CHAPTER-III

METHODS & PROCEDURE
CHAPTER - 3

METHODS AND PROCEDURE

Research methods are utmost important in a research process. They describe the various steps of the plan of attack to be adopted in solving a research problem, such as the manner in which the problems are formulated, the definition of the term, the choice of subject for investigation, the validation of data gathering tools, data collection, analysis and interpretation of data and the process of inferences and generalization. Procedure is to a research worker as tools are to a carpenter. Taking a specific, pin-pointed problem and trying to find a solution in a specific manner to it, is the procedure of research.

A research method describes the plan to adopt in solving the research problem. There are number of methods which are commonly used in research like historical, descriptive, experimental etc. To carry out the present study, the descriptive survey method has been employed. A descriptive research is one which describes, records, analyses and interprets the condition that exists. The descriptive survey method of research has been employed in the present study to investigate the leadership styles adopted by principals in relation to organizational role stress emotional intelligence and gender. Descriptive research deals with the relationships between the variables, testing the hypotheses and the development of generalizations, principles or theories that have universal validity (Best and Kahn, 1998). According to Best (1986) descriptive research involves description, recording, analysis and interpretation of conditions that exist. It involves some type of comparison or contrast and attempts to discover relationships between existing non-manipulated variables.

Smith and Glass (1987) stated that the fundamental purpose of descriptive survey research is to describe the characteristics and variables in population by directly examining variables. Descriptive research is a method of collecting and analyzing data, obtained from a large number of respondents representing a specific population, collected through highly structured and detailed questionnaires or interviews. (Sukhia et al, 1989)

Therefore, descriptive survey method helps to explain the phenomenon in term of relationships that exist, opinions that are held by the respondents, effects that are evident or trends that are developing. Organizational role stress and Emotional
intelligence are independent variables where as leadership style has been treated as
dependent variable for statistical analysis. Since this study deals with the relationship
between variables in a natural setting, it can be classified as non-experimental study.

3.1 DESIGN OF THE STUDY

The present study was conducted on principals of five districts of Punjab state. It was
observed that most of the government schools had officiating principals or principals
under transfer. To have a stable sample for research, private unaided senior secondary
schools constituted the universe for selection of sample, as principal were to be
mostly found in position in these schools. Secondly there would be diversity in
educational backgrounds and personality of principals along with a wide difference in
organizational role stress in which they function. A sample of 250 school principals
was drawn from the universe of 1150 senior secondary school principals from unaided
private schools. The total sample for the study was selected by multistage
randomization meaning thereby randomization was followed at the district, tehsil,
block, village and school level from the five districts out of existing twenty two
districts of Punjab. The sample was equally balanced between male and female
principals. Tools of leadership style, emotional intelligence and organizational role
stress were selected. Data was collected from the sample by administering the
standardized tools for leadership style, emotional intelligence and organizational role
stress to the principals of the selected school.

3.2 SAMPLE OF THE STUDY

Sample is a smaller representation of a larger whole. The whole group from which
sample is drawn is known as population. According to Gochran, W.G. (1950) “In
every branch of science, we lack the resources to study more than a fragment of the
phenomena that might advance our knowledge.”

Sampling is the process by which a relatively small number of individuals or
measures of individuals, objects or events is selected and analyzed in order to find out
something about the entire population from which it was elected. It helps to reduce
expenditure, save time and energy, permit measurement of great scope or produce
greater precision and accuracy. Sampling procedure provide generalizations on the
basis of a relatively small proportion of the population.
In the present study of the leadership style adopted by principals in relation to their organizational role stress, emotional intelligence and gender the investigator has adopted multistage random sampling technique and selected a sample of 250 senior secondary school principals of five Sampled districts of Punjab. These were Moga, Ludhiana, Jalandhar, Patiala, and Ferozepur. A sampling process involving several stages, in which units at each subsequent stage are sub sampled from previously selected larger units called multistage random sampling. Under the multistage random sampling first out of twenty two districts of Punjab, five aforementioned districts were randomly selected. From each district a list of private unaided senior secondary schools was procured and randomly schools were selected as shown in table 3.1. Thus out of 1150 private unaided senior secondary schools 250 principals were selected for the study through multistage random sampling.

Table 3.1 Sample for the study

<table>
<thead>
<tr>
<th>S.No</th>
<th>Districts</th>
<th>No of schools</th>
<th>Male principals</th>
<th>Female principals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ludhiana</td>
<td>80</td>
<td>38</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>Moga</td>
<td>30</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Jalandhar</td>
<td>60</td>
<td>23</td>
<td>37</td>
</tr>
<tr>
<td>4</td>
<td>Ferozepur</td>
<td>50</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Patiala</td>
<td>30</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>250</strong></td>
<td><strong>125</strong></td>
<td><strong>125</strong></td>
</tr>
</tbody>
</table>

List of Schools for conduct of Investigation

2. Joseph Convent School, Durari Dhandran Road Dugri, Ludhiana.
5. Shri Guru Harkrishan Public Sr. Sec. School, Doraha, Ludhiana.
13. A.V.M. Sr. Sec. School, Basant Vihar Noor Wala Road, Ludhiana.
15. Khalsa Sr. Sec. School, Mehman Singhwala, Ludhiana.
17. Spring Dew Public Sr. Sec. School, Nanaksar, Ludhiana.
18. Tagore Modern Sr. Sec. School, Raikot, Ludhiana.
22. Desh Bhagat Sr. Sec. School, Sohian, Maloud, Ludhiana.
23. Anand Isher Sr. Sec. Public School, Ahmedgarh Road, Chhapar, Ludhiana.
24. Baba Mukand Singh Sr. Sec. School, Ludhiana.
27. Guru Teg Bahadur Sr. Sec. School, Doraha, Ludhiana.
33. Anuvarti Public Sr. Sec. School, Jagroan, Ludhiana.
34. Anglo Sanskriti Sr. Sec. School, Khanna, Ludhiana.
35. Acharya Atma Ram Jain Sr. Sec. School, Khanna, Ludhiana.
36. Spring Dales Public Sr. Sec. School, Khanna, Ludhiana.
38. Guru Nanak Model Sr. Sec. School, Parbhat Nagar, Ludhiana.
41. R.S. Sr. Sec. School, Shastri Nagar, Ludhiana.
42. Sanatan Vidya Mandir Sr. Sec. School, Deep Nagar, Civil Lines, Ludhiana.
43. Dashmesh Sr. Sec. School, Dashmesh Nagar, Ludhiana.
44. New Sr. Sec. School, Civil Lines, Ludhiana.
45. Shri Guru Harkrishan Public Sr. Sec. School, Dugri Road, Model Town, Ludhiana.
47. N.M Jain Girls Sr. Sec. School, Ludhiana.
48. Brahm Rishi Bawra Shiksha Niketan, Madhopuri Gaushala Road, Ludhiana.
49. Everest Public Sr. Sec. School, Motinagar, Ludhiana.
50. Atam Public Sr. Sec. School, Atam Nagar Ludhiana.
51. Jain Public Sr. Sec. School, Banjaman Road, Ludhiana.
52. Holy Path Sr. Sec. School, New Madhopuri, Ludhiana.
53. Akal Sahai Convent Sr. Sec. School, New Janta Nagar, Ludhiana.
54. Guru Gobind Singh Sr. Sec. School, Indera Colony, Rahon Road, Ludhiana.
55. San Jain Sr. Sec. School, Circular Road, Ludhiana.
56. Manmohan Saini Public Sr. Sec School, Atam Nagar, Ludhiana.
57. Baba Isher Singh (Nanaksar) Public Sr. Sec. School, Bhai Randhir Singh Nagar, Ludhiana.
58. B.C.M Sr. Sec. School, Ludhiana.
60. Shakti Public Sr. Sec. School, Ludhiana.
63. Bhagat Puran Singh Memo. Sr. Sec. School, Rajewal (Rahno), Ludhiana.
64. Punjab Public Sr. Sec. School, Rupalon, Samrala, Ludhiana.
65. National Public Sr. Sec. School, Samrala, Ludhiana.
66. Sat Guru Pratap Singh Academy, Shri Bhaini Shaib, Ludhiana.
67. Indian Public Sr. Sec. School, Daba Lohara Road, Ludhiana.
68. Brahm Rishi Bawra Shiksha Nekatan Sr. Sec. School, Bayantpur, Ludhiana.
69. Sant Sunder Singh Public Sr. Sec. School, Buparai Kalan, Ludhiana.
70. Khalsa Girls Sr. Sec. School, Doraha, Ludhiana.
71. New Jain Public School, Dugri, Ludhiana.
74. Mata Hardai National Sr. Sec. School, Maghhiwara, Ludhiana.
75. S.D.P. Kanya Collegiate Sr. Sec. School, Daresi Road, Ludhiana.
76. Nightangale Public Sr. Sec. School, Chimani Road, Ludhiana.
77. Mai Bhago Collegiate School, Ramgarh, Ludhiana.
78. Baba Deep Singh Ji Girls Sr. Sec. School, Dupal Road Malodh, Ludhiana.
81. Adarsh Convent School Dharamkot, Moga.
82. Punjab Co-Education Sr. Sec. School, Bagha Purana, Moga.
83. Shahid Baba Khushhal Singh Sr. Sec. School, Charik, Moga.
84. Guru Nanak Public. Sr. Sec. School, Dharamkot, Moga.
85. Sita Ram Memorial Sr. Sec. School, Fatehgarh Panjtoor, Moga.
86. Shri Guru Gobind Singh Public. Sr. Sec School, Jindra, Moga.
87. Shri Hemkunt Sr. Sec. School, Kot-Ise-Khan, Moga.
88. Shri Guru Hargobind Public. Sr. Sec School, Lopon, Moga
89. Sant Mehan Singh Rajapeer Sr. Sec. School, Rajeana, Moga.
90. Jagat Sewak Khalsa Sr. Sec. School, Mehina, Moga.
91. Dashmesh Public. Sr. Sec. School, Bilaspur, Moga.
92. A.D Sr. Sec. School, Dharamkot, Moga.
93. Sant Vishakha Singh Memo Public Sr. Sec. School, Kishanpur Kalan, Moga.
94. Summer Field Sr. Sec. School, Moga.
95. Khalsa Girls Sr. Sec. School, Moga.
96. Kamla Nehru Sr. Sec. School, Nihal Singh Wala, Moga.
97. Sant Baba Bhag Singh Memo. Public School, Sukhanand, Moga.
98. Shamlal Veneet Sr. Sec. School, Bagha Purana, Moga.
99. Sant Baba Bhag Singh Memo Girls Sr. Sec. School, Sukhanand, Moga.
100. Baba Lachhaman Sidh Sr. Sec. School, Mallian Wala, Moga.
101. Rajindra Memo Public Sr. Sec. School, Kotkapura Road, Moga.
102. H.M. Convent School, Main Bazar, Moga.
103. Mother Teresa International School, G.T. Road, Moga.
104. Oxford International School, G.T. Road, Moga.
105. Baba Farid Public School, Kot-Ise-Khan, Moga.
106. Baba Rodu Shah Public School, Malhian Wala, Moga.
107. Guru Nanak Public Sr. Sec. School, Bilaspur, Moga.
108. Gain Jot Sr. Sec. School, Darapur, Moga.
110. Guru Nanak Public Sr. Sec. School, Dosanjh Talwandi, Moga.
111. Doaba Khalsa Public School, Mohalla Gobindgarh, Jalandhar.
112. Manav Mangal Public School, Friends Colony, Jalandhar.
113. A.S. Sr. Sec. School, Alawalpur, Jalandhar.
114. Indo German Sr. Sec. School, Rasila Nagar, Jalandhar.
115. S.N. S Doaba Khalsa Public Sr. Sec. School, Dheena, Jalandhar.
117. Indo German Vidya Kendra, Basti Nau, Jalandhar.
118. Saint George Convent School, Model Town, Jalandhar.
120. Saraswati Vidya Kender, Ashok Nagar, Jalandhar.
121. Suman Day Bording Sr. Sec. Public School, Punjab Avenue, Jalandhar.
122. S.P. Prime Public Sr. Sec. School, Deol Nagar, Jalandhar.
123. Janta Sr. Sec. School, Jandu Singh, Jalandhar.
124. Saint Pious Convent Sr. Sec. School, Lamba Pind, Jalandhar.
125. A.S. Sr. Sec. School, Turka Kalan, Jalandhar.
126. K.S.S.D Sr. Sec. School, Alawalpur, Jalandhar.
127. Apeejay Public School, Basti Sheikh Road, Jalandhar.
128. Guru Nanak Public Sr. Sec. School, Preet Nagar, Jalandhar.
130. New St. Soldier Public Sr. Sec. School, G.R.D Nagar, Jalandhar.
131. A.N. Gujral Memorial Sr. Sec. School, Nakodar Road, Jalandhar.
132. Rabindra Day Boarding Sr. Sec. School, Model Town, Jalandhar.
133. Phulwari Public. Sr. Sec. School, Lohian Khas, Jalandhar.
134. Dijkot Khalsa Sr. Sec. School, Alawalpur, Jalandhar.
135. Arya Kanya Sr. Sec. School, Basti Nau, Jalandhar.
137. L.R. Doaba Sr. Sec. School, Jalandhar.
139. Shining Stars Sr. Sec. School, Harbans Nagar, Jalandhar.
140. Phularwan Girls Sr. Sec. School, Preet Nagar, Jalandhar.
141. Doaba Khalsa Sr. Sec. School, Ladowal Road, Jalandhar.
142. Kanya Maha Vidhayalay Sr. Sec. School, Tanda Road, Jalandhar.
143. D.R. Jain National Sr. Sec. School, Jalandhar Cantt.
144. Montgomery Guru Nanak Khalsa Sr. Sec. School, Jalandhar Cantt.
145. N.D. Victor Sr. Sec. School, Jalandhar Cantt.
146. Guru Nanak Kanya Mahavidyala Sr. Sec. School, Jalandhar Cantt.
147. Devi Sahai Public Sr. Sec. School, Industrial Area, Jalandhar City.
148. Sialkot National Sr. Sec School, Gazi Mohalla, Jalandhar.
149. Sada Sukh Chopra Public Sr. Sec. School, Santokh Pur, Jalandhar.
150. D.S Public Sr. Sec. School, Jalandhar City.
151. Tagore Day Boarding Sr. Sec School, Model Town, Jalandhar City.
152. Smt Parwati Jain Co-Educational Sr. Sec. School, Vijay Nagar, Jalandhar City.
154. Khalsa Sr. Sec. School, Khaira Majja, Jalandhar.
155. A.S. Sr. Sec. School, Nakodar, Jalandhar.
156. United Christian Boys Sr. Sec. School, Suranussi, Jalandhar.
160. Saint Soldier Collegiate Sr. Sec. School, Basti Danish Mandan, Jalandhar.
161. Mata Sahib Kaur Khalsa Sr. Sec. School, Dhandowal Shahkot, Jalandhar.
162. Saint Mary Convent School, Gakhlan, Jalandhar.
163. Jyoti Public Sr. Sec. School, Aman Nagar, Jalandhar.
164. Shri Guru Arjun Dev Public Sr. Sec. School, Kartarpur, Jalandhar.
165. Gulotia Guru Hargobind Bate Khalsa Sr.Sec School, Jalandhar.
166. Shri Guru Ravi Dass Sr. Sec. School, Jalandhar.
169. A.P.S. Public Sr. Sec. School, Wadala Nakodar Road, Jalandhar City.
170. Shriman Sant Avtar Singh Yadgari Sr. Sec. School, Seechewal, Jalandhar.
171. D.C.M. Public Sr. Sec. School, Goluke, Ferozepur.
172. Navyug Sr. Sec. School, Abohar, Ferozepur.
175. Holy Heart Public School, Abohar, Ferozepur.
176. Shri Guru Teg Bahadar Public Sr. Sec. School, Arniwala Sheikh Subhan, Ferozepur.
177. Holy Cross Sr. Sec. School, Danewala Satokosi, Ferozepur.
179. Dayanand Chaman Lai Sr. Sec. School, Fazilka, Ferozepur.
180. K.R. Sr. Sec. School, Azaad Nagar, Ferozepur.
182. Babuta Sr. Sec. School, Jalalabad (West), Ferozepur.
183. K.G. Sr. Sec. School, Adarsh Nagar, Makhu, Ferozepur.
184. Shri Sadanand Shankar Adarsh School, Zira, Ferozepur.
185. G.D. Sr. Sec. School, Abohar, Ferozepur.
186. G.N.A.V. Sr. Sec. School, Abohar, Ferozepur.
188. Vikas Adarsh Sr. Sec. School, Abohar, Ferozepur.
189. Manav Mandir Sr. Sec. School, Bast Nizamdin, Ferozepur.
190. H.M. Sr. Sec. School, Ferozepur.
192. B.M. Jain Sr. Sec School, Ferozepur Cantt.
193. D.C.M. Jain Sr. Sec. School, Ferozepur Cantt.
195. Sikh Kanya Maha Vidyalaya Sr. Sec. School, Ferozepur City.
196. Tagore Memo Sr. Sec. School, Mallanwala Khaas, Ferozepur.
197. Shri Guru Gobind Sahib Public Sr. Sec. School, Mehar Singh Wala, Ferozepur.
198. Baba Isha Singh Nanaksar Public Sr. Sec. School, Muhar Mandir, Ferozepur.
199. Flower Valley Public School, Abohar, Ferozepur.
200. Shri B.L. Vikas Mandir Sr. Sec. School, New Abadi Abohar, Ferozepur.
201. Tender Heart Sr. Sec. School, Dharam Nagri Abohar, Ferozepur.
204. Dashmesh Sr. Sec. School, Ferozepur City.
205. B.S.M. Sr. Sec. School, Ferozepur City.
206. Manwata Public Sr. Sec. School, Ferozepur City.
207. Guru Teg Bahadur Sr. Sec School, Guru Harsahai, Ferozepur.
208. Shivalik Sr. Sec. School, Jalalabad, Ferozepur.
209. City Heart Sr. Sec. School, Ferozepur.
211. Green View Public School, Chanan Khera, Ferozepur.
212. Sardar Joginder Singh Dhaliwal Sr. Sec School, Jogindergarh, Ferozepur.
213. Shaheed Udham Singh Public Sr. Sec. School, Wasal Mohan Ke, Ferozepur.
214. Punjab Public School, Mulianwali, Ferozepur.
215. Indo British Public School, Sukhewala, Ferozepur.
216. Shri Sawan Mal Aggarwal Memorial Sr. Sec School, Ferozepur.
217. Rajdhani Public Sr. Sec. School, Jalalabad (West), Ferozepur.
218. Guru Gobind Singh Public Sr. Sec. School, Mandi Ladhu Ka, Ferozepur.
219. New Sachin Public School, Mandi Ladhu Ka, Ferozepur.
220. Shaheed Bhagat Singh Public School, Khushak Singh Wala, Ferozepur.
221. Maharaja Ranjit Singh Public Sr. Sec. School, Langroi, Patiala.
222. Shree Usha Mata Public Sr. Sec. School, Nabha, Patiala.
223. Aggarsain Girls Sr. Sec. School, Samana, Patiala.
225. Bhai Ram Kishan Gurmat Public Sr. Sec. School, Chaura, Patiala.
226. Prof Gurdas Singh Public School, Jansuyee, Rajpura, Patiala.
227. Tagore Public School, Moti Bagh, Patiala.
228. Green Well Academy, Ragho Majra, Patiala.
229. Blue Diamond Public School, Patiala.
230. Shivalik Public School, Patiala.
231. Batta Public School, Rajpura, Patiala.
232. B.P.S Public School, Patiala.
3.3 DATA COLLECTION

Data collection was undertaken from a sample of 250 principals of private unaided senior secondary schools. First the school principals were contacted telephonically and timings of meeting were fixed with the principals of private senior secondary schools. All the tools namely leadership style, Emotional intelligence scale and Organizational role stress scale were administered personally by the investigator to 250 school principals. As the tests were lengthy, therefore these were administered one after the other with some break in between.

First of all each principal was made familiar with the nature and purpose of each tests. All possible efforts were made to make the principals feel at ease and respond to the various tests with full concentration. The researcher answered their queries in order to motivate them to answer the questionnaire carefully. All efforts were made
to get maximum cooperation of the principals. They were assured about the confidentiality of their responses. It was with a lot of perseverance that the researcher was able to get time and attention of principals for data collection. Several visits, rejection and disappointment were experienced in the course of this tedious data collection.

3.4 TOOLS OF THE STUDY

Keeping the objectives of the study in mind following tools were used in the present study:

1. Leadership Style Scale by Sinha (J.B.P) 1983
2. Organizational Role Stress Scale developed by Pareek (1993).

DESCRIPTION OF THE TOOLS

3.4.1 LEADERSHIP STYLE SCALE

Sinha (J. B. P.) 1983 scale of leadership style was included to measure the culture-specific responses of leadership behavior. The scale has two formats: "I" format and (b) 'He' format. The item of 'I' format in first person which measured the self-rating of a leader. This format was used in executive sample only on the assumption that the executives of oil organization were the experienced ones. The item of 'I' format read as item No. 13 P, "I go by the joint decision of the group" and item No. 30 F, "Rule with an iron hand to get the work done". The item of 'He' format was in third person. This format was used to measure the leadership behavior of a fictitious or hypothetical leader. In both the samples, this format was included. Some of examples are item No. 4 N, "Helps his subordinates to grow up and assume greater responsibility". Item No. 35 F, "categories his subordinates as good as bad." Altogether there were 50 items which were distributed evenly among the five dimensions of leadership, viz., Authoritarian (F), Beureaucratic(B), Nurturant, Task-Oriented(T) and Participative(P). In each style there were 10 items. This scale may be applied on principals / managers /executives in leadership positions in organizations.
Administration

The Leadership Style Scale by Sinha (JBP) can be administered individually as well as in group. There is no time limit for the completion of the scale. However it takes approximately 25 to 30 minutes to complete it.

Scoring

The scale items were arranged in 5-point liker type rating scale.

1. Quit True - 5
2. True - 4
3. Doubtful - 3
4. False - 2
5. Quit False - 1

Reliability

In order to ascertain the reliability of the scale, both the internal consistency and temporal stability were determined. Using the responses from 216 (Top levels-53, Middle-101, and Supervisory grade-62) male and female executives participated the coefficient of internal consistency as corrected by Spearman –Brown formula was found to be .74.. The retest was done after four weeks on 50 subjects and the test – retest reliability coefficient was found to be .79.

Validity

The degree of authoritarian or democratic Nurturant, Task- Oriented and Participative leadership Styles expressed by each statement. The Experts were also requested to mention such statements as were, in their opinion either not well worded or difficult to understand. On the basis of the opinion expressed by them only 123 such items were subjected to item analysis which was according to them, definitely related to some specific dimensions or authoritarian, democratic, Nurturant, Task- Oriented and Participative leadership style. Out of them only 50 items which fulfilled the item-analysis criteria were finally retained in the scale. The results obtained show that the scale possesses construct validity.
3.4.2 ORGANIZATIONAL ROLE STRESS SCALE (ORS)

Development of ORS scale:

For measuring the organizational role stress of school principals the investigator was used ORS scale developed by Pareek (1993). ORS Scale is a 5-point scale, indicating how true a particular statement is for the role. Thus the scores for each role stress range from a minimum of 5 to a maximum of 25. Originally, the instrument had 40 items (5 for each of the 8 role stresses mentioned above). However, in the light of the findings of factor analysis, in the next section, two role stresses were split into four. Role ambiguity was split into Role Ambiguity (i.e. lack of clarity) and Role Expectation Conflict (i.e. Conflicting Expectations). Role inadequacy was split into Personal Inadequacy (i.e. inadequacy of internal or personal resources) and Resource Inadequacy (i.e. lack of external resources for effective performance of the role). The old instrument (Your Feelings about Your Role) is given in Appendix 1. The new scale (ORS Scale) is printed in a reusable booklet. Responses are to be given on an answer sheet. ORS Scale has 50 items. The score of each role stress may range from 0 to 20 and the total organizational role stress score may range from 0 to 200. The answer sheet is given separately to facilitate quick calculation of the role stress scores. The ratings of the respondents can be added row-wise to give the scores on the 10 role stress dimensions. The scale is being published in an international publication for wider use (Pareek).

Comparing the two forms (old and the new), it may be observed that 26 items have been retained without any change (item Nos. 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 14, 15, 16, 17, 18, 20, 22, 24, 26, 28, 31, 33, 34, 37, 38, 40), 12 items have been slightly modified (8, 9, 13, 19, 21, 25, 27, 29, 30, 32, 35, 36) and 2 items have been replaced by new items (23, 39) on now items were prepared.

The ORS scale contains five items for each Role Stress (a total of 50 statements); it uses a 5 point scale.

1. If you never feel this way.
2. If you occasionally feel this way.
3. If you sometimes feel this way.
4. If you frequently feel this way.
5. If you always feel this way.
The instruction for this scale is as follows

The various role stresses relevant to organizational life have already been discussed. Some managers were interviewed to find out what stresses they experienced in their roles. A group of managers were asked to write down the type of stresses experienced by them in their organizational roles. Based on these responses, the category of 8 role stresses were developed, and 6 to 7 items for each role stress were prepared. The items were tested with 20 managers, and the items were modified in the light of the responses and interviews. The final instrument consisted of 40 items (5 for each stress).

"People have different feelings about their roles. Statements describing some such feelings are given below. Please read each statement and indicate how often you have the feeling expressed in the statement in relation to your role in your organization by putting a circle (O) mark.

The total score of ORS ranges between 0 to 200, and on each Role Stress ranges from 0 to 20. A simple summation of the scores of the subject on each Role Stress would indicate the scores on that dimension. Pareek (1993) has identified the following ten stresses based on organization roles:

**Inter- Role Distance (IRD)**

IRD refers to the conflict between the organization role and other roles. When an individual occupies more than one role there are bound to be conflicts between the different roles that he occupies. (Item Nos. 1, 11, 21, 31, and 41).

**Role Stagnation (RS)**

RS takes place when an individual feels that there are few opportunities for learning and growth in the role. In organizations which are fast expanding, and which do not have any systematic strategy of manpower development, managers are likely to experience this stress. (Item Nos., 2,12,22,32 and 42)

**Role Expectation Conflict (REC)**

REC means conflicting demands made on the role by different persons in the organization. One may receive conflicting expectations from the boss, subordinates, peers, or clients. (Item Nos. 3, 13, 23, 33 and 43).
Role Erosion (RE)

RE is a feeling that some important functions a role occupant would like to perform, are being performed by some other person. This happens when organization are redefining their structure, wherein it may lead to elimination of some roles and creation of new ones. This may prompt managers to feel that the new role is less important than the previous role. (Item Nos. 4, 14, 24, 34 and 44).

Role Overload (RO)

Role overload is the result of large variations between the expected output and the actual output. When role overload is high, neither the delegation process nor assistance, is useful towards role performance (Item Nos. 5, 15, 25, 35 and 45).

Role Isolation (RI)

Role Isolation emanates due to lack of linkages between one’s role with other roles in the organization. In a role set, a role occupant feels that certain roles are psychologically closer to him due to frequency and ease of interaction. When linkages are strong, the role isolation will be low and in the absence of it role isolation is felt high. Therefore role isolation can be measured in terms of the existing and the desired linkages.

Personal Inadequacy (PIN)

When a role occupant feels that he is not prepared to undertake the role effectively. He may experience this stress. The role occupant may feel that has not had enough time to prepare for the assigned role. Persons who are assigned new roles without enough preparation or orientation are likely to experience this type of stress.

Self-Role Distance: (SRD)

This stress arises out of the conflict between the self-concept and the expectations of the role, as perceived by the role occupant. For example, an introvert who is fond of studying and writing may develop a self-role distance if he accepts the role of a statement in an organization. (Item Nos. 8, 18, 28, 38, and 48).

Role Ambiguity (RA)

When an individual is not clear about the various expectations that people have from his role, he experiences this types of conflict. It may be due to lack of information of feedback to the role occupant. Role ambiguity may be in relation to the activities,
responsibilities, priorities, norms or general expectations. Sometimes role ambiguity may emanate out of occupying roles which are newly created in an organization. (Item nos. 9, 19, 29, 39, and 49).

**Resources Inadequacy (RIN)**

This stress is experienced due to non-availability of resources needed for effective role performance. These may be information, people, material, finance or facilities (Item No, 10, 20, 30, 40 and 50)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>IRD</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>22</td>
<td>32</td>
<td>42</td>
<td>RS</td>
</tr>
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<td>17</td>
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<td>37</td>
<td>47</td>
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</tr>
<tr>
<td>8</td>
<td>18</td>
<td>28</td>
<td>38</td>
<td>48</td>
<td>SRD</td>
</tr>
<tr>
<td>9</td>
<td>19</td>
<td>29</td>
<td>39</td>
<td>49</td>
<td>RA</td>
</tr>
<tr>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>RIN</td>
</tr>
</tbody>
</table>

**Table-3.2**

Response Sheet for Organizational Role Stress Scale -

Reliability:

Retest reliability coefficients were calculated for a group of about 500 employees from 3 banks (Sen. 1982). Table 1 gives retest reliability (after 8 weeks) for all the 8 stresses, and the total role stress score. As may be seen all the coefficients, except one, are significant at .001 level: one coefficient is significant at .003 level. The scale has acceptable reliability.
Table 3.3: Retest Reliability of Role Stress Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-Role Distance</td>
<td>.45</td>
<td>.001</td>
</tr>
<tr>
<td>2. Inter-Role Distance</td>
<td>.58</td>
<td>.001</td>
</tr>
<tr>
<td>3. Role Stagnation</td>
<td>.63</td>
<td>.001</td>
</tr>
<tr>
<td>4. Role Ambiguity</td>
<td>.65</td>
<td>.001</td>
</tr>
<tr>
<td>5. Role Overload</td>
<td>.53</td>
<td>.001</td>
</tr>
<tr>
<td>6. Role Erosion</td>
<td>.37</td>
<td>.003</td>
</tr>
<tr>
<td>7. Role Inadequacy</td>
<td>.58</td>
<td>.001</td>
</tr>
<tr>
<td>8. Total Role Stress</td>
<td>.73</td>
<td>.001</td>
</tr>
</tbody>
</table>

Some evidence about validity is provided by a measure of self-consistency of an instrument. Each item was correlated with the total score on the instrument for about 500 respondents. All but two correlations were significant at .001 level; 1 at .002 and another at .008 levels. The results show high internal consistency of the scale. The distribution of the values of coefficients of correlation are given in Table 2. As will be seen from the table, only values of 3 items are below .36 (items No. 9, 15 and 25). In the whole scale only two items (9 and 25) were in the positive direction, and item 15 had a positive tone. In the final scale these items were modified.

Table 3.4: Frequencies of Item – Total Score Correlation Values for ORS Scale

<table>
<thead>
<tr>
<th>Values of Correlation</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than .15</td>
<td>2</td>
</tr>
<tr>
<td>.16 - .20</td>
<td>1</td>
</tr>
<tr>
<td>.36 - .40</td>
<td>2</td>
</tr>
<tr>
<td>.41 - .45</td>
<td>19</td>
</tr>
<tr>
<td>.46 - .50</td>
<td>3</td>
</tr>
<tr>
<td>.51 - .55</td>
<td>10</td>
</tr>
<tr>
<td>.56 - .60</td>
<td>3</td>
</tr>
</tbody>
</table>
Mean and SC values of the items were also analyzed. The lowest mean value was 1.42 and the highest 3.66. Incidentally the items having low correlation with the total have high mean values: Item 9 (2.4), Item 15 (3.6), and item 25 (2.9). The mean of the total scores was found to be 2.1 on a 5-point scale.

The scale booklets are reusable. The respondents are provided the booklets and the answer sheets. They instructed to read each item and give their responses in the answer sheet. The respondent indicates his response by writing 0, 1, 2, 3 or 4 against the serial number of each item as given the booklet. The items should be answered in the serial order.

After the answer sheets have been completed numbers in each row can be added, and the total can be written at the end in the space provided for this purpose. These will represent the total scores of the 10 role stresses.

**Uses of ORS Scale:**

ORS Scale can be used for several purposes. It can be used to investigate the nature and dynamics of role stress in various organizations. It can also be used to develop interventions for the use of individuals, group or organizations. There is a growing literature on the effects of role stress on personal and organizational effectiveness. Role stress has been found to be significantly related with external locus of control (Sen. 1982; Surti, 1982). All role stresses were found to have such a relationship in both the studies. Role Stress has been found to be significantly and negatively related with role efficacy. It, therefore, seems that role stresses can be reduced in an organization by increasing internality of people, involving them in organizational matters, and improving their role efficacy. Similarly, it can be said that by reducing role stress it may be possible to influence personal and some organizational dimensions.

**3.4 (3) EMOTIONAL INTELLIGENCE SCALE.**

The emotional intelligence scale by Anukool Hyde, Sanjyot Pethe, and Upinder Dhar (2001) was administered on senior secondary school principals to know their levels of emotional intelligence. The scale can be used for research and survey purposes. It can also be used for individual assessment. It is self-administering and does not require the services of highly trained tester. It is suitable for group as well as individual testing. The tool was administered individually. There are as many as 34 items in English in this scale and each item has five choices.
The 34 items of the scale are categorized into ten areas i.e.

- Self awareness (EIA)
- Empathy (EIB)
- Self motivation (EIC)
- Emotional stability (EId)
- Managing relations (EIe)
- Integrity (EIf)
- Self development (E Ig)
- Value orientation (EIh)
- Commitment (E Ii)
- Altruistic (EIj)

The authors of the scale provide following explanation for these categories

1) **Self awareness** - is being aware of one-self and is measured by items 6, 12, 18, 29. These items are “I can continue to do what I believe in even under severe criticism,” “I have my priorities clear,” “I believe in myself, and “I have built rapport and made and maintained personal friendships with work associates

2) **Empathy** - is feeling and understanding the other person and is measured by items 9, 10, 15, 20 and 25. These are “I pay attention to the worries and concerns of others” “I can listen to someone without the urge to say something,” “I try to see the other person’s point of view,” “I can stay focused under pressure, and “I am able to handle multiple demands.”

3) **Self motivation** is being motivated internally and is measured by 2, 4, 7, 8, 31 and 34. These items are “people tell me that I am an inspiration for them”, “I am able to make intelligent decisions using a healthy balance of emotions and reason,” “I am able to assess the situation and then behave,” “I can concentrate on the task at hand in spite of disturbances,” “I think feelings should be managed,” and I believe that happiness is an attitude.”

4) **Emotional stability** - is measured by items 14, 19, 26 and 28. These are “I do not mix unnecessary emotions with issues at hand,” “I am able to stay
composed in both good and bad situations,” “I am comfortable and open to novel ideas and new information, and “I am persistent in pursuing goals despite obstacles and setbacks.”

5) **Managing relations** is measured by 1, 5, 11 and 17. The statements that measure this factor are “I can encourage others to work even when things are not favorable,” “I do not depend on others encouragement to do my work well,” “I am perceived as friendly and outgoing,” and “I can see the brighter side of any situation.”

6) **Integrity** is measured by items 16, 27 and 32. “I can stand up for my beliefs,” “I pursue goals beyond what is required of me” and “I am aware of my weaknesses” are the statements that measure this factor.

7) **Self development** is measured by items 30 and 33 which are “I am able to identify and separate my emotions and I feel that I must develop myself even when my job does not demand it”

8) **Value orientation** is measured by items 21 and 22. The statements are “I am able to maintain the standards of honesty and integrity,” and “I am able to confront unethical actions in others”

9) **Commitment** is measured by items 23 and 24. “I am able to meet commitments and keep promises,” and “I am organized and careful in my work”

10) **Altruistic behavior** is measured by the items 3 and 13. The items are “I am able to encourage people to take initiative,” and “I can handle conflicts around me.”

**Instructions for Administration of the Emotional Intelligence Scale**

The manual of emotional intelligence scale provides following instructions:-

1. The instructions printed on the response sheet are sufficient to take care of the questions that are asked.

2. No time limit should be given for completing the scale. However most respondents should complete it in about 10 minutes.

3. Before administering the scale it is advisable to emphasize orally that responses should be checked as quickly as possible and sincere cooperation is sought for the same. The responses should be kept confidential.
4. It should also be emphasized that there is no right or wrong answer to the statements. The statements are designed to understand the differences in individual reactions to various situations. The scale is meant to know the difference between individuals and not meant to rank them as good or bad.

5. It should be duly emphasized that all statements have to be responded to and no statement should be left unanswered.

6. It is not desirable to tell the subjects the exact purpose for which the scale is being used.

7. Though the scale is self-administering, it has been found useful to read out the instructions printed on the response sheet to the subjects.

8. Manual scoring is done conveniently, hence no scoring key is provided.

9. Each item or statement should be scored 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree.

Reliability:

The reliability of the scale was determined by calculating reliability coefficient on a sample of 200 subjects. The split-half reliability coefficient was found to be 0.88.

Validity:

Besides face validity the scale has high content validity. The assessment of judges/experts about items of the scale indicates that they are directly related to the concept of emotional intelligence. In order to find out the validity from the coefficient of reliability (Garrett 1981), the reliability index was calculated which indicated high validity on account of being 0.93.

Norms of the Scale

Norms of the scale are available on a sample of 250 subjects. These norms can be regarded as reference points for interpreting the emotional intelligence scores. The users of this scale are advised to develop their own norms based on their own sample. Individuals with high score can be considered to have high level of emotional intelligence and are likely to be high performers.
Table 3.5: Norms for interpretation of raw scores of Emotional Intelligence Scale (EIS)

<table>
<thead>
<tr>
<th>Normal range</th>
<th>52-84</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>51 and below</td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>85 and above</td>
<td>High</td>
</tr>
</tbody>
</table>

**Scoring of the Test**

The responses were to be given on the booklet itself. There were five cells against every item of the inventory. Each cell indicates the frequency of occurrence of a particular behavior. The five cells belonged to five responses namely strongly agree, agree, neutral, disagree, strongly disagree. 5 marks were assigned to strongly agree, 4 for agree, 3 for neutral, 2 for disagree, 1 for strongly disagree.

**3.5 STATISTICAL TECHNIQUES EMPLOYED**

For the data analysis, the researcher employed various statistical techniques which are as follows:-

1. Descriptive Analysis such as Mean, median, standard deviation, skewness and Kurtosis were computed to study the nature of distribution for scores for all the variables of the study. Pie charts and bar diagrams were used to depict the results.

2. Bi-variate correlation was employed to study the relationship between the different leadership styles and dimensions of emotional intelligence, the different leadership styles and dimensions of organizational role stress of male and female school principals.

3. Differential Analysis was employed to determine if there were any statistically differences in the mean score of leadership styles, emotional intelligence and organizational role stress between the gender.

4. Multi-variate regression analysis was employed to study the predictor of five leadership styles from among the independent variables of dimensions of emotional intelligence and dimensions of organizational role stress in case of male and female school principals.