ANALYSIS AND INTERPRETATION OF DATA
CHAPTER - IV
ANALYSIS AND INTERPRETATION OF DATA

The value of research in education depends largely on the degree to which its results are intelligently analyzed, interpreted and applied. To provide a comprehensive look and easy grasp, the data collected is presented in tabular forms. This is followed by analysis and interpretation in order to make description more systematic.

The analysis and interpretation of data are given under the following heads:

1. Presentation of Data
2. Analysis of Data

PRESENTATION OF DATA

The data for the present study was collected from two different groups of principals, the first group were those recruited by the Union Public Service Commission coming from different part of the country with various social, cultural background, posted in different Government Senior Secondary Schools of Delhi, serving under the Directorate of Education. The second group was from the promoted principals who were promoted by the Directorate of Education from the post of Vice-Principals on the basis of seniority. In the absence of any other study on these groups of educational leaders, a study was conducted on a total of 30 principals and the perception of 300 teachers were sought regarding their respective principal’s leadership styles, interpersonal relationships and effectiveness.

These are grouped as:

Group A - Constituted principals drawn from Government Senior
Secondary Schools of Delhi recruited by the Union Public Service Commission, Delhi.

Group B - Constituted promoted principals from Government Senior Secondary Schools of Delhi.

A. **Variables of Leadership Style:**

As mentioned earlier, the data was collected by using the standardized scale Leadership Preference Scale (LPS) prepared by L.I. Bhushan containing variables with the characteristics of leadership styles:

(i) Authoritarian Leadership Style

(ii) Democratic Leadership Style

**Characteristics of Authoritarian Leadership Style:** On the scale items to assess authoritarian leadership style, covers the following characteristics

(i) Keep power to themselves

(ii) Insist on making most or all decisions

(iii) Direct workers to implement their decisions through downward communication but discourage upward communication.

(iv) Attempt to motivate through threats and punishments.

**Characteristics of Democratic Leadership Style:** In the LPS Scale items related to the following characteristics of democratic leadership style have been included.

(i) Decentralize authority

(ii) Involves workers in the decision-making process

(iii) Encourage upward communication

(iv) Allow workers freedom to work within constraints set for tasks
B. Variables of Interpersonal Relationship Description

Questionnaire (IRDO):

This covered the following sets of interpersonal skills and qualities:

1. **Interpersonal Skills:**
   
   i. Listening
   
   ii. Goal setting
   
   iii. Providing feedback
   
   iv. Appraising performance
   
   v. Disciplining
   
   vi. Delegating
   
   vii. Using oral persuasion
   
   viii. Politicking
   
   ix. Running group meeting
   
   x. Resolving conflicts
   
   xi. Communication

2. **Interpersonal Qualities:**

   i. Empathy
   
   ii. Warmth
   
   iii. Genuineness
   
   iv. Positive unconditional regard
   
   v. Confrontation
   
   vi. Immediacy

C. Variables of Leadership Behaviour Descriptive Questionnaire (LBDQ):

Principals identified as having effective leadership through
Leadership Behaviour Descriptive Questionnaire (LBDQ) are characterized with such leader roles as:

i. Planner
ii. Motivator
iii. Group interest enhancer
iv. Liaison establisher
v. Initiator
vi. Speaker
vii. Group structure comprehender
viii. Task assigner
ix. Goal setter
x. Communicator
xi. Cooperation builder
xii. Judicious evaluator
xiii. Suggestion inviter
xiv. Effective planner
xv. Position explainer

The raw scores collected from the three scales – Leadership Preference Scale (LPS), Interpersonal Relationship Description Questionnaire (IRDQ) and Leadership Behaviour Descriptive Questionnaire (LBDQ) to study leadership style, interpersonal relationships and effectiveness respectively were taken for analysis. The data collected were scored as per the scoring scheme of the tests described in Chapter III. The analysis of data is presented as per the objectives of the study.

**ANALYSIS AND INTERPRETATION OF DATA:**

In pursuance of the research hypothesis under the study, the data has been analyzed according to the following objectives of the study:
i. To study leadership styles of the recruited and promoted principals of Delhi.

ii. To study interpersonal relationships of the recruited and promoted principals of Delhi.

iii. To study the leadership effectiveness of the recruited and promoted principals of Delhi.

iv. To compare the leadership styles of the recruited and promoted principals of Delhi.

v. To compare the interpersonal relationships of the recruited and promoted principals of Delhi.

vi. To compare the leadership effectiveness of the recruited and promoted principals of Delhi.

**TABLE – 4.1**

**Scheme of Analysis of Data and Interpretation**

<table>
<thead>
<tr>
<th>Total Sample</th>
<th>(30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Group A**
  - Recruited Principals (15)
  - Teachers (150)

- **Group B**
  - Promoted Principals (15)
  - Teachers (150)

**Variables**

- Leadership Styles
- Interpersonal Relationship
- Leadership Effectiveness

1. Authoritarian Style (Factors)
2. Democratic Style (Factors)
Various statistical treatments applied for the study were:

**Mean (M):**

The arithmetic mean (M) is the sum of separate scores or measures divided by their numbers. In the present study, it was used for analyzing the data because it is the most accurate measure of central tendency. It is an average "which represents all of the scores made by the group, and as such gives a concise description of the performance of the sample, as a whole. It enables one to compare the performance of two groups of leaders on various tests and on various levels of the leadership styles, interpersonal relationships and leadership effectiveness factors studied.

**Standard Deviation (SD):**

The standard deviation is a positive square root of the variance and is also used as a measure of the spread or dispersion of scores in distribution. It is a very useful device for comparing characteristics that may be quite different or that may be expressed in different units of measurements. The standard deviation is independent of the magnitude of the mean and provides a common consuming unit of measurement. In this skill it has been comparing the homogeneity of the data of different characteristics of leadership styles, interpersonal relationships and leadership effectiveness.
t-test:

Since a mean is probably the most satisfactory measure of characterizing a group; it is important to determine whether the difference between means of the sample is significant. The test of significance of the difference between the two means is known as t-test. It involves the computation of the ratio between the experimental variance and error variance.

In the present study the t-test of significance has been applied in order to discover whether the two groups – promoted and recruited principals differ significantly in their leadership styles, interpersonal relationships and leadership effectiveness under the same environmental conditions, under same level of various factors of styles, effectiveness and interpersonal relationships.

**Leadership Style of the Recruited and Promoted Principals:**

In order to analyze the first major objective, the overall sample of 30 principals was classified into two categories viz, recruited and promoted principals, depending upon their scores obtained through their respective teachers regarding their leadership style. The factors included in leadership preference scale are like keeping power to themselves, making most of decisions, directing the workers to implement the decisions, attempting to motivate through threats, decentralizing authority, involving workers in decision-making, encouraging upward communication and providing workers freedom to work.

As the ‘Leadership Preference Scale’ aims at measuring one’s degree of preference for authoritarian or democratic style of various types of leadership described in various educational and industrial set up, the most
common form of leadership classification is on the basis of manner of extending influence. The authoritarian and democratic leadership styles are considered perhaps the most prominent and socially significant typology of leadership. Though other leadership styles like laissez-faire and situational factors were studied but not measured by the scale, the two extreme leadership styles were ascertained.

To have a comprehensive picture of leadership styles of the recruited and promoted principals Table-4.2 shows the degree of inclination and preference towards a particular style adopted by the two groups of principals. Mean, SD and t-value were computed to ascertain leadership styles of the two groups of leaders.

**TABLE – 4.2**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited Principals</td>
<td>72.18</td>
<td>13.70</td>
<td>4.92</td>
<td>Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted Principals</td>
<td>80.27</td>
<td>14.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table - 4.2 it may be observed that the Mean (M) value of the recruited principals is 72.18 in response to the leadership style, the Mean (M) value of the promoted principals is 80.27, which reflects higher inclination of promoted principals towards democratic style in comparison to recruited principals.

It exhibits that the promoted principals involve the followers in the decision-making process, democratic principals inform their subordinates of the school goals and the problems and constrains confronting them. Being open minded they respect the ability of their teachers and, therefore, solicit their ideas for accomplishing the goals and objectives of their schools.
As mentioned earlier the principals who are authoritarian keep power to themselves and insist on making most of decisions. The principals who like to "tell others what to do and want to control virtually all work activities typically use this style. It indicates that recruited principals were authoritarian. As opposed to the democratic leader authoritarian leaders wield more absolute power. He himself determines policies of the group, makes major plans and dictates the activities of members. He serves as ultimate agent, judge and as a purveyor of rewards and punishment for members.

The Figure - 4.1 exhibits that recruited principals have been observed as inclined towards authoritarian style and promoted principals have shown a very clear increase towards democratic style. Higher increase reflects
that promoted principals are democratic while leading the teachers and other personnels to accomplish goals of their schools.

To study the difference t-value was calculated. The obtained value of t was significant at .01 level. Therefore, it may be stated that recruited and promoted principals differed significantly with respect to their leadership style. Hence, the null hypothesis “There is no significant difference between leadership styles of the recruited and promoted principals” is rejected. The promoted principals are more inclined towards the democratic style.

**Interpersonal Relationship of the Recruited and Promoted Principals**

Human relations are the study of interpersonal relationship among people as they work together to achieve organizational goals and attain job satisfaction. A healthy interpersonal relationship can be developed by using interpersonal skills alongwith interpersonal qualities. The interpersonal elements which make relationship more healthy comprising of listening, goal setting, providing feedback, appraising performance disciplining, delegation, oral persuasion, politicking, running group meeting and resolving conflicts. Certain personal qualities are prerequisite for effective interpersonal relationship like warmth genuineness, empathy and unconditional positive regard.

As stated previously, the second major objective of the study was to study the interpersonal relationship of the recruited and promoted principals of Delhi and to compare their relationships in response to various factors in terms of interpersonal skills which are considered as determining factors of interpersonal relationships.

Relationship between various interpersonal skills contributing to
interpersonal relationship was studied on a sample of two groups comprising of 30 recruited and promoted principals. The interpersonal relationship has also been studied in the light of principal’s self-perception. The perceptions of 300 teachers were also taken to ascertain the interpersonal relationship of the principals in their respective schools.

The principals’ self-perception and teachers’ responses were taken to ascertain the interpersonal relationship of the recruited and promoted principals.

The analysis of data based on principals’ self-perception and data based on teachers’ perception are being presented side by side to have a comprehensive view of each dimension of interpersonal relationship of two groups of principals.

To attain the second objective the Mean (M), SD and t-value of various interpersonal skills were computed for studying the degree of the use of interpersonal skills and level of significance of difference between the recruited and promoted principals in respect to their interpersonal relationship.

Interpersonal Relationship Description Questionnaire (IRDQ) contains 50 items of interpersonal skills measuring interpersonal relationship. Ten teachers comprising of equal number of TGTs and PGTs were asked to rate the use of interpersonal skills specified in the item. The rating points were 0, 1, 2, 3 and 4. If a principal/teacher strongly agreed or agreed a rating of 4 or 3 was assigned. However, a rating of 2 was assigned when he was undecided. In case of disagreed or strongly disagreed a rating of 1 or 0 was assigned. Taking into cognizance on these points, the principals’ use of interpersonal skills (based on the reactions of principals and teachers) was analysed. For this the score of two scale values were
added and a range with the help of average was taken as the indicators of the levels viz - Low; Average; High. To ascertain the level of the use of interpersonal skills by the recruited and promoted principals this criterion was evolved by the investigator. This procedure was followed throughout the analysis of data based on principals’ self-perception and teachers’ responses regarding principals’ use of interpersonal skills. For each interpersonal skills, the range indicating Low, Average and High have been worked out. The same are given in Table - 4.3.

Table - 4.3 exhibits low, average and high as indicators of principals’ use of interpersonal skills as perceived by the recruited and promoted principals and teachers.

**TABLE - 4.3**

*Range Indicating Low, Average and High Levels of Principals' use of Interpersonal Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Interpersonal Skills</th>
<th>Level Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>1.</td>
<td>Listening Skills</td>
<td>0 - 6</td>
</tr>
<tr>
<td>2.</td>
<td>Goal Setting Skills</td>
<td>0 - 9</td>
</tr>
<tr>
<td>3.</td>
<td>Feed Back Skills</td>
<td>0 - 3</td>
</tr>
<tr>
<td>4.</td>
<td>Appraising Performance Skills</td>
<td>0 - 10.5</td>
</tr>
<tr>
<td>5.</td>
<td>Disciplining Skills</td>
<td>0 - 6</td>
</tr>
<tr>
<td>6.</td>
<td>Delegating Skills</td>
<td>0 - 7.5</td>
</tr>
<tr>
<td>7.</td>
<td>Oral Persuasion Skills</td>
<td>0 - 6</td>
</tr>
<tr>
<td>8.</td>
<td>Politicking Skills</td>
<td>0 - 6</td>
</tr>
<tr>
<td>9.</td>
<td>Running Group Meeting Skills</td>
<td>0 - 7.5</td>
</tr>
<tr>
<td>10.</td>
<td>Resolving Conflicts Skills</td>
<td>0 - 4.5</td>
</tr>
</tbody>
</table>

1. **Listening Skills**

(a) **Listening Skills (Principals’ Perception)**

Table - 4.4 contains Mean, SD and t-value of the scores obtained
through principals’ self-perception on listening skills.

**TABLE - 4.4**

*Mean, SD and t-value of Scores obtained through Principals’ Self-perception on Listening Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>13.53</td>
<td>1.51</td>
<td>1.69</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>12.53</td>
<td>1.73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table - 4.4 it may be observed that obtained value of Mean on listening skill is 13.53 and 12.53 for recruited and promoted principals respectively. As mentioned above, to ascertain the extent of the use of their listening skills, the range indicating “Low”, “Average” and “High” have been worked out. These are given in Table - 4.3. The obtained mean on the listening skills for recruited principals is 13.53 and promoted principals is 12.53. By the value given in Table-4.3, it may be inferred that both groups of principals are at the higher end in the case of listening skills.

Table - 4.4 indicates that t-value between the recruited and promoted principals. The score on listening skills reflects that there is no significant difference between the two groups of principals even at 0.05 level of significance. It may be also stated that in comparison to the promoted principals recruited principals use listening skills more to comprehend the problems of teachers, students and parents for the accomplishment of goals and objectives of school.

(b) **Listening Skills (Teachers’s Perception)**

Use of listening skills was studied through the reactions of teachers working in the schools of promoted and recruited principals. In this case
also the use of listening skills of the recruited and promoted principals was determined the range indicating 'low', 'average' and 'high' given in Table - 4.3. Mean (M), SD and t-value were calculated from the scores obtained through teachers’ responses.

The Mean (M), SD and t-value obtained through the teacher’s responses related to their principals use of listening skills are given in Table - 4.5.

**TABLE - 4.5**

*Mean, SD and t-value of the scores obtained through the Teachers’ Responses related to their Principals’s use of Listening Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>12.58</td>
<td>1.10</td>
<td>1.31</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>12.11</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table - 4.5, it may be observed that obtained values of Mean on the listening skills are 12.58 and 12.11 for recruited and promoted principals respectively. From Table - 4.3 it may be inferred that both the groups of principals are at the higher end in the use of listening skills in their schools as perceived by their teachers.

Table - 4.5 indicates that t-value between the recruited and promoted principals. The score on listening skills reflects that there is no significant difference between the two groups of principals even at 0.05 level of significance.

2. **Effective Goal Setting**

(a) **Effective Goal Setting (Principals’ Self-Perception)**
The Mean (M), SD and t-value were computed to study effective goal settings as interpersonal skills used by the recruited and promoted principals to attain the objectives of the study. For this also two sets of scores were received which are based on principals’ self-perception and teachers’s responses regarding the use of goal setting skills used by their principals in their schools.

Mean (M), SD and t-value obtained through the principal’s self-perception on goal setting skills are given in Table - 4.6.

**TABLE – 4.6**

*Mean, SD and t-value of the Scores Obtained Through the Principals’s Self-perception on Goal Setting Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>19.93</td>
<td>2.25</td>
<td>.30</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>20.20</td>
<td>2.54</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Table – 4.6 it may be observed that obtained value of Mean on goal setting skills is 19.93 and 20.20 for recruited and promoted principals respectively. To ascertain the extent of the use of goal setting skills, the range indicating ‘low’, ‘average’ and ‘high’ level of average score have been worked out. From Table - 4.3 both the groups of principals were found on the higher end in the use of goal setting skills.

Table - 4.6 showing t-value between recruited and promoted principals reflects that there is no significant difference between the two groups of principals in their use of goal setting skills at even 0.05 level of significance.
(b) **Effective Goal Setting (Teachers' Perception)**

The Table - 4.7 contains the Mean (M), SD and t-value on the use of goal setting skills as perceived by the teachers.

**TABLE - 4.7**

*Mean, SD and t-value of the scores Obtained Through the Teachers’ Responses related to their Principals’ Use of Goal Setting Skills.*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>18.25</td>
<td>2.17</td>
<td>.93</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>17.62</td>
<td>1.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Mean, SD of t-value of the scores obtained through the teachers’ responses related to their principals’ use of goal setting skills.

From Table - 4.7 it may be observed that obtained value of Mean on goal setting skills is 18.25 and 17.62 for recruited and promoted principals respectively. By these values it may be concluded that both the groups of principals are using goal setting skills to a greater extent as perceived by the teachers.

It is also inferred from Table - 4.3 that the recruited principals as perceived by their teachers in the use of goal setting skills are on the higher end.

Table - 4.7 showing t-value between the recruited and promoted principals reflects that there is no significant difference between the two groups of principals in their use of goal setting skills as perceived by their teachers even at 0.05 level of significance.
3. **Providing Effective Feedback Skills**

(a) **Providing Effective Feedback Skills (Principal’s Perception)**

The table – 4.8 encompasses the Mean (M), SD and t-value on the use of feedback skills.

**TABLE – 4.8**

*Mean, SD and t-value of the Scores Obtained Through Principals’s Self-perception on Feedback Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>6.13</td>
<td>1.46</td>
<td>1.13</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>6.67</td>
<td>1.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Mean, SD and t-value of the scores obtained through principals’ self-perception on feedback skills.

From Table - 4.8 it may be observed that obtained value of Mean on effective feedback skills is 6.13 and 6.67 for the recruited and promoted principals respectively. To ascertain the extent of the use of effective goal setting skills, the range indicating ‘low’, ‘average’ and ‘high’ levels were worked out.

From Table - 4.3 it may be inferred that the both groups of principals perceived themselves to be using effective feedback skills to a greater extent and are at the higher end.

Table - 4.8 showing t-value between recruited and promoted principals on the use of their feedback skills reflects that there is no
significant difference even at 0.05 level of significance.

(b) **Providing Effective Feedback Skills (Teachers’ Perception)**

The table -- 4.9 contains the Mean (M), SD and t-value of the recruited and promoted principals in response to the use of effective feedback skills as perceived by the teachers.

**TABLE – 4.9**

*Mean, SD and t-value of the Scores Obtained Through the Teachers’ Responses related to their Principals’ use of Feedback Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>5.96</td>
<td>0.53</td>
<td>1.05</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>5.74</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Mean, SD and t-value of the scores obtained through the teacher’s response related to their principals’ use of feedback skills.

From Table - 4.9 it may be observed that obtained value of Mean of effective feedback skills is 5.96 and 5.74 for the recruited and promoted principals respectively. To ascertain the extent of the use of feedback skills, the range indicating ‘low’, ‘average’ and ‘high’ levels were worked out. By these values it may be concluded that both groups of principals use effective feedback skills to some extent. As per the teachers’ perception, there is minor degree of difference in their use of aforesaid skills. From Table - 4.3 it may be observed that both the groups of principals are on the higher end in the use of these skills.

Table - 4.9 exhibiting t-value between recruited and promoted principals on the use of effective feedback skills reflects that these is no significant difference between the two groups even at 0.05 level of
significance.

4. **Appraising Performance Skills**

(a) **Appraising Performance Skills ( Principals’ Perception)**

The table – 4.10 containing the Mean (M), SD and t-value regarding the use of appraising performance skills of recruited and promoted principals.

**TABLE – 4.10**

*Mean, SD and t-value of the Scores Obtained Through Principals’ Self-perception on Appraising Performance Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>22.13</td>
<td>1.99</td>
<td>1.91</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>23.67</td>
<td>2.38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table - 4.10 it may be observed that obtained value of Mean on appraising performance skills is 22.13 and 23.67 for the recruited and promoted principals respectively. To ascertain the extent of the use of appraising performance skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out.

By these values it may be concluded that both the groups of principals perceived themselves to be using appraising performance skills to a greater extent and were found on higher end in practising these skills.

Table - 4.10 showing t-value between recruited and promoted principals on the use of their appraising performance skills reflects that there is no significant difference even at 0.05 level of significance.
(b) **Appraising Performance Skills (Teachers’ Perception)**

To attain the objectives, the Mean (M), SD and t-value were computed for studying the level of significance related to the use of appraising performance skills as perceived by the teachers. Table – 4.11 reveals that:

**TABLE – 4.11**

*Mean, SD and t-value of the Scores Obtained Through the Teachers’ Responses related to their Principals’ use of Appraising Performance Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>21.53</td>
<td>2.31</td>
<td>1.23</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>20.63</td>
<td>1.58</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Mean, SD and t-value of the scores, obtained through the teachers’ responses related to their principals’ use of appraising performance skills.

From Table - 4.11 it may be observed that obtained values of Mean on appraising performance skills is 21.53 and 20.63 for the recruited and promoted principals respectively. To ascertain the extent of the use of appraising performance skills, the range indicating ‘low’, ‘average’ and ‘high’ levels were worked out.

As mentioned in Table - 4.3 and 11 it may be inferred that both the groups of principals use appraising performance skills in their schools to a greater extent and were found on higher end.

Table - 4.11 showing t-value between recruited and promoted principals on the use of appraising performance skills exhibits that there is no significant difference even at 0.05 level of significance.
5. **Disciplining Skills**

(a) **Disciplining Skills (Principals’ Perception)**

To attain the objectives, Mean, SD and t-values were computed for studying the use of disciplining skills by these principals.

**TABLE - 4.12**

*Mean, SD and t-value of the Scores Obtained through Principals’ Self-perception on Disciplining Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>12.67</td>
<td>2.09</td>
<td>0.48</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>13.00</td>
<td>1.69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table - 4.12, it may be observed that obtained value of Mean on disciplining skills is 12.67 and 13.00 for the recruited and promoted principals respectively. To ascertain the extent of the use of disciplining skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out.

By these values as mentioned in Table - 4.3 and 4.12 it may be concluded that both the groups of principals perceived themselves to be using disciplining skills to a greater extent and they were found on higher end in the use of these skills.

Table - 4.12 showing t-value between the recruited and promoted principals on the use of disciplining skills as perceived by them reflects that there is no significant difference between the two groups of principals even at 0.05 level of significance.
(b) **Disciplining Skills (Teachers' Perception)**

The Table – 4.13 contains the Mean (M), SD and t-value of the recruited and promoted principals regarding the use of disciplining skills as perceived by the teachers.

**TABLE – 4.13**

*Mean, SD and t-value of the Scores Obtained through the Teachers' Responses related to their Principals' use of Disciplining Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>11.76</td>
<td>1.17</td>
<td>.16</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>11.69</td>
<td>1.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table – 4.13 it may be observed that obtained value of Mean on disciplining skills is 11.76 and 11.69 for the recruited and promoted principals respectively. To ascertain the extent of the use of disciplining skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. By these values as mentioned in Table – 4.3 and 4.13, it may be concluded that both the groups of principals use disciplining skills to some extent in their schools as perceived by the teachers they are found on the higher end in the use of these skills.

Table – 4.13 showing the t-value between recruited and promoted principals on the use of disciplining skills reflects that there is no significant difference between the two groups even at 0.05 level of significance.

6. **Delegating Skills**

(a) **Delegating Skills (Principal's Perception)**

To attain the objectives, the Mean, SD and t-value were computed to study in the use of delegating skills of the principals.
TABLE – 4.14

**Mean, SD and t-value of Scores Obtained through Principals’ Self-Perception on Delegating Skills**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>15.00</td>
<td>1.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>16.73</td>
<td>2.43</td>
<td>2.50</td>
<td>Significant</td>
</tr>
</tbody>
</table>

From Table – 4.14 it may be observed that obtained value of Mean on delegating skills is 15.00 and 16.73 for the recruited and promoted principals respectively. To ascertain the extent of the use of delegating skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. By these values it may be inferred that both the groups of principals perceived themselves to be using delegating skills to a greater extent were found on the higher end.

Table – 4.14 showing the t-value between recruited and promoted principals on the use of delegating skills exhibits that there is significant difference between the recruited and promoted principals at 0.05 level of significance. It implies that promoted principals use delegating skills in their schools better than the recruited principals. It may be inferred from this finding that the promoted principals clarify the assignment to the subordinates and endeavour to identify the person best capable of doing the task. They also specify the subordinates’ range of discretion all of them to participate to accomplish the task. They inform the subordinates that delegation has occurred as the subordinates need to know specially what has been delegated and how much authority has been granted.

(b) **Delegating Skills (Teachers’ Perception)**

The table – 4.15 contains the Mean (M), SD and t-value regarding
the use of delegating skills of the recruited as promoted principals as perceived by the teachers.

**TABLE – 4.15**

*Mean, SD and t-value of the Scores Obtained Through the Teachers’ Responses related to their Principals use of Delegating Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>15.17</td>
<td>1.24</td>
<td>1.45</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>14.52</td>
<td>1.22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table – 4.15 it may be observed that obtained value of Mean on delegating skills is 15.17 and 14.52 for the recruited and promoted principals respectively. To ascertain the extent of the use of delegating skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. It may be observed from Table – 4.3 that both the groups of principals use delegating skills in their schools to a level of greater extent and they were found on the higher end in the use of these skills.

Table – 4.15 showing the t-value between recruited and promoted principals on the use of delegating skills reflects that there is no significant difference between the two groups even at 0.05 level of significance.

7. **Oral Persuasion Skills**

(a) **Oral Persuasion Skills (Principals’ Perception)**

The table – 4.16 contains the Mean, SD and t-value regarding the use of oral persuasion skills as perceived by the Principals.
TABLE – 4.16

*Mean, SD and t-value of the Scores Obtained Through the Principal’s Self-Perception on Oral Persuasion Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>12.93</td>
<td>1.71</td>
<td>.41</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>13.20</td>
<td>1.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table – 4.16 it may be observed that obtained value of Mean on oral persuasion skills is 12.93 and 13.20 for the recruited and promoted principals respectively. To ascertain the extent of the use of oral persuasion skills the range indicating ‘low’, ‘average’ and ‘high’ levels were worked out. By these values, it may be concluded that both the groups of principals perceived themselves to be using oral persuasion skills to a level of greater extent and were found on the higher end.

Table – 4.16 showing t-value between recruited and promoted principals on the use of oral persuasion skills reflects that there is no significant difference at even 0.05 level of significance between the two groups of principals.

(b) *Oral Persuasion Skills (Teachers’ Perception)*

The Table – 4.17 exhibits the Mean, SD and t-value of the recruited as promoted principals on the use of oral persuasion skills as perceived by teachers.
Mean, SD and t-value of the Scores Obtained Through the Teachers’ Responses related to their Principals’ use of Oral Persuasion Skill

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>12.54</td>
<td>0.94</td>
<td>2.44</td>
<td>Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>11.57</td>
<td>1.22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table – 4.17 it may be observed that obtained value of Mean on oral persuasion skills is 12.54 and 11.57 for the recruited and promoted principals respectively. To ascertain the extent of the use of oral persuasion skills, the range indicating ‘low’, ‘average’ and ‘high’ levels were worked out. It may be observed from Table – 4.3 that both the groups of principals use oral persuasion skills in their schools to a level of greater extent and were found on the higher end.

Table – 4.17 showing t-value between recruited and promoted principals on the use of oral persuasion skills reflects that there is significant difference between the two groups of principals in the use of oral persuasion skills at 0.05 level of significance. It may be concluded from this finding that the recruited principals are better than the promoted principals in the use of oral persuasion skills. They endeavour to establish their credibility so that the teachers can trust and respect them. They use a positive tactful tone assuming that persons they are trying to persuade are intelligent and mature. They make their presentation clear and provide strong evidence to support their position. The recruited principals tailor their arguments to the listeners for effective persuasion.
8. Politicking Skills

(a) Politicking Skills (Principals' Perception)

The Table – 4.18 contains the Mean, SD and t-value of the recruited and promoted principals on the use of politicking skills in their schools.

TABLE – 4.18

Mean, SD and t-value of the Score Obtained Through the Principal’s Self-Perception on Politicking Skills

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>12.73</td>
<td>1.91</td>
<td>1.39</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>13.67</td>
<td>1.76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table – 4.18 it may be observed that obtained value of Mean on politicking skills is 12.73 and 13.67 for the recruited and promoted principals respectively. To ascertain the extent of the use of politicking skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. It may be inferred from Table – 4.3 that both the groups of principals perceived themselves to be using politicking skills to a level of greater extent and were found on the higher end.

Table – 4.18 showing t-value between recruited and promoted principals on the use of politicking skills reflects that there is no significant difference between the two groups at even 0.05 level of significance.

(b) Politicking Skills (Teachers’ Perception)

The Table – 4.19 exhibits the Mean (M), SD and t-value computed to study the use of politicking skills by the recruited and promoted principals.
From Table - 4.19 it may be observed that obtained value of Mean on politicking skills is 12.51 and 11.63 for the recruited and promoted principals respectively. To ascertain the extent of the use of politicking skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. By these values as mentioned in Table - 4.3, it may be concluded that both the groups of principals use politicking skills in their schools to a degree of greater extent and were found on the higher end.

Table - 4.19 showing t-value between recruited and promoted principals on the use of politicking skills reflects that there is significant difference between the two groups of principals at 0.05 level of significance. It may be inferred from this finding that recruited principals use politicking skills in their schools better than the promoted principals. It implies that the recruited principals frame their arguments in terms of organizational goals by covering up their self-interest. They try to develop right image among teachers, gain control over organizational resources. They make an effort to show that they are indispensable and endeavour to be visible in the organization. They try to have mentor from whom they can learn and get encouragement.

9. **Running a Group Meeting Skills**

(a) **Running a Group Meeting Skills (Principals’ Perception)**
The Table – 4.20 contains the Mean (M), SD and t-value on the use of running a group meeting skills of the recruited and promoted principals.

**TABLE – 4.20**

*Mean, SD and t-value of the Scores Obtained Through Principals’ Self-perception on Running Group Meeting Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>15.87</td>
<td>3.14</td>
<td>0.95</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>16.80</td>
<td>2.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table – 4.20 it may be observed that obtained value of Mean on running a group meeting skills is 15.87 and 16.80 for the recruited and promoted principals respectively. To ascertain the extent of the use of running a group meeting skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. It may be concluded from Table – 4.3 that both the groups of principals perceived themselves to be using running a group meeting skills to a greater extent and were found on the higher end.

Table – 4.20 showing t-value between recruited and promoted principals on the use of running a group meeting skills exhibits that there is no significant difference between the two groups at even 0.05 level of significance.

(b) **Running a Group Meeting Skills (Teachers’ Perception)**

The Table – 4.21 contains the Mean (M), SD and t-value on the use of running a group meeting skills of the recruited and promoted principals.
From Table – 4.21 it may be observed that obtained value of Mean on running a group meeting skills is 15.42 and 14.26 for the recruited and promoted principals respectively. To ascertain the extent of the use of running a group meeting skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. By these values as mentioned in Table – 4.3 and 4.21 it may be inferred that both the groups of principals use running a group meeting skills in their schools to a degree of greater extent and were found on the higher end.

Table – 4.21 showing t-value between recruited and promoted principals reflects that there is a significant difference between the two groups at even 0.05 level of significance. It may be concluded from this result that the recruited principals use running group meeting skills better than the promoted principals. It implies that the recruited principals prepare meeting agenda, distribute them in advance and consult with the participants before the meeting. They establish specific time-parameters, maintain focussed discussion, encourage different points of views and discourage the clash of personalities.

10. **Resolving Conflicts Skills**

(a) **Resolving Conflicts Skills (Principals' Perception)**
The Table – 4.22 contains the Mean (M), SD and t-value on the use of resolving conflicts skills of the recruited and promoted principals.

**TABLE – 4.22**

*Mean, SD and t-value of the Score Obtained Through Principals’ Self-perception on Resolving Conflict Skills*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>9.00</td>
<td>2.07</td>
<td>1.74</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>10.07</td>
<td>1.16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table – 4.22 it may be observed that obtained value of Mean on resolving conflicts skills is 9.00 and 10.07 for the recruited and promoted principals respectively. To ascertain the extent of the use of resolving conflicts skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. By these values as mentioned in Table – 4.3 and 4.22 it may be concluded that both the groups of principals use resolving conflicts skills to a greater extent and were found on the higher end.

Table – 4.22 showing t-value between recruited and promoted principals reflects that there is no significant difference at 0.05 level of significance between the two groups on the use of resolving conflicts skills.

(b) **Resolving Conflicts Skills (Teachers’ Perception)**

The Table – 4.23 containing the Mean (M), SD and t-value of the resolving conflict skills of the recruited and promoted principals.
Mean, SD and t-value of the Scores Obtained Through the Teachers' Responses related to their Principals' Use of Resolving Conflicts Skills

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>8.87</td>
<td>1.10</td>
<td>1.13</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>8.41</td>
<td>1.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table – 4.23 it may be observed that obtained value of Mean on resolving conflicts skills is 8.87 and 8.14 for the recruited and promoted principals respectively. To ascertain the extent of the use of resolving conflicts skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. By these values from Table 4.3 and 4.23, it may be inferred that both the groups of principals use these skills to a degree of a greater extent and were found on the higher end.

Table – 4.23 showing t-value between recruited and promoted principals exhibits that there is no significant difference at 0.05 level of significance in their use of resolving conflicts skills.

11. Communication Skills

(a) Communication Skills (Principals’ Perception)

The Table – 4.24 contains the Mean (M), SD and t-value of the recruited and promoted principals on their use of communication skills.
From Table – 4.24 it may be observed that obtained value of Mean on communication skills is 18.73 and 20.13 for the recruited and promoted principals respectively. To ascertain the extent of the use of communication skills, the range indicating ‘low’, ‘average’ and ‘high’ were worked out. By these values from Table – 4.3 and 4.24 it may be concluded that both the groups perceived themselves to be using communication skills to a greater extent and were found on the higher end.

Table – 4.24 showing t-value between recruited and promoted principals reflects that there is no significant difference even at 0.05 level of significance.

(b) Communication Skills (Teacher’s Perception)

The Table – 4.25 contains the Mean (M), SD and t-value of the recruited and promoted principals on their use of communication skills.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>18.73</td>
<td>2.79</td>
<td>1.33</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>20.13</td>
<td>2.97</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>18.88</td>
<td>1.81</td>
<td>2.13</td>
<td>Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>17.61</td>
<td>1.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From Table - 4.25 it may be observed that obtained value of Mean on communication skills is 18.88 and 17.61 for the recruited and promoted principals respectively. To ascertain the extent, the use of communication skills, the range indicating 'low', 'average' and 'high' were worked out. By these values as mentioned in Table - 4.3 and 4.25 it is inferred that both the groups of principals use these skills to a level of greater extent and were found on the higher end.

Table - 4.25 showing t-value between recruited and promoted principals exhibits that there is a significant difference at 0.05 level of significance in their use of communication skills. It may be inferred from this finding that recruited principals use communication skills better than the promoted principals. It implies that the recruited principals use communication skills as a weapon to eliminate hostility. They try to become ethical, sincere and direct while communicating with the teachers. They avoid errors, misconstructions and falsification. They develop an elaborate communication system to find reflection of trust in recipients.

**Overall Comparison of Interpersonal Relationships of Recruited and Promoted Principals of Delhi**

The principals’ overall use of interpersonal skills based on principals’ self-perception and teachers’ responses was analysed. For this the scores of two score values (overall) were added and a range with the help of average was taken as indicators of the levels viz low, average, high (Table 4.3). This criterion was evolved to ascertain the level of the use of interpersonal skills of the recruited and promoted principals.

Figure - 4.2 presents interpersonal relations of the recruited and promoted principals as perceived by the principals. The graphic representation showing the use of interpersonal skills exhibits that the
promoted principals were comparatively at higher end in the use of interpersonal skills, with their teachers to achieve the objectives and goals of their schools.

Table - 4.26 presents over view of interpersonal skills by showing the Mean (M), SD and t-value for each interpersonal skills, which were used by the principals in their schools.
### TABLE - 4.26

**Value of ‘t’ showing Significance of difference between Means of the Scores on various Dimensions of Interpersonal Relationships of Recruited and Promoted Principals (Data based on Principal’s Self-Perception)**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Interpersonal Skills</th>
<th>Recruited Principals</th>
<th>Promoted Principals</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1.</td>
<td>Listening</td>
<td>13.53</td>
<td>1.51</td>
<td>12.53</td>
<td>1.73</td>
</tr>
<tr>
<td>2.</td>
<td>Goal Setting</td>
<td>19.93</td>
<td>2.25</td>
<td>20.20</td>
<td>2.54</td>
</tr>
<tr>
<td>3.</td>
<td>Feedback</td>
<td>6.13</td>
<td>1.46</td>
<td>6.67</td>
<td>1.11</td>
</tr>
<tr>
<td>4.</td>
<td>Appraising Performance</td>
<td>22.13</td>
<td>1.91</td>
<td>23.67</td>
<td>2.38</td>
</tr>
<tr>
<td>5.</td>
<td>Disciplining</td>
<td>12.67</td>
<td>2.09</td>
<td>13.00</td>
<td>1.69</td>
</tr>
<tr>
<td>6.</td>
<td>Delegating</td>
<td>15.00</td>
<td>1.13</td>
<td>16.73</td>
<td>2.43</td>
</tr>
<tr>
<td>7.</td>
<td>Oral Persuasion</td>
<td>12.93</td>
<td>1.71</td>
<td>13.20</td>
<td>1.82</td>
</tr>
<tr>
<td>8.</td>
<td>Politicking</td>
<td>12.73</td>
<td>1.91</td>
<td>13.67</td>
<td>1.76</td>
</tr>
<tr>
<td>9.</td>
<td>Running Group Meeting</td>
<td>15.87</td>
<td>3.14</td>
<td>16.80</td>
<td>2.18</td>
</tr>
<tr>
<td>10.</td>
<td>Resolving Conflicts</td>
<td>9.00</td>
<td>2.07</td>
<td>10.07</td>
<td>1.16</td>
</tr>
<tr>
<td>11.</td>
<td>Communication</td>
<td>18.73</td>
<td>2.79</td>
<td>20.13</td>
<td>2.97</td>
</tr>
</tbody>
</table>

From Table - 4.26 it may be observed that recruited and promoted principals use these interpersonal skills to a greater extent to strengthen their interpersonal relationships and they were found on the higher end.

The graphic representation exhibiting 11 interpersonal skills used by the two groups of principals (principals’ self-perception) indicates that both the groups were to be using interpersonal skills to a greater extent to establish interpersonal relationship. It clarifies that they differ in the use
of certain interpersonal skills like listening, delegating, resolving conflicts and communication. The recruited and promoted principals as mentioned in Table - 4.27 differ significantly at 0.05 level in their use of delegating skills.

As stated previously that overall use of interpersonal skills as perceived by the recruited and promoted principals, from Table - 4.27 it may be concluded:

The recruited and promoted principals did not differ significantly even at 0.05 level of significance in their use of interpersonal skills.

![Figure 4.3 Graph Showing Interpersonal Skills](image)

Figure - 4.3 showing teachers' perception regarding the use of interpersonal skills by their respective principals also reveals that both the groups were found to be using interpersonal skills to a greater extent. It may also be inferred that these principals were at higher end in the use of interpersonal skills.
The table - 4.27 contains the Mean, S.D. and t-value on overall use of interpersonal skills of the recruited and promoted principals based on teachers’ perception.

**TABLE - 4.27**

*Value of 't' showing Significance of difference between Means of the Scores on various dimensions of Interpersonal Relationships of the Recruited and Promoted Principals (Data based on Teachers’ Perception)*

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Interpersonal Skills</th>
<th>Recruited Principals</th>
<th>Promoted Principals</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1.</td>
<td>Listening</td>
<td>12.58</td>
<td>1.10</td>
<td>12.11</td>
<td>0.86</td>
</tr>
<tr>
<td>2.</td>
<td>Goal Setting</td>
<td>18.25</td>
<td>2.17</td>
<td>17.62</td>
<td>1.50</td>
</tr>
<tr>
<td>3.</td>
<td>Feedback</td>
<td>5.96</td>
<td>0.53</td>
<td>5.74</td>
<td>0.62</td>
</tr>
<tr>
<td>4.</td>
<td>Appraising Performance</td>
<td>21.53</td>
<td>2.31</td>
<td>20.63</td>
<td>1.58</td>
</tr>
<tr>
<td>5.</td>
<td>Disciplining</td>
<td>11.76</td>
<td>1.17</td>
<td>11.69</td>
<td>1.10</td>
</tr>
<tr>
<td>6.</td>
<td>Delegating</td>
<td>15.17</td>
<td>1.24</td>
<td>14.52</td>
<td>1.22</td>
</tr>
<tr>
<td>7.</td>
<td>Oral Persuasion</td>
<td>12.54</td>
<td>0.94</td>
<td>11.57</td>
<td>1.22</td>
</tr>
<tr>
<td>8.</td>
<td>Politicking</td>
<td>12.51</td>
<td>1.23</td>
<td>11.63</td>
<td>1.02</td>
</tr>
<tr>
<td>9.</td>
<td>Running Group Meeting</td>
<td>15.42</td>
<td>1.40</td>
<td>14.26</td>
<td>1.21</td>
</tr>
<tr>
<td>10.</td>
<td>Resolving Conflicts</td>
<td>8.87</td>
<td>1.10</td>
<td>8.41</td>
<td>1.43</td>
</tr>
<tr>
<td>11.</td>
<td>Communication</td>
<td>18.88</td>
<td>1.81</td>
<td>17.61</td>
<td>1.43</td>
</tr>
</tbody>
</table>

Table - 4.27 presents overall view of interpersonal skills by showing the Mean (M), SD and t-value for each skills which were used by the two groups of principals in their schools as perceived by their respective teachers.
From Table - 4.27 it may be inferred that both the groups of principals use interpersonal skills to strengthen their relationship to a greater extent and were found on the higher end in the use of these interpersonal skills (Mentioned in Table - 4.3).

From Table - 4.27 it may be concluded that the recruited and promoted principals differ significantly at 0.05 level of significance in the use of interpersonal skills like politicking, running a group meeting, oral persuasion and communication skills.

It may also be found that there is no significant difference between the recruited and promoted principals in the use of interpersonal skills like listening, goal setting, feedback, appraising performance, disciplining, delegating and resolving conflict skills even at 0.05 level of significance.

The graphic representation (Figure - 4.3) further reveals that there is no remarkable difference between the two groups in the use of interpersonal skills. The graphic lines reflect that both the groups moved parallel in the use of these skills. They were almost equal in using skills like listening, goal setting, feedback, appraising performance and disciplining. The recruited principals were found better while using skills like delegating, politicking, running group a meeting, resolving conflicts and communication as perceived by the teachers.

On the basis of the above results the hypothesis which states that:

"There is no significant difference between the interpersonal relationship of the recruited and promoted principals of Delhi" is partially retained and partially rejected.

The hypothesis is retained with respect to the use of interpersonal
skills as listening, goal setting, feedback skills, disciplining, delegating and resolving conflicts. However, in respect to oral persuasion, politicking, running group meeting and communicating skills, the hypothesis is rejected since there was a significant difference in the use of these skills at 0.05 level of significance between the recruited and promoted principals.

Table - 4.28 indicates range viz - Low, Average and High exhibiting the level of overall use of interpersonal skills of the recruited and promoted principals.

**TABLE - 4.28**

*Range indicating Low, Average and High levels of Principals's Overall Use of Interpersonal Skills*

<table>
<thead>
<tr>
<th>Use of Interpersonal Skills</th>
<th>Level Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal's Perception &amp; Teachers' Perception</td>
<td>Low</td>
</tr>
<tr>
<td>0-75</td>
<td>75-125</td>
</tr>
</tbody>
</table>

The principals' use of interpersonal skills based on principals' self-perception and teachers' responses. The scores of two scale values were added and a range with the help of average was taken indicating the levels viz - Low (0 -75), Average (75-125) and High (125-200) regarding the principals' overall use of interpersonal skills. This criterion was evolved to ascertain the level of the use of interpersonal skills of the recruited and promoted principals.

Table - 4.29 contains Mean, SD and t-value on the overall use of interpersonal skills of the recruited and promoted principals.
From Table 4.29 it may be inferred that recruited and promoted principals perceived themselves to be using interpersonal skills to a greater extent to establish interpersonal relationship and they were found on the higher end. From Table 4.28 it may also be observed that both the groups of principals were found on higher end in overall use of interpersonal skills.

It may be also observed from Table 4.29 that there is no significant difference between the recruited and promoted principals in the overall use of interpersonal skills even at 0.05 level of significance. However, they differed significantly in the use of delegating skills as mentioned in Table 4.26 at 0.05 level of significance.

Table 4.30 contains Mean, SD and t-value on the overall use of interpersonal skills of the recruited and promoted principals.

**TABLE – 4.30**

*Mean, SD and t-value on Scores obtained through Teachers’ Responses in Overall Use of Interpersonal Skills by their Principals Determining Interpersonal Relationship*

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>153.47</td>
<td>13.40</td>
<td>1.71</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>145.80</td>
<td>11.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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From Table 4.30 it may be observed that both the groups of principals were found on the higher end in the use of interpersonal skills. From Table 4.28 it may be observed that both the groups of principals use the interpersonal skills to a greater extent to cement their interpersonal relationship.

Table 4.30 also indicates that there is no significant difference between the recruited and promoted principals even at 0.05 level of significance in the overall use of interpersonal skills. However, both the groups of principals differed significantly in the use of certain skills mentioned in Table 4.27 at 0.05 level of significance.

From Figure 4.4 it may be observed that both the groups of principals were found on the higher end in the use of interpersonal skills. The graphic representation of bar-diagram (principals’ perception) reveals that the promoted principals use various skills in their schools more than the recruited principals whereas the graphic representation of bar-diagram (teachers’ perception) exhibits that the recruited principals use various skills
of interpersonal skills in their schools more than the promoted principals.

LEADERSHIP EFFECTIVENESS

In order to have a comprehensive and comparative overall picture of leadership effectiveness of recruited and promoted principals, the behaviour of the leaders were studied through the teachers' responses. The leadership effectiveness was measured by computing Mean, SD for each group. 't' test was computed from the scores obtained on LBDQ in order to test the significance of difference between means of the two groups of principals (recruited and promoted).

The leadership effectiveness of the recruited and promoted principals were analysed based on teachers' responses. For this the score of the two values were added and a range with the help of average was taken as indicators of the levels viz - Low (0 - 225, Average (225 - 375) and High (375 - 525). This criterion was evolved to ascertain the level of leadership effectiveness of the recruited and promoted principals.

Table - 4.31 contains Mean (M), SD and t-value of leadership behaviour obtained through responses of teachers regarding leadership effectiveness of their principals.

| TABLE – 4.31 |
| Mean, SD and t-value Obtained Through Teachers’ Responses on Leadership Effectiveness |

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Principals</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruited</td>
<td>427.19</td>
<td>34.59</td>
<td>.91</td>
<td>Not Significant</td>
</tr>
<tr>
<td>2.</td>
<td>Promoted</td>
<td>404.89</td>
<td>88.68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the table – 4.31 it may be observed that obtained value of Mean on assumption of leadership role is 427.19 and 404.89 for recruited and promoted principals respectively. It may be inferred that the recruited and promoted were found on the higher end in relation to their leadership effectiveness.

It may be concluded from this finding that both the groups of principals assumed such leaders’ roles as planner, motivator, group interest enhancer, liaison builder, initiator, speaker, task assigner, goal setter, communicators, cooperation builder and effective planner etc. Assumption of these roles are very essential for leadership effectiveness. The recruited principals exhibit that they assume above mentioned roles better than the promoted principals.

It is also comprehended that both the groups of principals did not differ significantly even at 0.05 level of significance in relation to their leadership effectiveness.
Figure- 4.5 the rectangular bar diagram exhibits the leadership effectiveness of the recruited and promoted principals. It is perceived from the diagram that the recruited principals by the Union Public Service Commission (UPSC) are slightly better than the promoted principals in relation to their leadership effectiveness.

On the basis of above results, the hypothesis which states that:

"There is no significant difference between the leadership effectiveness of the recruited and promoted principals of Delhi" is retained.