CHAPTER IV

RESEARCH METHODOLOGY
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CHAPTER-IV
RESEARCH METHODOLOGY

4.1 Introduction

A research cannot be evaluated unless its procedure is reported in sufficient detail. The investigator should adopt a systematic and appropriate procedure in conducting the research. A careful consideration is being given in the selection of tools, collection of data and analyses of data. The accuracy, reliability and validity of the research findings depend on the correct and careful choice of the tools. The details regarding the variables, hypotheses choice of the tools, selection of the sample, collection of data and analyses are outlined in this chapter.

This chapter signifies the methodological framework of the study consists of the following aspects:

(i) Research Design
(ii) Hypotheses
(iii) Variables of the study
(iv) Tools used
(v) Sample of the study
(vi) Data collection
Each of these aspects have been briefly described hereunder:

4.2 Research Design

The present study is a descriptive survey research method. The research design specifies the questions to be investigated, the process of sample selection, methods of procedure to be followed, measurements to be obtained and comparison and other analyses to be made. The research design of the study is presented in the table-4.1.

Table-4.1: Research Design

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Variable studied</th>
<th>Tools used</th>
<th>Sample</th>
<th>Statistics used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Job Satisfaction</td>
<td>Job Satisfaction Scale</td>
<td></td>
<td>Descriptive, Differential, Correlation Regression, Analysis</td>
</tr>
<tr>
<td>2</td>
<td>Personal Effectiveness</td>
<td>Personal Effectiveness Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Teacher Attitude</td>
<td>Teacher Attitude Inventory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Role Efficacy</td>
<td>Role Efficacy Scale</td>
<td>510 Teachers</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Teacher Involvement</td>
<td>Teacher Involvement Inventory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Organizational Culture</td>
<td>Organizational Culture Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Organizational Climate</td>
<td>Organizational Climate Inventory</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3 Variables of the Study

i. Job Satisfaction
ii. Personal Effectiveness
iii. Teachers’ Attitude
iv. Role Efficacy
v. Teachers’ Involvement
vi. Organizational Culture
vii. Organizational Climate

4.4 Hypotheses of the Study

Hypothesis: There is no significant difference between teachers of different age groups (25-34 years, 35-44 years, 44+ years) with respect to their job satisfaction and its dimensions.

1. Intrinsic aspect of job,
2. Salary, promotional avenues and service conditions
3. Physical facilities
4. Institutional plans and policies
5. Satisfaction with authorities
6. Satisfaction with social status
7. Rapport with students
8. Relationship with co-workers
Hypothesis: There is no significant difference between teachers of different age groups (25-34 years, 35-44 years, 44+ years) with respect to personal effectiveness and its dimensions.

1. Self-disclosure
2. Openness to feedback
3. Perceptiveness

Hypothesis: There is no significant difference between teachers of different age groups (25-34 years, 35-44 years, 44+ years) with respect to teachers’ attitude and its dimensions.

1. Teaching profession
2. Classroom teaching
3. Child centered practices
4. Educational process
5. Pupils
6. Teachers

Hypothesis: There is no significant difference between teachers of different age groups (25-34 years, 35-44 years, 44+ years) with respect to role efficacy and its dimensions.

1. Centrality
2. Integration
3. Pro activity
4. Creativity
5. Inter role linkage
6. Helping relationships
7. Super ordination
8. Influence
9. Growth
10. Confrontation

**Hypothesis:** There is no significant difference between teachers of different age groups (25-34 years, 35-44 years, 44+ years) with respect to teachers' involvement and its dimensions.

1. Planning the social work
2. Decision-making
3. Extra curricular activities
4. Administration

**Hypothesis:** There is no significant difference between teachers of different age groups (25-34 years, 35-44 years, 44+ years) with respect to organizational culture and its dimensions.

1. Openness
2. Confrontation
3. Trust
4. Authenticity
5. Pro action
6. Autonomy
7. Collaboration
8. Experimentation

**Hypothesis:** There is no significant difference between teachers of different age groups (25–34 years, 35–44 years, 44+ years) with respect to organizational climate and its dimensions.

1. Performance standards
2. Communication flow
3. Reward system
4. Responsibility
5. Conflict resolution
6. Organizational structure
7. Motivational level
8. Decision making process
9. Support system
10. Warmth
11. Identify problems

**Hypothesis:** There is no significant difference between male and female teachers with respect to job satisfaction and its dimensions.

1. Intrinsic aspect of job,
2. Salary, promotional avenues and service conditions
3. Physical facilities
4. Institutional plans and policies
5. Satisfaction with authorities
6. Satisfaction with social status
7. Rapport with students
8. Relationship with co-workers

**Hypothesis:** There is no significant difference between male and female teachers with respect to personal effectiveness and its dimensions
1. Self-disclosure
2. Openness to feedback
3. Perceptiveness

**Hypothesis:** There is no significant difference between male and female teachers with respect to teachers’ attitude and its dimensions.
1. Teaching profession
2. Classroom teaching
3. Child centered practices
4. Educational process
5. Pupils
6. Teachers

**Hypothesis:** There is no significant difference between male and female teachers with respect to role efficacy and its dimensions.
1. Centrality
2. Integration
3. Pro activity
4. Creativity
5. Inter role linkage
6. Helping relationships
7. Super ordination
8. Influence
9. Growth
10. Confrontation

**Hypothesis:** There is no significant difference between male and female teachers with respect to teachers' involvement and its dimensions.

5. Planning the social work
6. Decision-making
7. Extra curricular activities
8. Administration

**Hypothesis:** There is no significant difference between male and female teachers with respect to perception of organizational culture and its dimensions.

1. Openness
2. Confrontation
3. Trust
4. Authenticity
5. Pro action
6. Autonomy
7. Collaboration
8. Experimentation

**Hypothesis:** There is no significant difference between male and female teachers with respect to organizational climate and its dimensions

1. Performance standards
2. Communication flow
3. Reward system
4. Responsibility
5. Conflict resolution
6. Organizational structure
7. Motivational level
8. Decision making process
9. Support system
10. Warmth
11. Identify problems

**Hypothesis:** There is no significant difference between teachers with different teaching experience (1-15, 15-25, 25+ years) with respect to job satisfaction and its dimensions.

1. Intrinsic aspect of job
2. Salary, promotional avenues and service conditions
3. Physical facilities
4. Institutional plans and policies
5. Satisfaction with authorities
6. Satisfaction with social status
7. Rapport with students
8. Relationship with co-workers

**Hypothesis:** There is no significant difference between teachers with different teaching experience (1-15, 15-25, 25+ years) with respect to personal effectiveness and its dimensions.

1. Self-disclosure
2. Openness to feedback
3. Perceptiveness

**Hypothesis:** There is no significant difference between teachers with different teaching experience (1-15, 15-25, 25+) with respect to teachers' attitude and its dimensions

1. Teaching profession
2. Classroom teaching
3. Child centered practices
4. Educational process
5. Pupils
6. Teachers

**Hypothesis:** There is no significant difference between teachers of different teaching experience of teachers (1-15, 15-25, 25+ years) with respect to role efficacy and its dimensions.
1. Centrality
2. Integration
3. Pro activity
4. Creativity
5. Inter role linkage
6. Helping relationships
7. Super ordination
8. Influence
9. Growth
10. Confrontation

**Hypothesis:** There is no significant difference between teachers with different teaching experience of teachers (1-15, 15-25, 25+years) with respect to teachers' involvement and its dimensions

1. Planning the social work
2. Decision-making
3. Extra curricular activities
4. Administration

**Hypothesis:** There is no significant difference between teachers with different teaching experience (1-15, 15-25, 25+years) with respect to organizational culture and its dimensions

1. Openness
2. Confrontation
3. Trust
4. Authenticity
5. Pro action
6. Autonomy
7. Collaboration
8. Experimentation

Hypothesis: There is no significant difference between teachers with different teaching experience (1-15, 15-25, 25+years) with respect to organizational climate and its dimensions.

1. Performance standards
2. Communication flow
3. Reward system
4. Responsibility
5. Conflict resolution
6. Organizational structure
7. Motivational level
8. Decision making process
9. Support system
10. Warmth
11. Identify problems
**Hypothesis:** There is no significant difference between teachers with different educational qualification of teachers (postgraduate and under graduate) with respect to their job satisfaction and its dimensions.

1. Intrinsic aspect of job
2. Salary, promotional avenues and service conditions
3. Physical facilities
4. Institutional plans and policies
5. Satisfaction with authorities
6. Satisfaction with social status
7. Rapport with students
8. Relationship with co-workers

**Hypothesis:** There is no significant difference between teachers with different educational qualification (postgraduate and under graduate) with respect to personal effectiveness and its dimensions.

1. Self-disclosure
2. Openness to feedback
3. Perceptiveness

**Hypothesis:** There is no significant difference between teachers with different educational qualification (postgraduate and under graduate) with respect to teachers' attitude and its dimensions

1. Teaching profession
2. Classroom teaching
3. Child centered practices
4. Educational process
5. Pupils
6. Teachers

**Hypothesis:** There is no significant difference between teachers with different educational qualification (postgraduate and undergraduate) with respect to role efficacy and its dimensions

1. Centrality
2. Integration
3. Pro activity
4. Creativity
5. Inter role linkage
6. Helping relationships
7. Super ordination
8. Influence
9. Growth
10. Confrontation

**Hypothesis:** There is no significant difference teachers with different educational qualification (postgraduate and undergraduate) with respect to teachers’ involvement and its dimensions.

1. Planning the social work
2. Decision-making
3. Extra curricular activities

4. Administration

**Hypothesis:** There is no significant difference between teachers with different educational qualification (postgraduate and undergraduate) with respect to organizational culture and its dimensions.

1. Openness
2. Confrontation
3. Trust
4. Authenticity
5. Pro action
6. Autonomy
7. Collaboration
8. Experimentation

**Hypothesis:** There is no significant difference between teachers with different educational qualification (postgraduate and undergraduate) with respect to organizational climate and its dimensions.

1. Performance standards
2. Communication flow
3. Reward system
4. Responsibility
5. Conflict resolution
6. Organizational structure
Hypothesis: There is no significant difference between arts and science teachers with respect to job satisfaction and its dimensions.

1. Intrinsic aspect of job
2. Salary, promotional avenues and service conditions
3. Physical facilities
4. Institutional plans and policies
5. Satisfaction with authorities
6. Satisfaction with social status
7. Rapport with students
8. Relationship with co-workers

Hypothesis: There is no significant difference between arts and science teachers with respect to personal effectiveness and its dimensions.

1. Self-disclosure
2. Openness to feedback
3. Perceptiveness

Hypothesis: There is no significant difference between arts and science teachers with respect to teachers' attitude and its dimensions.
1. Teaching profession
2. Classroom teaching
3. Child centered practices
4. Educational process
5. Pupils
6. Teachers

**Hypothesis:** There is no significant difference between arts and science teachers with respect to role efficacy and its dimensions

1. Centrality
2. Integration
3. Pro activity
4. Creativity
5. Inter role linkage
6. Helping relationships
7. Super ordination
8. Influence
9. Growth
10. Confrontation

**Hypothesis:** There is no significant difference between arts and science teachers with respect to teachers' involvement and its dimensions

1. Planning the social work
2. Decision-making
3. Extra curricular activities

4. Administration

**Hypothesis:** There is no significant difference between arts and science teachers with respect to organizational culture and its dimensions

1. Openness
2. Confrontation
3. Trust
4. Authenticity
5. Pro action
6. Autonomy
7. Collaboration
8. Experimentation

**Hypothesis:** There is no significant difference between arts and science teachers with respect to perception of organizational climate and its dimensions.

1. Performance standards
2. Communication flow
3. Reward system
4. Responsibility
5. Conflict resolution
6. Organizational structure
7. Motivational level
8. Decision making process
9. Support system
10. Warmth
11. Identify problems

**Hypothesis:** There is no significant difference between teachers working in different types of management (government, aided and unaided) with respect to job satisfaction and its dimensions.

1. Intrinsic aspect of job
2. Salary, promotional avenues, and service conditions
3. Physical facilities
4. Institutional plans and policies
5. Satisfaction with authorities
6. Satisfaction with social status
7. Rapport with students
8. Relationship with co-workers

**Hypothesis:** There is no significant difference between teachers of different types of management (government, aided and unaided) with respect to personal effectiveness and its dimensions

1. Self-disclosure
2. Openness to feedback
3. Perceptiveness

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Hypothesis: There is no significant difference between teachers of different types of management (government, aided and unaided) with respect to personal effectiveness and its dimensions.

1. Teaching profession
2. Classroom teaching
3. Child centered practices
4. Educational process
5. Pupils
6. Teachers

Hypothesis: There is no significant difference between teachers of different types of management (government, aided and unaided) with respect to role efficacy and its dimensions.

1. Centrality
2. Integration
3. Pro activity
4. Creativity
5. Inter role linkage
6. Helping relationships
7. Super ordination
8. Influence
9. Growth
10. Confrontation
Hypothesis: There is no significant difference between teachers of different types of management (government, aided and unaided) with respect to teachers' involvement and its dimensions.

1. Planning the social work
2. Decision-making
3. Extra curricular activities
4. Administration

Hypothesis: There is no significant difference between teachers of different types of management (government, aided and unaided) with respect to organizational culture and its dimensions

1. Openness
2. Confrontation
3. Trust
4. Authenticity
5. Pro action
6. Autonomy
7. Collaboration
8. Experimentation

Hypothesis: There is no significant difference between teachers of different types of management (government, aided and unaided) with respect to perception of organizational climate and its dimensions.

1. Performance standards
Hypothesis: There is no significant relationship between job satisfaction and its dimensions with personal effectiveness and its dimensions of teachers.

Hypothesis: There is no significant relationship between job satisfaction and its dimensions with teachers' attitude and its dimensions of teachers.

Hypothesis: There is no significant relationship between job satisfaction and its dimensions with role efficacy and its dimensions of teachers.

Hypothesis: There is no significant relationship between job satisfaction and its dimensions with teachers' involvement and its dimensions of teachers.

Hypothesis: There is no significant relationship between job satisfaction and its dimensions with perception of organizational culture and its dimensions of teachers.
Hypothesis: There is no significant relationship between job satisfaction and its dimensions with perception of organizational climate and its dimensions of teachers.

Hypothesis: Age, sex, teaching experience, educational qualification, teaching subjects, types of management would not be significant predictors of job satisfaction of teachers.

Hypothesis: Personal effectiveness, teachers’ attitude, role efficacy, teachers’ involvement, organizational culture and organizational climate would not be significant predictors of job satisfaction of teachers.

Hypothesis: Personal effectiveness, teachers’ attitude, role efficacy, teachers’ involvement, organizational culture and organizational climate would not be significant predictors of first dimension of job satisfaction of teachers - intrinsic aspect of job.

Hypothesis: Personal effectiveness, teachers’ attitude, role efficacy, teachers’ involvement, organizational culture and organizational climate would not be significant predictors of second dimension of job satisfaction of teachers - salary, promotional avenues and service conditions.

Hypothesis: Personal effectiveness, teachers’ attitude, role efficacy, teachers’ involvement, organizational culture and organizational climate would not be significant predictors of third dimension of job satisfaction - physical facilities.
significant predictors of fourth dimension of job satisfaction of teachers - institutional plans and policies.

**Hypothesis:** Personal effectiveness, teachers' attitude, role efficacy, teachers' involvement, organizational culture and organizational climate would not be significant predictors of fifth dimension of job satisfaction of teachers - satisfaction with authorities

**Hypothesis:** Personal effectiveness, teachers' attitude, role efficacy, teachers' involvement, organizational culture and organizational climate would not be significant predictors of sixth dimension of job satisfaction - satisfaction with social status.

**Hypothesis:** Personal effectiveness, teachers' attitude, role efficacy, teachers' involvement, organizational culture and organizational climate would not be significant predictors of seventh dimension of job satisfaction - rapport with students

**Hypothesis:** Personal effectiveness, teachers' attitude, role efficacy, teachers' involvement, organizational culture and organizational climate would not be significant predictors of eighth dimension of job satisfaction - relationship with co-workers

## 4.5 Tools Used

The following tools were used to measure the variables of the study.

3. Teacher Attitude Inventory by – S. P. Ahluwalia (1978)


5. Teacher Involvement Scale – by Selvaraju (1992)

6. Organizational Culture Scale (OCTAPACE Profile) – by Udai Pareek (2002)


4.5.1 Job Satisfaction Scale

Job satisfaction scale was constructed and standardized by Meera Dixit (1993). It consists of fifty two items to be responded on a five point scale. Test-retest reliability of the scale was .86, reliability by split half method was 0.92. Validity of the scale was fairly adequate as other researchers have already used this scale in India and obtained positive and significant relationship with the variables like sex, teaching experience.

Scoring

This job satisfaction scale consisted 52 items. The maximum possible score on this scale is 52 X 5 = 260 and minimum score is 52 X 1 = 52. One specimen item is given below which explains the way of assessment.
Table-4.2: Table Showing Assessment of Score of the Statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Decided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>You derive pleasure in teaching</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

As shown in the table above, scoring is on a five point scale from 1 to 5. For the response of “Strongly Agree” scoring is 5 and “agree” it is 4, for “undecided” 3 marks are allotted and for “disagree” scoring is 2 and for “strongly disagree” it is 1. Total score of the individual was considered to analysis.

Table-4.3: Dimensionwise Distribution of Items of Job Satisfaction Scale

<table>
<thead>
<tr>
<th>Job factors</th>
<th>Items No(s)</th>
<th>Total Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Intrinsic aspect of the job</td>
<td>1, 11, 25, 30, 35, 46 and 52.</td>
<td>7</td>
</tr>
<tr>
<td>b) Salary, Promotional avenues, and service condition</td>
<td>3, 12, 19, 20, 31, 34, 45 and 50.</td>
<td>8</td>
</tr>
<tr>
<td>c) Physical facilities</td>
<td>2, 10, 24, 29, 36, 43, 48, 49 and 51.</td>
<td>9</td>
</tr>
<tr>
<td>d) Institutional plans and policies</td>
<td>4, 13, 26, 38, 40 and 47.</td>
<td>6</td>
</tr>
<tr>
<td>e) Satisfaction with authorities</td>
<td>5, 14, 21, 27, 32 and 41.</td>
<td>6</td>
</tr>
<tr>
<td>f) Satisfaction with social status and family welfare</td>
<td>8, 9, 17, 18 and 23.</td>
<td>5</td>
</tr>
<tr>
<td>g) Rapport with students</td>
<td>7, 15, 22, 28, 33 and 39.</td>
<td>6</td>
</tr>
<tr>
<td>h) Relationship with co-workers</td>
<td>6, 16, 37, 42 and 44.</td>
<td>5</td>
</tr>
</tbody>
</table>
4.5.2 Personal Effectiveness Scale

This tool has been developed by Udai Pareek (2002)

The Personal Effectiveness Scale gives personal effectiveness types in terms of self-disclosure, feedback and perceptiveness. It contains 15 statements, five for each of the three aspects. A respondent checks each statement, indicating the extent to which it is true of him or her (on a 5 point scale). This instrument is self-administered.

Building on Johari Window (known/not known to self, and known/not known to others), a third dimension of effectiveness has also been added.

Scoring

The ratings are transferred to the score sheet the total scores on openness to feedback and perceptiveness are given, each ranging from 0-20. The score II can be used as the cut-off point for classifying the scores, on each of the three aspects, as low and high. The respondent marks the appropriate category (one out of eight) given on part of the score sheet, which is his effectiveness type.
Table 4.4: Dimensionwise Distribution of Items of Personal Effectiveness Scale

<table>
<thead>
<tr>
<th>Tool</th>
<th>Dimensions</th>
<th>Item Numbers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Effectiveness Scale</td>
<td>Self disclosure</td>
<td>1, 4*, 7, 10*, 13</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Openness to feedback</td>
<td>2, 5*, 8, 11*, 14</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Perceptiveness</td>
<td>3*, 6*, 9, 12*, 15*</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

The asterisk mark indicates the negative items

Reliability

The reliability of the scale was found by split half method and coefficient of reliability of the personal effectiveness scale was found to be 65.67

Validity

Validity of the scale has been established empirically by taking scores of teachers regarding personal effectiveness scale. Thus the coefficient of validity was found to be 0.9297. The indices of reliability and validity show that the scale is reasonably reliable and valid tool to measure personal effectiveness.

4.5.3 Teacher Attitude Inventory

This tool has been developed by S. P. Ahluwalia (1978)

The inventory is a 90 item Likert instrument consisting of six sub-scales. These sub-scales were developed by the Likert summated ratings procedure.
Each scale has 15 statements that pertain to a particular aspect of prospective and practising teachers' professional attitudes. The six aspects dealt within the inventory are attitude towards:

The inventory has been constructed and standardized by S. P. Ahluwalia. The form of the items is akin to the usual Likert format. The items were selected from a longer list by a scientific statistical procedure. The items in the final sub-scales were selected by item analysis.

Scoring

Each item alternative is assigned a weight ranging from 4 (Strongly Agree) to 0 (Strongly Disagree) for favourable items. In the case of unfavourable items range of weights is reversed i.e., from 0 (Strongly Agree) to 4 (Strongly Disagree). The attitude scores of a subject is the sum total of item scores of all the six sub-scales.

Table-4.5: Dimensionwise Distribution of Items of Teachers' Attitude Inventory

<table>
<thead>
<tr>
<th>Tool</th>
<th>Dimensions</th>
<th>Item Numbers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers' Attitude</td>
<td>Teaching Profession</td>
<td>1, 8, 13*, 20, 33, 34*, 41, 46*, 48*, 60*, 66, 72*, 79*, 85, 86*</td>
<td>15</td>
</tr>
<tr>
<td>Inventory</td>
<td>Class-room Teaching</td>
<td>2, 9, 14, 17, 35*, 38*, 42, 47, 53, 59*, 61*, 65*, 67, 73*, 84*</td>
<td>15</td>
</tr>
</tbody>
</table>

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The asterisk mark indicates the negative items.

### Reliability

Reliability was estimated by the split-half (odd-even) method and found to be 79.65 for a sample of 510 prospective teachers.

### Validity

Determination of validity of an attitude inventory is a hard task. The inventory appears to have content validity, and the method selecting items supports this supposition. Validity of the scale has been established empirically by taking scores of teachers regarding teachers attitude inventory. Thus the coefficient of validity was found to be 0.8925. The indices of reliability and validity show that the scale is reasonably reliable and valid tool to measure personal effectiveness.
4.5.4 Role Efficacy Scale

To collect the relevant data the Role Efficacy Scale (RES) of Udai Pareek (2002) was adopted. The scale consists of 20 items under 10 dimensions. Role effectiveness can be assessed through this instrument. The 10 aspects can be probed to work out ways to increase effectiveness by increasing the aspect on which one’s score is low.

The role efficacy scale was a structured instrument consisting of 20 traits of statements. A respondent marks one statement in each triad that describes his role most accurately. (There are two statements for each dimension of role efficacy and the scoring pattern followed is +2, +1 or −1.)

The regular scale is completed by assistant teachers for their own role, especially the role being supervised by the Heads of secondary schools.

Dimensions of Role Efficacy Scale

The 10 dimensions of Role Efficacy Scale are as stated below:

a. Centrality
b. Integration
c. Pro-activity
d. Creativity
e. Inter-role linkage
f. Helping relationship  
g. Super ordination  
h. Influence  
i. Growth  
j. Confrontation

There are two statements for each dimension of role efficacy and the scoring pattern followed was +2, +1 or -1. The three alternatives for each statement were pre-weighted.

### Table-4.6 Dimensionwise Distribution of Items of Role Efficacy Scale

<table>
<thead>
<tr>
<th>Tool</th>
<th>Dimensions</th>
<th>Item Numbers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Efficacy Scale</td>
<td>Centrality</td>
<td>1,11</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Integration</td>
<td>2,12</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Pro-activity</td>
<td>3,13</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>4,14</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Inter-role linkage</td>
<td>5,15</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Helping relationship</td>
<td>6,16</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Superordination</td>
<td>7,17</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Influence</td>
<td>8,18</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Growth</td>
<td>9,19</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Confrontation</td>
<td>10,20</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td></td>
</tr>
</tbody>
</table>

The asterisk mark indicates the negative items
Scoring

The following key is used for scoring responses.

Table-4.7: Scoring Key for Role Efficacy Scale

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>Item</th>
<th>a</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrality</td>
<td>1</td>
<td>+2</td>
<td>+1</td>
<td>-1</td>
<td>11</td>
<td>+2</td>
<td>+1</td>
<td>-1</td>
</tr>
<tr>
<td>Integration</td>
<td>2</td>
<td>+1</td>
<td>-1</td>
<td>+2</td>
<td>12</td>
<td>-1</td>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>Proactivity</td>
<td>3</td>
<td>-1</td>
<td>+1</td>
<td>+2</td>
<td>13</td>
<td>-1</td>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>Creativity</td>
<td>4</td>
<td>+1</td>
<td>+2</td>
<td>-1</td>
<td>14</td>
<td>+2</td>
<td>+1</td>
<td>-1</td>
</tr>
<tr>
<td>Inter-role linkage</td>
<td>5</td>
<td>-1</td>
<td>+2</td>
<td>+1</td>
<td>15</td>
<td>+2</td>
<td>+1</td>
<td>-1</td>
</tr>
<tr>
<td>Helping relationship</td>
<td>6</td>
<td>+1</td>
<td>+2</td>
<td>-1</td>
<td>16</td>
<td>-1</td>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>Super ordination</td>
<td>7</td>
<td>-1</td>
<td>+2</td>
<td>+1</td>
<td>17</td>
<td>+1</td>
<td>+2</td>
<td>-1</td>
</tr>
<tr>
<td>Influence</td>
<td>8</td>
<td>+1</td>
<td>-1</td>
<td>+2</td>
<td>18</td>
<td>+2</td>
<td>+1</td>
<td>-1</td>
</tr>
<tr>
<td>Growth</td>
<td>9</td>
<td>+1</td>
<td>-1</td>
<td>+2</td>
<td>19</td>
<td>+2</td>
<td>+1</td>
<td>-1</td>
</tr>
<tr>
<td>Confrontation</td>
<td>10</td>
<td>-1</td>
<td>+2</td>
<td>+1</td>
<td>20</td>
<td>+1</td>
<td>-1</td>
<td>+2</td>
</tr>
</tbody>
</table>

Reliability and Validity

Sen (1982) reported a retest reliability of 0.68 significant at 0.001 level. This shows the high stability of the scale.

The reliability of the Role Efficacy Scale was computed using split-half method of reliability. The overall reliability of the scale was 55.7221 and the overall validity 0.7465.

Thus this tool is found to be reliable and valid.
4.5.5 Teacher Involvement Scale

A four point Likert type rating scale was developed by Selvaraju (1993). Sixteen statements were listed out to measure four dimensions of teachers’ involvement in school activities.

Scoring

The scoring scheme of the tool is of four anchoring points (3, 2, 1, and 0). Reverse scoring was adopted for negative items.

Table-4.8 Dimensionwise Distribution of Items of Teachers’ Involvement Inventory

<table>
<thead>
<tr>
<th>Tool</th>
<th>Dimensions</th>
<th>Item Numbers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers’ Involvement Inventory</td>
<td>Planning the school work</td>
<td>1, 3, 9*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Decision making</td>
<td>2, 5, 6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Extra curricular activities</td>
<td>12, 8, 4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Administration</td>
<td>7*, 10, 11</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

The asterisk mark indicates the negative items

Reliability and Validity

The reliability established by the author worked out to be 0.76. In the present investigation the reliability of the tool was established by test-retest method and the correlation between two tests worked out to be 60.05. The validity was measured by the index of reliability and it was .77.
4.5.6 Organizational Culture Scale: (OCTAPACE Profile)

The tool has been developed by Udai Pareek (2002).

The OCTAPACE profile is a 40 item instrument that gives the profile of organization's ethos in eight values. These values are openness, confrontation, trust, authenticity, pro-action, autonomy, collaboration and experimentation. The instrument contains two parts. In part-I, values are stated in items 1 to 24 (three statements of each of the eight values), and the respondent is required to check (on a 4 point scale) how much each item is valued in his organization. Part 2 contains sixteen statements on beliefs, two each for eight values, and the respondent checks (on a 4 point scale) how widely each of them is shared in the organization.

In addition to checking the items on the extent of their importance or sharing in the organization, the respondent can also check how much they should be values, or how much the beliefs are useful. Thus both present as well as desired or ideal profiles can be obtained.

Scoring

To make scoring easier, an answer sheet is provided. From the key the items marked with an asterisk are first reversed so that 4 becomes 1, 3 becomes 2, 2 becomes 3 and 1 becomes 4. This makes all items undirectional. The rows are then added. The eight rows represent the eight aspects (Octopace)
in the same order. The scores on each aspect range from 5 to 20. In a group participants can themselves score their completed answer sheet.

Table-4.9: Dimensionwise Distribution of Items of Organizational Culture Scale

<table>
<thead>
<tr>
<th>Tool</th>
<th>Dimensions</th>
<th>Item Numbers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Culture Scale</td>
<td>Openness</td>
<td>1,9,17,25*,33,</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Confrontation</td>
<td>2,10,18,26*,34</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td>3,11,19,27,35*</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Authenticity</td>
<td>4,12*,20,28*,36</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Pro-action</td>
<td>5,13,21,29,37</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Autonomy</td>
<td>6,14*,22*,30*,38</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
<td>7,15,23*,31*,39</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Experimentation</td>
<td>8,16,24,32,40*</td>
<td>5</td>
</tr>
</tbody>
</table>

The asterisk mark indicates the negative items.

Reliability

The reliability of the scale was found by split half method and coefficient of reliability of the organizational culture was found to be 86.43

Validity

Validity of the scale has been established empirically by taking scores of students regarding organizational culture. Thus the coefficient of validity was found to be 0.9297. The indices of reliability and validity show that the scale is
a reasonably reliable and valid tool to measure organizational culture. Thus this tool is found to be reliable and valid.

4.5.7 Organizational Climate Inventory

The Organizational Climate Inventory developed by S. N. Chattopadhya and K. G. Agarwal (1998) is meant to understand the concept of organizational climate by examining various available models of organizational climate.

Scoring

The scale has both positive and negative statements. The positive statements carry a weightage of 5, 4, 3, 2, and 1 the negative ones a weightage of 1, 2, 3, 4 and 5.

Table-4.10: Dimensionwise Distribution of Items of Organizational Climate Inventory

<table>
<thead>
<tr>
<th>Tool</th>
<th>Dimensions</th>
<th>Item Numbers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Climate Inventory</td>
<td>Performance standards</td>
<td>6, 9, 10*, 13*, 30, 31*, 57*, 39, 60*, 63*, 64, 58*</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Communication flow</td>
<td>12*, 17*, 24*, 34*, 37, 38, 49*, 52*, 61*, 65*, 67*</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Reward system</td>
<td>29, 41*, 54*, 66</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Responsibility</td>
<td>4, 15, 27*, 40*</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Conflict resolution</td>
<td>1, 18, 23*, 42, 44*, 45, 46*</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Organizational structure</td>
<td>14*, 19*, 21*, 35*, 47</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Motivational level</td>
<td>28*, 32*, 51*, 56, 59*, 68, 69*</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Decision making process</td>
<td>2*, 15*, 25, 36*, 43, 62, 70*</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Support system</td>
<td>3*, 5, 7, 8*, 20*, 48*, 53*, 55*, 58*</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Warmth</td>
<td>26*, 39*, 60*, 63*, 64</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Identity problems</td>
<td>11, 22*, 33, 50*</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

The asterisk mark indicates the negative items.
Reliability

Since test-retest reliability was ruled out for lack of co-operation from the extremely busy hospital personnel, split-half reliability was worked out. Reliability co-efficient by Spearman-Brown Formula was .898 which shows that there was high internal consistency in the instrument and hence it was highly reliable.

Validity

For computing item validity, correlations with total organizational climate scores were computed. These correlations show that all items had highly significant correlation with total Organizational Climate Inventory score; P being .001 on 68 out of 72 items. Thus this tool is found to be reliable and valid.

4.6 Population and Sample

The population of the study consists of all teachers who have been working in secondary schools in Hubli-Dharwad.

The sample of the study was selected from Hubli-Dharwad corporation area. The investigator has used the stratified random sampling technique.

In Hubli-Dharwad corporation area presently there are 119 high schools in total (government, Aided, Un-aided) out of which 64 schools have been selected based on the total number of schools under each category of
management (Government-8, Aided-29 and Un-aided-27). The data was collected from 510 secondary school teachers.

4.7 Data Collection

The investigator personally collected the data from 510 Secondary school teachers in Hubli-Dharwad corporation area. Teachers were personally administered the tools. Clear-cut instructions were given to fill-up the responses to the items in the tools. The filled in proformas and tools were collected. The confidentiality of the responses was assured. The collected data was systematically pooled for analyses.

4.8 Statistical Techniques Used for Analysis of the Data

The following statistical techniques were used for analyzing the data as per the objectives of the study stated earlier.

(i) Descriptive analysis
(ii) Differential analysis
(iii) Correlation analysis
(iv) Regression analysis

4.9 Conclusion

The methodology adopted is described in this chapter. The data collected from the secondary school teachers are analyzed using appropriate statistical techniques for description and inference. The details of the data analyses is presented in the next chapter.