CHAPTER III

RESEARCH METOD
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This chapter begins with the purpose of the study, objectives and hypotheses. Next, the research design is discussed, followed by a description of the population and sample, instruments, procedures for data collection and limitations.

3.1 Purpose of the Study

The purpose of this non experimental ex post facto study was to test the influence of gender and type of school on leadership behavior, organizational climate and job performance among school teachers.

3.2 Operational Definitions

For the purpose of this study, the following definitions of the terms apply:

**Type of School.** Refers to Primary School that includes I to VII standards and VIII to X considered as High /Secondary school. These schools are categorized in two groups: Government schools considered as schools that fully finance and manage by the State Government and Private schools considered as schools that funded by the state government (aided) and those that recognized by the state government but with no funding (unaided).

**Leadership Behavior.** The characteristics and/or behaviors of a principal/head master based on the subscales of the Leadership Behavior Description Questionnaire (LBDQ) Form XII (Stogdill, 1963).
Organizational Climate. Refers to the quality and character of school life. It is based on patterns of school life experiences and reflects norms, goals, values, interpersonal relationships, teaching, learning and leadership practices, and organizational structures” (Mazzei, 2009). In the present study organizational climate refers to the behavior that will be obtained by the OCDQ, Halpin and croft, 1963. They discriminated six organizational Climates. The social interactions which characterize these six climates are summarized below:

1. **The Open Climate** describes an energetic, lively organization which is moving toward its goals, and which provides satisfaction for the group members' social needs. Leadership acts emerge easily and appropriately from both the group and the leader. The members are preoccupied disproportionately with neither task achievement-nor-social-needs satisfaction; satisfaction on both counts seems to be obtained easily and almost effortlessly. The main characteristic of this climate is the "authenticity" of the behavior that occurs among all the members.

2. **The Autonomous Climate** is described as one in which leadership acts emerge primarily from the group. The leader exerts little control over the group members; high Esprit results primarily from social.-needs satisfaction. Satisfaction from task achievement is also present, but to a lesser degree.

3. **The Controlled Climate** is characterized best as impersonal and highly task-oriented. The group's behavior is directed primarily toward, task accomplishment; while relatively little attention is given to behavior oriented to social needs satisfaction. Esprit is fairly high, but it reflects achievement at some expense to social-needs satisfaction. This climate lacks openness,
or "authenticity" of behavior, because the group is disproportionately preoccupied with task achievement.

4. **The Familiar Climate** is highly personal, but under controlled. The members of this organization satisfy their social needs, but pay relatively little attention to social control in respect to task accomplishment. Accordingly, Esprit is not extremely high simply because the group members secure little satisfaction from task achievement. Hence, much of the behavior within this climate can be construed as "inauthentic".

5. **The Paternal Climate** is characterized best as one in which the principal constrains the emergence of leadership acts from the group and attempts to initiate most of these acts himself. The leadership skills within the group are not used to supplement the principal's own ability to initiate leadership acts. Accordingly, some leadership acts is not even attempted. In short, little satisfaction is obtained in respect to either achievement or social needs; hence, Esprit among the members is low.

6. **The Closed Climate** is characterized by a high degree of apathy on the part of all members of the organization. The organization is not moving; Esprit is low because the group members secure neither social needs satisfaction nor the satisfaction that comes from task achievement. The members' behavior can be construed as "inauthentic" indeed; the organization seems to be stagnant.

**Job Performance.** Refers to a behavior or action related to the school’s goals and that can be measured in terms of the level of efficiency of that particular action or set of actions. In the
present study job performance refers to the behavior that will be obtained by the job performance questionnaire, Shokrkon and Arshadi in 1990.

**School Teachers.** In this study the term school teachers’ represents, government and private, primary and high school teachers of North and South Mysore, Karnataka State, India.

### 3.3 Objectives

1. To study the influence of gender and type of school on leadership behaviour, organizational climate and job performance among school teachers.

2. To study the level of leadership behaviour, organizational climate and job performance among school teachers.

3. To study the difference between the following categories with reference to leadership behavior among school teachers,

   (A) Gender (Male and female)

   (B) Government and Private High School

   (C) Government and Private Primary School

4. To study the difference between the following categories with reference to the organizational climate among school teachers

   (A) Gender (Male and female)

   (B) Government and Private High School
(C) Government and Private Primary School

5. To study the difference between the following categories with reference to job performance among school teachers,

(A) Gender (Male and female)

(B) Government and Private High School

(C) Government and Private Primary School

6. To study the relationship between leadership behaviour, organizational climate and job performance among school teachers.

3.4 Hypotheses

In the purview of above objectives the following null hypotheses are formulated:

1. There is no significant association between gender, types of school on organizational climate (open, autonomous, controlled, familiar, paternal and closed climates) among school teachers.

2. There is no significant difference between male and female high school teachers with reference to leadership behaviour and job performance.

3. There is no significant difference between male and female primary school teachers with reference to leadership behaviour and job performance.

4. There is no significant difference between high school and primary school teachers with reference to leadership behaviour and job performance.
5. There is no significant difference between male and female government high school teachers with reference to leadership behaviour and job performance.
6. There is no significant difference between male and female government primary school teachers with reference to leadership behaviour and job performance.
7. There is no significant difference between male and female private high school teachers with reference to leadership behaviour and job performance.
8. There is no significant difference between male and female private primary school teachers with reference to leadership behaviour and job performance.
9. There is no significant difference between private and government high school teachers with reference to leadership behaviour and job performance.
10. There is no significant difference between private and government primary school teachers with reference to leadership behaviour and job performance.
11. There is no significant relationship between leadership behaviour and job performance among school teachers.
12. There is no significant influence of organizational climate on leadership behaviour and job performance

3.5 Variables Considered for the Study

**Independent Variables:** Gender, Type of School

**Dependent Variable:** Leadership Behavior, Organizational Climate and Job Performance
3.6 Research Design

The researcher made use of the ex-post facto design in this particular study to find out the influence of gender and type of school on leadership behavior, organizational climate and job performance among teachers.

3.7 Sample of the Study

The selection of the sample for the study involved two-stage sampling.

I. Selection of Schools

II. Selection of Teachers

➤ Selection of Schools

Among the schools population available at present, 66 government primary schools, 66 private primary schools, 19 government high schools, 52 private high schools were chosen for the study, using “stratified random sample”.

➤ Selection of Teachers

All the teachers working in government/private primary and high schools in Mysore City constituted the population of the present study. Sample size was calculated according to the table provided by Krejcie and Morgan (1970). Regarding the population of teachers working in government primary schools that is 689, the sample of teachers is 248, and regarding the population of teachers working in private primary schools that is 360, the sample of teachers is 186. Regarding the population of teachers working in government high schools that is 275, the
sample of teachers is 162 and regarding the population of teachers working in private high schools that is 513, the sample of teachers is 226.

Table 3.1
*Total Number of Schools and Teachers in Mysore City*

<table>
<thead>
<tr>
<th>Type of Schools</th>
<th>Government Schools</th>
<th>Private Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary School</td>
<td>High School</td>
</tr>
<tr>
<td>Total Number of Schools</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Total Number of Teachers</td>
<td>689</td>
<td>275</td>
</tr>
</tbody>
</table>

Table 3.2
*Sample of Schools and Teachers in Mysore City*

<table>
<thead>
<tr>
<th>Type of Schools</th>
<th>Government Schools</th>
<th>Private Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary School</td>
<td>High School</td>
</tr>
<tr>
<td>Total Number of Schools</td>
<td>66</td>
<td>19</td>
</tr>
<tr>
<td>Total Number of Teachers</td>
<td>248</td>
<td>162</td>
</tr>
</tbody>
</table>

3.8 Instruments

Survey instruments are utilized as a method of collecting data from a group in order to describe characteristics, opinions, or other aspects of the population from which the sample is a part. The results derived from surveys can describe relationships among variables, as well as comparing groups through the use of statistical data analysis useful in causal-comparative research design (Fowler, 2002). Survey instruments were chosen for this study based on the
study’s focus which is to investigate the influence of gender and type of school on perceptions of principals’ leadership behaviors from teachers’ perspectives, organizational climate types and teachers job performance. The following tools were used for collection of the data required for the present study.

### Table 3.3
The List of Questionnaires

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tools</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Behavior</td>
<td>Ideal Leader Behavior – Form XII</td>
<td>Stogdill (1963)</td>
</tr>
<tr>
<td>Organizational Climate</td>
<td>Organizational Climate Description Questionnaire</td>
<td>Halpin &amp; Craft(1963)</td>
</tr>
<tr>
<td>Job Performance</td>
<td>Job Performance Questionnaire</td>
<td>Adapted Translated by the Researcher (originally constructed by Shokrkon and Arshadi in 1990 in Persian)</td>
</tr>
</tbody>
</table>

#### 3.8.1 Leader Behavior Description Questionnaire-Form XII

The LDBQ-Form XII was developed by Stogdill (1963) as a revision of the original LBDQ, authored by Halpin. It was published by the Fisher College of Business in 1963. The instrument was developed in order to obtain descriptions of leader behavior as observed by followers within the framework of 12 factors or subscales. The 12 subscales and definitions as defined by Stogdill (1963) include:

- **Representation** – speaks and acts as the representative of the group.

- **Demand Reconciliation** – reconciles conflicting demands and reduces disorder to system.

- **Tolerance of Uncertainty** – is able to tolerate uncertainty and postponement without anxiety or upset.
• Persuasiveness – uses persuasion and argument effectively; exhibits strong convictions.

• Initiation of Structure – clearly defines own role and lets followers know what is expected.

• Tolerance and Freedom – allows followers scope for initiative, decision, and action.

• Role Assumption – actively exercises the leadership role, rather than surrendering leadership to others.

• Consideration – regards the comfort, well being, status, and contributions of followers.

• Production Emphasis – applies pressure for productive output.

• Predictive Accuracy – exhibits foresight and ability to predict outcome accurately.

• Integration – maintains a closely-knit organization; resolves inter-member conflicts.

• Superior Orientation – maintains cordial relationships with superiors; has influence with them; is striving for higher status.

Each subscale contains either 5 or 10 items. The participant indicates a response by circling one of five letters (A, B, C, D, or E). Each item is scored on a 5, 4, 3, 2, 1 basis coinciding with the letters, with the exception of 20 items which are scored in reverse order (1, 2, 3, 4, 5). A higher response as indicated by these numbers indicates as a higher leader behavior expectation on the LBDQ Ideal. The entire questionnaire is designed to take the participant approximately 20 minutes to complete. The LBDQ-Form XII is a result of ongoing research and development in the general area of leadership that began in the 1940s and 1950s as part of the Ohio State Leadership Studies. Through empirical research, two broad areas of leader behavior were identified as “consideration” and “initiating structure”. These two areas became the subscales on the LBDQ. The addition of 10 subscales on the LBDQ-Form XII, which is the
fourth revision, were the result of further hypotheses regarding variance in leader behavior, development of items for the hypothesized factors, revised questionnaires, item analysis, and further revision. The LBDQ was used in recent researches (Sancar, 2013; Stratton, 2010; Canales, 2008). Reliability of the LBDQ-Form XII appears relatively strong. Internal consistency coefficients were reported between .70 and .80, using a modified Kuder- Richardson formula (Stogdill, 1963). The LBDQ-Form XII originally in English was translated by the research supervisor into Kannada language for Kannada medium teachers. Content validity of the questionnaire was also established with the help of 5 experts who know both English and Kannada (Indian). The subject experts did not suggest any changes or modifications. A pilot study was conducted on a sample of 40 teachers in Mysore city. The reliability of the scale was established with Cronbach Alpha Coefficient method, seems to be satisfactory, that is .93.

3.8.2 Organizational Climate Description Questionnaire

The Organizational Climate Description Questionnaire (OCDQ) was developed by Halpin and Croft (1963). The instrument is composed of 64 items which the two researchers settled on after reviewing in excess of 1000 statements which were felt to characterize behaviors commonly found in elementary schools. Seventy-one schools were used for their standardization process. Six geographical areas of the United States were utilized. The instrument is widely used in determining climate in elementary schools today. The OCDQ is divided into eight subtests; four are concerned with the principal as a leader and four are directly related to the teachers as a group.

1. Refer to page 45.
By employing factor analysis the researchers identified eight climate dimensions which they used to determine six organizational climates. The eight dimensions are (1) disengagement, (2) hindrance, (3) esprit, (4) intimacy, (5) aloofness, (6) production emphasis, (7) thrust, and (8) consideration. The first four dimensions relate to the teachers as a staff or group and the remaining four are focused on the principal as an educational leader. The six climates identified by Halpin and Croft ranged from "open" to "closed" along a continuum. The climates described are: (1) open, (2) autonomous, (3) controlled, (4) familiar, (5) paternal, and (6) closed. The questionnaire is a four point Likert type, namely: Rarely Occurs (R O), Sometimes Occurs (S O), Often Occurs (O O) and Very Frequently Occurs (V F O). Following the original procedure used by Halpin and Croft, each of the respondent's answers were to be identified by its subtest; each subtest dealing with one of the eight specific dimensions of climate. The item scores were to be summed and then divided by the number of items in each subtest. Each quotient was then to be rounded off to a two-digit score for each subtest. The next step was to standardize the subtest scores according to the mean and standard deviation of the total sample for that subtest by using the formula:

\[ X_S = \frac{10}{\sigma}x_o - \left(\frac{10}{\sigma}M - 50\right) \]

\( X_S = \) standard score  \( M = \) sample mean  
\( \sigma = \) sample standard deviation  \( x_o = \) subtest raw score

This computation changing raw scores to standard scores with a mean of fifty and a standard deviation of ten completed the standardization. To determine which of the six climates prototypic profiles approximated the schools profile the following method was used. A profile similarity
score was calculated to allow a numerical determination of the congruency between the schools profile and the six prototypic profiles of the six climates. This was done by calculating the absolute difference between each school scores and each of the prototypic profiles as defined by Halpin and Croft. In each instance the sum of the absolute differences was computed between the profile scores. A low sum would indicate a similarity to the prototypic profile and a high sum would show that the profiles were dissimilar.

Table 3.4
Prototypic Profiles' for Six Organizational Climates
Ranked in Respect to Openness vs. Closeness (Anderson, 1965)

<table>
<thead>
<tr>
<th>Climate</th>
<th>Group’s Characteristics</th>
<th>Leader's Group’s Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disengagement</td>
<td>Hindrance</td>
</tr>
<tr>
<td>Open</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Autonomous</td>
<td>40</td>
<td>41</td>
</tr>
<tr>
<td>Controlled</td>
<td>38</td>
<td>57</td>
</tr>
<tr>
<td>Familiar</td>
<td>60</td>
<td>42</td>
</tr>
<tr>
<td>Paternal</td>
<td>65</td>
<td>46</td>
</tr>
<tr>
<td>Closed</td>
<td>62</td>
<td>53</td>
</tr>
</tbody>
</table>

Reliability of the test was established by both split-half and test-retest method. This was found to be .86(N=40). Correlating the total scale scores using Pearson’s product Moment Coefficient of correlation method assessed validity of the scale. This was found to be .84 (N=40). The subscale validity was also determined using the same method the subscale scores. This was .78(N=40) The OCDQ originally in English was translated by the research supervisor into Kannada language for Kannada medium teachers. Content validity of the questionnaire was also established with the help of 5 experts who know both English and Kannada (Indian). The subject experts did not suggest any changes or modifications. A pilot study was conducted on a sample
of 40 teachers in Mysore city. The reliability of the scale was established with Cronbach Alpha Coefficient method, seems to be satisfactory, that is .83. The OCDQ has been used in many studies (Ediger, 2010; Douglas, 2010; Young, 2009; Grizzard, 2007)\(^1\).

### 3.8.3 Job Performance Questionnaire

The Job Performance Questionnaire (JPQ) was constructed by Shokrkon and Arshadi in 1990 in Persian to evaluate the employee’s performance in their job. The JPQ is composed of 15 Likert type items. The statements in the scale are rated on a four-point scale, the alternatives of which are: Rarely Occurs (R O), Sometimes Occurs (S O), Often Occurs (O O) and Very Often Occurs (V F O). Reliability of the test was established by both split-half and Cronbach's Alpha. The reliability coefficient through using Cronbach's Alpha was .86 and through using split-half was .78. The JPQ originally in Persian was translated by the research supervisor in to English language for English medium teachers. Then, It was translated by the research supervisor in to Kannada language for Kannada medium teachers. Content validity of the questionnaire was also established with the help of 5 experts who know both English and Kannada (Indian). The subject experts did not suggest any changes or modifications. A pilot study was conducted on a sample of 40 teachers in Mysore city. The reliability of the scale was established with Cronbach Alpha Coefficient method, seems to be satisfactory, that is .81 for English version and 82 for Kannada version.

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1. Refer to page 56.
3.9 Procedure

Phase I:

Step 1: Sample selection

Step 2: Administering questionnaires on selected sample and collection of data on 1000 samples to study leadership behavior, organizational climate and job performance of school teachers. This was done after getting permission from authorities concerned to collect data on influence of gender and type of school on leadership behavior, organizational climate and job performance of school teachers in private and government high/primary schools in Mysore city.

Phase II:

Step 1: Collecting data from 822 teachers to investigate influence of gender and type of school on leadership behavior, organizational climate and job performance of school teachers.

Step 2: Analysis of the data using appropriate statistical methods.

3.10 Statistical Techniques Used for Analysis of Data

The following statistical techniques were employed in the present investigation:

1. Descriptive statistics like mean and percentage have been employed to analyze the data descriptively.

2. Contingency Coefficient Analysis, Independent Samples ‘t’ tests, One Way ANOVA and Post Hoc Tests
3.11 Summary

Chapter 3 provided an overview of the proposed research methodology of the study. In this chapter an attempt has been made to explain the design of the study, methodology of the study, which includes the purpose of the study, objectives and hypothesis of the study, variables considered for the study, operational definitions of the key terms and concepts, tools used for data collection, sample, procedure and statistical techniques employed for analysis of the data, and summary.