CHAPTER - 3

THE PLAN AND PROCEDURE

3.1 Introduction
3.2 The Problem, Scope and Limitation
3.3 Definition of Major Terms
3.4 Major and Specific Objectives
3.5 Hypotheses Formulated for the Study
3.6 The Sample
3.7 The Research Tools
3.8 The Procedures of Analysis and Interpretation
3.9 The Chapterisation
3.10 Conclusion
3.1 **Introduction**

The purpose of this chapter is to present the research design of this study. The problem selected for investigation is a novel one in the sense that it is being investigated for the first time at a teachers' college level. Organizational climate, leadership behaviour and teacher morale have been amply investigated in industry and in education at the school level in India including Gujarat, but never before these variables were investigated at the level of teachers' colleges in relation to the effectiveness of teacher education programme. The plan and procedures to be deployed in identifying organizational climate of teachers' colleges in Gujarat, in determining the level of the morale of teacher educators and in evaluating the leadership being provided by the principals of these colleges will be outlined and described in this chapter. The tools of data collection and the sophisticated statistical techniques used for analysing and interpretation of the data will be described here.

3.2 **The Problem, Scope and Limitation**

The problem of the study is worded as under:

"A Study of the Organizational Climate and Teachers' Morale in Colleges of Education in Gujarat".
In 1973, there were 40 secondary teachers' colleges in Gujarat (vide Appendix VI), of which 20 were in the area of Gujarat University, 3 in the area of the Sardar Patel University, 5 in the area of Saurashtra University, 1 in the M.S. University of Baroda, 2 in South Gujarat University, 2 affiliated to the S.N.D.T. Women's University with its headquarters at Bombay, 2 in the Gujarat Vidyapeeth and 5 under the control of State Department of Education, Gujarat State. Considering the rural-urban character of the places where they were located, it can be said that 42.5 per cent were located in cities, 52.5 per cent in towns and the remaining 5.0 per cent in villages. Colleges of Education existed in all the then 18 districts of the State, excepting the districts of Surendranagar, Amreli and Dangs. The two districts - the Ahmedabad (11) and the Kheda (7) had between them 45 per cent of the total colleges of education in the State.

Their distribution, according to the pattern of their management was, university colleges 10 per cent; Government colleges 7.5 per cent, and the remaining 82.5 per cent private aided colleges.

Of these 40 colleges, 10 or 25 per cent had either departments or units of teachers' extension or inservice teacher education services.
The forty Colleges of Education had, among them, a total enrolment of 3,894 in the B.Ed. classes. The management-wise distribution of teacher trainees was Gujarat University 54.0 per cent, Sardar Patel University 13.9 per cent, Saurashtra University 10.9 per cent, South Gujarat University 6.2 per cent, M.S. University of Baroda 4.6 per cent, Gujarat Vidyapeeth 3.9 per cent, S.N.D.T. College 0.5 per cent and the Graduate Basic Training Centres 0.6 per cent. Thus, the Gujarat University affiliated teachers colleges formed the largest chunk so far as the intake capacity of the colleges of education was concerned.

The problem of the study is to locate organizational climate of these colleges situated in different urban-rural environment, under different managements, having different financial and other resources and having different quantum of students and staff, and to determine the level of morale of the teacher educators working in them. As climate and morale bear significant relationship with leadership behaviour, the same will be studied in the case of principals of colleges of education and heads of departments of education. Though the problem does not state specifically, the study of the variables of climate, morale and leadership behaviour is intended to be done in their bearing on the effectiveness of the teacher education programme being offered in them.
The scope of the study is extended to colleges of education under different managements, situated in different environments, having different status of resources and having different sizes. The respondents to the tools selected for data collection for the study will be all teacher educators working as regular staff members in these colleges. They would include male as well as female teachers. The staff would naturally have varying academic and professional background. The picture of organizational climate, staff morale and leadership behaviour of the colleges of education would be built up from the organization and treatment of the responses of the teacher educators on the tools which would be deployed by the investigator.

A number of factors influence the climate of an organization, morale of the teachers and leadership behaviour of the head. In the case of a college, a social organization, external cultural elements as well as social and economic factors influence the organizational atmosphere and behaviour. It is impossible to include all these factors in a single study. The present study is limited to the social and behavioural interactions between teachers and their colleagues and teachers and principal in both formal and informal contexts. It is also limited in the sense that the perceptions of teachers alone is considered, their personality characters have not been taken into account, and the perception of the students,
non-teaching staff and the parents have not been considered.

3.3 Definition of the Terms

Some important terms figure in the organization of the material and methods of research deployed in the present study. They are defined below in order that their connotations become definite and clear. This is believed to make interpretation more meaningful and the interpretability of the data would gain in clarity.

(1) Organizational Climate

In the present study, the term "organizational climate" is used in the same sense in which it is used by Halpin and Croft (1963) who refer climate as "the personality of the school". The meaning of the organizational climate, as conceived by Halpin and Croft, is the product of interplay among the organizational principles, individual needs and informal group variables, measured through some eight dimensions and represented on a continuum. The dimensions are according to teachers' perceived behaviour (Disengagement, Hindrance, Esprit and Intimacy) and principals' perceived behaviour (Aloofness, Production Emphasis, Thrust and Consideration). The climates on a continuum are: Open, Autonomous, Controlled, Familiar, Paternal and Closed.
(2) **Teacher Morale**

In the present study, morale refers to the professional interest and enthusiasm that a person displays towards the achievement of individual and group goals in a given job situation. This definition recognizes the satisfaction of both individual and group needs and their effective harmonization as a basis for morale.

(3) **Leadership Behaviour**:

It denotes the two leader dimensions of 'Initiating Structure' and 'Consideration' as described by Halpin. The first refers to the skills demonstrated by a leader in "establishing well defined patterns of organization, channels of communication and ways of getting the job done." The second delineates the relationship of the leader between himself and the members of his group-organization. The 'Consideration' type of behaviour reflects friendship, mutual trust, respect, and warmth in the relationship between himself and the members of the group" (Halpin, 1968, p.118). The first leader dimension denotes 'task-orientation' of a leader and the second 'people-orientation'. The first dimension reflects concern for production or output; the second, concern for employee or staff satisfaction.

(4) **Teacher**:

It is used in the study to mean teacher
educator. The latter is a member of the staff of a teacher's college whose primary job-responsibility is to provide professional training to teacher-trainees in his institution of teacher education.

(5) Teacher Education Programme:

It mainly refers to the teacher education programmes in colleges of education leading to a university degree known by the nomenclature - the B.Ed.

(6) "College of Education" means a College or a department preparing students for the B.Ed. degree of a University or the Graduate Diploma in Basic Education of the Department of Education, Gujarat State.

(7) "Effectiveness" of the Teacher Education Programme:

It stands for the extent of success achieved by a teacher education programme in preparing competent classroom teachers as perceived by the school system. It denotes the accomplishment of the existing Programme.

These definitions not only clarify the scope of the study but, in a way, delineate the boundary of the study or indicate its limitations.
3.4 **Major Objectives**

It was planned to determine the extent to which organizational climate, teachers' morale and leadership of principals' behaviour of colleges of education in Gujarat are related among themselves and how far these variables contribute into making the teacher education programme effective. To state more specifically, the major objectives of the study are:

1. To identify the climate types of the colleges of education of Gujarat.
2. To investigate the relationship between organizational climate of the colleges and teachers' morale of the teacher educators working in them.
3. To delineate the leadership behaviour of the principals of teachers' colleges and to investigate the relationship between the leadership behaviour and teachers' morale.
4. To investigate the relationship between organizational climate of teachers' colleges and leadership behaviour of their principals.
5. To investigate the impact of organizational climate, teachers' morale and leadership behaviour of the principals of teachers' colleges on the effectiveness of their teacher education programme.

These objectives can be put still more specifically as under:
(1) To identify the profile of each college of education of Gujarat and place them in the classified climate category.

(2) To determine the mean faculty morale of each college and categorize them as High, Average and Low morale colleges.

(3) To investigate the relationship between the organizational climate of the colleges and teacher morale of their staff.

(4) To investigate the relationship between the organizational climate and of the colleges and their principal's leadership behaviour.

(5) To observe the relationship between the organizational climate, teacher morale and principal's leadership.

(6) To measure the effectiveness of the teacher education programme in colleges of education in Gujarat.

(7) To group the colleges into high and low effectiveness in the teacher education programme.

(8) To investigate the relationship of these variables i.e. climate, morale and leadership behaviour in making the teacher education programme effective.

The present study will be structured on the basis of the above objectives. The pattern of analysis will also be decided by the exigencies of these objectives.
3.5 The Hypothesis

With the focus on the specific objectives outlined above, the following eighteen Hypotheses have been formulated:

(1) Organizational climate of colleges of education would show marked variations.

(2) The morale of teacher educators in the colleges of education would be 'average, rather than 'high' or 'low'.

(3) More college principals would exhibit the HH Pattern or the LL Pattern of leadership behaviour than the HL Pattern or LH Pattern, and among the former, the proportion of the latter (LL) would be more than the former (HH).

(4) 'Organizational climate' and 'teachers' morale' in colleges of education would be closely related.

(5) There exist marked variations in relationship between different dimensions of climate and the morale of teacher educators.

(6) There also exist marked variations in relationship between different factor-constituents of morale of teacher educators and different types of climates of colleges of education.

(7) Morale of teacher educators and leadership behaviour of college principals would show a definite relationship with each other.
(8) Both organizational climate and leadership behaviour of principals affect morale of the teacher educators significantly.

(9) The openness of the climate in colleges of education, in contrast to the closedness of climate, leads to high effectiveness of the teacher education programme in colleges of education.

(10) The teacher educators' rapport with the college principals and the effectiveness of the teacher education programme would show a close relationship.

(11) The rapport among teacher educators would relate to the effectiveness of the teacher education programme.

(12) The teacher educators' job satisfaction with salary, work load, and status would show a significant relationship with the effectiveness of the teacher education programme.

(13) Community support and pressure in colleges of education would show a varying relationship with the effectiveness of the teacher education programme.

(14) The curriculum issue factor of morale would have a significant bearing on the effectiveness of the teacher education programme.

(15) The Initiating Structure and considerations of leadership behaviour of the college principals would contribute greatly to the morale of the teacher educators.
There would be a significant difference in morale of teacher educators with an urban background and the rural background.

Morale of teacher educators would be positively correlate to the number of years of teaching experience they have.

The background data of the teacher educators would vary according to the organizational climate of the colleges of education to which they belong.

3.6 The Sample

As stated earlier, in 1973, there were 40 colleges of education offering programmes at the B.Ed. level and beyond in Gujarat State. The total enrolment of these colleges was 3,894. The number of teacher educators on the roll of these colleges was 370. (Chart IV)

With perseverance and continuous efforts, the investigator was able to collect data from 35 or 87.5 per cent of the colleges. The tools were administered on teacher educators. The investigator was able to collect responses to her tools from 300 teacher educators. Thus, the sample of the respondents is 81.0 per cent. It would be, thus, seen that looking to the size of the universe, the sample is fairly large and representative.
The following tables show that the sample is well stratified.

### Table 3.1: Sampled Colleges According to Their Urban-Rural Location.

<table>
<thead>
<tr>
<th></th>
<th>Total no. of colleges</th>
<th>Sampled colleges</th>
<th>Percentage of the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Colleges</td>
<td>17</td>
<td>15</td>
<td>83.8</td>
</tr>
<tr>
<td>Town colleges</td>
<td>21</td>
<td>18</td>
<td>85.4</td>
</tr>
<tr>
<td>Village colleges</td>
<td>2</td>
<td>2</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>35</strong></td>
<td><strong>87.5</strong></td>
</tr>
</tbody>
</table>

It would be seen that the sample represents over 80 per cent of colleges from city, town and rural areas.

### Table 3.2: Sample According to the Managements of Colleges of Education

<table>
<thead>
<tr>
<th>Type of Management</th>
<th>Total colleges</th>
<th>Sampled colleges</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. University</td>
<td>4</td>
<td>4</td>
<td>100.0</td>
</tr>
<tr>
<td>2. Government (Education Dept.)</td>
<td>3</td>
<td>3</td>
<td>100.0</td>
</tr>
<tr>
<td>3. Private</td>
<td>33</td>
<td>28</td>
<td>84.8</td>
</tr>
</tbody>
</table>

The table shows that the sample is quite large and representative from the point of managements of the colleges of education.
The Sample

Urban-Rural Location

Management

Sample

Size

Establishment
Table 3.3: Size of the Sampled Colleges.

<table>
<thead>
<tr>
<th>Size</th>
<th>Total colleges</th>
<th>Sampled colleges</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Large Colleges</td>
<td>6</td>
<td>6</td>
<td>100.00</td>
</tr>
<tr>
<td>(with enrolment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>above 140)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Medium Size</td>
<td>23</td>
<td>20</td>
<td>86.9</td>
</tr>
<tr>
<td>(Enrolment 90 to 139)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Small size</td>
<td>11</td>
<td>9</td>
<td>81.8</td>
</tr>
<tr>
<td>(Enrolment below 90)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Here, also the sample seems to be well stratified and representative.

Table 3.4: Period of Establishment.

<table>
<thead>
<tr>
<th>Period</th>
<th>Total colleges</th>
<th>Sampled colleges</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Before 1960</td>
<td>7</td>
<td>7</td>
<td>100.00</td>
</tr>
<tr>
<td>2. Between 1961-1965</td>
<td>11</td>
<td>9</td>
<td>81.8</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It would be seen that in this strata also, the sample selected is well representative.
The representativeness of the respondents is never below fifty per cent from any of the sampled colleges. From 45 per cent of the sampled colleges, it is either cent per-cent or nearly there about.

The sum and substance of the detailed break-up of the sample given above would show clearly that the sample is large, well stratified and unselected as all the forty colleges were given all possible opportunity to participate in constituting the sample of the present study.

3.7 **The Research Tools**

In collecting data for the present study, the following four tools are used:

1. Organizational Climate Description Questionnaire (the OCDQ), by Halpin and Croft, 1963. (Appendix X)
2. The Purdue Teacher Opinionaire (PTO) by Bentley and Rempel, Purdue University, 1970. (Appendix XI)
3. The Leader Behaviour Descriptive Questionnaire (LBDQ-Real) by Halpin and Winer, 1952. (Appendix XII)
4. The Effectiveness of the Teacher Education Programme (ETEP) prepared by the investigator 1975. (Appendix IX)
(1) Organizational Climate Description Questionnaire
(The-OCDQ)

Before selecting the OCDQ finally for use in the present study, the literature of educational research related to institutional climate was examined by the investigator. The scales developed so far to measure various dimensions of institutional environment were considered for their suitability to assess the educational climate components of institutional environment in terms of teacher-teacher and teacher-principal interactions under the college setting.

The instruments taken into account were:

(1) The College and University Environment Scales - Pace (1963);
(2) The High School characteristics Index - Stern (1963);
(3) The Activities Index - Stern (1963);
(4) The College Characteristics Index - Stern (1963);
(5) The Medical College Environment Scales - Hutchins (1962);
(6) The Environmental Assessment Techniques - Astin and Holland (1961);
(7) The Experience of college questionnaire- Chichering (1969);
(8) The school Survey Inventory- Coughlan et al (1964,1970);
(9) The organizational climate Index- Stern (1963); and
A close examination of the above mentioned instruments revealed that, organizational climate Index (OCI)- Stern (1963) and the Organizational Climate Description Questionnaire (OCDQ) Halpin and Croft (1963) were the only tools suited for the purpose of the present study. Others were mostly developed for assessing either the college and university environment or they were related to learning environment of these organizations.

The investigator did not use the organizational climate Index developed by Stern and Steinhalf (1963) because it did not fulfil the requirements of the study, namely, giving a Climate Index based on teacher-teacher and teacher-principal interactions related to academic functioning of the college organization. It is based on personality studies and on the concept of Need-Press of Henry Murray (1938). Stern and others evolved two Questionnaires to determine the Need-Press factors which they felt are influencing the development of climate in colleges. "Activity Index "(AI) dealt with needs of individuals and "college characteristic Index "(OCI) probed the Environmental Press as experienced by persons in the organization. Stern and Steinhoff developed "Organizational climate Index" which is an adaption of CGI. The two key dimensions of the OCI are "development Press" and "Control Press" by representing these two dimensions along with
intersecting axes, the OCI scores can be pin-pointed and the climate described. The OCI included 300 items with 6 first order variables and 2 second order variables.

The investigator found OCI to be too time-consuming and lengthy, and not fulfilling the requirements of the study.

However, the "Organizational Climate Description Questionnaire", developed by Halpin and Croft (1963) was originally prepared for Elementary Schools. But it was found better suited for the present study. The same has been used abroad and in India at secondary school stage. Abroad it has been used also at higher education stage. (Borodoff, 1973).

While constructing an organizational climate Description Questionnaire for Higher Education (OCDQ - HE), at Oregon University, Borrevik J. R. (1973) concludes in his findings that OCDQ - HE is the replication of the same basic design as used in the elementary school investigation in the 1960s and the identification of the same type of domains in this investigation provides additional evidence to Halpin's description of the nature of organizational climate in educational organizations. But OCDQ - HE is still at its rudimentary form and, therefore, it has not been used in the present study. Therefore, the OCDQ prepared by Halpin has been adapted in the present study with certain modifications and changes made in
order to suit the needs and requirements of the colleges of education and the cultural background of the respondents in Gujarat.

The OCDQ

The Organizational Climate Description Questionnaire (the OCDQ) developed by Halpin and Croft consists of 64 items. It measures eight different variables, viz. (1) Disengagement, (2) Hindrance, (3) Esprit, (4) Intimacy, (5) Aloofness, (6) Production Emphasis, (7) Thrust and (8) Consideration, out of which the first four pertain to the characteristics of the teachers as a group and the other four to the characteristics of the principal as a leader. From the scores of these eight sub-tests, the profile or psychograph for each institution is constructed, which depicts the institution's organizational climate. By comparing the profiles of different institutions the distinguishing features of their respective organizational climates are spotted. Furthermore, by analyzing the profile for a given institution, the character and quality of its climate is estimated.

The eight sub-tests of the OCDQ are:
Teacher's Behaviour (Characteristics of the Group).

(1) Disengagement refers to the teachers' tendency to be "not with it". This dimension describes a group which is "going through the motions", a group that is "not in gear" with respect to the task at hand. In short, this sub-test focuses upon the teachers' behaviour in a task-oriented situation.

(2) Hindrance refers to the teachers' feeling that the principal burdens them with routine duties, committee demands, and other requirements which the teachers construe as unnecessary "busy work". The teachers perceive that the principal is hindering rather than facilitating the work.

(3) "Esprit" refers to morale. The teachers feel that their
social needs are being satisfied, and that they are, at the same time, enjoying a sense of accomplishment in their job.

(4) Intimacy refers to the teachers' enjoyment of friendly social relations with each other. This dimension describes a social needs satisfaction which is not necessarily associated with task-accomplishment.

Principal's Behaviour (Behaviour of the Leader)

(5) Aloofness refers to behaviour by the principal which is characterized as formal and impersonal. He "goes by the book" and prefers to be guided by rules and policies rather than to deal with the teachers in an informal, face-to-face situation. His behaviour, in brief, is universalistic rather than particularistic; nomothetic rather than idiosyncratic. To maintain this style, he keeps himself — at least, "emotionally" — at a distance from his staff.

(6) Production Emphasis refers to behaviour by the principal which is characterized by close supervision of the staff. He is highly directive and plays the role of a "straw" boss. His communication tends to go in only one direction, and he is not sensitive to feedback from the staff.

(7) Thrust refers to behaviour by the principal which is characterized by his evident effort in trying to "move the organization". Thrust behaviour is marked not by close
supervision, but by the principal's attempt to motivate the teachers through the example which he personally sets. Apparently, because he does not ask the teachers to give of themselves anymore than he willingly gives of himself, his behaviour though task-oriented, is none the less viewed favourably by the teachers.

(8) Consideration refers to behaviour by the principal which is characterized by an inclination to treat the teachers "humanly", to try to do a little something extra for them in human terms.

The scores obtained under each of these sub-tests are then fed into constructing the profile for each of the institutions and also allowed to differentiate the meaningful types of organizational climates. Thus six organizational climates were identified that could be arranged along a continuum defined at one end by the Open climate, and at the other, by the Closed climate. The continuum does not possess any porcelain perfection; it has a few chips and nicks along the edges. (Halpin, 1966).

The identified six organizational climates were termed as the (1) "Open", (2) the "Autonomous", (3) the "Controlled", (4) the "Familiar", (5) the "Paternal", and (6) the "Closed" climates.
The six organizational climates based upon the behaviour tapped by the items of each of the eight sub-tests which constitute the six prototypic profiles are as follows. This discussion is also based on Halpin (1966).

(1) The Open Climate: The Open climate depicts a situation in which the members enjoy extremely high esprit. The teachers work well together without bickering and griping (low disengagement). They are not burdened by mountains of busy work or by routine reports; the principal's policies facilitate the teacher's accomplishment of their task (low Hindrance). On the whole, the group members enjoy friendly relations with each other, but they apparently feel no need for an extremely high degree of intimacy. The teachers obtain considerable job satisfaction, and are sufficiently motivated to overcome difficulties and frustrations. They possess the incentive to work things out and to keep the organization "moving". Furthermore, the teachers are proud to be associated with their institution.

The behaviour of the principal represents an appropriate integration between his own personality and the role he is required to play as principal. In this respect, his behaviour can be viewed as genuine. Not only does he set an example by working hard himself (High Thrust) but, depending upon the situation, he can either criticize the action of teachers or go out of his way to help a teacher (High Consideration).
CHART SHOWING THE HIGH-LOW POSITION OF DIFFERENT CLIMATE DIMENSIONS (EIGHT SUB-TESTS OF THE OCDB)

HIGH

AVERAGE

LOW

LOWEST

HIGHEST

OPEN AUTONOMOUS CONTROLLED FAMILIAR PATERNAL CLOSED

CHART VI

REF:

- a. Disengagement
- b. Hindrance
- c. Esprit
- d. Intimacy
- e. Aloofness
- f. Production Emphasis
- g. Thrust
- h. Consideration
He possesses the personal flexibility to be genuine whether he be required to control and direct the activities of others or to show compassion in satisfying the social needs of individual teachers. He has integrity in that he is "all of a piece" and, therefore, can function well in either situation. He is not aloof, nor are the rules and procedures which he sets up are inflexible and impersonal. Nonetheless, the rules and regulations that he adheres to provide him with subtle direction and control for the teachers. He does not have to emphasize production; nor does he need to monitor the teacher's activities closely, because the teachers do, indeed, produce easily and freely. He does not do all the work himself because he has the ability to let appropriate leadership acts emerge from the teachers (low production Emphasis). Withal, he is in full control of the situation, and he clearly provides leadership for the staff. In Open Climate institutions, the behaviour of teachers (the group) and the principal (the leader) can be briefly categorized as under:

<table>
<thead>
<tr>
<th>Group Behaviour</th>
<th>Leader Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) High Esprit</td>
<td>(1) High Thrust</td>
</tr>
<tr>
<td>(2) Low Disengagement</td>
<td>(2) High Consideration</td>
</tr>
<tr>
<td>(3) Low Hindrance</td>
<td>(3) Not Aloof</td>
</tr>
<tr>
<td>(4) Low Intimacy</td>
<td>(4) Does not emphasise high production - low Production Emphasis.</td>
</tr>
</tbody>
</table>
(2) The Autonomous Climate: The distinguishing feature of this organizational climate is the almost complete freedom that the principal gives to teachers to provide their own structures - for - interaction so that they can find ways within the group for satisfying their social needs. As one might surmise, the scores lean slightly more toward social-needs satisfaction than towards task achievement (relatively high scores on Esprit and Intimacy).

When the teachers are together in a task-oriented situation, they are engaged in their work, and they achieve their goals easily and quickly (low disengagement). There are few minority pressure groups, but whatever satisfaction does exist among the group members does not prevent the group as a whole from working well together. The essential point is that the teachers do work well together and accomplish the tasks of the organization.

The teachers are not hindered by administrative paper work, and they do not gripe about the reports that they are required to submit. The principal has set up procedures and regulations to facilitate the teachers' tasks. A teacher does not have to run to the principal everytime he needs supplies, books, projectors and so on; adequate controls have to be established to relieve the principal as well as the teachers of these details (Low Hindrance). The morale of the teachers
is high, but not as high as in the Open Climate institutions. The high morale probably stems largely from the social-needs satisfaction which the teachers receive. (Esprit would probably be higher if greater task-accomplishment also occurred within the organization).

The principal remains aloof from the teachers, for he runs the organization in a business-like and rather impersonal manner (high Aloofness). His leadership style favours the establishment of procedures and regulations which provide guidelines that the teachers can follow; he does not personally check to see that things are getting done. He does not force people to produce, nor does he say that "we should be working harder". Instead, he appears satisfied to let the teachers work at their own speed; he monitors their activities very little (Low Production Emphasis). On the whole, he is considerate, and he attempts to satisfy the social needs of the teachers as well as most principals do (Average Consideration).

The principal provides 'thrust' for the organization by setting an example and by working hard himself. He has the personal flexibility both to maintain control and to look out for the personal welfare of his teachers. He is genuine and flexible, but his range of administrative behaviour as compared to that of the principal in the Open climate, is somewhat
restricted. The behaviour patterns of teachers and the principal in Autonomous Climate educational institutions are as under:

**Group Behaviour**

1. Low Disengagement
2. Low Hindrance
3. Relatively High Esprit
4. Relatively High Intimacy

**Leader Behaviour**

1. High Aloofness
2. Low Production Emphasis
3. Average Consideration
4. Average Thrust

(3) **The Controlled Climate**: The Controlled climate is marked, above everything else, by a press for achievement at the expense of social-needs satisfaction. Everyone works hard and there is little time for friendly relations with others or for deviation from established controls and directives. This climate is over weighted towards task-achievement and away from social-needs satisfaction. Nonetheless, since morale is high (Esprit) this climate can be classified as Open rather than closed.

The teachers are completely engaged in the task. They do not bicker, find fault, or differ with the principal's directives. They are there to get the job done, and they expect to be told personally just how to do it (Low Disengagement). There is an excessive amount of paper work, routine reports, busy work, and general 'hindrance' which get...
in the way of the teachers' task accomplishment. Few procedures have been set up to facilitate their work; in fact, paper work seems to be used to keep them busy (High Hindrance). Accordingly, teachers have little time to establish very friendly social relations with each other, and there is little feeling of camaraderie (Low Intimacy). Teachers ordinarily work by themselves and are impersonal with each other. In fact, social isolation is common; there are few genuinely warm relations among the teachers. Espírit, however, is slightly above average. One infers that the job satisfaction found in this climate results primarily from task accomplishment, not from social-needs satisfaction.

The principal is described as dominating and directive. He allows little flexibility within the organization, and he insists that everything be done "his" way (high Production Emphasis). He is somewhat aloof; he prefers to publish directives to indicate how each procedure is to be followed. These directives, of course, are impersonal and are used to standardize the way in which teachers accomplish certain tasks. Especially, the principal says, "my way of doing it is best and to hell with the way people feel". Means and ends have already been determined; the principal becomes dogmatic when members of the group do not conform to his views. He cares little about how people feel; the important thing is to get the job done, and in his characteristic way. Accordingly, he does not seek to
satisfy the group's social need (Low Consideration). Never­theless, he tries to move the organization by working (Average Thrust), and he personally sees to it that everything runs properly. He delegates few responsibilities, leadership acts emanate chiefly from himself, rather than from the group. (Surprisingly, it seems that many school teachers actually respond well to this type of militant behaviour and apparently do obtain considerable job satisfaction within this type of climate). The teachers' and the principal's behaviours in institutions having this climate follow the following patterns:

<table>
<thead>
<tr>
<th>Group Behaviour</th>
<th>Leader Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Low Disengagement</td>
<td>(1) High Production Emphasis</td>
</tr>
<tr>
<td>(2) High Hindrance</td>
<td>(2) Somewhat Aloof</td>
</tr>
<tr>
<td>(3) Low Intimacy</td>
<td>(3) Low Consideration</td>
</tr>
<tr>
<td>(4) Esprit Slightly above average</td>
<td>(4) Average Thrust</td>
</tr>
</tbody>
</table>

(4) The Familiar Climate:

The main feature of this climate is the conspicuously friendly manner of both the principal and the teachers. Social needs satisfaction is extremely high, while little is done to control or direct the group's activities toward goal achievement.

The teachers are disengaged and accomplish little in a
task-oriented situation, primarily because the principal exerts little control in directing their activities. Also, there are too many people trying to tell others how things should be done (High Disengagement). The principal does not burden the teachers with routine reports; in fact, he makes it as easy as possible for them to work. Procedural helps are available (Low Hindrance). The teachers have established personal relationships among themselves, and socially, at least, everyone is part of a big happy family (High Intimacy). Morale or Job satisfaction, is average, but it stems primarily from social needs satisfaction. In short, the esprit that is found in this climate is one-sided in that it stems almost entirely from social needs satisfaction.

The behavioural theme of the principal is, essentially, "let's all be a nice happy family". He evidently is reluctant to be anything other than being considerate, lest he may, in his estimation, injur the "happy-family" feeling (High Consideration). He wants everybody to know that he, too, is one of the groups, that he is in no way different from anybody else. Yet his abdication of social control is accompanied, ironically enough, by high disengagement on the part of the group.

The principal is not aloof and not impersonal and official in his manners. Few rules and regulations are established as guides to suggest to the teachers as to how things "should be done", (Low Aloofness). The principal does not
emphasize production, nor does he do much personally to insure that the teachers are performing their tasks correctly. No one works to full capacity, yet no one is even "wrong"; also the actions of members - at least in respect of task-accomplishment - are not criticized (Low Production Emphasis). In short, little is done either by direct or by indirect means and evaluate or direct the activities of the teachers. However, teachers do attribute 'thrust' to the principal. But, in this context, this probably means that they regard him as a "good person" who is interested in their welfare and who "looks out for them". The teachers' and the principal's behaviour are characterised as follows:

<table>
<thead>
<tr>
<th>Group Behaviour</th>
<th>Principal Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) High Disengagement</td>
<td>(1) High Considerate</td>
</tr>
<tr>
<td>(2) Low Hindrance</td>
<td>(2) Low Aloofness</td>
</tr>
<tr>
<td>(3) High Intimacy</td>
<td>(3) Low Production Emphasis</td>
</tr>
<tr>
<td>(4) Esprit Average</td>
<td>(4) Low Thrust</td>
</tr>
</tbody>
</table>

(5) **The Paternal Climate**: The Paternal climate is characterized by the ineffective attempts of the principal to control the teachers as well as to satisfy their social-needs. His behaviour is non-genuine and is perceived by the teachers as non-motivating. This climate is, of course, a partly Closed one.

The teachers do not work together; they are split into factions. Group maintenance has not been established because
of the principal's inability to control the activities of the teachers (High Disengagement). Few hindrances burden the teachers in the form of routine reports, administrative duties, and committee requirements, mainly because, the principal does a great deal of this busy work himself (Low Hindrance). The teachers do not enjoy the friendly relationships with each other (Low Intimacy). Essentially, the teachers have given up trying; they let the principal take care of things as best he can. Obviously, low esprit results when the teachers obtain inadequate satisfaction in respect of both task-accomplishment and social needs.

The principal, on the other hand, is the very opposite of being aloof; he is everywhere, at once checking, monitoring, and telling people how to do things. In fact, he is so non-alooof that he becomes intrusive. He must know everything that is going on. He is always emphasizing all the things that should be done (Production Emphasis), but somehow nothing gets done. The principal sets up such items as schedules and class changes, personally that he does not let the teachers perform any of these activities. His view is that "Daddy knows best".

The school and his duties within it are the principal's main interest in life; he derives only minimal social needs satisfaction outside his professional role. He is considerate,
but his consideration appears to be a form of seductive over solicitousness rather than a genuine concern for the social needs of others. In a sense, he uses this consideration behaviour to satisfy his own social needs. Although he preserves an average degree of thrust, as evidenced by his attempt to move the organization, he none-the-less fails to motivate the teachers, primarily because he, as a human being, does not provide an example, or an ideal, which the teachers care to emulate. The teachers' and the principal's behaviours in this climate takes the following shape:

Parental Climate

<table>
<thead>
<tr>
<th>Group Behaviour</th>
<th>Leader Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) High disengagement</td>
<td>(1) Low Aloofness</td>
</tr>
<tr>
<td>(2) Low Hindrance</td>
<td>(2) High Production Emphasis</td>
</tr>
<tr>
<td>(3) Low Intimacy</td>
<td>(3) Low Consideration</td>
</tr>
<tr>
<td>(4) Low Esprit</td>
<td>(4) Low Thrust</td>
</tr>
</tbody>
</table>

(6) The Closed Climate: The close climate marks a situation in which the group members obtain little satisfaction in respect to either task-achievement or social-needs. In short, the principal is ineffective in directing the activities of the teachers, at the same time, he is not inclined to look out for their personal welfare.
The teachers are disengaged and do not work well together. Consequently, group achievement is minimal (High Disengagement). To secure some sense of achievement, the major outlet for the teachers is to complete a variety of reports and to attend to a host of "house keeping duties". The principal does not facilitate the task accomplishment of the teachers (High Hindrance), Esprit is it a low level, reflecting low job satisfaction and social-needs satisfaction. The salient bright spot that appears to keep the teachers in the school together is that they do obtain satisfaction from their friendly relations with other teachers. (Average Intimacy). One would speculate that the turnover rate for teachers in this climate institutions would be very high, unless, of course, the teachers are too old to move rapidly to another job, or have been "locked into the system" by the attractions of a retirement system.

The principal is highly aloof and impersonal in controlling and directing the activities of the teachers (High Aloofness). He emphasizes production and frequently says that "we should work harder". He sets up rules and regulations about how things should be done, and these rules are usually arbitrary (High Production Emphasis). But his words are hollow, because he, himself, possesses little 'Thrust' and he does not motivate the teachers by setting a good personal example. Essentially, what he says and what he does are two
different things. For this reason, he is not genuine in his actions. He is not concerned with the social needs of teachers; in fact, he can be depicted as inconsiderate (Low Consideration). His cry of "Let's work harder" actually means, "you work harder". He expects everyone else to take the initiative, yet he does not give them the freedom required to perform whatever leadership acts are necessary. Moreover, he himself does not provide adequate leadership for the group. For this reason, the teachers view him as not genuine; indeed, they regard him as a "phony". This climate characterizes an organization for which the best prescription is radical surgery. The teachers' and the principal's behaviours in this climate type of institutions are as follows:

<table>
<thead>
<tr>
<th>Group Behaviour</th>
<th>Leader Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) High disengagement</td>
<td>(1) High Aloofness</td>
</tr>
<tr>
<td>(2) High Hindrance</td>
<td>(2) High Production Emphasis</td>
</tr>
<tr>
<td>(3) Low Esprit</td>
<td>(3) Low Thrust</td>
</tr>
<tr>
<td>(4) Average Intimacy</td>
<td>(4) Low Consideration</td>
</tr>
</tbody>
</table>

It should be noted here that the OCDQ originally standardised by Halpin and Croft made use of a sample of 1,151 elementary school teachers. The 64 items included in the OCDQ constitute what remained out of total 1,000 items which originally formed the pool. The OCDQ sub-tests were also factor-
analysed, and factor loading was determined. The intercorrelations among the eight sub-test scores were factored using a principal-components method of analysis. It would, thus, be seen that the OCDQ has been subjected to considerable objective procedures of examination and pruning. It is a valid and reliable tool.

(2) **The Purdue Teacher Opinionaire (PTO)**

(The American spelling "Opinionaire" has been used as given in the PTO manual)

The Second tool to be used in the present study is the Purdue Teacher Opinionaire (1970). It is designed to provide a measure of 'teacher morale'. The PTO yields a total score indicating the general level of the teachers' morale and also provides meaningful sub-scores which break down morale into some of its dimensions.

The ten factors included in the Opinionaire are:

1. Teacher rapport with principal,
2. Satisfaction with teaching,
3. Rapport among teachers,
4. Teacher salary,
5. Teacher load,
6. Curricular issues,
7. Teacher status,
8. Community support of education,
9. College facilities and services,
10. Community pressure.

In the Opinionaire with 10 factors, two main dimensions are involved.
(a) Task-achievement which refers to perceived productivity and progress toward the achievement of the tasks of the organization.

(b) Need-satisfaction, which refers to the perceived job-satisfaction of individual needs through the interaction of the participant in his role within the work group and the total organization.

The PTO consists of 100 items which give one objective and practical index of teacher morale by means of the perception of the participants. The Opinionnaire also provides specific and valid information about crucial problems and areas of tension which may have adverse effect on morale. The first form of the Opinionnaire, developed in 1961, consisted of 145 items selected and logically grouped to sample eight categories pertaining to the teacher and his school environment: (1) teaching as an occupation; (2) relationship with students; (3) relationship with other teachers; (4) administrative policies and procedure; (5) relationship with community; (6) curriculum factors; (7) working conditions; and (8) economic factors.

In the development of the instrument an experimental form was administered to a large representative sample of high school teachers. The final choice of items for the opinionnaire
was based on internal consistency item analysis techniques. The Kuder-Richardson internal consistency reliability coefficients for the eight categories ranged from .79 to .98, with an overall reliability coefficient of .96.

The revised form of the Purdue Teacher Opinionnaire consists of 100 items and 10 factors.

The following is a brief description of the 10 factors included in the opinionnaire:

**Factor - 1 "Teacher Rapport with Principal"**: It deals with the teachers' feelings about the principal, his professional competency, his interest in teachers and their work, his ability to communicate, and his skill in human relations.

**Factor - 2 "Satisfaction with Teaching"**: It pertains to teacher relationships with students and feelings of satisfaction with teaching. According to this factor, the high morale teacher loves to teach, feels competent in his job, enjoys his students and believes in the future of teaching as an occupation.

**Factor - 3 "Rapport Among Teachers"**: It focuses on a teacher's relationship with other teachers. The items here solicit the teacher's opinion regarding the cooperation, preparation, ethics, influence, interests and competence of his peers.
Factor - 4: "Teacher Salary": It pertains primarily to the teacher's feelings about salary. Is the salary based on teacher's competency? Is the salary policy administered fairly and justly? Do teachers participate in the development of these policies?

Factor - 5: "Teacher Load": It deals with such matters as record-keeping, clerical work, extra curricular load, keeping up-to-date professionally.

Factor - 6: "Curriculum Issues": It solicits teachers' reactions to the adequacy of the teaching programme in meeting the student needs in providing for individual differences and preparing students for effective citizenship.

Factor - 7: "Teacher Status": It samples teachers' feeling about the prestige, security and benefits offered by teaching. Several of the items refer to the extent to which the teacher feels he is an accepted member of the community.

Factor - 8: "Community Support of Education": It deals with the extent to which the community understands and is willing to support a sound educational programme.

Factor - 9: "College Facilities and Services": It has to do with the adequacy of facilities, supplies and equipments and the efficiency of the procedure for obtaining material and services.
Factor - 10: "Community Pressure": It gives special attention to community expectations with respect to the teacher's personal standards, his participation in outside activities, and his freedom to discuss controversial issues in the classroom.

The revised form was administered to the high school faculties with 20 or more teachers in Indiana and Oregon. The 60 Indiana schools were a stratified random sample and the 16 Oregon schools were selected primarily from the eastern part of the state. Four weeks later the instrument was readministered in all of the schools included previously. Altogether, test-retest data were obtained for 3023 teachers.

The test-retest correlations for total scores and for factor scores are listed as follows:

### Test-retest Correlations for Purdue Teacher Opinionnaire Factor and Total Scores

<table>
<thead>
<tr>
<th>Factor (N=3023) Correlation</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Teacher Rapport with Principal</td>
<td>.88</td>
</tr>
<tr>
<td>(2) Satisfaction with teaching</td>
<td>.84</td>
</tr>
<tr>
<td>(3) Rapport among teachers</td>
<td>.80</td>
</tr>
<tr>
<td>(4) Teacher salary</td>
<td>.81</td>
</tr>
<tr>
<td>(5) Teacher load</td>
<td>.77</td>
</tr>
<tr>
<td>(6) Curriculum issues</td>
<td>.76</td>
</tr>
<tr>
<td>(7) Teacher status</td>
<td>.81</td>
</tr>
<tr>
<td>(8) Community support of Education</td>
<td>.78</td>
</tr>
<tr>
<td>(9) School Facilities and services</td>
<td>.80</td>
</tr>
<tr>
<td>(10) Community Pressures</td>
<td>.62</td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td><strong>.87</strong></td>
</tr>
</tbody>
</table>
An understanding and diagnosis of how teachers feel about their particular college situation will help to improve the level of morale of teacher educators in colleges of Education. This opinionnaire has been applied to measure the morale of the teachers in secondary schools of Tamil Nadu (Pillai, 1972) and Baroda (Shelat, 1974).

An adapted version of Ralph R. Bentley and Averno M. Remple's "The Purdue Teacher Opinionnaire" as described above will be used to measure the morale of the teacher educators in colleges of education in Gujarat. This instrument is designed to provide the opportunity to the teacher educators to express their opinion about their work as college teachers and various related college problems in their particular college situation. The respondents will be requested to give their frank opinion as there are no right or wrong responses. They will also be assured that their responses will be treated confidential and the results will be reported by groups only.

The questionnaire will be distributed to the same sample on which the Organizational Climate Description Questionnaire will be administered.

The respondents will be asked to indicate the extent to which each statement characterizes his college situation by making one of the four categories given below:
<table>
<thead>
<tr>
<th>Agree</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probably Agree</td>
<td>PA</td>
</tr>
<tr>
<td>Probably Disagree</td>
<td>PD</td>
</tr>
<tr>
<td>Disagree</td>
<td>D</td>
</tr>
</tbody>
</table>

Scoring of these four categories is intended to be done by assigning weights 4, 3, 2 and 1 if "A" or "Agree" is the keyed response and 1, 2, 3, 4 if "D" or "Disagree" is the keyed response.

The factor score will be obtained by summing all of the item weights for each factor.

The total score will be obtained by the sum of all 10 factor scores.

(3) **Leader Behaviour Description Questionnaire (The LBDQ)**

The third tool used in the study is "The Leader Behaviour Description Questionnaire (LBDQ)" (vide Appendix XII). It was constructed by Halpin and Winer (1952) is devised to measure the group's description of its leader behaviour. There are two specific dimensions of leader behaviour, as stated earlier "Initiating Structure", and "Consideration". These two dimensions have also been earlier clarified.

The third tool used in the study is the **Leader Behaviour Description Questionnaire (LBDQ)**.
Description Questionnaire (LBDQ) devised by the Personnel Research Board at the Ohio State University. Hemphill and Coors constructed the original form of this questionnaire, and Halpin and Winer (1952) identified "initiating structure" and "Consideration" as two fundamental dimensions of leader behaviour. These dimensions were identified on the basis of a factor analysis of the responses of 300 crew members who described the leader behaviour of their 52 aircraft commander. 'Initiating structure' and 'consideration' accounted for approximately 34 and 50 per cent, respectively, of the common variance.

On the basis of factor analysis, keys were constructed for these two dimensions of leadership behaviour. The original consideration key of 28 items has an estimated reliability (corrected by the Spearman-Brown formula) of .94. The corresponding estimate for the 29 items initiating structure key is .76. In the later, published form of the LBDQ there are only 15 items on each of the keys. The estimated reliabilities are .93 and .86, respectively.

By measuring the behaviour of leaders on the 'initiating structure' and 'consideration' dimensions, it will be determined by objective and reliable means how specific leaders differ in leadership style, and whether these differences are related, significantly to independent criteria of the leader's
effectiveness and efficiency. In sum, the Leader Behaviour Description Questionnaire will offer a means of defining these leader behaviour dimensions operationally.

The LBDQ consists of 30 items in all. On examining the items of the instrument LBDQ, the investigator found it suitable to assess the leader behaviour of the principal as perceived by the teacher educators in the colleges of education. The statements are of general application and therefore can be made use for colleges as well as for school situation.

Procedure (LBDQ)

In this Questionnaire, there are thirty short, descriptive statements of ways in which leaders may behave. The respondents are to be asked to indicate the frequency with which his college principal engages in each form of behaviour by checking one of the five adverbs: Always, often, occasionally, seldom and never. If the keyed response is "always" the scoring will be '4', and if the keyed response is "Never" the scoring was '0'. For negative items the scoring will be in reverse order.

(4) "Evaluation of the Effectiveness of the Teacher Education Programme" (ETEP)

To evaluate the effectiveness of the teacher education programme in colleges of education in Gujarat, a special
tool was constructed by the investigator. As the purpose of the questionnaire was to evaluate the effectiveness of the teacher education programme in colleges of education, care was taken to include, the academic, professional and other related activities of the teacher training programme prevalent in colleges of education in Gujarat. For this a review of the existing teacher education programme in different universities of Gujarat was made. This resulted into an enquiry of the programme from 10 different areas of the teacher education programme; namely, Admission, Curriculum, Teacher Educators, Library and Audio-Visual and Physical Facilities, Teaching Techniques, Leadership of the Principal, Democratic Staff and Students Participation, Staff Professional Growth, Periodical Evaluation and its Feed-back and Financial Adequacy and Regularity, in colleges of Education.

Later, a try out of the questionnaire was conducted on 20 teacher educators selected randomly irrespective of the location or affiliation of the colleges or university to which they belonged. To begin with the tool consisted of 130 items, covering all the 10 aspects of the teacher education programme. Later, the discussion and suggestions made by the teacher educators helped in reframing the questions with respect to language and eradicating the non-response statements.

The questionnaire finally emerged this scrutiny consist
of 90 items of simple and short statements based on the factual inquiry as well as the perception of the teacher educators (Vide Appendix IX).

A brief description of the 10 factors of the effectiveness of the teacher education programme is given below:

$F_1$ - "Criteria for Admission": It refers to the policy outlined and implemented regarding the admission of the teacher trainees in colleges of education.

$F_2$ - "Curriculum": It refers to curriculum and other related academic activities practised in colleges of education and its impact on the value system and attitudes of the teacher trainees.

$F_3$ - "Teacher Educators": It refers to the academic and professional activities carried out by the teacher educators in the colleges of education.

$F_4$ - "Library, Audio-visual and Physical Facilities": It refers to the adequacy of supply and availability of reading material, aids and equipments for teaching and physical facilities to teacher educators and teacher trainees in colleges of education.

$F_5$ - "Teaching Techniques": It refers to the academic activities outlined and the teaching techniques applied by the teacher educators.
F_6 - "Leadership of the Principal": It refers to the Principal's effective manipulation of the teacher educators into a work group.

F_7 - "Democratic Staff and Student Participation in Administrative and Academic Decision-making": It refers to the democratic approach to administrative and academic decision-making by teacher educators as well as teacher trainees in the colleges of education.

F_8 - "Staff Professional Growth": It refers to encouragement and incentive given to the teacher educators to improve their academic and professional qualifications and experience.

F_9 - "Periodical Evaluation of the Work of Students and Staff and Their Feed-back": It refers to the improvements brought about in the existing teacher education programme based on the evaluation and the feedback of the staff and students.

F_10 - "Financial Adequacy and Regularity": It refers to the financial aspect of the colleges which is a source of security for the teacher educators.

These 91 statements are distributed under 10 factors given in Table 3.5.
### Table 3.5: The Factors and Items of the Tool on Effectiveness of Teacher Education Programme (The ETEP)

<table>
<thead>
<tr>
<th>Factor No.</th>
<th>Names of Factors</th>
<th>No. of items</th>
<th>Maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Criteria for admission</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>2.</td>
<td>Curriculum</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>3.</td>
<td>Teacher Educators</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>4.</td>
<td>Physical Facilities Audio-visual aids and Library</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>5.</td>
<td>Teaching Techniques</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>6.</td>
<td>Leadership of the Principal</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>7.</td>
<td>Democratic staff and student participation in academic decision</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>8.</td>
<td>Staff Professional Growth</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>9.</td>
<td>Periodical Evaluation of the work of students and staff and their feedback</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>10.</td>
<td>Financial Adequacy and regularity</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

Statements for each factors are given in Appendix No. IX.

This Questionnaire will be personally distributed to the teacher educators of the colleges by the investigator on whom the other three tools, viz. The Organizational Climate Description Questionnaire, the Purdue Teacher Opinionnaire, and Leader Behaviour Description Questionnaire would be administered.
Thus out of the total of 35 sampled colleges, 20 colleges are intended to be selected for administering the ETEP tool. Special care will be taken to include 50 per cent of the colleges from each of the identified six climate categories.

To mark the responses four choices will be given viz., "Fully true", "Partially true", "Doubtful", and "Not at all". The respondents will be asked to check one of the four choices. If the keyed response is "Fully true" or "F" the scoring will be '4' and if the keyed response was "Not at all" or "N" the scoring will be '1'. For the negative items the scoring will be in reverse order.

3.8 The Procedures of Analysis and Interpretation

This would be described in relation to the research tools used in the present study.

(1) Identification of the Organizational Climate of the Colleges of Education.

The obtained raw score on the OCDQ will be converted into standard scores first normatively and then ipsatively. Normative standardization will be done across the sample of 35 colleges so that each of the eight subtest scores could be compared on a common scale. Thus, each subtest will be normatively
standardized according to the mean and standard deviation of the total sample for that subtest.

Ipsative standardization will be made with respect to the mean and standard deviation of the profile scores for each college. For both standardization procedure, a standard score system based upon a mean of 50 and standard deviation of 10 will be chosen as suggested by Halpin (1966). These standardized scores will indicate two things: first, a score above 50 on a particular subtest would indicate that the given college scored above the mean of the sample on that subtest and second, that the score on that subtest was above the mean of the college's other subtest scores.

Hereafter, the next step would be to classify the colleges of education with respect to their organizational climate according to the prototype profiles for each of the six climates ranked in respect to Openness Vs. Closedness arrived at as per the directions shown in Halpin and Crofts study (1966). Each College's profile will be compared in turn with each of the six prototype profiles and the profile similarity score will be computed. The absolute differences between each subtest's score in a college profile and the corresponding score in the first prototype profile will be obtained, then in the second prototype profile and so on. In each case, the sum of the absolute differences between the
profile scores will be computed where the low sum would indicate the profiles are highly similar and a large sum would indicate that the profiles are dissimilar. The college would be assigned to the climate defined by that prototype profile for which its profile similarity score is the lowest.

(2) **Purdue Teacher Opinionaire Scores**. The tool is intended to measure the morale of the teacher educators.

The raw scores obtained on the 100 item instrument (PTO) will be classified according to the 10 factors given in the Opinionaire; as the opinionaire does not only yield a total score indicating the general level of a teacher's morale, but also provides meaningful sub-scores which break down morale into its ten dimensions or factors. Thus, the factor scores will be obtained by summing up the weights assigned to the items belonging to a given factor and the total score will be obtained by summing up the factor scores. The college morale score will be computed by finding the average total score and average total scores for each of the ten dimensions. The mean of the college total score will give an idea as to what the average morale of the faculty of a particular college is. To interpret the score, i.e. to decide whether the score is indicative of 'high', 'average' or 'low' morale, the scores will be converted into stanine scores i.e. scores which range from 1 (low) to 9 (high) with a mean of 5 and standard deviation of 2.
The stanine score, though crude enough to present a single digit to represent each class, it is precise enough for a practical and statistical comparison. As the stanines are equally spaced steps in a scale, the level of morale in one college will be easily compared with the level of morale in another college (Bentley and Rempel's PTO manual, 1970)

(3) **Leader Behaviour Descriptive Questionnaire (The LBDQ)**

To measure the leadership behaviour of principals of colleges of education, the scores on two specific dimensions of the LBDQ i.e. the "Initiating Structure" and "Consideration", will be considered. There are 15 items for each of these dimensions, making the questionnaire of 30 items in all. Total score based on the summation of the item scores will be obtained for each individual separately for 'Initiative Structure' and 'Consideration' components of leadership behaviour. Institutions will be labelled as 'high' or 'Low' on the basis of their mean score position above or below the grand mean of the respective scores. Thus, four different patterns of leadership viz., HH, HL, LH and LL will be obtained by combining the levels of 'initiative structure' and 'consideration' factors. These four patterns have specific significance. This will be clear from the following observations by Halpin (1966, pp.98-9).
"The leaders described in Quadrant I (i.e. the HH Pattern) are evaluated as highly effective, whereas those in Quadrant III (i.e. the LL Pattern), whose behaviour is ordinarily accompanied by group chaos, are characterized as most ineffective. The leaders in Quadrant IV (i.e. the HL Pattern) are martinets and the "cold fish" so intent upon getting a job done that they forget they are dealing with human beings, not with cogs in a machine. The individuals described in Quadrant II (i.e. the LH Pattern) are also ineffective leaders. They may ooze with the milk of human kindness, but this contributes little to effective performance unless their consideration behaviour is accompanied by a necessary minimum of Initiating Structure behaviour."

(4) **The Effectiveness of the Teacher Education Programme**

The ETEP (Effectiveness of Teacher Education Programme) measures a consolidated picture of effectiveness of teacher education programme that is being provided in colleges of education. There are 91 statements which are distributed under 10 factors.

The factor scores will be obtained by summing up the weights assigned to the items belonging to a given factor. Thus, scores will be obtained for all the colleges with respect to the factors of the effectiveness of the teacher education programme. The two desired groups will be obtained as the colleges fall above or below the median - effectiveness
scores of each of the 10 factors of the questionnaire, thereby forming the group of "High" and "low" effectiveness in the colleges of education in Gujarat.

Statistics Applied

In analysing the data yielded by the four research tools, the following sophisticated statistics will be deployed:

1. Contingency Coefficient will be computed to find out the significant relationship between the six identified climate categories of the colleges viz., Open, Autonomous, Familiar, Controlled Paternal and Closed and the three categories of teacher's morale, viz., High, Average and Low.

2. The coefficient of correlation by Product Moment Method between the scores obtained on the eight dimensions of the OCDQ, viz., Disengagement, Hindrance, Esprit, Intimacy, Aloofness, Production Emphasis, Thrust, Consideration and the total morale scores of the teacher educators under the 'Familiar', 'Paternal' and 'Closed' climate categories having average and low morale will be computed.

3. The significance of the relationship between each of the morale factors with the six climate categories will
be determined by calculating the Analysis of Variance. This simple composite test will compare all the mean scores of morale, classified into six climate categories simultaneously and will indicate whether or not a statistically significant difference exists somewhere in the mean scores of morale. This will also answer the question whether the variability between groups is large enough to compare with the variability within groups, to justify the inference that the mean of the population from which the different groups were sampled are not all the same. In other words, if the variability between group means is large enough, one can conclude that they probably come from different populations and that there is a statistically significant difference in the data.

The formula applied for testing the 'F' ratio is:

\[
F = \frac{\text{Between group variance}}{\text{Within group variance}}
\]

If 'F' ratio is significant, a 'post-Hoc' test is applied to find the difference between the mean scores of the pairs made on the classification of six climate categories.

ANOVA tables are thus prepared for each of the 10 factors of morale scores classified into six categories of organizational climate.
(4) To determine the relationship between the leader behaviour of the principal (HH, HL, LH and LL) and the morale of the teacher educators (High, Average, Low) a contingency coefficient of correlation will be applied.

(5) The 't' test will be applied to test the significant mean score difference on the eight dimensions of OCDQ (as mentioned earlier) according to the classification of the colleges of High and Low effectiveness.

(6) The 't' test will be applied to test the significance of the difference between teacher educators rapport with the principal, rapport among the teacher educators, teacher educators job satisfaction, satisfaction with salary, work load, status, community support and Pressure at colleges of Education and Curriculum issues and each of the 10 factors of "effectiveness of the teacher education Programme", treated separately.

(7) Contingency coefficient will be used to compute the relationship between 'Initiating Structure' and 'Consideration' with the morale of the teacher educators.

(8) The 't' test will be used to compute the significant difference in morale between teacher educators with an Urban background and rural background.
(9) Contingency coefficient will also be computed to establish the significant relationship between the morale of the teacher educators and the years of teaching experience.

In brief, the above statistics will be used in the study to analyse and interpret the data yielded by the research tools.

3.9 The Chapterisation

The research report - the thesis will be organized under five main chapters, each chapter having a number of sections. These chapters will be as under:

Chapter 1: It will be introductory. It will attempt to survey broadly the recent scene in teacher education in the country, particularly at the B.Ed. degree level, and would indicate priority need for teacher education programme in the country. It would also try to build up a general picture of teachers' colleges, teacher education programme and teacher educators in Gujarat State. As the concern of the present study is organizational climate of colleges of education in Gujarat, morale of teacher educators, and leadership behaviour of college principals, the theoretical postulates regarding them would be examined, and a theoretical frame of reference for the study of these three variables in
relation to the effectiveness of teacher education programme would be outlined.

Chapter 2 : It would relate to a review of studies done in Gujarat, India and abroad on teacher education, organizational climate, teacher morale, leadership and teacher education programme and also related literature on the subject.

Chapter 3 : It describes in detail the research design of the present study.

Chapter 4 : It constitutes a major part of the thesis. It presents in adequate details the analysis of the data yielded by the research tools hypothesis-wise, and interprets the results using some sophisticated statistics.

Chapter 5 : It is the last concluding chapter. It presents major findings and the conclusion of the study. An attempt is also made to examine the implications of the findings of the study to improve the teacher education programme in Gujarat State.

3.10 Conclusion :

Such is the research design of the present doctoral study. In developing it, the investigator kept in mind some
of the inadequacies revealed by survey of research on teacher education. An attempt is made to maintain the focus of the research in formulating various hypotheses and selecting procedures and techniques of statistical analysis and interpretation.

The next chapter will be devoted to the analysis of the data yielded by the research tools using a representative sample of 300 teacher educators from the 35 colleges of education in Gujarat.