x_5)\) in predicting emotional intelligence is 59.3. It is clear that the R the index of prediction has changed from 0.698 to 0.770 and hence the percentage variance increased from 48.4 to 59.3.

The obtained F value, 406.13 with \((2, 753)\) degrees of freedom is greater than the table value 4.63 at .01 level of significance. This suggests that the predictor variable \(x_5\) is also significant in predicting emotional intelligence.

The B coefficient of the variable teacher characteristics and interpersonal relations in development of the regression equation is 4.212 and 2.939. Therefore the equation in this case is written as

\[ y = 4.212 x_4 + 2.939 x_5 + 81.35 \]

This equation suggests that for a unit increase in the predictor variable \((x_4)\), \(y\) increases by 4.212 units when the effect of \(x_5\) is held constant and that for unit increase in \(x_5\), \(y\) increases by 2.939 units when the effect of variable \(x_4\) is nullified.

The increment in percentage variance after step 2 analysis was found out and presented in table 5.65.

**Table 5.65**

*Increment in Percentage Variation after Step 2 Analysis*

<table>
<thead>
<tr>
<th>Step No</th>
<th>Variable</th>
<th>Percentage variance ((R^2 \times 100))</th>
<th>Increment in the percentage variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher characteristics ((x_4))</td>
<td>48.4</td>
<td>10.9</td>
</tr>
<tr>
<td>2</td>
<td>Interpersonal relations ((x_5))</td>
<td>59.3</td>
<td></td>
</tr>
</tbody>
</table>
Step 3 Analysis

In order to see the increment in the percentage variation accounted by the predictor variable, a third step analysis was carried out. The third input variable is the one which has the next highest value in partial correlation with the independent variable is preparation and planning for teaching \((x_1)\). So this variable is entered in the third step analysis. The result is shown in the table 5.66.

Table 5.66

Result of Step 3 Regression Analysis

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Multiple R</th>
<th>(R^2)</th>
<th>(R^2 \times 100)</th>
<th>Standard error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.816</td>
<td>0.666</td>
<td>66.6</td>
<td>20.81</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>(F)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>516265.370</td>
<td>3</td>
<td>172088.457</td>
<td>279.569</td>
<td>.01</td>
</tr>
<tr>
<td>Residual</td>
<td>462892.740</td>
<td>752</td>
<td>615.549</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>979158.110</td>
<td>755</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>74.026</td>
<td>9.09</td>
</tr>
<tr>
<td>Teacher characteristics ((x_4))</td>
<td>3.41</td>
<td>0.388</td>
</tr>
<tr>
<td>Interpersonal relations ((x_5))</td>
<td>4.90</td>
<td>0.680</td>
</tr>
<tr>
<td>Preparation and planning for teaching ((x_1))</td>
<td>2.97</td>
<td>0.818</td>
</tr>
</tbody>
</table>
Result of step 3 analysis given in the table 5.66 suggests that the index of predictability is 0.816 and also we can see that the percentage variance accounted by the variable teacher characteristics ($x_4$), interpersonal relations ($x_5$) and preparation and planning for teaching ($x_1$) in predicting emotional intelligence is 66.6.

The obtained F value 279.569 with (3, 752) degrees of freedom is greater than the table value 3.80 at .01 level of significance. This suggests that the predictor variable $x_1$ is also significant in predicting emotional intelligence.

The B coefficient of the variable teacher characteristics ($x_4$), interpersonal relations ($x_5$) and preparation and planning for teaching ($x_1$) are 3.41, 4.90 and 2.97 respectively. So the equation in this case is written as

$$y = 3.41x_4 + 4.90x_5 + 2.97x_1 + 74.02$$

This equation suggests that for a unit increase in the predictor variable ($x_4$) the increase in $y$ is 3.41 units when the effect of $x_5$ and $x_1$ are held constant. For unit increase in $x_5$, $y$ Increases by 4.90 when the effects of $x_4$ and $x_1$ are constant and for unit increase $x_1$, $y$ increases by 2.97, when the effects of $x_4$ and $x_5$ are nullified. The increment in percentage variance after step 3 analysis was found out and presented in table 5.67.

Table 5.67

<table>
<thead>
<tr>
<th>Step No</th>
<th>Variable</th>
<th>Percentage variance ($R^2 \times 100$)</th>
<th>Increment in the percentage variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher characteristics ($x_4$)</td>
<td>48.4</td>
<td>10.9</td>
</tr>
<tr>
<td>2</td>
<td>Interpersonal relations ($x_5$)</td>
<td>59.3</td>
<td>7.3</td>
</tr>
<tr>
<td>3</td>
<td>Preparation and planning for teaching ($x_1$)</td>
<td>66.6</td>
<td>7.3</td>
</tr>
</tbody>
</table>
Step 4 Analysis

The fourth predictor input variable is knowledge of subject matter \((x_3)\). The result of the step 4 analysis using this variable is given in the table 5.68.

Table 5.68

**Result of Step 4 Regression Analysis**

**Model Summary**

<table>
<thead>
<tr>
<th>Multiple R</th>
<th>(R^2)</th>
<th>(R^2 \times 100)</th>
<th>Standard error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.832</td>
<td>0.692</td>
<td>69.2</td>
<td>19.985</td>
</tr>
</tbody>
</table>

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>(F)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>524355.226</td>
<td>4</td>
<td>131088.807</td>
<td>216.462</td>
<td>.01</td>
</tr>
<tr>
<td>Residual</td>
<td>454802.884</td>
<td>751</td>
<td>605.596</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>979158.110</td>
<td>755</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coefficients**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>66.320</td>
<td>10.240</td>
</tr>
<tr>
<td>Teacher characteristics ((x_4))</td>
<td>3.486</td>
<td>0.385</td>
</tr>
<tr>
<td>Interpersonal relations ((x_5))</td>
<td>4.081</td>
<td>0.711</td>
</tr>
<tr>
<td>Preparation and planning for teaching ((x_1))</td>
<td>3.923</td>
<td>0.851</td>
</tr>
<tr>
<td>Knowledge of subject matter ((x_3))</td>
<td>3.874</td>
<td>1.060</td>
</tr>
</tbody>
</table>

Result of step 4 analysis given in the table 5.68 reveals that the index of predictability is 0.832 and also we can see that the percentage variance accounted by the variable teacher characteristics \((x_4)\), interpersonal relations \((x_5)\), preparation and planning for teaching \((x_1)\), and knowledge of subject matter \((x_3)\) in predicting
emotional intelligence is 69.2. It is clear that the percentage variance increased from 59.3 to 66.6.

The obtained F value 216.462 with (4, 751) degrees of freedom is greater than the table value 3.34 at .01 level of significance. This suggests that the predictor variable $x_3$ is also significant in predicting emotional intelligence.

The B coefficient of the variable teacher characteristics ($x_4$), interpersonal relations ($x_5$), preparation and planning for teaching ($x_1$) and knowledge of subject matter ($x_3$) are 3.48, 4.08, 3.923 and 3.874 respectively. The standard errors of B are 0.385, 0.711, 0.851 and 1.060 respectively. So the multiple regression equation for predicting the emotional intelligence by means of predictor variable $x_4$, $x_5$, $x_1$ and $x_3$ is

$$y = 3.486 x_4 + 4.080 x_5 + 3.923 x_1 + 3.87 x_3 + 66.32$$

This equation suggests that for a unit increase in the predictor variable ($x_4$) the increase in $y$ is 3.48 units when the effect of $x_5$, $x_1$ and $x_3$ are held constant. For unit increase in $x_5$, $y$ increases by 4.08 when the effects other three variables are held constant and for unit increase in $x_1$, $y$ increases by 3.92, and for unit increase in $x_3$, $y$ increases by 3.87 when the effects of the relevant variables are nullified. The increment in percentage variance after step 4 analysis is presented in table 5.69.

**Table 5.69**

*Increment in Percentage Variation after Step 4 Analysis*

<table>
<thead>
<tr>
<th>Step No</th>
<th>Variable</th>
<th>Percentage variance ($R^2 \times 100$)</th>
<th>Increment in the percentage variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher characteristics ($x_4$)</td>
<td>48.4</td>
<td>10.9</td>
</tr>
<tr>
<td>2</td>
<td>Interpersonal relations ($x_5$)</td>
<td>59.3</td>
<td>7.3</td>
</tr>
<tr>
<td>3</td>
<td>Preparation and planning for teaching ($x_1$)</td>
<td>66.6</td>
<td>2.6</td>
</tr>
<tr>
<td>4</td>
<td>Knowledge of subject matter ($x_3$)</td>
<td>69.2</td>
<td></td>
</tr>
</tbody>
</table>
Step 5 Analysis

The fifth predictor input variable is classroom management \((x_2)\). So the variable classroom management is entered in step 5 analysis. The result of the step 5 analysis is given in the table 5.70

Table 5.70

Result of Step 5 Regression Analysis

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Multiple R</th>
<th>R²</th>
<th>R² x 100</th>
<th>Standard Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.857</td>
<td>0.734</td>
<td>73.4</td>
<td>18.57</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>529003.598</td>
<td>5</td>
<td>105800.720</td>
<td>176.274</td>
<td>.01</td>
</tr>
<tr>
<td>Residual</td>
<td>450154.512</td>
<td>750</td>
<td>600.206</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>979158.110</td>
<td>755</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>60.388</td>
<td>10.299</td>
</tr>
<tr>
<td>Teacher Characteristics ((x_4))</td>
<td>3.258</td>
<td>0.392</td>
</tr>
<tr>
<td>Interpersonal Relations ((x_5))</td>
<td>4.776</td>
<td>0.751</td>
</tr>
<tr>
<td>Preparation and Planning for Teaching ((x_1))</td>
<td>2.693</td>
<td>0.956</td>
</tr>
<tr>
<td>Knowledge of Subject Matter ((x_3))</td>
<td>4.948</td>
<td>1.124</td>
</tr>
<tr>
<td>Classroom Management ((x_2))</td>
<td>2.700</td>
<td>0.970</td>
</tr>
</tbody>
</table>

Result of step 5 analysis given in the table 5.70 reveals that the index of predictability is \(0.857\) and also we can see that the percentage variance accounted by
the teacher characteristics ($x_4$), interpersonal relations ($x_5$), preparation and planning for teaching ($x_1$), knowledge of subject matter ($x_3$) and classroom management ($x_2$) in predicting emotional intelligence is 73.4. Hence the percentage variance increased from 69.2 to 73.4.

The obtained $F$ value, 176.24 with (5, 750) degrees of freedom is greater than the table value 3.04 at .01 level of significance. This suggests that the predictor variable $x_2$ is also significant in predicting emotional intelligence.

The $B$ coefficient of the variable teacher characteristics ($x_4$), interpersonal relations ($x_5$), preparation and planning for teaching ($x_1$), knowledge of subject matter ($x_3$) and classroom management ($x_2$) are 3.25, 4.77, 2.69, 4.94 and 2.70 respectively. Also the standard errors of $B$ are 0.392, 0.751, 0.956, 1.124 and 0.970 respectively. So the multiple regression equation for predicting the emotional intelligence by means of predictor variables $x_4$, $x_5$, $x_1$, $x_3$ and $x_2$ is

$$y = 3.25x_4 + 4.77x_5 + 2.69x_1 + 4.94x_3 + 2.70x_2 + 60.38$$

This equation suggests that for a unit increase in the predictor variable ($x_4$) the increase in $y$ is 3.25 units when the effects of all other variables are held constant. For unit increase in $x_5$, $y$ increases by 4.77 when the effects of other variables are held constant. For unit increase in $x_1$, $y$ increases by 2.69 and for unit increase in $x_3$, $y$ increases by 4.94 when the effects of other relevant variables are held constant. Also for unit increase in $x_2$ increase in $y$ is 2.70 when the effects of $x_1$, $x_4$, $x_5$, and $x_3$ are nullified. The increment in percentage variance after step 5 analysis is presented in table 5.71.
Table 5.71

Increment in Percentage Variation after Step 5 Analysis

<table>
<thead>
<tr>
<th>Step No</th>
<th>Variable</th>
<th>Percentage variance (R^2 X 100)</th>
<th>Increment in the percentage variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher characteristics (x_4)</td>
<td>48.4</td>
<td>10.9</td>
</tr>
<tr>
<td>2</td>
<td>Interpersonal relations (x_5)</td>
<td>59.3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Preparation and planning for teaching (x_1)</td>
<td>66.6</td>
<td>7.3</td>
</tr>
<tr>
<td>4</td>
<td>Knowledge of subject matter (x_3)</td>
<td>69.2</td>
<td>2.6</td>
</tr>
<tr>
<td>5</td>
<td>Classroom management (x_2)</td>
<td>73.4</td>
<td>4.2</td>
</tr>
</tbody>
</table>

5.4.9 PREDICTION EQUATION FOR EMOTIONAL INTELLIGENCE USING THE PREDICTORS OF TEACHER EFFECTIVENESS

The criterion variable, emotional intelligence of primary school teachers in Kerala State can be predicted by five correlates of teacher effectiveness. That is teacher characteristics, interpersonal relations, preparation planning for teaching, knowledge of subject matter and classroom management. The predictor variables in the order found in stepwise regression analysis are given below.

Teacher characteristics (x_4)

Interpersonal relations (x_5)

Preparation and planning for teaching (x_1)

Knowledge of subject matter (x_3)

Classroom management (x_2)

The prediction equation for emotional intelligence on the basis of the correlates of teacher effectiveness can be written as

\[ y = 3.25 x_4 + 4.77 x_5 + 2.69 x_1 + 4.94 x_3 + 2.70 x_2 + 60.38 \]
This equation for predicting the teacher effectiveness shows that for every unit increase $x_4, x_5, x_1, x_3, x_2$ is increasing by 3.25, 4.77, 2.69, 4.94, and 2.70 respectively. It may be inferred that addition and improvement of each of the above predictor variable will effect in the betterment of teacher effectiveness.

5.4.10 RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS AND THEIR PUPILS’ ATTITUDE

5.4.10.1 RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS AND THEIR PUPILS’ ATTITUDE FOR THE TOTAL SAMPLE

To find out the relationship between emotional intelligence of primary school teachers and their pupils’ attitude, the scores of emotional intelligence and the mean scores of pupils’ attitude towards each teacher in the total sample were subjected to Pearson’s product moment correlation test. The details are presented in table 5.72.

Table 5.72

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>r Value</th>
<th>T Value</th>
<th>SEr</th>
<th>Confidence Interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.553</td>
<td>18.225</td>
<td>.0252</td>
<td>(.4878, .6181)</td>
<td>30.58</td>
<td>Moderate correlation</td>
</tr>
</tbody>
</table>

The co-efficient of correlation between emotional intelligence and pupils’ attitude for whole sample is .553. This value is higher than the value .115 (degrees of freedom 754) set for significance at .01 level. The obtained t (18.22) value is greater than the table value (2.58) at .01 level of significance.
with the degrees of freedom 754. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.4878, .6181).

The result shows a moderate relationship between emotional intelligence and pupils’ attitude. The relationship shows that there is a considerable dependence of variables on one another. The emotional intelligence of a teacher will influence the pupils’ attitude. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 30.58%. This suggests that around 30.58% of variation can be attributed between these two variables.

5.4.10.2 RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL TEACHERS AND THEIR PUPILS’ ATTITUDE FOR THE SUB SAMPLES

To find out the extent of relationship between emotional intelligence and pupils’ attitude among the sub samples of primary school teachers, the scores of emotional intelligence and the mean scores of pupils’ attitude towards each teacher in the sub samples were subjected to Pearson’s product-moment correlation test. The coefficients of correlation are presented in table 5.73.
Table 5.73

*r Value, SEr, Confidence Interval, Shared Variance, t Value, and Verbal Interpretation of Sub Samples for the Variable Emotional Intelligence and Pupils’ Attitude*

<table>
<thead>
<tr>
<th>Sample</th>
<th>N</th>
<th>r</th>
<th>t</th>
<th>SEr</th>
<th>Confidence interval</th>
<th>Shared variance</th>
<th>Verbal interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>380</td>
<td>.402</td>
<td>8.535</td>
<td>.0430</td>
<td>(.2910, .5129)</td>
<td>16.16</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Urban</td>
<td>376</td>
<td>.463</td>
<td>10.102</td>
<td>.0405</td>
<td>(.3584, .5675)</td>
<td>21.44</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Government</td>
<td>252</td>
<td>.418</td>
<td>7.275</td>
<td>.0519</td>
<td>(.2838, .5521)</td>
<td>17.47</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Aided</td>
<td>248</td>
<td>.501</td>
<td>9.079</td>
<td>.0475</td>
<td>(.3782, .6237)</td>
<td>25.10</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Unaided</td>
<td>256</td>
<td>.428</td>
<td>13.003</td>
<td>.0297</td>
<td>(.3513, .5046)</td>
<td>18.32</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Male</td>
<td>300</td>
<td>.428</td>
<td>7.547</td>
<td>.0510</td>
<td>(.2962, .5597)</td>
<td>18.32</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Female</td>
<td>456</td>
<td>.471</td>
<td>11.376</td>
<td>.0364</td>
<td>(.3769, .5650)</td>
<td>22.18</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>TTC or Equivalent</td>
<td>428</td>
<td>.469</td>
<td>10.960</td>
<td>.0377</td>
<td>(.3712, .5662)</td>
<td>22.00</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>B Ed or Above</td>
<td>328</td>
<td>.498</td>
<td>10.368</td>
<td>.0415</td>
<td>(.3908, .6051)</td>
<td>24.80</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>15 years or more</td>
<td>402</td>
<td>.539</td>
<td>12.798</td>
<td>.0353</td>
<td>(.4471, .6302)</td>
<td>29.05</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15 years</td>
<td>354</td>
<td>.498</td>
<td>10.774</td>
<td>.0399</td>
<td>(.3948, .6011)</td>
<td>24.80</td>
<td>Moderate correlation</td>
</tr>
</tbody>
</table>

From the table 5.73, it is found that the values of co-efficient of correlation between emotional intelligence and pupils’ attitude for all the sub samples are significant at .01 level.

In the case of rural teachers the coefficient of correlation is .402 and is greater than the table value .128 at .01 level of significance. The obtained t (8.53) value is greater than the table value (2.58) at .01 level of significance with the
degrees of freedom 378. The r value lies in between the confidence interval (.2910, .5129).

The result shows a moderate relationship between emotional intelligence of rural teachers and their pupils’ attitude. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance of 16.16%. This suggests that around sixteen percentage of variation can be attributed between the two variables.

The coefficient of correlation between emotional intelligence scores of urban teachers and their pupils’ attitude scores is found to be .463 and is greater than the table value .128 at .01 level of significance. The obtained t (10.10) value is greater than the table value (2.58) at .01 level of significance with the degrees of freedom 374. The r value lies in between the confidence interval (.3584, .5675).

The result shows a moderate relationship between emotional intelligence of urban teachers and their pupils’ attitude. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance of 21.44%. This suggests that around twenty one percentage of variation can be attributed between the correlated variables.

In the case of government school teachers the co-efficient of correlation between emotional intelligence and pupils’ attitude is .418. The value is higher than the value set for the significance at .01 level. The obtained t (7.27) value is greater than the table value (2.58) at .01 level of significance with degrees of freedom 250. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.3584, .5675).
The result shows a moderate relationship between emotional intelligence of government school teachers and their pupils’ attitude. The relationship shows that there is a considerable dependence of variables in one another. Since the obtained ‘r’ is positive, any increase in emotional intelligence of government school teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 17.47%. This suggests that around seventeen percentage of variation can be attributed between the correlated variables.

In the case of aided school teachers the co-efficient correlation between emotional intelligence and pupils’ attitude is .501. This value is higher than the value set for the significance at .01 level. The obtained t (9.07) value is greater than the table value (2.58) at .01 level of significance with 246 degrees of freedom. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.3782, .6237).

The result shows a moderate relationship between emotional intelligence of aided school teachers and their pupils’ attitude. Since the obtained ‘r’ is positive, any increase in emotional intelligence may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 25.10%. This suggests that twenty five percentage of variation can be attributed between the correlated variables.

In the case of unaided school teachers the co-efficient correlation between emotional intelligence and pupils’ attitude is .428. This is higher than the value set for the significance at .01 level. The obtained t (13.00) value is greater than the table value (2.58) at .01 level of significance with 254 degrees of freedom. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.3513, .5046).
The result shows a very close relationship between emotional intelligence of unaided school teachers and their pupils’ attitude. Since the obtained ‘r’ is positive, any increase in emotional intelligence of unaided school teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 18.32%. This suggests that around eighteen percentage of variation can be attributed between the correlated variables.

The co-efficient of correlation between emotional intelligence and pupils’ attitude for male teachers is .428. This is higher than the value set for the significance at .01 level. The obtained t (7.54) value is greater than the table value (2.58) at .01 level of significance with degrees of freedom 298. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.2962, .5597).

The result indicates a moderate relationship between emotional intelligence of male teachers and their pupils’ attitude. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in emotional intelligence of male teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 18.32%. This suggests that around eighteen percentage of variation can be attributed between the correlated variables.

In the case of female teachers the co-efficient of correlation between emotional intelligence and pupils’ attitude is .471, and the value exceeds the table value set for significance at .01 level. The obtained t (11.37) value is greater than the table value (2.58) at .01 level of significance with 454 degrees of freedom. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.3769, .5650).
The result shows a moderate relationship between emotional intelligence of female teachers and their pupils’ attitude. Since the obtained ‘r’ is positive, an increase in emotional intelligence of female teachers may cause a corresponding increase in their pupils’ attitude. The obtained ‘r’ has a shared variance 22.18%. This suggests that twenty two percentage of variation can be attributed between the correlated variables.

In the case of teachers with TTC or equivalent qualifications, the co-efficient of correlation between emotional intelligence and pupils’ attitude is .469. This is higher than the value set for significance at .01 level. The obtained t (10.96) value is greater than the table value (2.58) at .01 level of significance with 426 degrees of freedom. Hence the obtained r is highly significant at .01 level and the confidence interval is (.3712, .6051).

The result shows a moderate relationship between emotional intelligence of teachers with TTC or equivalent qualifications and their pupils’ attitude. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in emotional intelligence of teachers with TTC or equivalent qualifications may cause a corresponding increase in the pupils attitude. The obtained ‘r’ has a shared variance 22.00%. This suggests that twenty two percentage of variation can be attributed between the correlated variables.

In the case of teachers with B.Ed or above qualifications, the co-efficient of correlation between emotional intelligence and pupils’ attitude is found to be .498. This is higher than the value set for significance at .01 level. The obtained t (10.36) value is greater than the table value (2.58) at .01 level of significance with 326
degrees of freedom. Hence the obtained $r$ is highly significant at .01 level and the confidence interval is (.3908, .6051).

The result shows a moderate relationship between emotional intelligence of teachers with B.Ed or above qualifications and their pupils’ attitude. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘$r$’ is positive, an increase in emotional intelligence of teachers with B.Ed or above qualifications will cause a corresponding increase in the pupils’ attitude. The obtained ‘$r$’ has a shared variance 24.80%. This suggests that around twenty five percentage of variation can be attributed between the correlated variables.

In the case of teachers with 15 years or more experience the co-efficient of correlation between emotional intelligence and pupils’ attitude is .539 and this is higher than the value set for significance at .01 level. The obtained $t (12.79)$ value is greater than the table value (2.58) at .01 level of significance with 400 degrees of freedom. Hence the obtained value of correlation is highly significant at .01 level and the confidence interval is (.4471, .6302).

The result shows a moderate relationship between emotional intelligence of teachers with 15 years or more experience and their pupils’ attitude. Since the obtained ‘$r$’ is positive, any increase in emotional intelligence of teachers with below 15 years experience may cause a corresponding increase in the pupils’ attitude. The obtained ‘$r$’ has a shared variance 29.05%. This suggests that twenty nine percentage of variation can be attributed between the correlated variables.

In the case of teachers with below 15 years experience the co-efficient of correlation between emotional intelligence and pupils’ attitude is .498 and this is higher than the value set for significance at .01 level. The obtained $t (10.71)$ value
is greater than the table value (2.58) at .01 level of significance with 352 degrees of freedom. Hence the obtained correlation is highly significant at .01 level and the confidence interval is (.3948, .6011).

The result shows a moderate relationship between emotional intelligence of teachers with below 15 years experience and their pupils’ attitude. Since the obtained ‘r’ is positive, an increase in emotional intelligence of teachers may cause a corresponding increase in their pupils’ attitude. The obtained ‘r’ has a shared variance 24.80%. This suggests that around twenty five percentage of variation can be attributed between the correlated variables.

5.4.11 RELATIONSHIP BETWEEN TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS AND THEIR PUPILS’ ATTITUDE

5.4.11.1 RELATIONSHIP BETWEEN TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS AND THEIR PUPILS’ ATTITUDE FOR THE TOTAL SAMPLE

To find out the relationship between teacher effectiveness of primary school teachers and their pupils’ attitude, the scores of teacher effectiveness and the mean scores of pupils’ attitude towards each teacher in the total sample were subjected to Pearson’s product moment correlation test. The details are presented in table 5.74

Table 5.74

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>r Value</th>
<th>t Value</th>
<th>SEr</th>
<th>Confidence Interval</th>
<th>Shared Variance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>756</td>
<td>.456</td>
<td>14.06</td>
<td>.028</td>
<td>(.3816, .5303)</td>
<td>20.79</td>
<td>Moderate Correlation</td>
</tr>
</tbody>
</table>
The co-efficient correlation between teacher effectiveness and pupils’ attitude for whole sample is .456 this is higher than the value set for the significance at .01 level. The obtained t (14.06) value is greater than the table value at .01 level of significance. Hence the obtained correlation is highly significant in .01 and the confidence interval is (.3816, .5303)

The result shows a very close relationship between teacher effectiveness and pupils’ attitude. The relationship shows that there is a considerable dependence of variables in one another. The teacher effectiveness will influence the pupil’s attitude and vice versa. Since the obtained ‘r’ is positive, any increase in teacher effectiveness will affect the corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 20.79%. This suggests that around 20.79% of variation can be attributed between the correlated variables.

5.4.11.2 RELATIONSHIP BETWEEN TEACHER EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS AND THEIR PUPILS’ ATTITUDE FOR THE SUB SAMPLES

To find out the extent of relationship between teacher effectiveness and pupils’ attitude among the sub samples of primary school teachers, the scores of teacher effectiveness and the mean scores of pupils’ attitude towards each teacher in the sub samples were subjected to Pearson’s product - moment correlation test. The coefficients of correlation are presented in table 5.75.
Table 5.75

\( r \) Value, SE\( r \), Confidence Interval, Shared Variance, \( t \) Value, and Verbal Interpretation of Sub Samples for the Variable Teacher Effectiveness and Pupils’ Attitude

<table>
<thead>
<tr>
<th>Sample</th>
<th>N</th>
<th>( r ) value</th>
<th>( t )</th>
<th>S.( r )</th>
<th>Confidence interval</th>
<th>Share variance</th>
<th>Verbal interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>380</td>
<td>.412</td>
<td>8.790</td>
<td>.0425</td>
<td>(.3021, .5218)</td>
<td>16.97</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Urban</td>
<td>376</td>
<td>.435</td>
<td>9.3427</td>
<td>.041</td>
<td>(.3271, .5428)</td>
<td>18.92</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Government</td>
<td>252</td>
<td>.435</td>
<td>7.6385</td>
<td>.051</td>
<td>(.3032, .5667)</td>
<td>18.92</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Aided</td>
<td>248</td>
<td>.444</td>
<td>7.7719</td>
<td>.0509</td>
<td>(.3124, .5755)</td>
<td>19.71</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Unaided</td>
<td>256</td>
<td>.467</td>
<td>8.4169</td>
<td>.048</td>
<td>(.3409, .5930)</td>
<td>21.80</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Male</td>
<td>300</td>
<td>.405</td>
<td>7.6465</td>
<td>.0482</td>
<td>(.2804, .5295)</td>
<td>16.40</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Female</td>
<td>456</td>
<td>.487</td>
<td>11.8807</td>
<td>.0357</td>
<td>(.3948, .5791)</td>
<td>23.71</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>T.T.C or Equivalent</td>
<td>428</td>
<td>.419</td>
<td>9.5244</td>
<td>.0398</td>
<td>(.3161, .5218)</td>
<td>17.55</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>B.Ed or Above</td>
<td>328</td>
<td>.483</td>
<td>9.9595</td>
<td>.0423</td>
<td>(.3737, .5922)</td>
<td>23.52</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>15 years or more</td>
<td>402</td>
<td>.498</td>
<td>11.4855</td>
<td>.0375</td>
<td>(.4012, .5947)</td>
<td>24.80</td>
<td>Moderate correlation</td>
</tr>
<tr>
<td>Experience</td>
<td>354</td>
<td>.501</td>
<td>10.8609</td>
<td>.0398</td>
<td>(.3982, .6037)</td>
<td>25.10</td>
<td>Moderate correlation</td>
</tr>
</tbody>
</table>

The co-efficient of correlation between teacher effectiveness and pupils’ attitude for rural teachers is .412 this is higher than the value set for the significance at .01 level. The obtained \( t \) (8.79) value is greater than the table value (2.58) at .01 level of significance with the degrees of freedom 378. Hence the
obtained correlation is significant at .01 and the confidence interval is (.3021, .5218)

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among rural teachers. The relationship shows that there is a considerable dependence of variables on one another. The obtained ‘r’ is positive; therefore any increase in teacher effectiveness of rural teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 16.97%. This suggests that around 16.97% of variation can be attributed between the correlated variables.

In the case of urban teachers the co-efficient correlation between teacher effectiveness and pupils’ attitude is .435. This is higher than the value set for the significance at .01 level. The obtained t value (9.34) is greater than the table value at .01 level of significance with the degrees of freedom 374. Hence the obtained correlation is significant at .01 and the confidence interval is (.3271, .5428).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among urban teachers. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of urban teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 18.92%. This suggests that around 18.92% of variation can be attributed between the correlated variables.

Among the government school teachers the co-efficient correlation between teacher effectiveness and pupils’ attitude is .435. This is higher than the value set for the significance at .01 level. The obtained t value (7.63) is greater than the table value at .01 level of significance with the degrees of freedom 250. Hence the
obtained correlation is significant at .01 and the confidence interval is (.3032, .5667).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among government school teachers. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of government school teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 18.92%. This suggests that around 18.92% of variation can be attributed between the correlated variables.

In the case of aided school teachers the co-efficient correlation between teacher effectiveness and pupils’ attitude is .444. This is higher than the value set for the significance at .01 level. The obtained t value (7.77) is greater than the table value at .01 level of significance with the degrees of freedom 246. Hence the obtained correlation is significant at .01 and the confidence interval is (.3124, .5755).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among aided school teachers. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of aided school teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 19.71%. This suggests that around 19.71% of variation can be attributed between the correlated variables.

In the case of unaided school teachers the co-efficient correlation between teacher effectiveness and pupils’ attitude is .467. This is higher than the value set for the significance at .01 level. The obtained t value (8.41) is greater than the table
value at .01 level of significance with the degrees of freedom 254. Hence the obtained correlation is significant at .01 and the confidence interval is (.3409, .5930).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among unaided school teachers. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of unaided school teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 21.80%. This suggests that around 21.80% of variation can be attributed between the correlated variables.

In the case of male school teachers the co-efficient correlation between teacher effectiveness and pupils’ attitude is .405. This is higher than the value set for the significance at .01 level. The obtained t value (7.64) is greater than the table value at .01 level of significance with the degrees of freedom 298. Hence the obtained correlation is significant at .01 and the confidence interval is (.2804, .5295).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among male school teachers. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of male school teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 16.40%. This suggests that around 16.40% of variation can be attributed between the correlated variables.

Among female school teachers the co-efficient correlation between teacher effectiveness and pupils’ attitude is .487. This is higher than the value set for the
significance at .01 level. The obtained t value (11.88) is greater than the table value at .01 level of significance with the degrees of freedom 454. Hence the obtained correlation is significant at .01 and the confidence interval is (.3948, .5791).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among female school teachers. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of female school teachers may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 23.71%. This suggests that around 23.71% of variation can be attributed between the correlated variables.

In the case of teachers with T.T.C or equivalent qualifications, the coefficient correlation between teacher effectiveness and pupils’ attitude is .419. This is higher than the value set for the significance at .01 level. The obtained t value (9.52) is greater than the table value at .01 level of significance with the degrees of freedom 426. Hence the obtained correlation is significant at .01 and the confidence interval is (.3161, .5218).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among teachers with T.T.C or equivalent qualifications. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of teachers with T.T.C or equivalent qualifications may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 17.55%. This suggests that around 17.55% of variation can be attributed between the correlated variables.
In the case of teachers with B.Ed or above qualifications, the co-efficient correlation between teacher effectiveness and pupils’ attitude is .483. This is higher than the value set for the significance at .01 level. The obtained t value (9.95) is greater than the table value at .01 level of significance with the degrees of freedom 326. Hence the obtained correlation is significant at .01 and the confidence interval is (.3737, .5922).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among teachers with B.Ed or above qualifications. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of teachers with B.Ed or above qualifications may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 23.32%. This suggests that around 23.32% of variation can be attributed between the correlated variables.

Among the teachers with 15 years or more experience, the co-efficient correlation between teacher effectiveness and pupils’ attitude is .498. This is higher than the value set for the significance at .01 level. The obtained t value (11.48) is greater than the table value at .01 level of significance with the degrees of freedom 326. Hence the obtained correlation is significant at .01 and the confidence interval is (.4012, .5947).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among teachers with 15 years or more experience. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of teachers with 15 years or more experience may cause a corresponding increase in the pupils’
attitude. The obtained ‘r’ has a shared variance 24.80%. This suggests that around 24.80% of variation can be attributed between the correlated variables.

In the case of teachers with below 15 years experience, the co-efficient correlation between teacher effectiveness and pupils’ attitude is .501. This is higher than the value set for the significance at .01 level. The obtained t value (10.86) is greater than the table value at .01 level of significance with the degrees of freedom 326. Hence the obtained correlation is significant at .01 and the confidence interval is (.3982, .6037).

The result shows a moderate relationship between teacher effectiveness and pupils’ attitude among teachers with below 15 years experience. The relationship shows that there is a considerable dependence of variables on one another. Since the obtained ‘r’ is positive, any increase in teacher effectiveness of teachers with below 15 years experience may cause a corresponding increase in the pupils’ attitude. The obtained ‘r’ has a shared variance 25.10%. This suggests that around 25.10% of variation can be attributed between the correlated variables.

CONCLUSION

The descriptive analysis of data revealed that the primary school teachers possess a moderate level of emotional intelligence and its various components such as personal efficacy, interpersonal efficacy and intrapersonal efficacy. The primary school teachers could be classified into three distinct groups - high, average, and low - showing significant differences among them in the level of emotional intelligence.

It was found that the primary school teachers possess a moderate level of teacher effectiveness and its various components such as preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics as well as interpersonal relations. Here also the primary teachers
could be classified into distinct groups - high, average and low - with significant differences among them in the level of teacher effectiveness.

The inferential data analysis revealed that there exist significant differences between the emotional intelligence of rural and urban primary school teachers. The urban teachers have high emotional intelligence than that of the rural teachers. However no gender wise difference was noticed in this regard. But they differ with respect to educational qualifications. The teachers having the educational qualification of TTC or equivalent have high emotional intelligence than that of the teachers having the educational qualification B.Ed or above. The primary school teachers differ significantly in their emotional intelligence with respect to experience also. Teachers having teaching experience of 15 years or above have higher emotional intelligence than that of the teachers with below 15 years of teaching experience. It was noticed that the primary school teachers from different types of management do not differ significantly in their emotional intelligence.

In the case of teacher effectiveness the primary teachers differ significantly with respect to locale. The urban teachers have high teacher effectiveness than rural primary school teachers. Also they differ with respect to gender for this variable. The female primary teachers possess greater teacher effectiveness when compared to their male counterparts. However no significant difference was noticed in teacher effectiveness among primary school teachers having different educational qualifications. They do not differ in the variable teacher effectiveness with respect to teaching experience or type of management of school.

The emotional intelligence was found to be significantly and positively correlated with teacher effectiveness. All the components of emotional intelligence show significant correlations with teacher effectiveness. The stepwise regression
analysis revealed that all the three components - personal efficacy ($x_1$), interpersonal efficacy ($x_2$), and intrapersonal efficacy ($x_3$), - are predictors of teacher effectiveness.

All the components of teacher effectiveness show significant correlations with emotional intelligence. The stepwise regression analysis established that all the five components - preparation and planning for teaching ($x_1$), classroom management ($x_2$), knowledge of subject matter ($x_3$), teacher characteristics ($x_4$), and interpersonal relations ($x_5$) - are predictors of emotional intelligence.

There is a significant positive relationship between emotional intelligence of primary school teachers and pupils’ attitude. This was found to be true for all the subsamples of primary school teachers. Again it was revealed that there is a significant positive relationship between teacher effectiveness of primary school teachers and pupils’ attitude. When the subsamples were considered similar results were obtained.