

2.1 Introduction

In the present study institutional climate of affiliated colleges of Gujarat University constitutes the central theme to which teacher morale and student control ideology are studied as contributory as well as the product variables. It was, therefore, a detailed conceptual framework of the three variables that was presented at great length with feed-back from available research. This conceptual framework is intended to serve as a theoretical framework of reference for the three variables. In the present chapter the main and meaningful outlines of the research plan intended to study the one major variable (institutional climate) and the two of its correlates (teacher morale and student control ideology) will be outlined and briefly discussed. The study makes use of two altogether new research instruments ('Institutional Climate Description Questionnaire' and 'College Teacher Morale Opinionnaire'), specially developed by the investigator - which would be more appropriate to Indian culture and educational scene in Gujarat - to collect requisite data. These will be separately dealt with in the next chapter. The two newly constructed tools would be the first Indian tools to measure and evaluate institutional climate of affiliated colleges and morale of teachers working therein. The research instrument to measure student control ideology will be the

one developed and standardised by Willower, Eidell and Hoy at the Pennsylvania University, U.S.A. (1967), (This tool was named by the authors as the Pupil Control Ideology - the PCI).

The affiliated colleges included in the study belong to all academic disciplines (excepting Medicine) of the Gujarat University. Therefore, the study is more of the Gujarat University and would provide useful directions and dimensions for the study of other Indian universities* which are predominantly of the affiliating type.

It may also be noted that research efforts made in the area of organizational climate and teacher morale were in school area with the solitary exception of a study by Ivy Franklin (1975) who studied climate, morale and leader behaviour in colleges of education in Gujarat in perspective of their possible impact on the effectiveness of professional preparation of secondary school teachers. Shah (1975) had studied climate of colleges of Central Gujarat incidentally. The present study, therefore, is the first to study climate, teacher morale and student control ideology at the level of colleges affiliated to a large size university with a tradition of twenty-eight years behind it.

The discussion in the present chapter will be woven around the following local points :

* They numbered 102 in 1974-75 excluding 9 deemed universities

- (a) The problem and the definition of important terms
- (b) The rationale of the study
- (c) Its scope and limitations
- (d) Its objectives
- (e) Some assumptions
- (f) The hypotheses
- (g) The sample
- (h) The research instruments
- (i) Procedure of analysis and interpretation
- (j) The purview of the chapters that follow.

Each one of these focal points will be dealt with in a separate section.

2.2 The Problem

The problem of the study is worded as under :

'Institutional Climate as a Factor of Staff Morale and Student Control Ideology in the Affiliated Colleges of Gujarat University.'

In other words, the statement of the problem boils down to the identification, measurement and evaluation of the organizational climate of affiliated colleges located in the area of the jurisdiction of the Gujarat University in the context of teacher morale and student control ideology.

The elucidation of the principal terms used in the statement of the problem, it is assumed, would add to the

clarification of the problem.

(a) Institutional Climate : The term is used in the same sense in which Halpin and Croft used the term 'organizational climate'. It signifies the personality of the institution. Like individuals, institutions are also known to differ in their personalities. This fact of variation in institutional personality gets support from the following citation of Halpin (1966:131) :

'Anyone who visits a few schools notes quickly how schools differ from each other in their feel... Each appears to have a 'personality' of its own that we describe as the 'organizational climate' of its own. Analogously, personality is to the individual what Organizational Climate is to the organization.'

This term is preferred to the one popularised by Halpin and Croft because it is more expressive and is specific to educational institutions, whereas Halpin-Croft's term is applicable to all sorts of organizations including educational ones.

This personality - the infra-atmosphere is built up by inter-locking interaction patterns of teachers, and principals. In the present study, however, to these twin group interaction complexes is added one more group of interactions generated by administration through its

hierarchical structure - the line - and - staff pattern, human relationships, communication and decentralization-cum-freedom. The conceptual framework of 'institutional climate' is dealt with at length in Chapter I. The generating influences for these inter-locking interaction patterns stem principally from social and psychological needs satisfaction, esprit, social and organizational control (reflected in emphasis on or concern for task accomplishment.)

(b) Staff : The term refers to the member of the teaching staff of a college in any hierarchy, whose primary job-responsibility is to impart education by transmitting knowledge, skills, etc. to the students enrolled in the institution.

(c) 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 effectiveness harmonization as a basis for morale. The term implies that (a) morale is not a single global dimension but consists of a number of components; (b) it is an individual attribute, although the institution does play a significant role therein; (c) it is a function of the specific job situation and not a generalized trait in the individual; and (d) it can be interpreted in terms of human

needs and the environmental sources of satisfaction of these needs.

(d) Student Control Ideology : The term refers to a way of thinking about controlling students by the teachers. Student control ideology is bi-polar. On one end it can best be described as 'custodial', and on the other end 'humanistic'.

A custodial student control ideology is characterized, as observed by Willower, et al. by stress on the maintenance of order and a punitive moralistic orientation toward the control of students.

A humanistic student control ideology is marked by a positive attitude towards students and reflects 'trust', 'confidence', 'recognition of the worth' and reliance on the 'basic goodness' of students.

(e) Affiliated Colleges : The term 'affiliated colleges' refers to institutions which are not directly conducted, supervised, controlled and financed by the Gujarat University but which are either private colleges managed by registered public trusts or societies with support from State Government

through a grant-in-aid system or are Government managed and financed colleges operating within the rules of the University. They are periodically inspected by the University through specially constituted committee, called 'Local Inquiry Committee.' The students of all affiliated colleges are examined by the parent University through its programme and system of examination, and are awarded degrees or diplomas ~~to them~~ if they pass the examination set by the University as per its rules.

It may be noted here that these colleges are located in Gujarat in the areas of the Gujarat University, which exclude the areas of jurisdiction of South Gujarat University, M.S. University of Baroda, Sardar Patel University, Saurashtra University, and Gujarat Vidyapeeth, (besides the areas of Agricultural University and Ayurved University) which are single faculty universities.) The affiliated colleges are attached to different Faculties depending upon the academic discipline to which they belong. The Gujarat University has Faculties of Arts, including Education, Science, Commerce, Law, Engineering and Medicine.*

(f) Static and Dynamic Variables : Two terms 'static variables' and 'dynamic dependent variables' are also used in this investigation. The former includes those variables that do not change as per different components or dimensions

* These colleges could not be included in the present study because doctors - the medical educators said they were too busy to find time to fill out the research questionnaires.

e.g. faculty, zone or region, rural, urban or city/town situation, size of the institution, socio-economic status of the institutions, Similarly age, sex, experience, qualifications of the teachers are also static variables. The dynamic variables are changing variables. They vary according to various static independent variables. A dynamic variable may be high, average or low under different college situations. Institutional climate, teacher morale and student control ideology are such dynamic variables.

2.3. The Rationale of the Study

Colleges in the country, particularly the affiliated colleges, have been passing through critical times. Many of them are under tremendous financial pressures, and it has become a matter of common knowledge, particularly in Gujarat, that colleges in certain disciplines like science and education are not in a position to make regularly payment of salary to the teaching staff continuously for three or four months. They have become so vulnerable that their very existence is threatened. With the introduction of 10 + 2 + 3 pattern in Gujarat, the Pre-university Classes in Arts, Science and Commerce in most of the affiliated colleges are likely to be closed down from June 1977, and a good number of junior college teachers face the danger of losing their job.*

* The following comments from 'The Indian Express' (dated 19th March 1977) are illuminating in this context :

'The number of college teachers who have been deprived of their jobs in Gujarat following the introduction of the new pattern of education is incredibly great. They have been thrown out of their colleges. The college teacher has lost something more....'

The Gujarat University Area Teachers' Association (the GUATA) is extremely vigilant and active and puts a lot of pressure on the State Government and the University Administration to improve conditions of payment and other work conditions for college teachers. The situation is intriguing. It has become more suspect with the introduction of the new school pattern of 10+2 and with the announcement of the Gujarat Government about the adoption of the recommendation of the Sen Committee appointed by the Central Government for the improvement of salary scales and work conditions in colleges. This poses obstruse financial challenges to management of private colleges particularly of science, education, etc. which do not have money to pay to their teachers as per the existing salary scales, not to mention the raised scales of the Sen Committee. It is true that under the clamping pressure of the National Emergency and the fright of drastic action being taken by Government under MISA, the student front on the college campus has become quiet in the course of last one year or so. But environment is still filled with internal and external educational as well as economic pressures and tensions. It has, therefore, become crucial to identify and evaluate the institutional climate of various categories of college level institutions and to relate it to some selected personal variables and to major independent ...than his job. Apart from his status, the retrenchment has robbed him of his emotional attachment to the place where he used to work. He has suffered a tremendous psychological set-back which the assured projection cannot redress.'

variables like staff morale and student control ideology. When campuses of colleges are relatively quiet, it will be easier (as the student factor will be isolated) to map the domain of institutional climate, describe it and evaluate it more reliably.

Teachers' morale is particularly assuming a proportion as great and as much causing anxiety as the deteriorating students' morale. If what is frequently reported in the dailies and monthlies of Gujarat - particularly 'Sandesh', 'Gujarat Samachar', 'Gujarat Mitra', 'Indian Express' and 'Times of India' about stormy meetings of the courts of the Gujarat university, statements of presidents of the University Teachers' Associations and views expressed in these dailies by their readers is in any way indicative of the agitated minds of the University and college teachers, one can hazard to observe that morale of teachers of universities and colleges in the State, too, has been going down. But these are guesses or assumptions. It is necessary to bring the issue within the searching ken of a scientific investigation. Morale is both an individual and^a group concept. It is also a web of complex delicate texture of interacting forces! It is necessary not only to discover the level of the morale of teachers of the affiliated colleges (because conditions are worse than what one can expect to find in Departments and Institutions directly conducted, financed and controlled by the Gujarat University and Gujarat Government), but

also to discover which of its ingredients or factors are positively or adversely affecting morale. It is particularly for this reason that the present study has included 'Staff morale' as one of the two correlates of the study. Keeping the Indian scene in higher education as it has developed in the course of last few years - in seventies, the present researcher has, through preliminary exploratory exercises, mapped the domain of morale as consisting of eight dimensions, viz., (1) teacher welfare, (2) security, (3) conditions of work, (4) interpersonal relations, (5) job-satisfaction, (6) administration, (7) need-satisfaction and (8) cohesion. These eight dimensions differ from Patel's (1973) seven components viz., (1) integration between the principal and the staff, (2) harmony of the staff, (3) satisfaction with subject teaching, (4) satisfaction with pay, (5) satisfaction with work-load, (6) involvement of teachers, (7) and general relationship. These seven components are more pertinent and typical at school level. The five main components of teacher morale identified by Premila Dekhtawala (1977), viz. (1) Individual characteristics, (2) Behavioural characteristics, (3) Group spirit, (4) Attitude towards job and (5) Community involvement came to be reported only recently (that is, after the data collection for the present was over). Again, this teacher morale inventory is specifically meant for secondary school teachers. At the college level, the tradition and format

appear to be, to some extent, different in Gujarat. So the need was there to develop a separate independent tool to measure teacher morale of colleges. Franklin (1975) has used the Purdue Teacher Opinionnaire by Ralph Bentley and Averno Remple to study the morale of the staff of colleges of education of Gujarat. But this tool, too, was originally meant to measure morale of school teachers. Some factors mapped in this test like those that deal with teacher rapport with principal, curriculum issues, community support of education, and college facilities and services have not much relevance in a society where still hierarchical structure, bureaucracy, disengagement of community characterize educational scene at the stage of higher education. It is for these reasons that when the present investigator decided to measure and evaluate staff morale of her sampled colleges, she decided to develop a tool which would, in a good measure, be appropriate to conditions prevailing in affiliated colleges of the Gujarat University.

The second correlate of the present study is student control ideology. This correlate has been selected to get some idea of the student control ideology of college teachers. It is very important to know this, because ideology, very often, influences one's action. It is alleged that college teachers do not sincerely make attempts to come closer to the student community, and the two camps - one of teachers and the

other of students - have come to be developed on college and university campuses. They still espouse the ideology of keeping students at respectful distance and they still believe that students need to be controlled so that their minds and behaviour become disciplined and they are able to devote themselves with single mindedness to the pursuit of excellence in learning, training and research. But this thinking is still hypothetical. The truth of it needs to be objectively and methodically investigated. It is very much necessary to know to what extent the teaching community of the colleges harbour in their minds the custodial ideology or humanistic ideology. The many reforms in higher education that are being stressed by the University Grants Commission of the country, particularly the questions-bank system, continuous assessment of sessional work of students, the semester system, the adoption of newer methods of teaching (discussion, seminar, paper reading, assignments, etc.) will continue to cast shadows of doubt and misgivings unless the teachers' control ideology is properly examined, evaluated and reoriented.

Such is broadly the rationale of the present study.

2.4 Scope and Limitations of the Study

As observed earlier, the scope of the study covers institutional climate as dependent variable and teacher morale and student control ideology as independent variables. Some biographical variables are also included. It is largely a perception study. Its authenticity is limited to the extent to which the respondents have indicated their responses (perceptions) freely, without rancour, bias or fear. The present investigator has administered the tools mostly herself, and she carried the feeling that college teachers express their reactions, to speak comparatively, more freely and with less reservation than school teachers.

The scope of the study is extended to all the faculties of the Gujarat University excepting the medical faculty. The investigator made a number of visits to the medical college at Ahmedabad to discuss her tools and get the data from the medico teacher educators, but she had to give up her attempts because the medicos said that they were too busy to be able to oblige her. She had, therefore, kept the medical college out of her sample. This constitutes a limitation of the study.

Ideologically and practically, the measure for institutional climate does not solely depend upon the interaction behaviour patterns of teachers, principals and administration. The perceptions of the students about how the administration, principals and teachers behave, how they feel about these three groups of interaction patterns contribute also to the conceptualisation of institutional climate. The investigator is aware of the factor that consumers' perceptions have as important a place as of the three variables - the principals', teachers' and administrators'. Similarly, the local community also affects the climate. The political pressure groups, some members of which get elected to the University Court, also exert influence in shaping a college climate. College financial resources often leave their effect on climate and morale of teachers in colleges. These are not included in the scope of the present study, as that would have enlarged the scope of the research to such an extent that it might have turned out to be a stupendous task for the present investigator. All the dozen or so climate studies done in India so far have limited themselves to the interactions among teachers and teachers with the principal. The tools for identification of climate that have been so far constructed use largely teachers as the respondents. Those studies which have sought

to secure students' perceptions have framed separate tools for students. Even Shah (1975) has framed separate tools, for students. The exclusion of students' and community, perceptions as contributory influence to envisaging climate does delimit the scope of the study.

Halpin and Croft (1963) have categorised six types of organizational climate on a climate continuum. This facilitates, perhaps, demarcating climate types sharply. The methodology used by the present researches facilitates categorising climate type at the two extreme ends - the Open Climate and the Closed Climate and another at the intermediate level. These have been conceptualised and devised independent of Halpin-Croft model. The Open Climate identified in the study is not the combination of the Open and Autonomous Climate types, the intermediate the combination of Controlled and Familiar types, and Closed Climate the combination of the Paternal and Closed Climates. In the present study, the Open Climate constitutes one extreme end of the climate continuum, the Closed Climate another extreme end of the continuum and the Intermediate Climate denotes the middle or intermediary position on the continuum.

These are, among others, principal limitations of the study.

2.5 The Objectives of the Study

The overall purpose of the study is to seek answers to questions agitating the State and the society, the administrators and teachers, the parents and the planners as to in which direction the institutional climate of colleges has been shaping itself, what are the factors and forces that determine the directions and dimensions of the climate, whether the climate leaves any imprint on the staff morale, and whether the student control ideology - the custodial and humanistic orientation they display in their control ideology - bears any relationship with the nature and any dimensions of the institutional climate. These are the major concerns of the present study.

The specific objectives of the study are as under :

1. To develop separately two research instruments valid and reliable enough to identify, describe and evaluate institutional climate and teacher morale of the sampled colleges;
colleges of the
2. To inquire whether different/ Faculties of the Gujarat University manifest variations in their institutional climate;
3. To identify those dimensions or components of institutional climate in which different Faculties are stronger or weaker;
4. To find out whether perceptions of different dimensions of institutional climate by principals on one hand and teachers on the other differ significantly.

5. To inquire into the possible effects some institutional and some teacher variables leave on institutional climate.
6. To determine whether any significant relationship exists between (a) climate and teacher morale in general and (b) dimensions of institutional climate and factors of teacher morale ;
7. To seek to determine whether types of institutional climate bear any significant relationship with student control ideology ; and
8. To examine the extent of intercorrelatedness among climate, teacher morale and student control ideology ;

These objectives would serve the focal points of the present perception study.

2.6 Assumptions

The study assumes that like personality traits of individuals, the personality of institutions - the institutional climate can be measured and evaluated in terms of openness and closedness. The naming of the sub-tests or dimensions is arbitrary- it is not final and it can be named in other ways also. It is further assumed that, the interaction patterns of two negative teachers' behaviour (disengagement and hindrance) and principals' behaviour (aloofness and production emphasis), two positive teachers' behaviour (esprit and intimacy) and principals' behaviour (thrust and consideration) have as much relevance as bi-polar dimensions of administrative behaviour such as organizational structure, communication, human relations and decentralised democratization - freedom (internal autonomy) have

their contribution in building institutional climate at the higher stage of education. It is deemed useless (vide - Halpin, 1966:225) to demonstrate the 'validity' of any typology - the test of typology is assumed to lie in its usefulness to develop greater understanding of the environment in the colleges that have considerable influence on what goes on within college classrooms, laboratories and libraries and also on the outside campus. It is not held that the colleges that would secure Open climate score on the tool would be really open and those that would secure Closed climate score would be really closed. These questions are considered as unanswerable at the present. More research is required to find answers to these questions. The actuality = the reality of the Open, Intermediate and Closed Climates has not been assumed. What is assumed is the concept of Openness and Closedness and an intermediary climate concept. However, it is surmised - one is not certain - that the Esprit may be an index to authenticity as evaluated in a more independent way. (vide - Halpin, 1966:226).

It is also assumed that the global score on teacher morale secured by deploying the tool on college teacher morale would be more representative and comprehensive than the single mean score on the dimension 'Esprit' of the tool on Institutional Climate (ICDQ - Baroda Form).

It is further assumed that student control in a traditional society like the Indian society plays a central part in the organizational life of the colleges and it appears as a thread running through the fabric of the college culture. However, changes are taking place, though gradually and inperceptibly, with the force of external influences with the result that custodial ideology may be slowly changing towards humanistic ideology. This may be happening more where institutional climate tends towards Openness, less where it tends towards Closedness and uncertain where the climate occupies an intermediary position between openness and closedness.

2.7 The Formulation of the Hypotheses

Keeping the objectives of the study in mind, the following hypotheses are formulated :

1. More affiliated colleges of the Gujarat University would manifest Closed Climate than either Intermediate or Open Climate.
2. The faculties of Arts and Education would be characterised by Open Climate to a greater extent, the faculties of Law and Commerce by Intermediate Climate to a greater extent and the faculties of Science and Engineering by Closed climate to a greater extent.
3. There are no real differences between mean perceptions of teachers of different faculties, paired with one another, about Institutional climate dimensions as measured by the ICDQ.

4. There are no real differences between mean perceptions of college principals and college teachers of Institutional climate dimensions as measured by the ICDQ.
5. Institutional climate of affiliated colleges of the Gujarat University is expected to vary according to their size, urban town, location, zonal wise distribution and the socio-economic status of their teachers.
6. The morale of the teachers in the affiliated colleges in the Gujarat University would be 'average' rather than 'high' or 'low'.
7. The factor wise morale mean scores as yielded by the CTMO would show significant differences when the faculties are examined in perspective of the size, the location and the zonal distribution of their colleges.
8. Institutional climate of the affiliated colleges of the Gujarat University, as measured by the ICDQ and morale of teachers working therein as measured by the CTMO are significantly related.
9. Of the twelve dimensions of the ICDQ, Disengagement, Hindrance and Aloofness will be negatively related with all the factors of the CTMO.
10. *How?* There would be marked variations among the teachers of different faculties in their student control Ideology as measured by the SCI.
11. *mind* Teachers of colleges possessing open climate will be significantly humanistic in Student Control Ideology while those of colleges having closed climate will be significantly custodial.
12. Institutional climate, teacher morale and student control ideology of the sampled colleges are interrelated.

The organization of data collection and their analysis would be attempted keeping the above hypotheses in focus.

2.8 The Sample

As observed earlier, the Gujarat University comprises Faculties of Arts (including Education), Science, Commerce, Law, Engineering and Medicine. In the sample, all Faculties, excepting Medicine, will be included. There is no particular reason in excluding the Faculty of Medicine from the orbit of the study excepting the failure to get reasonably adequate data from its teachers who had no time to fill out the questionnaires.

The areas of jurisdiction of the Gujarat University are nine of the total nineteen districts of the Gujarat State. The sample covers all the nine districts, but not all the colleges situated in them. There are in all 194 colleges situated in the nine districts, of which 122 or 62.9 percent are included in the sample. Their district-wise sampling is not uniform, because cooperation from all colleges would not be expected to be uniform. Excepting two districts, in the remaining seven districts the sampled colleges range from 56.2 percent to 100 percent of the universe. In two districts of North Gujarat, the proportion of colleges included in the sample is 35 to 40 percent of the total number of colleges in them.

* Vide Appendix I

Table :2.1: presents district-wise distribution of the sample.

Table :2.1: District-wise Distribution of the Colleges (Sample)

District	Total No.of Colleges	Sampled Colleges	Percentage
Ahmedabad City	64	36	56.2
Baroda	12	12	100.00
Kheda	35	24	68.5
Panchmahals	14	11	78.5
Mehsana	32	19	59.4
Sabarkantha	14	5	35.1
Banaskantha	5	2	40.00
Ahmedabad	8	5	62.5
Kutch	10	8	80.0
Total	194	122	62.9

The investigator has tried to cover all the Faculties in the Gujarat University excepting the Medical Faculty for reasons stated earlier. The Faculty-wise distribution of the sampled colleges is shown in Table 2.2 on the next page.

The table 2.2 shows that two Faculties - the Science and Engineering - are cent percent represented in the sample. Excepting Arts Faculty (45.5 percent) all other Faculties have more than 50 percent representations. Therefore, the sample can be deemed to be fairly well reflecting different

A MAP OF GUJARAT STATE SHOWING PERCENTAGE DISTRIBUTION OF SAMPLED COLLEGES.



FIG 2

Table :2.2: Faculty-wise Distribution of the Sample

Faculties	Total No. of Colleges	Sampled Colleges	Percentage of the Sample
Arts	68	31	45.5
Science	32	32	100.00
Commerce	56	36	64.2
Education *	21	11	52.3
Law	15	10	66.6
Engineering	2	2	100.0
Total	194	122	62.9

Faculties or academic disciplines so far as the strength of its institutions is concerned. When colleges are in a greater number, as it happens in Arts and Commerce Faculties, large sampling poses manifold challenges. The investigator had the most trying and frustrating time with principals of colleges to get their cooperation in getting the questionnaires filled out by their teachers. This happened in spite of the fact that the investigator was a member of their own fraternity. She had to use all patience, perseverance and courage that she could muster, and keeping, as it were, ice on her head and assuming her physical frame

* Though constitutionally, Education in the Gujarat University is a part of the Faculty of Arts, in this study, however, 'Education' has been taken separately as Colleges of Education have their own important place in the Gujarat University.

being made of iron, she moved from colleges to colleges in efforts to collect the data for her study. When these struggles are borne in mind, the sample that she could get was the best that she could hope to get.

Besides the districts, the investigator used three other strata to make her sample stratified and hence more representative. Tables 2.3, 2.4 and 2.5 present the sample according to its city-town classification, small-large size and zone-wise distribution.

Table :2.3: City-Town-wise Break-up of the Sample

Stratum	Universe (Colleges)	Sampled Colleges	Percentage of the stratum universe
City	62	36	58.06
Town	132	86	65.15
Total	194	122	62.9

It will be seen that the sample from both cities and towns is more than 58 percent and the difference between the two is not quite large.

The sampled colleges are all above 50 percent. The percentage of large sized colleges is greater as they turned out to be more responsive and cooperative. Mostly they are two faculty colleges.

Table :2.4: Distribution of Sampled Colleges according to their Size

Stratum (Size)	Universe (Colleges)	Sampled Colleges	Percentage of the Sample
Small	113	59	52.2
Large	81	63	77.7
Total	194	122	62.9

N.B. : Colleges having enrolment of 400 or below are considered to be 'small' and those having enrolment larger than 400 are considered 'large' sized colleges

two Faculty colleges.

Table :2.5: Zone-wise Distribution of the Sampled Colleges

City		South		North		Total	
Total	Sampled	Total	Sampled	Total	Sampled	Total	Sampled
64	36	61	47	69	39	194	122
(56.2)		(77.0)		(56.5)		(62.9)	

Note : Figures in parenthesis indicate percentages

The investigator has also used 'zone' as one of the strata. Table 2.5 above gives zone-wise stratification of the sample. Each zone has 50 percent or more of the total colleges situated therein.

The investigator has divided the colleges into three zones as follows :

1. City zone comprising the colleges situated in Ahmedabad city.
2. South zone comprising the colleges situated in Baroda District, Kheda District and Panchmahals district.
3. North zone comprising the colleges situated in Mehsana District, Sabarkantha District, Banaskantha District, Ahmedabad district and Kutch district.

Table :2.6: Faculty-wise Distribution of the Sampled Colleges of the Three Zones

Faculties	City		South		North	
	Total	Sampled	Total	Sampled	Total	Sampled
Arts	22	8 (36.3)	21	10 (47.6)	25	13 (52.00)
Science	9	9 (100.0)	12	12 (100.0)	11	11 (100.0)
Commerce	18	9 (50.0)	16	16 (100.0)	12	11 (99.2)
Education	9	4 (44.0)	6	4 (66.6)	6	3 (50.0)
Law	6	5 (83.3)	4	3 (75.0)	5	2 (40.0)
Engineering	1	1 (100.0)	1	1 (100.0)	0	0
Total	65	36 (56.2)	60	46 (77.0)	59	40 (67.7)

Note : Figures in parentheses indicate percentages

Table 2.6 above gives distribution of the sampled colleges Faculty-wise in respect of the three zones of the Gujarat University.

Ahmedabad city is the seat of the Gujarat University. In the post-independent period, Ahmedabad city has witnessed unprecedented expansion in education at almost all stages. The city zone denotes the colleges located in the area of jurisdiction of the Ahmedabad Corporation, Sixty-four or 32.4 percent of the total colleges of the Gujarat University are located in Ahmedabad city. Of these, 36 or 56.2 percent of the colleges are included in the sample. Evidently, the sample in this zone is smaller than that in other two zones. The reason is that the city college principals and teachers felt different about extending their cooperation in a research which aimed at measuring their climate, staff morale and control ideology which would reveal their true 'inside' picture. Nearly 50 percent of the printed tools were distributed among the teachers of this zone. But their response left much to be desired. Among the sampled colleges, the largest number is of Arts Colleges followed by Commerce colleges. But, on the whole, the sample represents colleges belonging to all faculties.

The South zone includes the colleges affiliated to the Gujarat University from Baroda, Kheda and Mehsana districts. The largest sample 47 out of the total 61 (or 77 percent) is from this zone. This zone, too, includes colleges belonging to all the Faculties.

The North zone includes 39 out of the total 69 (or 56.5 percent) of colleges of the University. It consists of Mehsana, Sabarkantha, Banaskantha, Ahmedabad and Kutch districts.

Thus, if considered zone-wise, the sample appears to be fairly well representative.

The sum and substance of the detailed break-up of the sample gives above shows that the researcher has endeavoured to make her sample stratified, large, unbiased, random and adequate in size and proportion. This is as far as the number of colleges is concerned.

Table :2.7: Distribution of Sampled Colleges of the Gujarat University - Teachers and Faculty-wise

Faculty	Total No. of Teachers	Sampled Teachers	Percentage
Arts	1069	147	13.9
Science	850	118	13.9
Commerce	841	115	13.6
Education	211	29	13.7
Law	136	18	13.2
Engineering	56	7	12.5
Total	3163	434	13.7

The sample of teachers consisted of 434 or 13.7 percent of the total universe of 3,163 teachers in the affiliated colleges of the Gujarat University. Their Faculty-wise distribution is given in Table 2.7 above.

2.9 The Research Tools

For collection of the data, the study makes use of three tests, viz., (1) Institutional Climate Description Questionnaire (the ICDQ) (2) the College Teacher Morale Opinionaire (the CTMO) and (3) Student Control Ideology (the SCI). Each one of them will be dealt with in details in the next chapter.

2.10 Procedures for Analysing and Interpretation of the Data

As the investigator has developed her own tool (the ICDQ - Baroda Form) to measure institutional climate, she had to develop the procedures for identifying climate which would be different from those that were followed by Halpin and Croft. The procedures that would be used by her in categorising colleges on a climate continuum with Open climate at one end, the Closed climate at the other end and the Intermediate climate as one that falls between the Open and Closed Climate at both the ends are in Appendix II.

The data yielded by the College Teacher Morale Opinionaire will be converted first into standard scores twice : first normatively and second ipsatively. For classifying the global morale score into high, average and low, the standardised scores will be converted into stanine scores.

The method of analysing the data by the tool 'SCI' will be largely (ones) that was followed originally by the authors, Willower, Eidell and Hoy.

The research format that would be used in the study would primarily be one of testing the hypotheses.

In Hypothesis I, the t-test technique will be used to test the significance of differences of main scores of the twelve dimensions that make the new ICDQ between colleges with Open and Closed climate types.

The variation in climate category-wise distribution of the colleges of the different Faculties of the Gujarat University which forms the subject of the Hypothesis II will be studied through the F-test.

The variations in the mean perceptions of college teachers of different pairs of Faculties on all the twelve dimensions in Hypothesis III will be tested for their significance through the t-test.

The testing of significance of mean perception differences of college principals and teachers on the ICDQ dimensions in Hypothesis IV will also be tested by computing their t-values on all the dimensions and finding out their level of significance.

In Hypothesis V, the influence of certain variables such as college size, their urban-rural location, their zonal distribution and the SES of their teachers on the climate of

the colleges will be studied by applying to the data chi-square tests or t-tests.

The Hypothesis VI centres around classification of colleges on their global morale scores. This will be done, as indicated earlier, by using the stanine scale system. The testing of significance of agreement between the obtained results on the three categories of teacher morale with those to be expected will be tested for their significance by using the chi-square test. The study of variations in teacher morale among colleges belonging to different Faculties of the Gujarat University will be tested through the F-ratio.

The Hypothesis VII deals with the variations in mean scores of the components of the CTMO tool in regard to Faculties paired differently with one another and in relation to variables such as size, location and zonal distribution. The significance of these differences ⁱⁿ component-wise means will be tested for their significance through the t-test.

The Hypothesis VIII is centred around establishing relationship between teacher morale and climate. Here, the ^{to be} statistics used for interpreting the data will be chi-square test, t-test and contingency of coefficient of correlation.

The inter-correlation among climate dimensions (ICDQ) and morale components (CTMO) forms the theme of the Hypothesis IX.

To test this Hypothesis, the t-test will be used.

The study of student control ideology of college teachers constitutes the theme of the Hypothesis X. The two types of control ideology - the Custodial and the Humanistic - of college teachers belonging to different academic disciplines of the Gujarat University will be examined making use of the t-test technique.

The relationship between climate perceptions and student control ideology is the theme of the Hypothesis XI. Here the analysis of variance using F-ratio will be used.

The last Hypothesis seeks to examine the inter-relationship among college climate typology, college teacher morale category and typology of student control ideology. The statistics that would be used to test this Hypothesis will be the chi-square test.

An attempt on a small scale will also be made to predict climate by computing regression equation.

The procedures for analysing and interpreting the data yielded by the three research instruments would be on the lines indicated above.

2.11 The Conclusion

This is broadly the research design of the study - its plans and procedures. It presents objectives of the study, the hypotheses formulated in the light of the stated objectives,

the description and the discussion of the sample, the significant facts about the three research instruments - the ICDQ, the CTMO and the SCI that are intended to be used in collecting data adequate for testing each of the hypotheses formulated and the procedures of analysis and interpretation of the data to verify the hypotheses. The types of statistics that would be used are indicated with reference to variables that have relevance to the testing of the hypotheses.

The chapter that follows would be focused on the discussion of the development and standardization of the research instruments to be used in the present study.
