CHAPTER IV :

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4.1 INTRODUCTION

As was emphasised earlier, the primary concern of the investigator in the present study was to inquire into institutional climate of the Maharaja Sayajirao University of Baroda and to examine whether the student unrest and outbursts of indiscipline on the campus of the University which particularly had begun to raise their ugly head from 1970 have anything to do with the inner socio-psychological life in its Faculties - Departments of teaching, research and training and the type of control ideology demonstrated by its teachers and administrators. The interest of the investigator in the study of institutional climate of the M.S. University stemmed from eight sources, viz., firstly over the last twenty five years, the University has emerged as one of the best known universities; secondly it has earned national and, to some extent, international prestige; Thirdly, unlike many regional universities in India, it is more cosmopolitan in terms of staff and students - its staff is drawn from almost all parts of India; Fourthly, it has been quite often in the forefront in undertaking new and challenging programmes; Fifthly, it is reputed that its teaching community, comparatively speaking enjoy considerable academic freedom; sixthly, it is a fast growing university in terms of both students, physical

resources and programmes; seventhly, some of its research departments have been markedly active so much so that they draw doctoral students from North and South, eighthly, it is one of the few universities in India whose some Faculties have experience in operating challenging programmes like Semester System, Grade and Credit System and continuous sessional assessment. The investigator had natural curiosity to know what type of organizational climate is being manifested by its various Departments (Faculties and Institutions) and whether climate and student control ideology are the functions of the institutional climate.

Besides these, she wanted to extend explorations in climate research in the field of higher education and universities.

The study of organizational climate has been a recent development. In the U.S.A. this pioneering movement began with a series of studies with the development of the "Organizational Climate Description Questionnaire" by Halpin and Croft and a series of studies in the field initiated by Halpin (1963), Morris (1964), Plaxton (1965), Millar (1965), and others including Hughes (1967), Null (1967), Sargent (1967), Kenney, White and Gentry (1970), Kenney and Rentz (1970) and Owens (1970).

In India the studies in organizational climate began a little later. Mehra (1968) and Sharma took a lead in this respect. A number of other Indian studies in climate followed suit. They were by Rao (1968), Sharma (1971a, 1971b, 1971c), Sharma and Santhanam (1971, 1971), Bayati (1972), Sharma (1972a, 1972b, 1972c), Sharma and Qureshi (1972), Patel (1973), Kothai Pillai (1973), Shelat (1975), Shah (1975), Franklin (1975), Pandya (1975), Samrong Pengnu (1976), Choksi (1976), Tikmani (1976), Gupta (1976) and Gandhi (1977), and Mehta (1977).

In India most of the climate studies done till recently pertained to secondary schools. The field of higher education remained almost untouched until Shah (1975) and Franklin (1975) broke the ice. Shah studied the climate of some affiliated colleges of Central Gujarat, but his interest in the study of climate arose out of his anxiety to understand the college campus life. Franklin (1975), Choksi (1976), Tikmani (1976) and Gupta (1976) studied organizational climate of teachers' colleges but in different perspectives. Choksi did a comparative study of climate of Elementary Teachers' Colleges of Gujarat and Philippines. Tikmani's concern was more to probe the administration of elementary teachers' colleges of Gujarat State. Studies by Franklin and Gupta pertained to secondary teachers'

colleges of Gujarat, the former in the context of staff morale and effectiveness of teacher education programme and the latter's sample was from the State of Punjab but he studied climate as one of the inputs in the Systems Analysis he did of the teacher education of secondary school teachers of Punjab.

The investigator was told that only recently Anjani Mehta completed a climate study of the affiliated colleges of the Gujarat University, another of the five universities of Gujarat, besides the M.S. University of Baroda. The Gujarat University, like most of the remaining 100 universities of India is partly teaching but predominantly of an affiliating type. The present investigator felt that it would be interesting to examine of how institutional climate of an affiliating and teaching university resembles or differs.

These are some of the points of stimulation for the present research.

As pointed out in Chapter II on the research design, the approach that the present investigator would like to adopt in her research is to formulate some hypotheses and test them through appropriate statistical procedures. Fifteen hypotheses covering the entire canvass of the present research with its overtones on climate, its relationship with control ideology

and the relationship of climate and control ideology with students' unrest or acts of indiscipline have been formulated. In the present chapter, each of them will be taken up, one by one, and will be tested for their acceptance or rejection. The treatment, thus, will be hypothesis-wise.

4.2 IDENTIFICATION OF INSTITUTIONAL CLIMATE

This constituted the first and primary concern of the present study.

The Hypothesis formulated in this connection reads as under :

> "Institutional Climate of various faculties of the M.S.University of Baroda would show marked variations".
>
> (The Hypothesis I)

On the basis of the findings of some of the Indian researches on climate, the investigator was led to formulate the above hypothesis. In studies by Mehra (1968), Sharma (1973), Neela Shelat (1975), Pandya (1975), Darji (1975), Kirit Gandhi (1977) and Anjani Mehta (1977), the dominant trend was in favour of closed climate. Even Shah (1975), Franklin (1975) and Gupta (1976) have found that more

institutions have closed climate than they have other types of climate.Therefore, the investigator would like to examine her own sample and to find out the institutional climate.

The data for the study were largely collected in the first term of 1975. At this time The University had the following Faculties :

1. Arts
2. Science
3. Education & Psychology
4. Commerce
5. Technology & Engineering
6. Fine Arts
7. Home Science
8. Social Work and
9. Law
10. Medicine

But besides these statutory Faculties, the University conducted the following research training or teaching organizations which were called "Institutions" under the M.S.University Act of 1949. They are :

1. College of Indian Music, Dance & Dramatics
2. Baroda Sanskrit Mahavidyalaya
3. Preparatory Unit - Science

3. The Polytechnic
4. M.K. Amin Arts College and College of Commerce and Science, Padra.
5. The Oriental Institute.

The institutions are administratively independent units but academically in matters of programme-syllabi, examinations etc, they are part and parcel of the Faculties. The institutions have their own staff but some of them participate in teaching courses offered by cognats Faculties. For instance, College of Indian Music, Dance & Dramatics is an independent institution having its own separate Department and staff but so far as courses of studies, examination procedures, and standards are concerned, it is a part of the Faculty of Fine Arts. Degrees in Music, Dance and Dramatics are awarded under the Faculty of Fine Arts. This is only to illustrate the relationship between an Institution and a Faculty. Both of them have their own academic Departments, with a head and its instructional staff.

It may be noted here that the data needed for the identification of institutional climate were collected from 255 university teachers whose cooperation was secured in responding to the items of the ICDQ (Baroda Form II). The

respondents included Professors, Readers and Lecturers. Professors included some Deans, Heads of Institutions and Departments. In collecting data, the investigator largely used personal approach in a tool like the ICDQ which requires teachers' evaluation of their colleagues and leaders' behaviours. There are understandable apprehension and among teachers in responding to the ICDQ items. This required clarification of the purpose of the research and even the methodology of research. A rapport had to be established with the respondents. Some of them had apprehension and fears of victimisation if they frankly and truly responded to the items of the ICDQ. Their resistence became considerably less when they were made to realise that (a) the primary interest is the institutional climate and that too to understand the inner life of the university which may have some impact on what is happening on the University campus; (b) The research is intended to diagnose the personality of university institutions as social scientists would be interested in understanding processes and factors conducive to group maintenance, task accomplishments and student acts of indiscipline. The investigator got excellent cooperation from some Deans and Heads of Departments who considerably facilitated her task. Some leaders not only resisted but questioned the utility of such studies.

The investigator, however, spared no pains in convincing them that research in social science - psychological and sociological factors need to be adequately investigated using operational or actual situations from the university institutions.

As the investigator did not use Halpin's OCDQ, she apparently cannot use the procedures developed by Halpin and Croft to identify climate. The identification of climate types among the Faculties/Institutions/Departments became a challenging problem. Had it been merely evaluating openness of climate, the challenge would not have been so intriguing. Sargent (1967: 5) on the recommendation of Don B.Croft has suggested that a measure of openness of an institution can be had by subtracting the average Disengagement score of a faculty (teachers) from the sum of its average Esprit [illegible] and dimension scores.

The investigator surmounted her difficulty by using the procedures developed by her with the assistance of some of the staff members of the Department of Educational Administration of the Faculty of Education & Psychology and the Centre of Advanced Study in Education (M.S.University of Baroda). Adopting these procedures, the investigator was able to identify institutional climate for each of the 15 sampled Faculties (including Institutions of the University).

It is necessary to clarify here that instead of using the six types of climate as identified by Halpin and Croft (1963), in their research, the investigator has classified three types of climate viz., Open climate, Intermediate climate and Closed climate. This is not the first study to make use of the three types of climate. Sargent (1967), Samrong Pengnu (1976), Kirit Gandhi (1977) and Anjani Mehta (1977) have used three types of climate. Open and Closed climate are the two extremes of climate and the Intermediate climate occupies the middle position. The procedures used by the investigator in identifying the three categories of institutional climate are described and discussed below.

In identifying the institutional climate, the following steps were resorted to :

(1) Preparation of Faculty Profile

Step I : After scoring each item of the ICDQ as discussed in the previous chapter, individual respondent's subtest score was computed by summing up the item scores of all the twelve subtests and dividing by the number of items in the corresponding subtest. To prepare the Faculty profile, the Faculty mean subtest score for each of the subtests was computed. These scores define the average response of the university

teachers for each respective sub-test. Thus, the profile of scores indicates how most of the university teachers in a Faculty or in an Institution characterised the Institutional climate of the particular Faculty. Specifically the scores indicate how often certain types of behaviour 'occur' among the university teachers and the manner in which teachers react with the heads of their Department in the sampled Faculty.

In this way, 19 Faculty and 5 Institutional profiles were prepared in terms of their raw scores. These raw scores were converted into double standardized scores first normatively and then ipsatively. Normative standardization was done across the sample of 15 Faculties/Institutions of the M.S.University so that each of the twelve subtests scores could be compared on a common scale. Thus, each subtest was standardized according to the mean and SD of the total sample of that subtest. Ipsative standardization was done with respect to the mean and SD of the profile score for each Faculty. For both the standardization procedures, a standarded score system based upon mean of 50 and SD of 10 were used. These standardized scores pointed out two things: (i) a score above 50 on a particular subtest indicated that the given Faculty score was above the mean of the sample on that subtest and (ii) the score on that subtest was above the mean of the Faculty's other subtest scores. The

distribution of 15 faculties and 5 Institutions mean standarded scores for all the sampled Faculties is given in Appendix M. This is done to illustrate this step.

(2) Step 2: Stanine Score System :

The second step was on the following lines. The 10 Faculties and 5 Institutions mean Standard scores were classified into the Statnine Score System with a range from 10 to 90. The distribution of scores of the 15 Faculty-Institutions into the Stanine system reflected in the Profile Chart presented under Table 4.1.

The stanines 9 and 8 are indicative of the highest level, stanines 7 and 6 as of high level, stanines 5 and 4 representing low level and stanines 3, 2, and 1 revealing the lowest level. Thus, the Profile Chart was prepared for comparing the position of particular score of particular dimensions.

(3) Step 3 : The Attribution of Weightage or Numerical Value of each Level of the Twelve Dimensions of the Climate.

Thereafter, the weights or numerical values for each level were applied by giving the highest, high, low and lowest levels, the values of 4,3, 2, and 1 respectively.

(4) Step 4: Computation of Total Faculty Stanine Score for the purpose of Classification into three Climate Categories

Each of the 15 Faculties/Institutions selected for the

Table 4.1 : Profile Chart

	Disengagement	Hindrance	Esprit	Intimacy	Aloofness	Production Emphasis	Thrust	Consideration	Communication	Organizational Structure	Freedom	Human Relations
90	67	67	60	60	69	61	59	59	58	59	59	60
80	63	63	57	57	62	57	56	58	57	55	57	57
70	59	56	53	54	56	55	55	54	55	53	54	55
60	57	53	50	53	51	53	54	53	53	51	53	52
50	52	49	49	49	46	50	51	51	52	49	52	50
40	42	44	46	45	39	48	48	49	49	47	49	47
30	38	41	44	44	36	46	47	47	47	45	46	45
20	34	37	42	40	31	42	43	43	43	42	44	43
10	31	33	38	35	29	35	40	41	37	39	39	40

study was assigned its mean standard scores of twelve subtests according to the scores normatively obtained. Then, the scores were tabulated at each level of everysubtest and were added, thereby obtaining the total stanine scores by each Faculty, were determined. This gives the 'Faculty Stanine Score' which each of the 15 Faculty possessed and was utilized in identifying the Faculty climate. This is illustrated in Table 4.2.

The table 4.2 indicates the mean standard scores of the twelve subtests obtained by the Faculty 1. Again, the Faculty stanine score i.e. 32 is obtained by adding the scores of given weightage shown in brackets at every subtest channel in the table. Likewise the Faculty stanine scores of other Faculties are obtained by following the same method illustrated above in the case of Faculty No.1 in the Table 4.3.

(5) Step 5: Classification of Various Faculties According to the Climate Types.

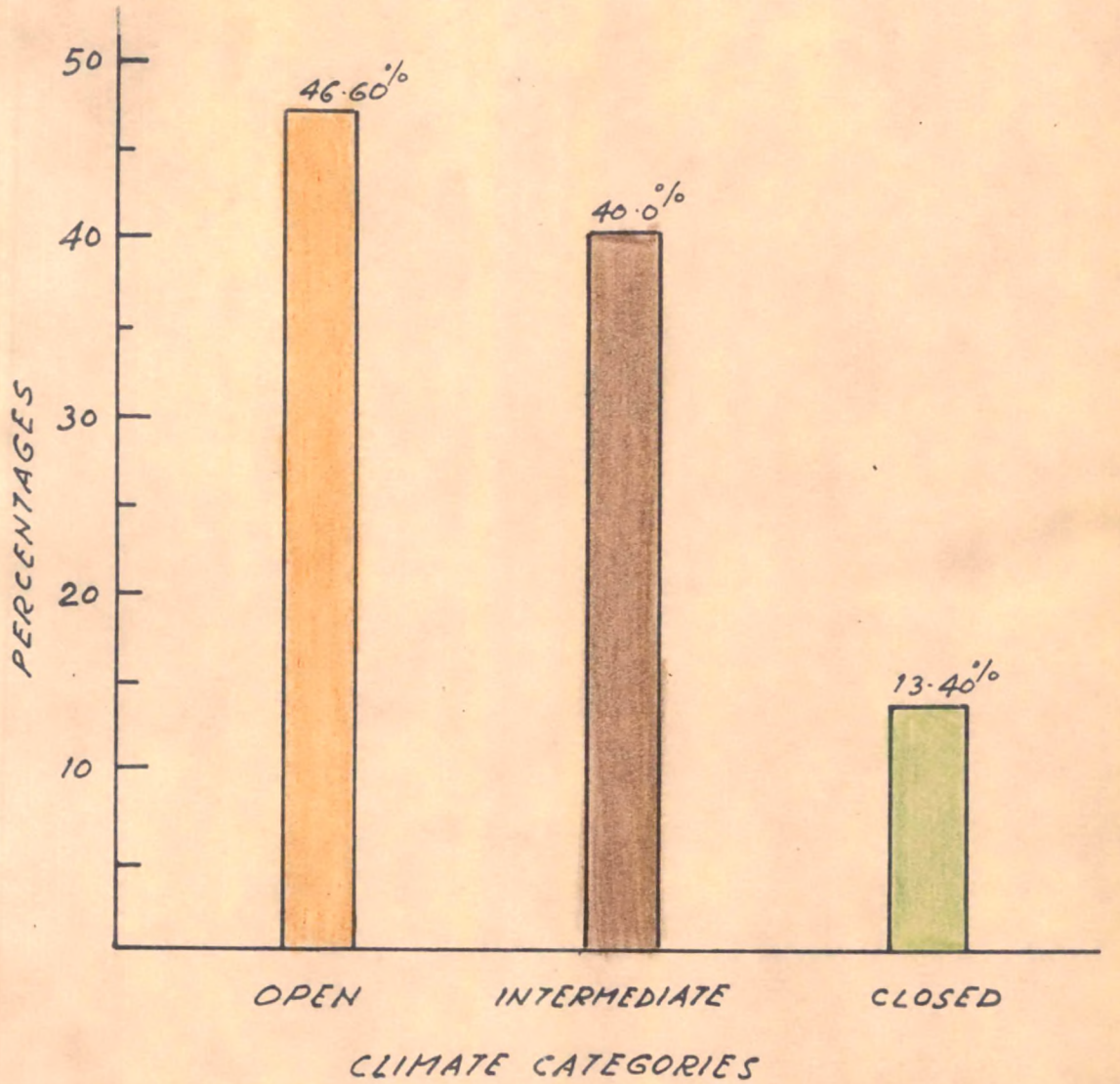
Table 4.3 shows the classification of 15 Faculties/ Institutions of the M.S.University, Baroda in terms of Open, Intermediate and Closed Climate types.

Table 4.2 : Illustration of How the Faculty Stanine Score of Faculty No.1 is obtained.

Stanine Level	ICDQ Subtests											
	1	2	3	4	5	6	7	8	9	10	11	12
Highest												
9												
8									56 (4)			
High												
7	52 (2)			55 (3)			57 (3)					50 (3)
6						57 (2)						
Low												
5			48 (2)					50 (2)			45 (2)	
4		47 (3)								47 (2)		
Lowest												
3												
2					33 (4)							
1												
										Total		32

Note: The obtained Stanine score sub-test-wise is given against respective stanine level in the reverse order from 9 to 1. The figures in the brackets indicate the weightage of the obtained Stanine Score.

CHART-4



DISTRIBUTION OF FACULTIES/INSTITUTIONS
ACCORDING TO CLIMATE CATEGORY

Table 4.3 : Climate-wise Distribution of Faculties.

Faculty	Faculty Stanine Score (18-38)	Types of Climate		
		Open (32-38)	Inter-mediate (25-31)	Closed (18-24)
F_1	32	*		
F_2	33	*		
F_3	33	*		
F_4	31		*	
F_5	26		*	
F_6	37	*		
F_7	37	*		
F_8	30		*	
F_9				*
F_{10}	27		*	
F_{11}	37	*		
F_{12}	30		*	
F_{13}	34	*		
F_{14}	20			*
F_{15}	30		*	
Total 15		7 (46.6%)	6 (40.0%)	2 (13.4%)

Reviewing the Faculty stanine scores as shown in the Table 5.3, it is evident that the lowest Faculty stanine score is 18 and the highest Faculty stanine score is 38. The range from the lowest score viz., 18 to the highest

score viz., 38 was suitably divided into three equal subranges, the subrange 18-24 indicating closed climate, the subrange 25-31 indicating Intermediate Climate and the subrange 32-38 indicating Open Climate. It would be further seen that only 7 Faculties, out of the total 15 Faculties came under the group of Open Climate and the corresponding percentage is 44.6. Out of the 15 Faculties 6 Faculties fell into the subrange 25-31 indicating the Intermediate climate. Here the percentage was 40.0. The remaining 2 Faculties were covered under the third range 18-24 indicating the Closed Climate. The percentage in this case was 13.4.

From the above table, it would be seen that the number of Faculties/Institutions and the percentage thereof falling under Open and Intermediate Climate types was closer to each other. Out of the total 15 Faculties/Institutions of the University, the proportion of those possessing Open Climate was the highest and those possessing Closed Climate was the lowest - it actually constituted one-third of the total number of Open Climate ones.

In order to determine significant differences of climate categories of the faculties, the chi-square was applied.

Table 4.4 : Chi-Square Value of Organizational Climate Types of 15 Sampled Faculties.

	Types of Climate			Total
	Open	Intermediate	Closed	
No.of Faculties in each category	7 (46.6%)	6 (40.0%)	2 (13.4%)	15 (100%)
df = 2	x^2= 3.10	Significant at .30 level.		

The chi-square value is given in Table 4.4, which is significant. It further points out that there exists significant differences in institutional climate of the Faculties. The results indicate that there are variations of climate, it supports the hypothesis I formulated for the present study.

The results revealed by the present study show a contrary trend if they are viewed against the results of Indian researches on secondary schools. In most of the studies the proportion of Closed Climate school is distinctly more glaring than the open climate schools. This could be seen from Table 4.5 given on the next page.

Table 4.5 : Percentage Distribution of Secondary Schools Climate-wise as revealed in some Previous Studies on Organizational Climate of Secondary Schools in Gujarat.

Investigator	Area of the Sample	Percentage Distribution of Schools over the Three Climate Types		
		Open	Intermediate	Closed
1. M.L.Sharma, P.B.Buch and Kamla Rai (1971)	Gujarat State	33.33	28.43	38.24
2. Kuldip Kumar (1972)	Baroda City	32.80	29.90	37.30
3. B.N.Patel (1973)	South Gujarat Districts (Surat and Valsad)	32.69	30.78	36.53
4. G.Mubazia and M.L. Sharma (1973)	South Gujarat Districts (Broach, Bulsar Surat and Dang)	30.44	21.73	47.83
5. Neela Shelat (1974)	Baroda District	34.00	24.00	42.00
6. D.G.Pandya (1975)	Central Gujarat(Kheda and Panchmahals districts)	33.50	28.80	37.70
7. D.R.Darji (1975)	Panchmahals district	27.00	26.00	47.00
8. Kirit Gandhi (1976)	Gujarat State	28.40	35.16	35.94

These results are clearly not in conformity with findings of the various researches at college level. Franklin (1975), for instance, had studied institutional climate of the Colleges of Education of Gujarat State. Her study revealed that 45.86 per cent of the colleges have closed climate, 17.14 per cent towards Intermediate climate and 37.0 per-cent Openness of Climate.

Shah (1975) had also studied institutional climate of the Arts, Science and Commerce colleges of the Central Gujarat. He also found that half of the sampled colleges belonged to the Closed climate. Gupta (1976) revealed the same trend of greater number of Closed climate colleges than the Open climate colleges.

Anjami Mehta (1977) had also found that 48.36 per cent of affiliated colleges of the Gujarat University belonged to the Closed climate category, 27.87 per cent colleges belonged to the Intermediate climate category and 23.77 per-cent to the Open Climate category. Thus, the M.S.University of Baroda stands out distinctly in the matter of openness of climate when compared to colleges of either Sardar Patel University or Gujarat University (Vide- Shah's study)

University (vide- Mehta's study) of all the affiliated colleges belonging to the remaining four Universities of Gujarat (vide- Franklin's study).

This shows that in the Gujarat University other affiliated colleges tend to possess more closedness of institutional climate than the open climate, whereas the pattern of Climate typology emerging from the present study is the Faculties of M.S.University, Baroda is altogether different. There are more Open and Intermediate climate colleges than Closed climate colleges, on the campus of the University. Thus, the present study reveals different results from the other studies on colleges or universities. This would mean that the Hypothesis I is not only substantiated but the results show a distinct trend in favour of openness of climate which other studies on Organizational climate fail to manifest. Faculties in M.S. University tend to be more Open and Intermediate than Closed climate.

The present section on identification of institutional climate of various Faculties of the M.S. University, Baroda, can be concluded with testing Hypothesis I to the effect that faculties vary among themselves in the matter of climate

types is sustained. A further conclusion is that the trend revealed in earlier studies done on institutional climate of colleges in Gujarat State is not substantiated. This is perhaps due to the fact that the M.S.University of Baroda is a unitary, teaching and partially residential university.

4.3 MEAN SCORES ON DIFFERENT DIMENSIONS OF THE ICDQ IN OPEN AND CLOSED CLIMATE FACULTIES

It may be recalled that one of the revealing conclusions reached in the previous section in the discussion on the Hypothesis I, that, the Faculties of the M.S. University manifested relatively more Open and Intermediate Climates to a greater extent than they did Closed Climate. Such a finding was to reiterate, in sharp comtrast to the findings of studies by Shah (1975), Franklin (1975), Choksi (1976), Tikmani (1976), Gupta (1976) and recently by Mehta (1977). This marks an altogether new trend in climate studies on schools and colleges undertaken in the country between 1973 and 1977. The intriguing questions are (a) what causes variation in institutional climate, and how the Faculties of the M.S.University of Baroda happen to differ from the corresponding university

of Gujarat which was established in 1949, in the same year in which the M.S. University came into existence. The Hypothesis II is formulated in this perspective. It reads as under :

> "Faculties with Open Climate will have higher mean scores than those with Closed Climate, on sub-tests "Esprit", "Intimacy", "Thrust", "Consideration", "Communication" and "Human Relations" and on the rest of the sub-tests lower mean scores. Faculties with Closed Climate will have higher mean scores on "Disengagement", "Hindrance", "Aloofness" and "Production Emphasis" but lower mean scores on the remaining sub-tests".
>
> (The Hypothesis II)

In a recent study by Kirit Gandhi on the climate of secondary schools of Gujarat State, he found the following variations in the mean scores on the different dimensions of the OCDQ (Baroda form I). Gandhi's (1977:210) findings of the Difference in Mean Scores on different dimensions of the OCDQ under Open and Closed Climate, are shown in Table 4.6. Mehta's (1977) findings regarding the Faculties of the Gujarat University are presented in Table 4.9A.

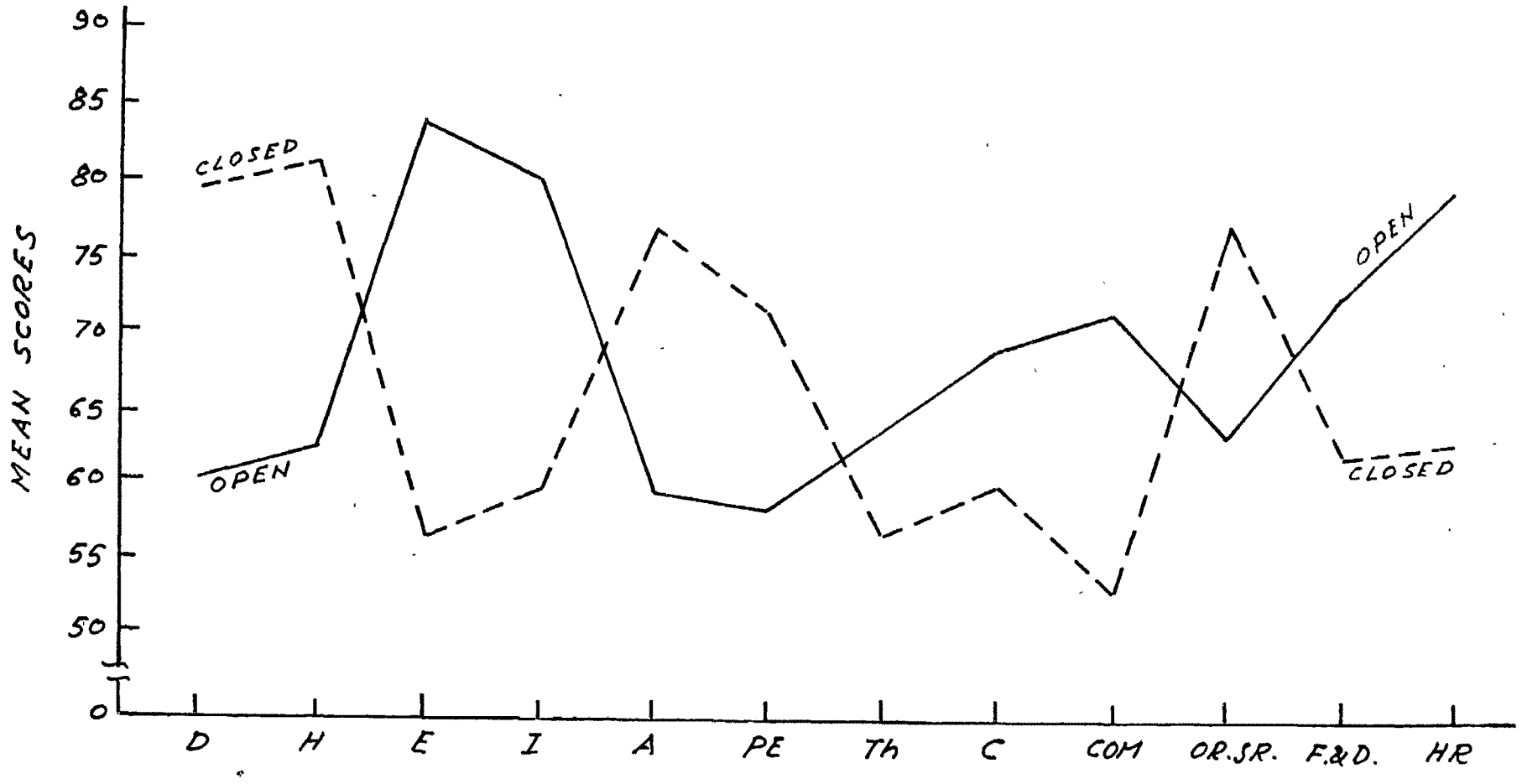
Table 4.6 : Mean Differences on OCDQ Dimensions in respect of Open and Closed Climate Schools.

Dimensions of the OCDQ	Open Climate Schools Mean Score Higher	Closed Climate schools Mean Scores Lower
Esprit	55.78	44.41
Intimacy	55.40	46.17
Thrust	54.70	46.78
Consideration	55.51	43.41
Communication	54.13	45.74
Human Relations	56.43	44.48
Freedom and Democratisation	56.78 Lower	43.85 Higher
Disengagement	36.22	63.24
Hindrance	36.27	62.02
Aloofness	36.19	61.83
Production Emphasis	48.53	50.03
Organizational Structure	53.32	46.85

Thus, Gandhi's study provided a kind of rationale in formulating the present Hypothesis II.

Table 4.7 given on the next page presents dimension-wise comparison of Faculties/Institutions manifesting different climate categories, that is to say Open, and Closed. It will

CHART - 5



PROFILE OF MEAN SUB-TEST SCORES FOR OPEN & CLOSED FACULTIES/INSTITUTIONS

Table 4.7 : Mean Differences on ICDQ (Baroda Form III) in respect of Open and Closed Climate Faculties/ Institutions.

ICDQ Dimensions	Open Climate Mean Score	Closed Climate Mean Score
1. Disengagement	60.40	78.19
2. Hindrance	61.73	81.45
3. Esprit	84.32	56.22
4. Intimacy	80.04	59.37
5. Aloofness	57.84	77.02
6. Production Emphasis	56.79	71.44
7. Thrust	63.44	55.78
8. Consideration	68.53	54.16
9. Communication	70.77	52.53
10. Organizational Structure	62.86	76.83
11. Freedom-& Democratization	73.47	60.78
12. Human Relations	80.09	62.36

be seen from the table that in comparison to Closed Climate Faculties/Institutions, in Open Climate Faculties/Institutions the mean score on "Esprit" (84.32), "Intimacy"(80.04), "Thrust" (63.44), "Consideration"(68.53), "Communication" (70.77) and "Human Relations" (80.09) are higher and on the rest of the sub-tests, mean scores are lower. In Closed Climate Faculties/Institutions the mean scores on "Disengagement" (78.19), "Hindrance" (81.45), "Production Emphasis"

(71.44), "Organizational Structure (76.83), the mean scores are higher than those in the Open Climate Faculties/Institutions, but lower mean scores on other dimensions. These results show that the Hypothesis II so far as it relates to Faculties and Institutions is substantiated.

A Faculty or an Institution consists of one or more academic Departments. It would, therefore, be interesting to examine the Hypothesis II, further at the level of Departments. The Table 4.8 given on the next page presents the necessary data.

The table 4.8 shows the comparison between the mean scores of Departments manifesting various types of climate with regard to the twelve dimensions of the ICDQ (Baroda form III). The table indicates that in the case of two negative dimensions, of teachers' behaviour, 'Disengagement' and 'Hindrance', the mean scores are higher in closed climate Departments than they are in Open Climate Departments. Whereas in the two positive dimensions of teacher behaviour, viz., 'Intimacy' and 'Esprit' the mean scores in Open Climate Departments are higher than those in Closed climate Departments.

Dimensions Nos. 5 to 8 indicate principals' behaviour.

Table 4.8 : The Mean SD on the Twelve Dimensions of the Organizational Climate Department-wise According to the Three Types of Climates (Open, Intermediate and Closed).

Types of Climate	Dis-engage-ment	Hind-rance	Esprit	Inti-macy	Aloof-ness	Produ-ction Empha-sis	Thrust	Consi-dera-tion	Commu-nica-tion	Organi-zational Struc-ture	Freedom & Demo-cratiza-tion	Human Rela-tions
	1	2	3	4	5	6	7	8	9	10	11	12
Open												
Mean	38.64	41.69	50.74	53.88	34.92	49.91	52.77	56.18	53.01	57.91	54.87	55.39
SD	8.34	7.38	9.77	5.99	8.95	7.45	7.07	3.74	5.77	7.79	5.27	4.39
Intermediate												
Mean	48.82	46.86	51.06	49.38	45.75	53.01	54.12	50.25	53.68	47.75	51.03	48.88
SD	12.92	11.13	8.42	10.42	15.22	11.00	9.71	5.56	5.15	6.55	6.85	8.83
Closed												
Mean	61.27	59.73	44.91	47.73	61.67	53.69	47.47	44.56	44.39	45.01	45.30	44.14
SD	5.59	10.93	4.72	8.24	11.41	9.85	5.10	5.74	6.59	6.48	5.89	4.42

They are : "Aloofness" and "Production Emphasis". They denote negative behaviour, and 'Thrust' and 'Consideration' indicate positive behaviour of the principal. In Open Climate Departments scores on dimensions 'Aloofness' and 'Production Emphasis' are lower than those in Closed Climate Departments, as it should be the case. Whereas, the mean scores of the dimensions 'Thrust' and 'Consideration' are higher in Open Climate Departments than those in Closed Climate Departments. Dimensions Nos. 9 to 12 denote administrative behaviour. The mean scores of all these four dimensions are expected to be higher in Open Climate Departments than those in the Closed Climate Departments. The results support this assumption.

Thus, the results prove that the differences of mean scores on the twelve dimensions of teacher behaviour, principal behaviour and administrative behaviour respectively in the Departments of Faculties and Institutions in the two extreme end climate types create climate variations. These results support the Hypothesis that there are variations in the twelve sub-tests in the desired directions indicated therein.

For further testing the Hypothesis in regard to Department-wise dimensions, it was decided to examine the data through the t-technique. The pertinent analysis in this connection is given in Table 4.8.

Table 4.9 : Dimension-wise Comparison.

	Dis-engage-ment	Hindrance	Esprit	Inti-macy	Aloof-ness	Produ-ction Emphasis
	1	2	3	4	5	6
Comparison between Open and Closed	-20.7**	-12.1**	+5.0**	+5.35**	-16.43**	-2.73**

	Thrust	Consi-deration	Commu-nica-tion	Organi-zation-al St-ructure	Freedom & Demo-crati-zation	Human Rela-tions
	7	8	9	10	11	12
Comparison between Open and Closed	+5.57**	+14.99**	+8.82**	+11.58**	+10.85**	+16.27**

Note: '+' = 'higher mean' of the Open Climate type than that of the second.
'-' = 'higher mean' of the Closed Climate type than that of the first (Open Climate type)

* Significant at .01 level
** Significant at .05 level

Comparison of Open and Closed type climates, the study

Table 4.9A : Comparison of Dimension-wise Mean Scores of the Sampled Departments possessing Open Climate and Closed Climate (Gujarat University)

Dimensions	Open Climate		Closed Climate		t-test value	Level of Significance
	Mean	S.D.	Mean	S.D.		
1. Disengagement	40.09	8.89	62.00	6.31	11.00	.01
2. Hindrance	41.51	6.39	60.96	5.63	12.64	.01
3. Esprit	53.09	4.91	45.36	6.97	5.16	.01
4. Intimacy	51.68	6.29	47.11	6.08	2.91	.01
5. Aloofness	35.77	7.81	63.71	9.15	13.07	.01
6. Production Emphasis	41.31	6.75	51.25	7.46	0.04	NS
7. Thrust	52.17	6.84	47.82	3.85	3.00	.01
8. Consideration	53.71	5.51	44.50	4.89	6.92	.01
9. Organizational Structure	51.91	7.99	47.25	8.29	2.26	.05
10. Communication	60.31	8.45	39.43	5.72	11.18	.01
11. Human Relations	53.06	6.66	45.46	4.10	5.28	.01
12. Freedom and Democratization	56.03	5.43	45.50	6.12	7.23	.01

A comparison of Tables 4.8 and 4.9 shows that in Open Climate Faculties, the mean scores in the Gujarat University ranges from 40.09 in "Disengagement" to 60.31 in "Communication"; in the closed Climate Faculties the range is from 39.43 in "Communication" to 62.00 in "Disengagement." In the M.S. University of Baroda, in Open Climate Faculties/Institutions, the range is from 38.64 in "Disengagement" to 57.91 in "Org. Structure"; in the Closed Climate organizations, the range is from 44.14 in "Human

(Cont. p. 223)

of the 12 sub-tests, shows that all of them are significant at .01 level.

This would mean that the Hypothesis II is not only supported but the extremity of the Open and Closed climates is substantiated by the t-values. It is the significance of differences in the mean scores of various dimensions that create the climate differences.

From the results stated above, it could be seen that the dimensions play a very useful role in determining the type of climate.

4.4 IDENTIFICATION OF DEPARTMENTAL CLIMATE CATEGORIES AND TESTING OF THE SIGNIFICANCE OF VARIATIONS IN THEM

While examining the previous Hypothesis, a reference to the climate of University Departments of teaching, training and research was made and the operational behaviours of all the twelve dimensions of the Departments were examined and discussed in the context of their Open and Closed categories of climate. A question that naturally arises is : How were the climates of different Departments identified? The main purpose of the present section will be to outline

Relations' to 61.67 in "Aloofness. The Social Needs seem to be better satisfied in the M.S. University of Baroda, but the Gujarat University has, by and large, a better showing on "Esprit" and "Administrative Behaviours."

and illustrate how institutional climate at a Departmental level can be identified and evaluated. In 1975, threre were 57 Departments in the M.S. University of Baroda distributed over its various Faculties and Institutions. The focal points in the Hypothesis are three: (a) to set-up procedures to identify Departmental, Institutional or organizational climate; (b) to classify the Departments into three climate categories, viz., Open, Intermediate and Closed; (c) to examine the significance of among the differences in three category climates over which the 57 Departments are distributed and (d) to examine these climate variations further by classifying the 57 Departments into 5 major academic divisions of (1) Humanities, such as languages, (2) Social Sciences, such as Economics, Sociology, (3) Pure Science, such as Physics, (4) Applied Sciences such as Geology, and Fine Arts, Music, Dance, Dramatics, Sculpture etc. and to test the significance of variations among them.

The Hypothesis is worded as under :

"The various Departments of the University will differ among themselves in terms of their three climate categories, not only that but the same trend of climate variation will continue

to be manifested even when they are further classified into major divisions on the basis of their academic discipline".

(The Hypothesis III)

At first the procedures for identifying the climate of the Department stage will be described with a concrete illustration.

It may be recalled that the first step followed in identifying the climate category at the Faculty/Institute stage was to prepare Faculty/Institute profile. As the same step of procedures is also to be followed in identifying the climate categories, the details are not elaborated here to avoid repetition. It would suffice to observe here that the 57 Departmental profiles were prepared one for each Department included in the sample of the study. These profiles were in terms of raw scores. These raw scores, as was done in the case of identification of climate categories of Faculties/Institutions were converted into Standard Scores, twice, firstly normatively and then ipsatively. The Department Mean and Standard Scores are given in the Appendix III.

As in the case of Faculties/Institutions, the Departments

the mean scores and Standard Scores were converted into the Stanine System with a range of 90 to 10. The same system of Stanine Classification, interpretation and weightage were used as was the case of in the use of the Stanine System in regard to Faculty/Institution and the "Department Stanine Score for each of the 57 Departments was computed. The Table 4.10 gives an illustration of how the Departmental Stanine score was obtained in case of one of the 57 Department of the University.

The Table 4.10 indicates the Mean Standard Scores for the twelve sub-tests obtained by the Department. Again the Department Stanine scorei.e. 39 is obtained by summing up the scores of given weightage in all brackets at every sub-test channel in the table. Likewise the department Stanine Scores for other departments are obtained by repeating the same method discussed in the foregoing chapter.

Classification of Various Departments of Various Faculties According to the Climate Types

As stated previously for the 57 departments of the various Faculties of the University, the Stanine Score System was compiled to enable the investigator finally to classify them into the three types of climates, varying from Open to Closed climate.

Table 4.10 : Illustration of How the Departmental Stanine Score of Department No.1 is obtained.

Stanine Level	ICDQ sub-tests 1	2	3	4	5	6	7	8	9	10	11	12
Highest												
9				61 (4)			61 (4)			57 (4)		
8								58 (4)				
High												
7												
6									53 (3)			
Low												
5	48 (3)		48 (2)								51 (2)	50 (2)
4						47 (3)						
Lowest												
3		41 (4)										
2												
1					23 (4)							
										Total		39

Note: The obtained stanine score sub-test-wise is given against respective Stanine level in the reverse order from 9 to 1. The figures in the brackets indicate the weightage of the obtained Stanine Score.

Table 4.11 presents the classification of the 57 Departments of the 15 Faculties/Institutions of the M.S.University, Baroda, in terms of Open, Intermediate or Closed Climate types.

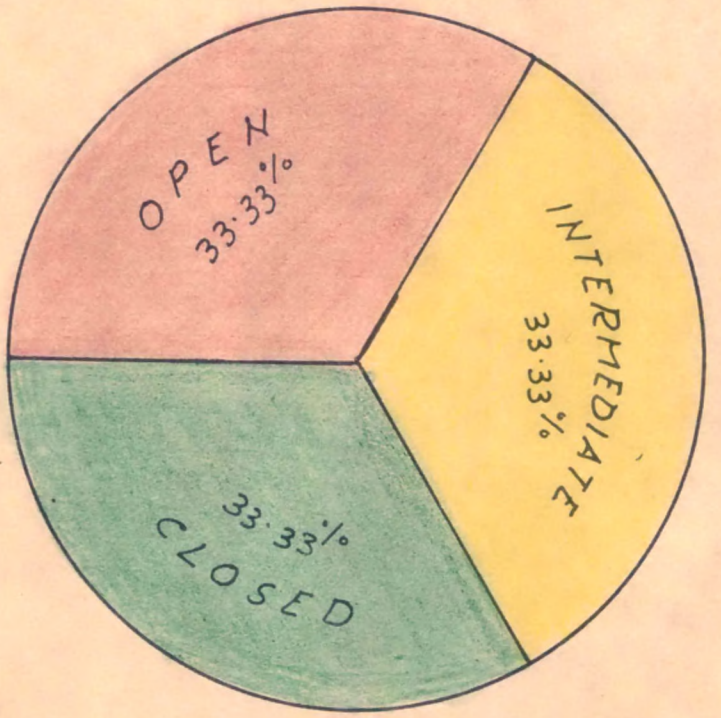
Table 4.11 : Classification of 57 Departments According to Closed, Intermediate and Open Climate Types.

Department No.	Department Stanine score (15-44)	Climate Types		
		Closed (15-24)	Intermediate (25-34)	Open (35-44)
1	39			*
2	20	*		
3	34		*	
4	32		*	
5	33		*	
6	20	*		
7	36			*
8	28		*	
9	28		*	
10	24	*		
11	38			*
12	21	*		
13	34		*	
14	21	*		
15	33		*	
16	29		*	
17	35			*
18	31		*	
19	42			*
20	33		*	

Table 4.11 (contd.)

Department No.	Department Stanine Score (15-44)	Climate Types		
		Closed (15-24)	Intermediate (25-34)	Open (35-44)
21	22	*		
22	40			*
23	18	*		
24	36			*
25	26		*	
26	27		*	
27	41			*
28	40			*
29	28		*	
30	21	*		
31	16	*		
32	22	*		
33	36			*
34	36			*
35	28		*	
36	19	*		
37	26		*	
38	22	*		
39	43			*
40	16	*		
41	36			*
42	37			*
43	22	*		
44	35			*
45	20	*		
46	30		*	
47	38			*
48	37			*

CHART-6



DISTRIBUTION OF DEPARTMENTS ACCORDING TO CLIMATE CATEGORY

Table 4.11 (contd.)

Department No.	Department Stanine Score (15-44)	Climate Types		
		Closed (15-24)	Intermediate (25-34)	Open (35-44)
49	32		*	
50	21	*		
51	41			*
52	21	*		
53	41			*
54	19	*		
55	22	*		
56	28		*	
57	33		*	
Total 57		19 (33.33)	19 (33.33)	19 (33.33)

Looking at the above table 4.11, the lowest Department-wise Stanine Score is 15 and the highest Stanine Score is 44. The range from the lowest score of 15 to the highest score of 44 is further subdivided into three equal sub-ranges. The sub-range 15-24 is assigned to the Closed climate types, the subrange 25-34 to the Intermediate Climate type and the next sub-range 35-44 to the Open Climate type. It is interesting to note that 19 Departments fall equally in each range giving an equivalent percentage of 33.33 for each

sub-range. This indicates the number of Departments possessing the three climate categories are fairly and equitably located in each type of climate.

The above results lend support to our hypothesis that the Department-wise classifications show marked variations in the Institutional Climate.

Department-wise Variations

As mentioned earlier, the 57 Departments of the 15 Faculties/Institutions of the M.S.University could be further classified imto 5 categories on the basis of the academic discipline they represent, viz., the Humanities, the Social Sciences, the Pure Sciences, the Applied Sciences and the Fine Arts. The climate-wise distribution of these five major divisions of the Departments is presented in the Table 4.12.

The results in the table were tested for their significance by applying the F-ratio. The differences in the major Departments based on academic disciplines in respect of their climate categories are found to be significant. This would suggest that the climate category of Departments is related to the major academic disciplines to which they belong.

Table 4.12 : Percentage Distribution of Three Climate Types Department-wise.

Types of Department	Climate			Total
	Open	Intermediate	Closed	
1. Humanities	41.66 (5)	25.0 (3)	33.33 (4)	100.00 (12)
2. Social Sciences	38.46 (5)	30.77 (4)	30.77 (4)	100.00 (13)
3. Pure Sciences	15.38 (2)	46.15 (6)	38.46 (5)	100.00 (13)
4. Applied Sciences	38.46 (5)	30.77 (4)	30.77 (4)	100.00 (13)
5. Fine Arts	33.33 (2)	33.33 (2)	33.33 (2)	100.00 (6)
	33.33 (19)	33.33 (19)	33.33 (19)	100.00 (57)

Note: Figures in the brackets indicate the number of Departments.

F-ratio = 24.05 Significant at .01 level.

In the Open Climate group, Humanities, Social Sciences, Applied Sciences, have 5 departments each, whereas in the case of Pure Sciences and Fine Arts, there are 2 Departments each. Further under the Open Climate, Humanities Departments have the highest percentage i.e. 41.66 followed by the Social Sciences 38.46 and the Applied Sciences 38.46, Fine Arts 33.33 and Pure Sciences 15.38 percentage.

In the Intermediate Climate group, Pure Sciences have 6 Departments, Social Sciences and Applied Sciences have 4 Departments each, Humanities have 3 Departments and Fine Arts have 2 Departments. The percentage is higher in the case of Pure Sciences Department i.e. 46.15 followed by Fine Arts 33.33 per cent, Social Sciences 30.77 per cent, Applied Sciences 30.77 and Humanities 25.00 per cent.

In the Closed Climate group Pure Sciences have 5 Departments, Humanities, Social Sciences, Applied Sciences each have 4 Departments and Fine Arts have 2 Departments only.The percentage in the case of Pure Sciences is 38.46 followed by Humanities, Fine Arts, 33.33 each and Social Sciences and Applied Sciences 30.77 each.

Thus, out of the 12 Departments that fall under the category of Humanities the major concentration is in the Open Climate followed by Closed Climate and then Intermediate climate. In the case of Social Sciences consisting of the 13 Departments, the major concentration is in the Open Climate group followed by an equal dispersion in the Intermediate and Closed climates. So far as Pure Sciences are concerned, of the 13 Departments there in the major concentration is in

the Intermediate climate followed by Closed climate and then by the Open climate. In respect to Applied Sciences, of the 13 Departments, the Open Climate has a major share followed by an equal share in the Intermediate and Closed Climates. Out of the six Departments falling under Fine Arts, 2 Departments each are equally located in Open, Intermediate and Closed climates. From the above discussion it appears that the Hypothesis is sustained.

Department and Sub-test-wise Comparison

The hypothesis is further supported if the Department-wise classification is looked into. The results of Department-wise and sub-test-wise Mean and SD scores are discussed in the Table 4.13, given on the next page.

It was stated earlier that the Open and Closed climates are the two climate types at the extreme ends of the climate continuum. Therefore, the mean scores of dimensions of Closed climate on positive behaviour should be less than the mean scores of the positive dimensions of Open climate, whereas, the negative behaviour dimensions the mean scores of Open climate should be lower than those of the Closed climate. These would provide better criteria to judge whether the

Table 4.13 : The Mean SD on the Twelve Dimensions of the Organizational Climate of Departments according to the Five Types of Departments.

Types of Departments	Dis-engage-ment	Hind-rance	Esprit	Inti-macy	Aloof-ness	Produ-ction Empha-sis	Thrust	Consi-dera-tion	Commu-nica-tion	Organi-zation-al St-ructure	Free-dom & Demo-crati-zation	Human Rela-tions
	1-A	2-B	3-C	4-D	5-E	6-F	7-G	8-H	9-I	10-J	11-K	12-L
Humanities												
Mean	47.37	50.39	49.59	50.65	40.07	51.87	51.98	53.35	50.30	52.96	51.59	49.78
SD	14.65	13.32	11.41	9.40	11.99	6.27	5.35	5.45	4.28	10.75	7.23	6.92
Social Sciences												
Mean	47.26	50.90	47.82	43.61	48.26	52.69	52.73	50.75	51.14	52.1	50.59	51.59
SD	12.87	14.27	9.41	7.98	10.55	7.65	12.71	6.45	6.32	10,57	6.51	7.05
Pure Sciences												
Mean	48.61	52.68	48.92	48.25	43.80	53.42	52.80	50.39	53.17	46.75	49.27	51.78
SD	14.70	10.98	9.11	9.54	17.11	9.64	5.01	5.48	6.53	5.25	5.56	8.38
Applied Sciences												
Mean	53.27	47.40	48.61	55.45	54.52	52.92	48.81	47.36	47.77	49.12	49.49	45.1
SD	9.63	11.59	4.89	3.98	18.22	11.91	6.96	7.73	8.36	7.81	8.76	6.95
Fine Arts												
Mean	57.75	47.63	50.69	47.19	53.56	42.56	54.44	50.13	49.81	46.81	51.13	50.31
SD	15.30	14.12	5.13	10.40	15.50	6.86	8.52	7.92	9.00	5.38	4.57	5.98

Open Climates of the various Departments of various faculties are really significantly different from the Closed climate types.

The Table 4.13 indicates the mean and SD scores for the five major Departments in relation to the twelve dimensions carried out for the purpose of the comparison. The table shows that in the two negative dimensions of teachers' behaviour viz., "Disengagement" and "Hindrance", the mean scores for the 'Disengagement' dimension, are low in the Departments of Humanities, Social Sciences and Pure Sciences, whereas for the dimension of 'Hindrance', the mean scores are low in Applied Sciences and Fine Arts. In the two positive dimensions of teacher behaviour viz., 'Esprit' and 'Intimacy', the mean scores for the 'Esprit' dimension are almost the same in all the Departments whereas for the 'Intimacy' dimension the mean score is higher in Applied Sciences than in the other Departments.

Dimensions Nos. 5 to 8 indicate Principals' behaviour. The two negative dimensions of principals' behaviour are 'Aloofness' and 'Production Emphasis'. The mean scores on the dimension 'Aloofness', in the Departments of Humanities,

Social Sciences and Pure Science are lower than those in the Departments of Applied Sciences and Fine Arts, whereas in the case of the dimension 'Production Emphasis' only Fine Arts is having lower mean score than the remaining other Departments. The mean scores of the dimensions 'Thrust' and 'Consideration' are higher in Humanities, Social Sciences, Pure Sciences and Fine Arts than those in Applied Sciences Departments.

Dimensions Nos.9 to 12 constitute administrative behaviour. The mean scores of the dimension 'Communication', is high in the Departments of Pure Sciences and Social Sciences. As regards the dimension 'Organizational Structure' the mean scores are high in Humanities and Social Sciences Departments. In the case of the dimension 'Freedom & Democratization', the mean scores are high in the Departments of Humanities and Fine Arts, whereas in the case of the dimension 'Human Relations', the mean scores are high in the Social Sciences and Pure Sciences.

In conclusion, the department-wise classification of results under each dimension reveals that there are marked variations department-wise and these support the hypothesis.

The results of the comparison between different pairs of departments for the various sub-tests are significant which can be seen from the t-values obtained in each sub-test as detailed in the Table 4.14, given on the next page.

The table 4.14 is a comparison between various Departments. The t-value computed for different pairs of Departments indicate significante of results at .05 or they are non-significamt at .01 levels.

In the first group of comparison between Humanities and Social Sciences, these two groups score equal number of high mean score values. The Humanities Departments score high mean score values for the sub-tests 'Disengagement', 'Esprit', 'Intimacy', 'Consideration', 'Organizational Structure' and 'Freedom and Democratization'. The Social Sciences Departments score high mean score values for the sub-tests 'Hindrance', 'Aloofness', 'Production Emphasis', 'Thrust', 'Communication' and 'Human Relations'. In the case of the sub-test 'Consideration' the t-value indicates significant result at .05 level whereas for sub-tests 'Intimacy' and 'Aloofness', significant results are at .01 level. For the remaining sub-tests the results are not significant.

Table 4.14 : Dimension-wise Comparison of Departments According to their T-values.

Comparison between (pairs) of Departments	Dis-engage-ment	Hind-rance	Esprit	Inti-macy	Aloof-ness	Produ-ction Empha-sis	Thrust	Consi-dera-tion	Commu-nication	Organi-zation-al St-ructure	Free-dom & Democr-atiza-tion	Human-Rela-tions
	1	2	3	4	5	6	7	8	9	10	11	12
1 and 2	+0.04 NS	-0.18 NS	+0.83 NS	+3.99 **	-3.58 **	-1.27 NS	-0.37 NS	+2.14 *	-0.75 NS	+0.40 NS	+0.72 NS	-1.27 NS
1 and 3	-0.43 NS	-0.96 NS	+0.34 NS	+1.29 NS	-1.26 NS	-0.95 NS	-0.81 NS	+2.75 **	-2.58 *	+3.89 **	+1.86 NS	-1.31 NS
1 and 4	-2.78 **	+1.34 NS	+0.69 NS	-4.11 **	-4.85 **	-0.56 NS	+2.69 **	+4.67 **	+1.92 NS	+2.35 *	+1.39 NS	+3.70 **
1 and 5	-2.41 *	+0.71 NS	-0.37 NS	+1.24 NS	-3.59 **	+5.0 **	-1.35 NS	+1.80 NS	+0.29 NS	+2.29 *	+0.24 NS	-0.53 NS
2 and 3	-0.51 NS	-0.74 NS	-0.62 NS	-2.75 **	+1.61 NS	+0.16 NS	-0.04 NS	+0.31 NS	-1.65 **	+3.43 **	+1.14 NS	-0.13 NS
2 and 4	-3.11 **	+1.57 NS	-0.64 NS	-11.57 **	-2.24 *	+0.41 NS	+2.33 *	+2.63 **	+2.49 *	+1.89 NS	+0.78 NS	+5.26 **
2 and 5	-2.72 **	+0.89 NS	-1.16 NS	-1.45 NS	-1.56 NS	+5.19 **	-0.50 NS	+0.32 NS	+0.66 NS	+1.92 NS	-0.31 NS	+0.40 NS
3 and 4	-2.31 *	+2.75 **	+0.27 NS	-6.26 **	-3.57 **	+0.27 NS	+3.78 **	+2.60 *	+4.17 **	-2.04 *	-0.17 NS	+5.23 **
3 and 5	-2.19 *	+1.53 NS	-0.75 NS	+0.39 NS	-2.06 *	+4.22 **	-1.0 NS	+1.16 NS	+1.68 NS	-0.05 NS	-1.22 NS	+0.43 NS
4 and 5	-1.54 NS	-0.07 NS	-1.55 NS	+5.57 **	+0.20 NS	+3.37 **	-2.86 **	-1.31 NS	-0.89 NS	+1.13 NS	-0.73 NS	-3.08 **

Note: 1 = Humanities; 2= Social Sciences; 3 = Pure Sciences; 4= Applied Sciences, and 5= Fine Arts.
In each pair the symbol '+' means 'higher mean' of the first than that of the second and the symbol '-' means 'higher mean of the second than that of the first.
* means significant at .05 level; ** means significant at .01 level; NS = Not significant.

In the comparison with Humanities and Pure Sciences, the Humanities group scores high mean score values for 'Esprit', 'Intimacy', 'Consideration', 'Organizational Structure' and 'Freedom and Democratization', whereas Pure Sciences Departments score high mean score values for 'Disengagement', 'Hindrance', 'Aloofness', 'Production Emphasis', 'Thrust', 'Communication' and 'Human Relations'. For the sub-test 'Communication', the t-value indicates significant relationship at .05 level for the sub-tests 'Consideration and 'organizational Structure' significant relationship at .01 level and the relationship is not significant within the case of the remaining sub-tests.

The comparison of Humanities and Applied Sciences Departments show higher mean scores for 'Humanities Departments in respect of the sub-tests of 'Hindrance', 'Esprit', 'Thrust', 'Consideration', 'Organizational Structure', 'Human Relations', 'Communications' and 'Freedom and Democratization', whereas the Applied Sciences Departmentsscore high mean score for the sub-tests of 'Disengagement', 'Intimacy', 'Aloofness', and 'Production Emphasis'.For the sub-test 'Organizational Structure', the results were significant at .05 level; for the sub-tests 'Disengagement', 'Intimacy', 'Aloofness', 'Thrust',

'Consideration', and 'Human Relations', the results indicate significant relationship at .01 level. In respect of the sub-tests of 'Hindrance', 'Esprit', 'Production Emphasis', 'Communication' and 'Freedom and Democratization', the results did not show any significance.

Comparison of Humanities and Fine Arts Departments, shows that Humanities Departments score higher mean scores for the sub-tests of 'Hindrance', 'Intimacy', 'Production Emphasis', 'Consideration', 'Organizational Structure', 'Freedom and Democratization and 'Communication'. The Fine Arts Departments show higher mean scores for the sub-tests of 'Disengagement', 'Esprit', Aloofness', 'Thrust', and 'Human Relations'. In these Departments for the sub-tests of 'Disengagement' and 'Organizational Structure', the results were found to be significant at .05 level. For the sub-tests of 'Aloofness' and 'Production Emphasis', the results were found to be significant at .01 level, whereas in the case of the remaining sub-tests the results did not show significant relationship.

Social Sciences compared with Pure Sciences show higher mean scores in respect of the sub-tests of 'Aloofness', 'Production Emphasis', 'Consideration', 'Organizational Structure' and 'Freedom and Democratization', whereas

Pure Sciences score higher mean score for the sub-tests of 'Disengagement', 'Hindrance', 'Esprit', 'Intimacy', 'Thrust', 'Communication' and 'Human Relations'. In respect of the sub-tests 'Intimacy' and 'Organizational Structure' the results were found to be significant at .01 level whereas for the remaining sub-tests the results failed to show any significant relationship.

Social sciences when compared with the Applied Sciences show higher mean scores for the sub-tests of 'Hindrance', 'Production Emphasis', 'Thrust', 'Consideration', 'Organizational Structure', 'Human Relations', 'Communication' and 'Freedom and Democratization'. The Applied Sciences score higher mean scores for only 4 sub-tests i.e. 'Disengagement', 'Esprit', 'Intimacy' and 'Aloofness'. The t-values indicate significant relationship at .05 level for the sub-tests of 'Aloofness', 'Thrust' and 'Communication' and significant relationship at .01 level for the sub-tests of 'Disengagement', 'Intimacy', 'Consideration' and 'Human Relations'. For the remaining sub-tests the results were not significant.

Social Sciences compared to Fine Arts show higher mean score values for the sub-tests of 'Hindrance', 'Production Emphasis','Consideration', 'Organizational Structure',

'Human Relations', and 'Communication'. The Fine Arts Departments score higher mean scores for the sub-tests 'Disengagement', 'Esprit', 'Intimacy', 'Aloofness', 'Thrust' and 'Freedom and Democratization'. The t-values indicate significant relationship at .01 level for the sub-tests 'Disengagement' and 'Production Emphasis' and for the remaining sub-tests no significant relationship was found.

Pure sciences and Applied Sciences Departments when compared, show that Pure Sciences Departments score higher mean scores in respect of seven sub-tests viz., 'Hindrance', 'Esprit', 'Production Emphasis', 'Thrust', 'Consideration', 'Human Relations' and 'Communication'. The Applied Sciences Department score higher significant relationship at .05 level in respect of the sub-tests 'Disengagement', 'Consideration' and 'Organizational Structure'. In respect of the sub-tests of 'Hindrance', 'Intimacy', 'Aloofness', 'Thrust', 'Communication' and 'Human Relations', significant relationship was found at .01 level and for the remaining sub-tests no significant relationship could be established.

Pure Sciences and Fine Arts departments show that Fine Arts Departments score higher mean scores in respect of sub-tests of 'Disengagement', 'Esprit', 'Aloofness', 'Thrust',

'Organizational Structure' and'Freedom and Democratization'. The Pure Sciences Departments score higher mean scores for the sub-tests of 'Hindrance', 'Intimacy', 'Production Emphasis', 'Consideration', 'Communication' and 'Human Relations'. The t-values indicate significant relationship at.05 level in respect of the sub-tests of 'Disengagement' and 'Aloofness'. Again, significant relationship was found at .01 level in respect of the sub-tests 'Production Emphasis' and no significant relationship could be found for the remaining sub-tests.

Comparison of the Applied Sciences Departments with the Fine Arts Departments should the that Applied Sciences have higher mean scores for sub-tests of 'Intimacy', 'Aloofness', 'Production Emphasis', and 'Organizational Structure'. Fine Arts Departments score higher mean score for the sub-tests of 'Disengagement', 'Hindrance', 'Communicatiom' and Freedom and Democratization'. The t-values indicated significant relationship at .01 level in respect of the sub-tests of 'Intimacy', 'Production Emphasis', 'Thrust', and 'Human Relations'. No significant relationship was found in respect of the other sub-tests.

In conclusion, comparison of sub-tests results of the

5 major Departments whem interrelated shows marked variations. Therefore, the hypothesis stands sustained. The result thus proves that the hypothesis is supported and distinction between Open and Closed climates is substantiated by the t-values of their various dimensions.

The analysis shows that certain Departments stand higher in teacher behaviour dimensions, some in principal behaviour dimensions and others in administrative dimensions. The data need to be further expanded and need to be further validated before one can arrive at a conclusion that certain Departments stand higher in more productive and desirable dimensions like 'Esprit', 'Intimacy', 'Thrust', 'Consideration', 'Communication', 'Human Relations' and 'Freedom and Democratization' and others stand lower on them.However, the Hypothesis III stands substantial in its major focal points.

4.5 ESTIMATES OF INSTITUTIONAL CLIMATE BY DEANS AND TEACHERS AND PROFESSORS AND LECTURERS

An intriguing factor in climate researches is the extent to which the participants involved in perceiving institutional climate of their schools or Departments or Faculties or institutions differ in their perceptions of

the different dimensions of the climate measurement tool - the interaction patterns which give rise to variations in climate categories. Some research efforts have been made in this direction. That provided the present investigator to frame the present Hypothesis. She has somewhat broadened the scope of her inquiry in this respect because in her case the respondents could be divided in more than two categories, viz., teachers,Deans, Heads of the Departments and even among the teachers she could have categories of professors, readers and lecturers. Sargent (1967), using the dimensions of the OCDQ by Halpin and Croft tested the significance of perceptions of teachers and principals. Earlier, Brown (1966), Watkins (1966) also tested the significance of difference between perceptions of teachers and principals on climate dimensions.The trend is found in the studies by McWilliams (1967), Dugan (1968), Latjeineir(1969) Sommervile (1969), Berenda (1970), Taotipaya (1977), Kirit Gandhi (1977) and Anjani Mehta (1977).

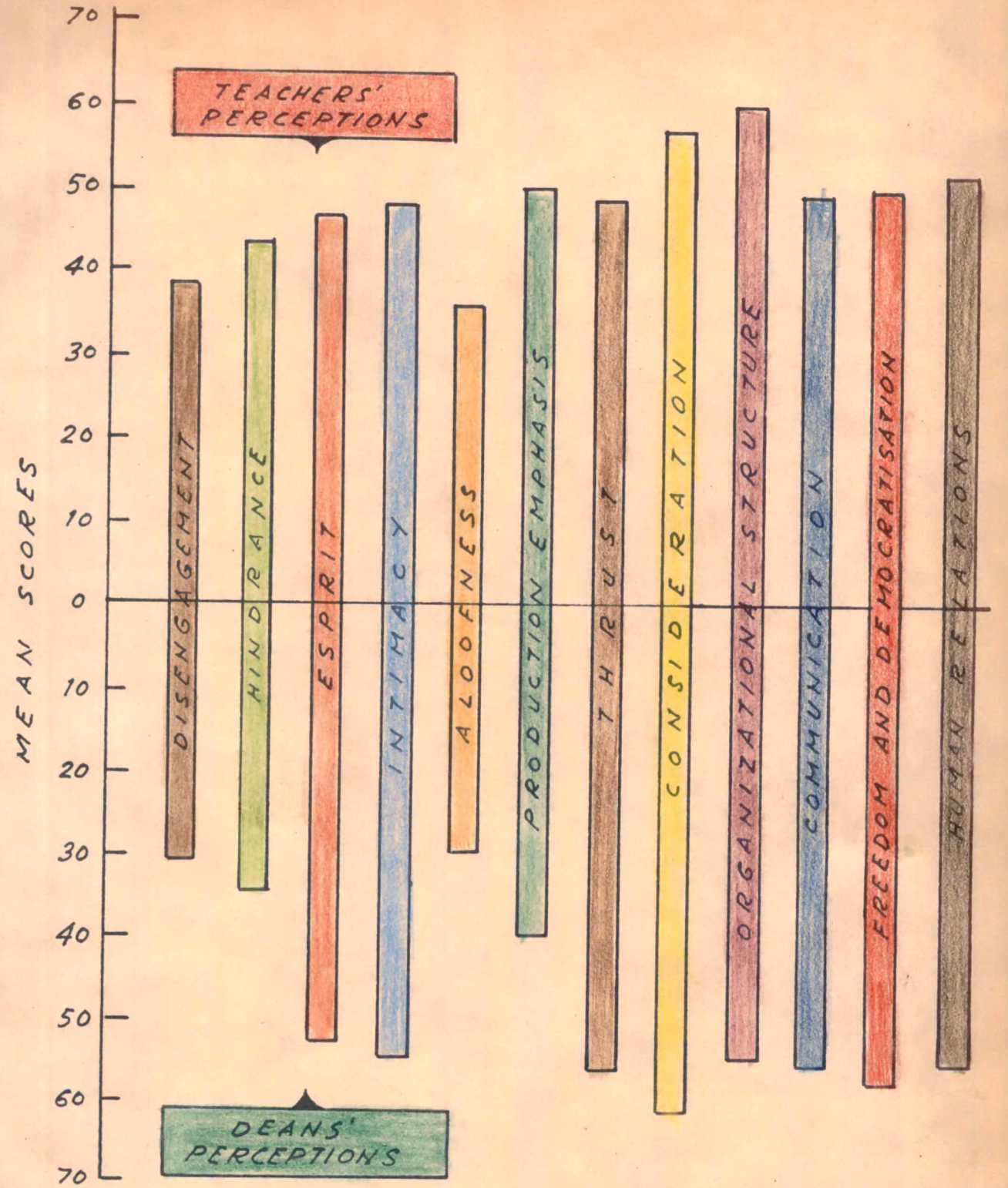
These earlier studies have provided a rationale and background to the present investigator to formulate the present Hypothesis which is worded as under :

"There are no real differences between the mean perceptions of (a) Faculty Deans and Faculty teachers, (b) between those of professors and lecturers on different dimensions of institutional climate as measured by the ICDQ and (c) between Heads of Departments and Lecturers(Baroda FormIII)(The Hypothesis IV)

To test this Hypothesis the mean scores, and S.D. of Deans and Teachers and Professors and Lecturers were calculated and with their help the t-values of the differences of perceptions on all the twelve dimensions of Deans and Teachers and Professors and Lecturers were computed and their level of significance was worked out. The Table 4.15 given on the next page, presents the mean perception scores, S.D.s of Deans and Teachers on their perceptions of the twelve dimensions of the ICDQ (Baroda Form III) and their t-values.

From the table, it can be seen that t-values are significant between the mean perceptions of Faculty Deans and of Faculty teachers' on all the twelve dimensions of the ICDQ (Baroda Form III). It shows that these results differ from the results reported by Sargent. In Sargent's

CHART-7



DEANS' AND TEACHERS' PERCEPTION MEAN SCORES OF THE VARIOUS DIMENSIONS OF THE ICDQ

Table 4.15 : Significance of Differences in Mean Perceptions of Deans and Faculty Teachers on ICDQ Dimensions

Dimensions	Deans (N=15)		Teachers (N=182)		t-value
	Mean	SD	Mean	SD	
Disengagement	32.42	4.23	39.23	6.10	6.19**
Hindrance	35.17	3.14	43.04	4.14	7.87**
Esprit	53.46	5.22	46.10	4.83	5.29**
Intimacy	55.24	4.18	47.17	6.32	4.46**
Aloofness	30.11	3.16	36.12	5.13	6.98**
Production Emphasis	40.17	4.56	50.51	5.18	8.20**
Thrust	57.33	3.34	48.21	4.21	9.79**
Consideration	62.21	5.40	57.40	7.10	3.23**
Organizational Structure	55.52	4.11	60.10	5.13	3.78**
Communication	56.22	4.44	48.47	5.12	4.84**
Freedom and Democratization	58.33	5.14	49.21	5.21	6.60**
Human Relations	56.40	3.26	51.20	4.13	4.72**

** Significant at .01 level.

study at least on one dimensions, i.e. 'Aloofness' a small mean difference (.97) was found between the perceptions of teachers and principals. In the present study the perceptions of the faculty Deans' and of the teachers differ significantly

on all the twelve dimensions of the Institutional climate of the faculties at .05 level. From this result it could be seen that the perceptions of the Deans on institutional climate are altogether different from those of their faculty teachers. The Hypothesis (a) therefore, stands rejected.

Table 4.16 presents the second part of the Hypothesis which relates to relative differences in perceptions of professors and lecturers about each of the twelve dimensions of the same ICDQ (Baroda Form III). In this case the t-values are significant at .01 level in regard to differences in perceptions of these two groups on dimensions "Disengagement", "Hindrance", "Intimacy", "Aloofness", "Thrust" at .01 level and also on the dimensions of "Communication" and Production Emphasis at .01 level. On the remaining dimensions, i.e. on "Esprit", "[illegible]", "Consideration", "Organizational Structure", "Freedom and Democratization" and on "Human Relations", the t-values were found to be insignificant. Thus, in the second part, the Hypothesis is not borne out.

Table 4.16 : The Relative Differences in Perceptions of Professors and Lecturers About Twelve Dimensions of ICDQ.

Dimensions	Professors (N=50)		Lecturers (N=182)		t-value
	Mean	SD	Mean	SD	
Disengagement	35.21	4.27	39.23	6.10	4.73**
Hindrance	38.34	5.18	43.04	4.14	5.68**
Esprit	50.17	3.53	46.10	4.83	1.88
Intimacy	50.56	4.92	47.17	6.32	3.84**
Aloofness	32.40	4.44	36.12	5.13	4.59**
Production Emphasis	45.17	4.13	50.51	5.18	6.84**
Thrust	50.26	3.30	48.21	4.21	4.92**
Consideration	58.34	5.17	57.40	7.10	0.78
Organizational Structure	59.10	4.30	60.10	5.13	1.51
Communication	49.83	4.42	48.47	5.12	2.12*
Freedom and Democratization	50.33	4.53	49.21	5.21	1.08
Human Relations	51.25	4.14	51.20	5.26	0.07

* Significant at .05 level
** Significant at .01 level

Table 4.17 : Significance of Differences in Mean Perception of Heads of Departments and Lecturers.

Dimensions	Heads of the Departments		Lecturers		t-value
	Mean	SD	Mean	SD	
	(N=57)		(N=182)		
Disengagement	35.16	3.10	34.23	6.10	6.67**
Hindrance	38.27	5.15	43.04	4.14	2.20*
Esprit	51.33	3.83	46.10	4.83	3.71**
Intimacy	52.28	5.30	47.17	6.32	6.38**
Aloofness	32.10	4.26	36.12	5.13	3.35**
Production Emphasis	44.28	4.42	50.51	5.18	11.12**
Thrust	53.06	3.56	48.21	4.21	13.47**
Consideration	60.20	6.18	57.40	7.10	3.01**
Organizational Structure	58.14	4.26	60.10	5.13	2.88**
Communication	52.17	5.16	48.47	5.12	6.16**
Freedomt and Democratization	53.88	4.47	44.21	5.21	4.53**
Human Relations	53.37	4.18	56.40	5.26	6.58**

* Significant at .05 level
** Significant at .01 level

The third part of the Hypothesis deals with differences in estimates of the twelve dimensions of the same ICDQ by Heads of Departments and Lecturers. The Table 4.17 shows that differences are significant at the accepted levels of

significance on all the twelve dimensions. That is to say, that the Heads of Departments and the lecturers under them perceive differently teachers', principal's and administrative behaviour dimensions. Therefore, like the first part of the Hypothesis, this last part of the Null Hypothesis is not accepted.

The research evidence on this issue does not seem to be conclusive. For instance, Anderson (1965) found that principals perceived the organizational climate of their schools better than their staff. He particularly found that the principal tended to perceive "Esprit", "Intimacy", "Consideration" and "Production Emphasis" higher and "Disengagement" and "Hindrance" lower than what the teachers did. Sargent (1967) confirmed these findings and reported that principals perceived all dimensions except "Aloofness" significantly. Dugan (1968), however, found that there were no significant differences in perceptions of principals and teachers on principal dimensions whereas Owenby (1969) found significant differences between principal's and teachers' perceptions on "Disengagement", "Aloofness" and "Production Emphasis". Taotipaya (1977) in this study of climate of Thai secondary schools found absence of any significant relationship between mean perceptions of teachers and principals on the dimensions of the ACDQ.

Among the Indian researchers, Gandhi (1977) and Mehta (1977) have examined this question. Gandhi has studied the mean perceptions of principals and teachers on the twelve dimensions of the OCDQ (Baroda Form I) which deals with organizational climate of secondary schools. Mehta (1977) studied similar mean perceptions of teachers and principals of the affiliated colleges of the Gujarat University using ICDQ (Baroda Form II) which is meant for studying organizational climate of affiliated colleges.

Gandhi found real and significant differences between mean perceptions of school principals and school teachers on all the twelve dimensions of the OCDQ (Baroda Form-I). Anjani Mehta (1977), however, found that the mean differences between the perceptions of college principals and college teachers were found to be not statistically significant. The college principals and the college teachers seemed to agree in their perceptions about two of the total twelve dimensions, viz., "Production Emphasis" and "Organizational Structure". The mean differences in perceptions in regard to other dimensions of the ICDQ were insignificant as tested through their t-values. The hypothesis is sustained in its first part (Dean-teachers' perceptions) and fails in the second part (professors'-lecturers' perceptions).

4.6 FACULTY CLIMATE AND PUPIL ACTS OF INDISCIPLINE

As stated earlier one of the main interests of the present investigator in undertaking the current study is to examine whether the institutional climate has anything to do with pupil acts of indiscipline which sporadically burst out in 1974 and 1975 on the campus of the university. This wave of student unrest touched most of the Faculties, but in the case of some, the student agitations were frequent and were more extensive. This was particularly the case in large size Faculties of Arts, Commerce, Engineering and Technology and institutions like the Polytechnic. The other Faculties of Science, Education and Psychology, Medicine and Fine Arts, too, had occasional outbursts; the two Faculties which had relatively less student unrest were the Faculties of Social Work and Fine Arts, the former having the least of student disturbances. The Faculties of Arts, Commerce, Technology and Engineering and the Institution of Polytechnic were the worst victims of this student activist movement. In order to study the problem, the following Hypothesis was formulated.

"Faculty climate is a factor related to students' acts of indiscipline".

(The Hypothesis V(a))

This Hypothesis will be tested in the following way:

(a) Comparison of Pupil Acts of Indiscipline, mean scores and their S.D.s in the faculties manifesting three different categories of institutional climate.

(b) Testing the significance of differences in mean Pupil Acts of Indiscipline, scores in Faculties possessing different types of institutional climate, pairing them differently and testing the significance of the inter-climate variations through the application of the t-tests.

(c) Applying the technique of analysis of variance in respect of student indiscipline acts, mean scores under the three categories of Faculty institutional climate, viz., Open, Intermediate and Closed and computing their K-values and testing the level of significance pairing the three climate categories of the Faculties differently, and

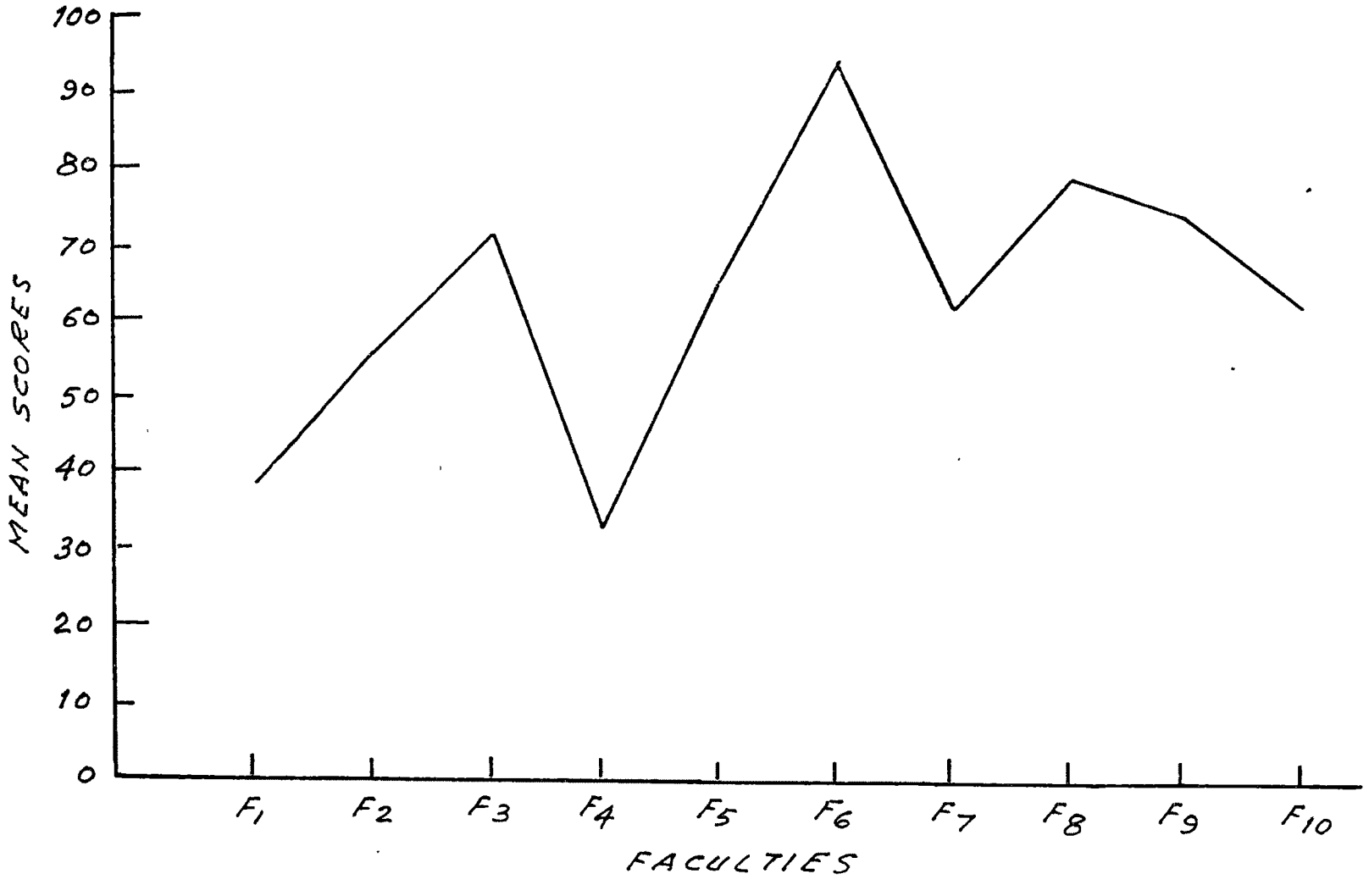
(d) examining the pupil acts of indiscipline at the Departmental level in the context of the five major Departments paired differently, and testing the significance of differences among the differently paired five major Departments (based on the academic discipline to which they belong.

The discussion that follows is organized on the above lines.

The Tables 4.18 and 4.19 present the mean scores, SDs and t-values of individual Faculty/Institution of the University. These data are taken into consideration in categorising their total climate into three categories, viz., Open, Intermediate and Closed. The

The Table 4.18, given on the next page, presents comparison of pupil acts of indiscipline, mean scores, and their SD across the three types of institutional climate to which the related Faculties belong.

CHART-9

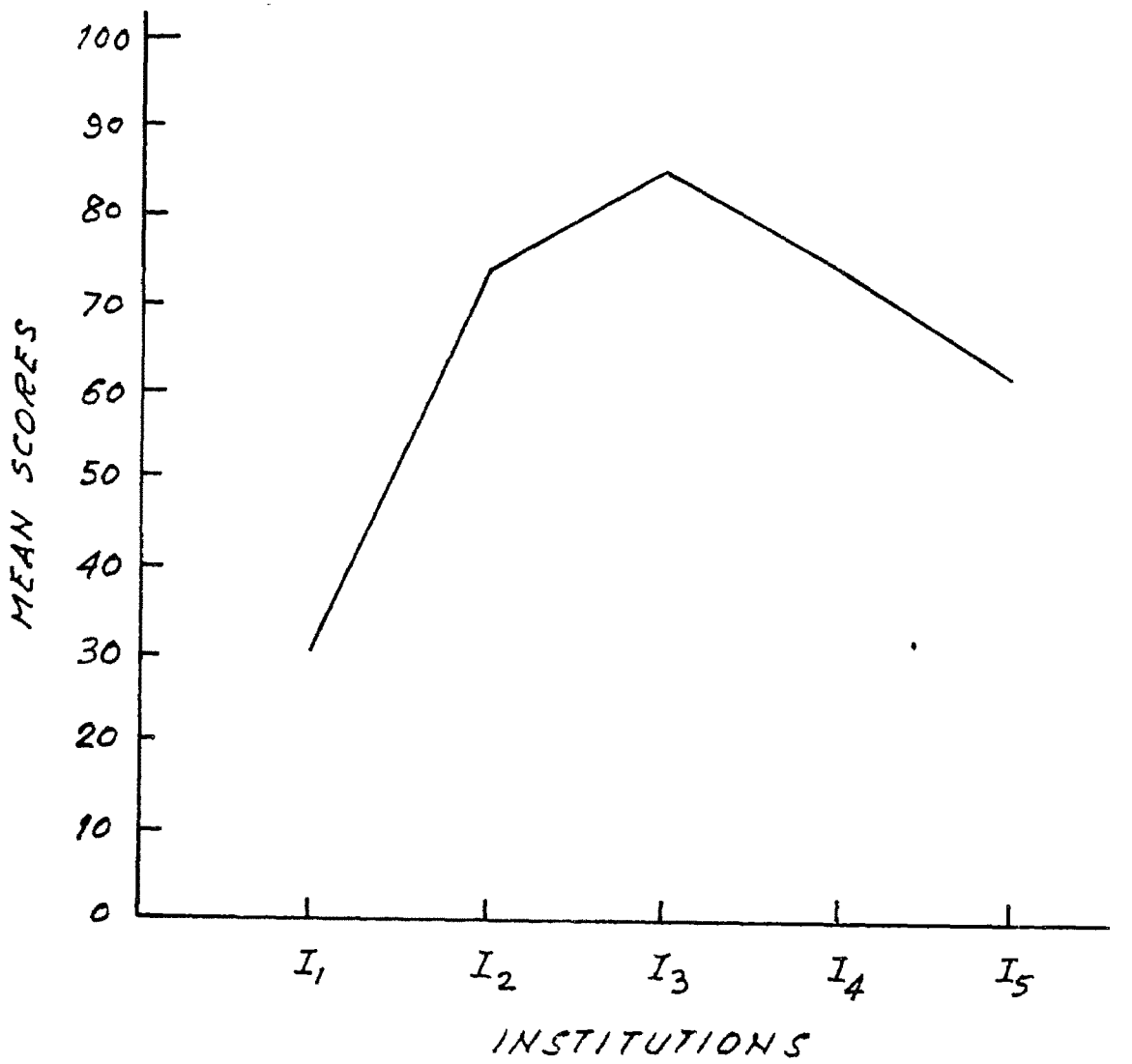


FACULTYWISE MEAN SCORES OF THE SAI

Table 4.18 : Faculty-wise Mean Scores of Students' Acts of Indiscipline

	S A I			
	Mean	df^2	SD	n
		Faculties		
1.	36.70	41255.26	27.6403	54
2.	55.62	2573.69	12.6829	16
3.	72.28	15911.64	29.7310	18
4.	32.40	49740.80	33.2468	45
5.	66.00	200.00	17.0711	04
6.	95.54	7965.21	24.7529	13
7.	61.67	934.67	13.1169	03
8.	79.65	26679.00	25.3253	40
9.	52.14	610.36	19.3416	07
10.	63.40	1064.19	10.8740	09
		Institutions		
1.	30.00	50.36	26.8222	07
2.	74.30	52.30	3.2496	05
3.	83.80	8454.40	23.7408	15
4.	73.55	22350.50	33.4294	20
5.	61.50	182.25	13.50	02

CHART- 9



INSTITUTIONWISE MEAN SCORES OF THE SAI

Table 4.19: Faculty-wise and Institution-wise t-value of Pupils' Acts of Indiscipline.

PAI				
SD	SED	t	df	Remark
25.3880	7.2264	4.30089	68	0.01
28.5774	7.7770	1.8540	70	
30.6285	6.1822	0.6955	97	
27.208	14.0985	1.4682	56	
27.5179	8.5012	1.0398	65	
27.7128	16.4385	1.5226	55	
27.1738	5.6687	1.2436	92	
26.6380	10.7009	3.2296	59	
24.0350	8.2580	2.0170	32	
29.7770	8.6670	3.0900	59	0.01
12.4130	6.9400	1.4960	18	
19.707	7.3770	5.4110	27	0.01
14.4680	9.1030	0.665	17	
23.2750	6.8850	3.4900	54	0.01
12.3140	5.5800	0.6240	21	
32. 070	9.1490	1.1060	61	
28.3830	15.6900	0.4000	20	
28.6940	10.4440	2.2270	29	0.05
29.8210	18.5970	0.5710	19	
27.5780	7.8270	0.9420	56	
26.8020	11.9380	1.6870	23	
32.5970	17.0070	0.964	47	
32.1000	10.1070	1.3000	56	
33.2070	19.8000	1.0470	46	
30.3430	6.5940	0.4170	83	
31.7340	12.8940	2.3470	50	0.05
8.9180	2.9155	0.5145	15	
11.7558	8.9790	0.7240	05	
12.2190	6.4080	0.6090	42	
10.9070	6.8360	0.2820	09	
25.2840	16.1950	2.0910	14	
26.0630	8.3207	1.9100	51	
21.8280	10.2330	4.2410	18	0.01
25.9750	15.5490	1.1560	41	
14.1220	9.745	0.9780	08	
24.6260	10.0890	2.7270	45	0.01

cont...

Table 4.19 (contd.)

PAI				
SD	SED	t	df	Remark
22.5584	13.2088	0.3937	10	
25.9715	11.8881	0.3196	20	
33.0977	14.5350	0.1273	25	
27.3032	21.8912	0.8451	07	
20.8741	10.5195	1.5742	14	
21.7399	11.2264	0.8017	18	
31.2099	15.6049	0.2166	23	
6.8564	5.7365	2.3185	05	
9.6479	5.3813	2.1110	12	
30.5529	10.4358	0.5414	33	
23.9953	18.0630	1.2345	15	
20.800	8.770	2.3220	22	0.05
33.5654	24.8928	0.6689	20	
29.4484	11.8202	1.2444	27	
11.7683	9.1997	0.2108	09	

Table 4.20 : Comparison of Pupils' Acts of Indiscipline, Scores of University Teachers of Open, Intermediate and Closed Types of Faculties.

Types of Faculties Institutional Climate	Pupil Acts of Indiscipline Score	
	Mean	SD
Open	70.50	25.75
Intermediate	81.80	29.83
Closed	81.82	28.53

From the Table 4.20 it can be seen that the mean scores on pupils' Acts of Indiscipline as perceived by university teachers belonging to the Faculties manifesting Open and Closed climates are 70.50 and 81.82 respectively. It means that the mean score on Pupil Acts of Indiscipline in Open climate Faculties is lower than the corresponding mean score in the Closed climate Faculties. It indicates that there are differences in the mean scores on the Pupils' Acts of Indiscipline in Faculties possessing different types of institutional climate. These results support the Hypothesis V.

The Hypothesis is further tested by applying the t-technique. In the following Table 4.21 the t-values for different categories of Faculty climate are given.

Table 4.21 : Significant difference between Pupils' Acts of Indiscipline and Various Types of Faculty Institutional Climate.

Types of Faculty's Institutional Climate	Pupils' Acts of Indiscipline t-value	Level of Significance
Open-Intermediate	2.58	.05
Intermediate-Closed	0.03	NS
Open-Closed	2.64	.01

NS = Not significant.

The above table indicates that the t-value is significant at .01 level in the case of Open and Closed climate Faculties. It means that there is significant relationship between types of climate and pupils' acts of indiscipline. It further indicates that the more openness of the climate, the less are the pupils' acts of indisciplime and vice-versa.

The Hypothesis is further tested by the analysis of variance to examine the influence of categories of climate on pupils' acts of indiscipline. The analysis is given in the following Table 4.22.

Table 4.22 : Analysis of Variance Data to test the influence of Categories of Climate on Students' Acts of Indiscipline.

	df	SS	MS(V)	F
Between means	2	2432.08	1216.04	4.30*
Within condition	220	62040.51	282.23	

* Significant at .05 level

Categories of Faculties/ Institutions	Mean Score of Students' Indiscipline Acts	K-value	Pairs of Climate Categories
Open Climate	112.17	1.06	Open-Intermediate
Intermediate	117.05	2.10	Intermediate-Closed
Closed Climate	128.20	5.42	Open-Closed*

* $p < .01$

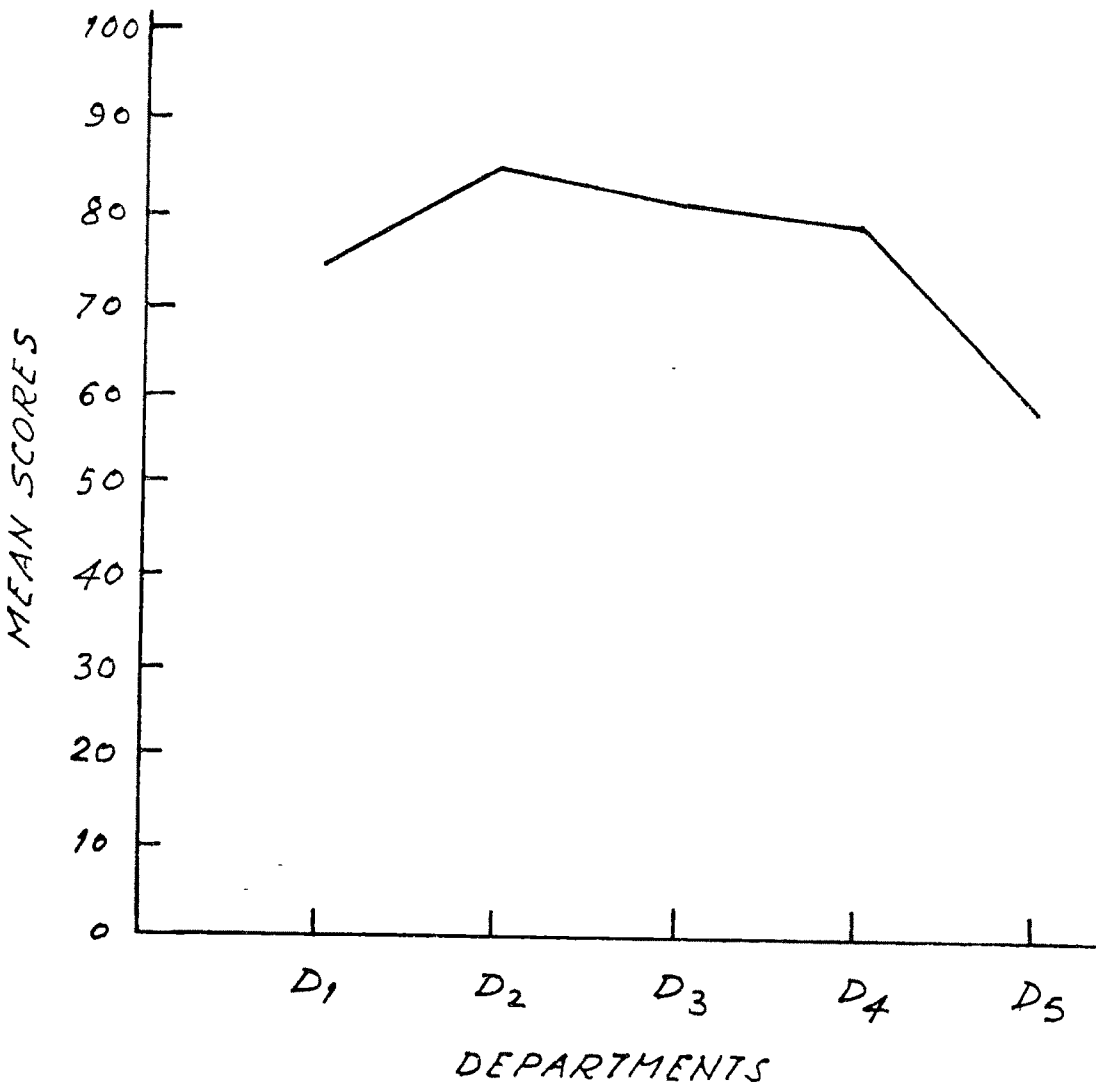
From the above Table 4.22 it is seen that the result is significant at .01 level. It indicates that there exists a significant relationship between climate types and Pupils' Acts of Indiscipline. Therefore the Hypothesis is accepted.

In the earlier discussion Pupils' Acts of indiscipline were studied in relation to Faculty/Institution climate categories. It would now be, therefore, necessary to study further the Pupils' Acts of Indiscipline with regard to the climate of various Departments. The present Hypothesis is formulated with the purpose of the study as mentioned above, The Hypothesis V(b) is the extension of the Hypothesis V(a) and worded as under :

> "There are significant differences in the pupils' acts of indiscipline in relation to various departments."
>
> (The Hypothesis V(b))

It will be seen from the Table 4.23 that the t-values between each of pair of the major departments (i.e. Humanities, Social Sciences, Pure Sciences, Applied Sciences and Fine Arts) are significant at the accepted levels.

CHART- 10



DEPARTMENTWISE MEAN SCORES OF THE SAI

Table 4.23 : Department-wise PAI: Mean, SD and t-values.

Pairs of Major Departments	PAI Mean	SD	Mean	SD	t-value	Level of Significance
1-2	74.28	29.42	85.1	30.36	2.78	.05
1-3	74.28	29.42	80.8	29.27	2.13	.05
1-4	74.28	29.42	79.20	27.39	2.96	.01
1-5	74.28	29.42	58.50	12.05	2.08	.05
2-3	85.1	30.36	80.8	29.27	2.76	.05
2-4	85.1	30.36	79.20	27.39	2.17	.05
2-5	85.1	30.36	58.50	12.05	3.41	.01
3-4	80.8	29.27	79.20	27.39	2.34	.05
3-5	80.8	29.27	58.50	12.05	2.97	.01
4-5	79.20	27.39	58.50	12.05	2.96	.01

Note: 1 = Humanities
2 = Social Sciences
3 = Pure Sciences
4 = Applied Sciences
5 = Fine Arts

It shows further evidences to demonstrate that not only the Faculties/Institutions alone but the academic discipline based major Departments differ significantly in their mean scores on Pupils' Acts of Indiscipline. The Null Hypothesis V(b) is, therefore, substantiated.

4.7 RELATIONSHIP OF PUPIL ACTS OF INDISCIPLINE WITH SOME OF THE DIMENSIONS OF THE ICDQ (BARODA FORM III)

Students on the university or college campuses indulging in acts of violence or flouting the rules and discipline are not a simple affair - it is a complex phenomenon. A factor like growing feelings of injustice done to them by authorities particularly in examination results is one of the dominant causes. But the fact that teachers and students are drifting away from one another is also no less a decisive cause. The personal and close touch between the students and taughts is on decline. Students quite often allege that teachers whom they want to consult on some academic issue or from whom they desire to seek guidance or help are not available in their cabins or cubicles. There are cases reported by teachers and confirmed by Deans/heads of Institutions/Departments that teachers go late to report for duty and quite often behave in the class and outside the class as if they are not interested in teaching. It does not take time for students to identify teachers who are really interested in their jobs and in students and who are disengaged - whose hearts are not in their academic work, but their interest lies somewhere else.

Quite often students get exasperated when they find teachers who are not upto the mark in teaching or who appear to be not really interested in preparing their lectures thoroughly and in teaching sincerely - and whose academic and personal relationship behaviours are characterised by "disengagement".

Students are found to have resorted to acts of indiscipline when they feel that their Department heads or/of Institution or the Deans of the Faculty hinder them in their curricular, co-curricular and extra-curricular activities. Students are found to clash with the Dean or the head of their Institution/Department when they are hindered making use of their union funds for activities like educational tours, excursions, sports, cultural activities and recreation. Where the leadership at the Faculty/Institution/Departmental level is of the negative, dominating, hindering and revengeful type, not infrequently students have been found to have revolted and indulged openly into some violent or semi-violent acts of indiscipline including by quitting classes and examinations, shouting slogans, and gheroeing the persons responsible for such acts of hindrance.

Departments or Faculties/Institutions where esprit among the teachers is low become potent causes of students' acts of indiscipline or rioting.

In some Departments/Faculties or institutions, the leadership is characterised by aloofness. It wears a mantle of superiority and develops a kind of detachment from their colleagues and students under the mask of being very much busy. When Deans and Heads of Departments keep themselves away from students and are not easily accessible to them, the latter naturally feel resentment and they not infrequently show that they are not happy with such aloofness or alienation: This particularly happens when students are kept outside the office of the Dean/Heads of Departments for a long time when students' need could be met by sparing a few minutes - Their needs are not often complex and time consuming - they want a short meeting with the Dean/Head for a signature on some document or a testimonial or a certificate of character or when they want to inform the Dean that they will be late in the payment of term fees on account of some unforeseen and insumountable difficulty cropped up before their parents - they want extension of a short period, or they want to explain

that on account of sickness they could not take a periodical test.Deans/heads should find time to listen to students and make a genuine attempt to understand and solve their difficulties. An egoistic behaviour or a high handed bureaucratic attitude or treatment creates a bridge between students and leadership. Control, dominance, display or tantrum of temper make leader's aloofness not only more ugly but bring forth unwholesome reactions from students.

When the behaviour of Faculty/Dean/Institution principal or Department's head is characterized as formal and impersonal, when he insists upon going "by the book" and when he keeps himself - at least emotionally - at a distance from students, seeds of student dissatisfaction and indiscipline are automatically sown.

Against such a perspective, the following Hypothesis is formulated:

> "Students' acts of indiscipline would relate significantly to the ICDQ (Baroda Form III) dimensions of "Disengagement", "Hindrance", "Esprit" and "Aloofness".
>
> (The Hypothesis VI)

To test the hypothesis, the Correlation Matrix developed earlier (vide- page 158) is made use of the following coefficients of correlations emerge from the Matrix.

Table 4.24 : Correlation of Some ICDQ Dimensions with Pupil Acts of Indiscipline as measured by the SAC.

	ICDQ Dimensions of Coefficient of Correlation			
	Dis-engage-ment	Hindrance	Esprit	Aloofness
Students' Acts of Indiscipline (as measured by the SAI)	.14**	.21**	-.15**	.07**

** significant at .01 level

The following findings emerge about the correlations between pupils' acts of indiscipline and the four sub-tests of the ICDQ i.e."Disengagement", "Hindrance", "Esprit" and "Aloofness".

(1) The two dimensions of the teacher behaviour (Dis-engagement and Hindrance) in which high scores are indicative of Closed Climate manifest positive significant relationship with the scores of the teachers on Students' Acts of Indiscipline

(PAC) (Disengagement, $p < .01$; Hindrance, $p < .01$).

(2) The "Esprit" dimension on which a high score is indicative of Open climate correlates negatively and significantly with students' acts of indiscipline (SAC).

(3) One of the dimensions of principal behaviours - "Aloofness" in which high score is indicative of Closed climate correlates significantly with students' acts of indiscipline (the SAI), hence it can be observed that teacher behaviour of "Disengagement", "Hindrance" and "Esprit" and principal behaviour of "Aloofness" play a significant role in creating students' acts of indiscipline.

The results substantiate the Hypothesis VI.

4.8 RELATIONSHIP OF THE ADMINISTRATIVE BEHAVIOUR DIMENSIONS OF THE ICDQ (BARODA FORM III) AND STUDENTS' ACTS OF INDISCIPLINE

It was shown in the preceding section that teacher negative behaviour dimensions of "Disengagement", "Hindrance" and positive dimension of "Esprit" as well as the negative principal behaviour dimension of "Aloofness" correlate

significantly with students' acts of indiscipline. Not these four dimensions alone predominantly contribute to the students' acts of indiscipline. What has been reported in the press on student unrest in the course of last seven years or so makes one feel that the administrators - their administrative behaviours are no less responsible for students' acts of indiscipline. The four dimensions of administrative behaviour of the ICDQ (Baroda Form III) which are assumed to have contributed to student unrest are : "Communication", "Human Relations", "Freedom and Democratization" and "Organizational Structure".

Shah (1975) in his doctoral study on "College Campus Life" in Central Gujarat came to the conclusion that student unrest amounts to no more than blind protest against college authorities. He tends to suggest that college administrators are no less responsible than teachers and others for student unrest bursting out on college campuses.

It was already pointed out in the previous section that the aloofness of college principals - in the case of the M.S. University - the aloofness of Deans of Faculties/ Heads of Institutions/

Heads of Departments is also a potent factor of students' acts of indiscipline.

Apart from aloofness, the communication gap also comtributes in no small measure to students' acts of indiscipline. Communication is a powerful means to bring students closer to teachers, administrators and administrative office. Where the flow of communication is easy, free and frank, there are less chances of misunderstanding taking place among students about teachers, principals, even programmes and even decision - making done in the Faculty/Institution, Department and even in the University itself. Quite often administrators are sluggish in their communication with students. They do not hold direct dialogue or meetings with students; with the painful and disastrous results that students get information from second and third rate sources where it gets distorted at every stage of transmission.

Faculties have students' Union but unfortunately this organization has not been able to serve as an effective channel of communication between students and Faculty authorities. There is no students' council or forum at Departmental level, and therefore, the communication flow between the head

of the Department and teachers with students is often poor, uncertain and not full.

Further, quite a number of Deans of Faculties/Heads of Institutions and heads of Departments consider themselves as rulers, all powerful.They take shelter behind the powers that are given to them under university statutes and authority that they wield. Considering themselves as little Rajas (kings), they believe more in dictation, transmission of orders, punitive actions, taking decisions with or little consultation, with the sad result that not only students but even a number of staff members have little participation in decision-making process. Decisions are communicated from a position of authority, prestige and pressure. This makes communication process as one flowing from top to bottom and never or rarely from bottom to the top. No, or, very little real and genuine attempts are made to get a feed-back from students. Students have little opportunity to convey to authorities what they feel about the decision-making done at the level of Department or at the level of the Faculty/ Institution. When they do not have any opening to communicating their feelings and their reactions, someone in the students

community makes an issue out of the dissatisfaction being felt by the student community; he ignites the match stick using feelings of dissatisfaction, exasperation, injustice, insult, injury etc. done to them and becomes an agent of spreading student unrest and rioting. The investigator was told that it was due to inadequate and ineffective communication and feed-back from students that student unrest was spread in some Departments and Faculties on the question of the Semester System, internal assessment, award of grades, taking of three periodical tests and the adoption of the system of the ATKT at some examinations like Preparatory Science and on the question of denial of a choice to students in some Faculties to get their internal assessment grade decided on the basis of any two tests as it is done in some Faculties and Departments of the University. Desai (1970: 335) observes that the bureaucratic, rigid, non-communicative and rough administrative machinery of universities sparkle off incidents which feed the movement of student strife and turbulence in university campuses. Some of the student rioters have said that "we are turned to bitterness by the impotency of our action. We cannot follow because we are not validly led. We

cannot lead because we are not heard".

Besides poor, single tract communication which permits little feed-back from students and which gives little scope to students in decision-making on the matters that affect them vitally and extensively, the other administrative behaviours that pave way for students' unrest are the organizational Structure, Freedom and Decentralisation and Human Relations.

In the Faculties/Institutions and Departments, the Organizational Structure is hierarchical where juniors or those who are studying in Preparatory Units or undergraduate class are considered to be still "boyish" and "girlish" and their views or reactions are not taken quite seriously. It is believed that they are no better than high school students and they could be terrorised into submissiveness without much difficulty. The experience on the University Campus of the last seven years, i.e. since 1970, has shown that it is this group of juniors and freshmen who are in forefront in many violent events of student behaviour. These adolescents could be and are easily excited and incited and unscrupulous student leaders (and sometimes even teachers whose behaviour is characterized by "Disengagement") inflame them into violent

and noisy acts of student indiscipline.

Lack of or indifferent human relationship on the part of administrators at the faculty/Institution/Department and even at the University level, has also been cited as one of the causes of students' exasperation and resentment. They allege that their (students') individuality is not recognised, their needs are not properly understood and little enthusiasm is shown to meet them. Gajjar's (1975) study on "Personnel Services in the M.S.University" though does not mention inadequate student personnel services as the cause of student unrest, but it does underscore the fact that the indifferent human relations shown by university administrators have played no small part in making the student community bitter about the Faculty/Department and university administration. The administrators, at whatever level they operate need to develop an attitude towards their job and students as well as teachers that will insure their approaching their tasks with the consideration of the personal worth of individuals at the core of their operations. They must learn to be sensitive to their needs. Research evidences indicate that this kind of sensitivity reduces frustration and consequently

students' acts of indiscipline. They particularly the Heads of Departments should begin to recognize the potentialities which exist in individual students and make all attempts to nurture and develop these potentialities. Sometimes heads of Departments make the mistake of boosting up only the talented students and ignoring the average and weak students. When such a thing happens, some from the latter group carry in them seeds of student unrest.

The Hypothesis VII given below is tested against such a background perspective obtaining on the campus of the M.S. University of Baroda. The Hypothesis reads as under :

> "Students' acts of indiscipline would relate significantly to the four administrative dimensions of the ICDQ (Baroda Form III) (Communication, Organizational Structure, Freedom and Democratization and Human Relations."
>
> (The Hypothesis VII)

The Hypothesis was examined by using correlation technique used in the Correlation Matrix presented earlier (vide- page). The relevant data are reported in Table 4.25.

Table 4.25 : Correlation of Administrative Behaviour with Dimensions of the ICDQ/Students' Acts of Indiscipline.

	Dimensions of ICDQ			
	Communi-cation	Human Relations	Freedom and Democratiza-tion	Organiza-tional Structure
Students' Acts of Indiscipline (as measured by SAI)	-.13**	-.18**	-.19**	-.06*

* Significant at .05 level
** Significant at .01 level

The following findings emerge about correlations between the administrative dimensions of the ICDQ and Students' Acts of Indiscipline.

(1) All the four dimensions in which high scores are indicative of Open Climate exhibit negative significant relationship with the scores of the teachers on Students' Indiscipline Acts (The SAI).

(2) The correlation coefficients ranged from -.06 to -.19.

Hence, it can be generalized that in the Faculties where teachers perceive the administrative dimensions in

a manner indicative of Closed Climate, the frequency of students' indiscipline acts is greater than in the faculties where teachers perceive the administrative dimensions in a manner indicative of Open Climate. In short, the perceptions of administrative dimensions have an effect upon the frequency of students' indiscipline acts.

4.9 RELATIONSHIP WITH TEACHERS' STUDENT CONTROL IDEOLOGY AND ADMINISTRATIVE DIMENSIONS OF THE ICDQ

Earlier an attempt was made to examine relationship between Open Climate and Closed Climate types of the Faculties/ Institutions and Departments of the M.S.University of Baroda and Student Control Ideology. The present Hypothesis probes a little further this relationship between the two variables, viz., climate and control ideology. Here, the stress is on examining the significance of relationship between teachers' pupil control ideology with their perceptions of the four administrative dimensions - Communication, Organizational Structure, Freedom and Democratization and Human Relations. The Hypothesis formulated in this connection reads as under :

"Teachers' Student Control Ideology would relate significantly with the four administrative dimensions of the ICDQ (Baroda Form III)".

(The Hypothesis VIII)

Willower, Eidell and Hoy (1967) in their study had examined teachers' and principals' control ideology. They found that the difference in control ideology of the two was significant with a t-value of 5.693, df=180 and $p < .001$. Gandhi (1977) and Mehta (1977) who had respectively used ICDQ (Baroda Form I) and PCI (Baroda Form I) and the original PCI did not inquire into the kind of relationship between teachers' PCI scores and their mean perception scores on the four corresponding administrative dimensions of their climate tool, namely OCDQ (Baroda Form I) and ICDQ (Baroda Form II).

The data on the ICDQ (Baroda Form III) were collected from the Inter-Correlation Matrix given on page 154. Thus, in testing the present Hypothesis, as in the case of the two preceding hypotheses, the correlation technique was applied. The analysed data are presented in Table 4.26 which represents Correlation between Student Control Ideology of teachers as measured by the SCI and the Administrative Four Dimensions of the ICDQ (Baroda Form III).

Table 4.26 : Coefficients of Correlation between Administrative Dimensions of the ICDQ and Student Control Ideology (Baroda Form III)

	ICDQ Dimensions (Baroda Form III)			
	Communi-cation	Organiza-tional Structure	Freedom and Democrati-zation	Human Rela-tions
Student Control Ideology (The SCI)	-.11**	-.06*	-.08*	-.13**

* Significant at .05 level
** Significant at .01 level

It will be seen from the above table that the Pearson Product Moment Coefficient of Correlation between Communication and the SCI is .11 which is significant at .01 level between Organizational Structure and the SCI - it is .06 which is significant at .05 level, between "Freedom and Democratization and SCI is .08 which is also significant at .05 level, and between "Human Relations and SCI is .13 which is significant at .01 level. Thus, the coefficients of the Correlation of the SCI with all the four administrative behaviour dimensions of the ICDQ are significant at the accepted levels.

The Hypothesis VIII is, therefore accepted.

In addition, the negative correlations were found between the SCI scores and scores of all the four dimensions of administrative sub-tests in which high scores are indicative of Open Climate. Hence, it can be concluded that teachers having custodial SCI perceive the four dimensions of administrative sub-tests in a manner indicative of Closed climate while teachers with a humanistic SCI perceive the four dimensions - Communication, Organizational Structure, Freedom and Democratization and Human Relations in a manner indicative of Open Climate.

4.10 INSTITUTIONAL CLIMATE AND STUDENT CONTROL IDEOLOGY OF UNIVERSITY TEACHERS

As underscored earlier the major concern in the present investigation is to examine to what extent institutional climate and in its conjunction the student control ideology are conducive to pupil acts of indiscipline which were once of the major headaches of the university administrators, teachers, the local police authorities and even the local community. This was particularly the case in the students' Nav-nirman Movement which emerged with all its fury from January 1975 and continued for quite a long time till the university campuses were made quiet under the Emergency declared by the erst-while Government of Prime Minister Indira Gandhi. It was true that for the outbursts of student unrest several forces were responsible; some of them were extraneous but some were inherent in the functioning of the university itself. Here, one would not bother about the pervading and deeper influences of the political forces responsible for the outbreaks of a plethora of student acts of indiscipline. One would look for the internal causes like institutional climate, custodial ideology operated by university teachers and examine the possible relation of the

latter with students' acts of indiscipline as the relation - ship of institutional climate at Faculty Stage, Department stage and at the level of major divisions of Departments based on academic disciplines, like humanities, social sciences etc. had already been examined in the previous section. The focal point in the present section will, therefore be pupil control ideology of university teachers and its relationship with Faculty/Institution and Department-wise organizational institutional climate.

In this perspective, the following Hypothesis is formulated:

> "There would be significant relationship between the institutional climate of (a) different faculties/Institutions and (b) of different Departments and the typology of the student Control Ideology of their teachers.
>
> (The Hypothesis IX)

The rationale for formulating such a kind of Hypothesis came from some selected western and Indian studies. Appleberry and Wayne Hoy (1969) studied the pupil control ideology of Professional personnel in "Open"and "Closed" elementary schools. Gandhi (1977) studied the same in relation to

secondary schools of Gujarat State and Mehta (1977) did the same in regard to the affiliated* colleges of the Gujarat Universities. The M.S. University of Baroda, as observed earlier, is a city university, having its own Departments, own teachers, own courses of studies and examines either the students of various Departments for their various qualifying examinations or as it happens with some Departments, the Departments set and conduct their own degree qualifying examinations and degrees are awarded by the University itself.

The Table 4.27 given on the next page, gives the Faculty-wise/Institution-wise Mean Scores on Pupil Custodial Ideology and their SDs as measured by the PCI (Baroda Form III).

It would be seen that Faculty (F_3) has the smallest PCI score (101.22) and the Faculty (F_9) has the highest PCI (120) scores. It can, therefore, be said that whereas Faculty F3 has the humanistic control ideology the Faculty F_8 manifests the custodial pupil control ideology. The other Faculties which are shown relatively mere humanistic rather than custodial are Faculty F_7, F_{10} and F_1 and which are shown as more

* These are the private or government colleges but not university managed institutions, which send their students to the University for examinations that qualify students for the various degrees awarded by the University.

Table 4.27 : Faculty-wise SCI Score.

Faculty	SCI			
	Mean	df^2	SD	n (teacher respondents)
F_2	114.05	5380.70	9.9821	54
F_7	106.56	1793.88	10.5885	16
F_3	101.22	3227.14	13.3897	18
F_1	109.78	7547.85	12.9510	45
F_9	113.50	209.00	7.2284	04
F_4	115.00	984.00	8.7001	13
F_8	120.00	482.00	12.6754	03
F_5	117.40	6061.60	12.3101	40
F_4	111.57	861.58	11.0943	07
F_{10}	109.45	112.50	12.9555	26
Institutions				
I_5	112.86	430.86	7.8455	07
I_3	121.00	206.00	6.4187	05
I_4	118.80	819.40	7.3910	15
I_1	108.50	112.50	7.5	02
I_2	125.89	392.87	6.6070	09

custodial rather than humanistic are Faculties F_5, F_4, F_2 ,F_9 and F_6.

Similarly among the five Institutions included in the Sample, the Institutions manifesting more of humanistic control ideology rather than custodial ideology are Institutions I_1 and the others - the Institutions I_4, I_5 and I_2 and I_3 are manifesting more custodial ideology rather than humanistic ideology.

The significance of difference among the mean scores of different Faculties/Institutions was tested by applying the t-test technique. The results of the t-values are reported in Table 4.28 . The t-values denote significant differences in the control ideology of teachers between

(a) Faculties F_1 and F_2 (.05 level), F_1 and F_3(.01 level), F_2 and F_6 (.05 level) F_2 and F_8 (.01 level), F_3 and F_4 (.05 level) F_3 and F_6, F_3 and F_8 (.01 level) F_4 and F_8 (.05 level).

(b) The differences were found to be non-significant in the case of the remaining pairs of Faculties.

(c) The t-values were significant in this respect between Institutions I_3 and I_4 (at .05 level),

Table 4.28 : The t-values of Faculty-wise - Institution-wise SCI.

Faculty	SCI				Remark
	SD	SED	t	df	(Level of Signt.)
F_1F_2	10.2717	2.9237	2.5618	68	0.05
F_1F_3	11.0891	3.0180	4.2512	70	0.01
F_1F_4	11.5450	2.3303	1.8324	97	NS
F_1F_5	9.9908	5.1771	0.1062	56	NS
F_1F_6	9.8954	3.0570	0.3108	65	NS
F_1F_7	10.3245	3.6327	1.638	55	NS
F_1F_8	11.1522	2.3265	1.4399	92	NS
$F1F_9$	10.286	4.1320	0.6002	59	NS
F_1F_{10}	7.6752	3.8679	0.3687	14	NS
F_2F_3	12.526	4.304	1.241	32	NS
F_2F_4	12.583	3.6630	0.8790	59	NS
F_2F_5	10.549	5.897	1.177	18	NS
F_2F_6	10.1430	3.7870	2.2285	27	0.05
F_2F_7	11.5700	7.2800	1.8460	17	NS
F_2F_8	12.0610	3.5680	3.0380	54	0.01
F_2F_9	11.2450	5.0960	0.9831	21	NS
F_2F_{10}	7.0644	3.9403	1.2410	12	NS
F_3F_4	13.2900	3.7060	2.3100	61	0.05
F_3F_5	13.1080	7.2460	1.6950	20	NS
F_3F_6	12.0500	4.3860	3.1420	29	0.01

Table 4.28 (contd.)

Faculty	SCI				Level of Significance
	SD	SED	t	df	
F_3F_7	13.9700	8.7120	2.1560	19	0·05
F_3F_8	12.8800	3.6560	4.4260	56	0.01
F_3F_9	13.3330	5.9390	1.7430	23	
F_3F_{10}	7.4262	3.1311	1.2644	22	NS
F_4F_5	12.8470	6.7030	0.5550	47	
F_4F_6	12.3430	3.8860	1.3430	56	
F_4F_7	13.212	7.8780	1.2970	46	
F_4F_8	12.8050	2.7830	2.7380	83	.05
F_4F_9	12.9090	5.2690	0.3400	50	
F_4F_{10}	11.7847	4.7302	1.4755	27	NS
F_5F_{10}	8.9180	2.9155	0.5145	15	
F_5F_7	11.7558	8.9790	0.7240	05	
F_5F_8	12.2190	6.4080	0.6090	42	
F_5F_9	10.9070	6.8360	0.2820	09	
F_5F_{10}	7.4935	5.8579	1.9686	09	NS
F_6F_7	10.2330	6.5540	0.7630	14	
F_6F_8	11.7540	3.7530	0.6390	51	
F_6F_9	10.1260	4.7470	0.7230	18	
F_6F_{10}	9.1836	3.3320	0.7580	09	NS
F_7F_8	12.6330	7.5620	0.3440	41	

Table 4.28 (contd.)

Faculty	SCI				Level of significance
	SD	SED	t	df	
F_7F_9	12.9600	8.9430	0.9430	08	
F_7F_{10}	11.7271	6.7680	0.8642	09	
F_8F_9	12.404	5.0820	1.1470	45	
F_8F_{10}	10.2212	4.3647	0.7646	09	
F_9F_{10}	11.4327	3.3711	1.7601	09	
F_1F_2	7.9800	4.6730	1.7419	10	
F_1F_3	7.9065	3.6191	1.6413	20	
F_1F_4	12.3089	5.4055	0.6308	25	
F_1F_5	8.8104	7.0640	0.6172	07	
F_2F_3	7.4578	3.8511	0.5713	18	
F_2F_4	12.4462	6.2231	1.8559	23	
F_2F_5	7.9812	6.6755	1.8725	05	
F_3F_4	11.2496	3.8425	2.4333	33	0.05
F_3F_{15}	7.8820	5.9334	1.7359	15	
F_4F_{15}	13.1708	9.7677	0.0972	20	

(d) In the case of other Institutions, the t-values regarding pupil control ideology were not significant.

The above table indicates that the mean scores of PCI for teachers in Open and Closed climate Faculties were 111.20 and 114.08 respectively. The mean score of PCI for university teachers in Open climate faculties, was lower than the mean score of PCI for university teachers in closed climate Faculties (t=1.56 NS). Moreover, the university teachers in Intermediate Climate types of faculties had lower mean score than that of the university teachers in closed climate types of Faculties.

The results show that the mean scores of PCI in Open climate faculties are smaller than they are in Closed climate colleges. Smaller scores in Open climate, as shown by Willower et al (1976: 22-23) and Appeleberry and Hoy (1969: 80-81) indicate humanistic orientation of teachers in regard to their control ideology and higher scores in Closed climate colleges indicate custodial orientation of teachers.

The analysis of variance yeilded an F-ratio of ($p < .01$) which is significant. As a result of these findings, the Hypothesis is sustained.

For supporting the Hypothesis the Scheife test was applied. It was also found to be significant at .01 level.

It may be observed that in the Hypothesis IX , it is stipulated there would be significant relationship between the institutional climate typology of Faculties/Institutions and Pupil Control Ideology. That would mean that Open Climate Faculties/Institutions would tend to manifest humanistic pupil ideology and Closed Climate Faculties/Institutions would manifest a trend in favour of Custodial pupil Control Ideology. The Table 4.29 presents Pupil Control Ideology mean scores and their S.D. against the type of climate manifested by their Faculties/Institutions in which they work.

Table 4.29 : Summary of Data and Analysis of Variance for the Relationship Between Institutional Climate and Student Control Ideology of the Faculties/Institutions of the M.S.University of Baroda.

	df	SS	MS(v)	F
Between mean	2	3820.46	1910.23	
Within Conditions	220	69740.12	317.56	6.02**

** Significant at .01 level

Categories of Department	Mean PCI Score	K-Value	Pair combination	P
Open Climate	108.24	1.74	Open-Intermediate	
Closed Climate	126.34	3.73	Open-Closed	P < .01

The examination of differences in mean scores on Pupil Control Ideology among the five major academic disciplines based on Departments would give one a further insight into the type of control ideology entertained by University teachers. Table 4.30 given below tests significance of difference in mean perception scores of University teachers belonging to different major Departments through the application of the t-tests. The results reveal the following :

Table 4.30 : Department-wise PCI Mean, SD and t-value.

Pairs of Major Departments	PCI				t-value	Level of Significant
	Mean	SD	Mean	SD		
1-2	111.20	12.75	109.18	13.05	0.77	NS
1-3	111.20	12.75	111.63	11.00	0.19	NS
1-4	111.20	12.75	115.65	11.85	2.01	.05
1-5	111.20	12.75	119.63	11.72	2.32	.05
2-3	109.18	13.05	111.63	11.00	1.07	NS
2-4	109.18	13.05	115.65	11.85	2.98	.01
2-5	109.18	13.05	119.63	11.72	2.86	.01
3-4	111.63	11.00	115.65	11.85	2.07	.05
3-5	111.63	11.00	119.63	11.72	2.54	.05
4-5	115.65	11.85	119.63	11.72	1.23	NS

Note: 1 = Humanities
2 = Social Sciences
3 = Pure Sciences
4 = Applied Sciences
5 = Fine Arts
NS = Not significant

(1) The difference in mean teacher perceptions on Control Ideology is insignificant between those in the Departments of Humanities and Social Sciences as well as between those of Social Sciences and Pure Sciences, and between those in the Departments of Applied Sciences and Fine Arts and Pure Sciences and Fine Arts.

(2) In other pairs, i.e. between teachers of Humanities and of Pure Sciences, the t-value is significant at .05 level, between teachers of Humanities and of Fine Arts, it is significant at .05 level, at .01 level between the teachers of Social Sciences and Applied Sciences and between those of Social Sciences and of Fine Arts.

The Hypothesis IX is thus supported by the analysed data presented in Table 4.30 .

This question of relationship between Pupil Control Ideology and Institutional Climate was also investigated by some western and Indian researchers. For instance, Appleberry and Hoy (1969) found that public elementary schools with relatively Open climates were found to be significantly more humanistic in Pupil Control Ideology than elementary schools with relatively Closed climates. They found that professional

personnel in relatively Open schools had a mean PCI score of 52.34 while those in relatively Closed schools had a mean PCI score of 55.87. Analysis of variance yielded an F-ratio of 8.67 ($P < .01$).

In Anjani Mehta's study (1977) which related to the affiliated colleges of the Gujarat University, she found that teachers of affiliated colleges possessing Open Climate have been significantly humanistic in their teachers' control ideology while the contrary was the case in respect of colleges that demonstrated Closed Climate - here teachers were found to manifest custodial control ideology to a greater extent.

Gandhi's study (1977), revealed PCI mean scores of 112.87 and 126.92 respectively for teachers of Open climate schools and Closed climate schools. Furthermore, he found the relationship between the degree of Openness of climate of all the sampled schools and the PCI of teachers significant ($r=.18$, $P < .01$) implying thereby that the more open the climate of a school is, the more humanistic is the Pupil Control Ideology of their teachers.

Thus, the findings of the present study reflect the trend revealed in the earlier Western and Indian studies.

4.11 RELATIONSHIP BETWEEN PERSONALITY FACTORS AND INSTITUTIONAL CLIMATE

To examine the relationship between the personality factors of departmental heads and the type of the schools, a related hypothesis was formulated. It reads as under :

> "The personality factors of departmental heads of the Open, the Intermediate and Closed types of departments will differ."
>
> (The Hypothesis X)

The one-way analysis of variance test was used to test the hypothesis X. The table 4.31 contains a summary of the F-ratios for the analysis of variance for one-way design for the three categories of departments for 16 personality as measured by the traits included in the 16 P.F. questionnaire.

As can be seen from the Table 4.31, the analysis yielded significant 'F' ratios for the 16 P.F. Factors A, B, G, and Q.

The significance of these four 'F' ratios demanded further testing of the Hypothesis by making groups on the basis of categories of departments, using all combinations

Table 4.31 : The Analysis of Variance Data for the Relationship Between the Climate Categories of the Departments and Personality Factors of their Heads.

16 P.F. Factors	F-ratio	P	16 P.F. Factors	F-Ratio	P
A	3.82	$p < .05$	L	3.05	
B	4.03	$p < .05$	M	2.20	
C	1.70		N	0.79	
E	2.14		O	0.33	
F	0.65		Q_1	3.79	$p < .05$
G	4.13	$p < .05$	Q_2	1.38	
H	1.10		Q_3	1.66	
I	0.38		Q_4	0.90	

Table 4.32: Test of Significance for Pairs of Means on Factors A, B, G and Q, of Teachers of Different Categories of Departments Using Scheffe' Test.

16 P.F. Factors	Climate Category of Department	Mean	K	Pair	p
A	Open	5.48	2.17	Open-Intermediate	
	Intermediate	5.27	1.68	Intermediate-Closed	
	Closed	3.13	5.52	Open-Closed	$p < .05$
B	Open	4.77	3.27	Open-Intermediate	
	Intermediate	4.30	2.14	Intermediate-Closed	
	Closed	3.14	4.45	Open-Closed	$p < .05$

cont...

Table 4.32 (contd.)

16 P.F. Factors	Climate Category of Department	Mean	K	Pair	p
G	Open	5.29	1.63	Open-Intermediate	
	Intermediate	4.12	0.20	Intermediate-Closed	
	Closed	3.80	3.33	Open-Closed	$p < .05$
Q_1	Open	3.12	1.60	Open-Intermediate	
	Intermediate	3.05	2.28	Intermediate-Closed	
	Closed	1.92	3.90	Open-Closed	$p < .05$

of pairs. Mean differences in case of all these pairs were tested by using Scheffe' test. The Table 4.32 shows K-values of different combinations.

The Table 4.32 shows that -

(1) The difference between the mean scores on Factor A of the departmental heads of "Open" and "Closed" categories is 2.35 which is significant at .05 level of significance. This means that the departmental heads of the "Open" category are warm, out-going, and good natured while the departmental heads of the "Closed" category are aloof, precise, and rigid.

(2) The difference between the mean scores on Factor B of the departmental heads of "Open" and "Closed" categories is

1.63 which is significant at .05 level of significance.This means that the departmental heads of the "Open" category are bright, cultured and quick in grasping ideas, while the departmental heads of the "Closed" category are dull, low capacity for the higher terms of knowledge and somewhat boorish

(3) The difference between the mean scores on factor G of the departmental heads of "Open" and "Closed" categories is 1.49 which is significant at .05 level of significance. This means the departmental heads of "Open" category are conscientious, planful, energetic and responsible, while the departmental heads of the "Closed" category are casual, unsteady and irresolute.

(4) The difference between the mean scores on Factor Q of the departmental heads of "Open" and "Closed" categories is 1.20 which is significant at .05 level of significance. This means that the departmental heads of the "Open" category are experimenting, intellectually mature and more tolerant of inconvenience, while the departmental heads of the "Closed" category are conservative, cautious and traditional.

It should be noted from the above findings that this

Hypothesis was upheld only in case or four (A, B, G and Q_1) of the 16 P.F. Factors. Hence it can be said that the Hypothesis remains essentially unsupported or partly supported.

4.12 FACULTY CLIMATE AND BELIEF SYSTEMS OR DOGMATISM OF TEACHERS

In the plan of the present study, institutional climate of the Faculty/Institution or Department is perceived by teachers in regard to the interaction patterns reflected in the twelve dimensions.of the ICDQ (Baroda Form III). It is possible that the belief systems or dogmatism of university teachers influence their perception of the institutional climate of their faculty, institution or Department. The investigator would like to find out whether the belief systems of the sampled university teachers influence their perception of the climate of their institution or not. The present Hypothesis is formulated in that perspective.

The Hypothesis is worded as under :

"There are no true differences in mean scores on the belief systems of university teachers belonging to Faculties/Institutions manifesting different climate categories as measured by the Dogmatism Scale."

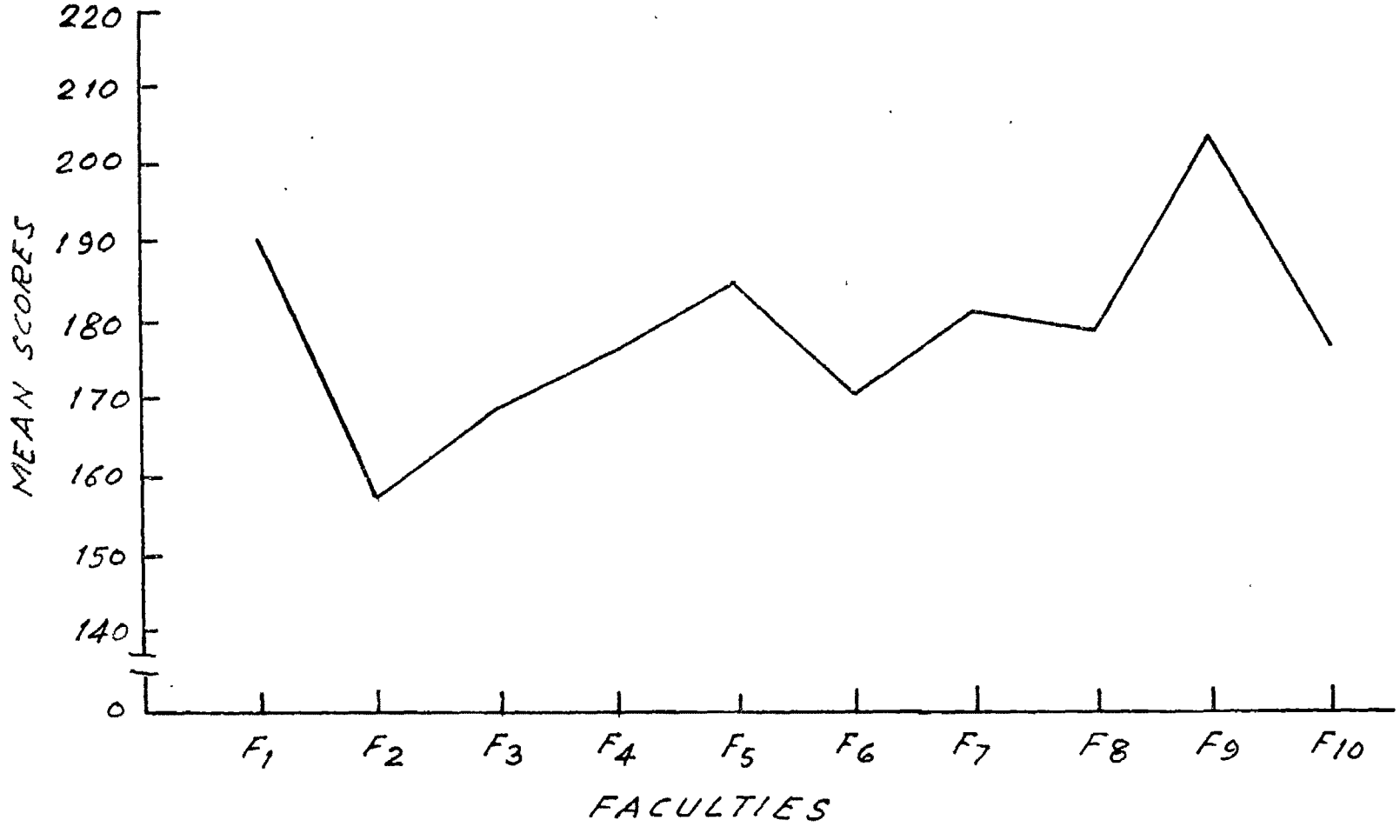
(The Hypothesis XI)

As mentioned earlier, the sample of the present study was 15 Faculties/Institutions of the M.S.University, Baroda. The Faculty-wise Mean, SD and t-values are given in the following tables.

The Hypothesis is examined firstly by testing the differences in mean perception scores of teachers on the dogmatism scale on the basis of the climate category of their Faculty/Institution. The comparison of dogmatism scores of university teachers belonging to Faculties/Institutions possessing Open, Intermediate or Closed climate types is presented in Table 4.33.

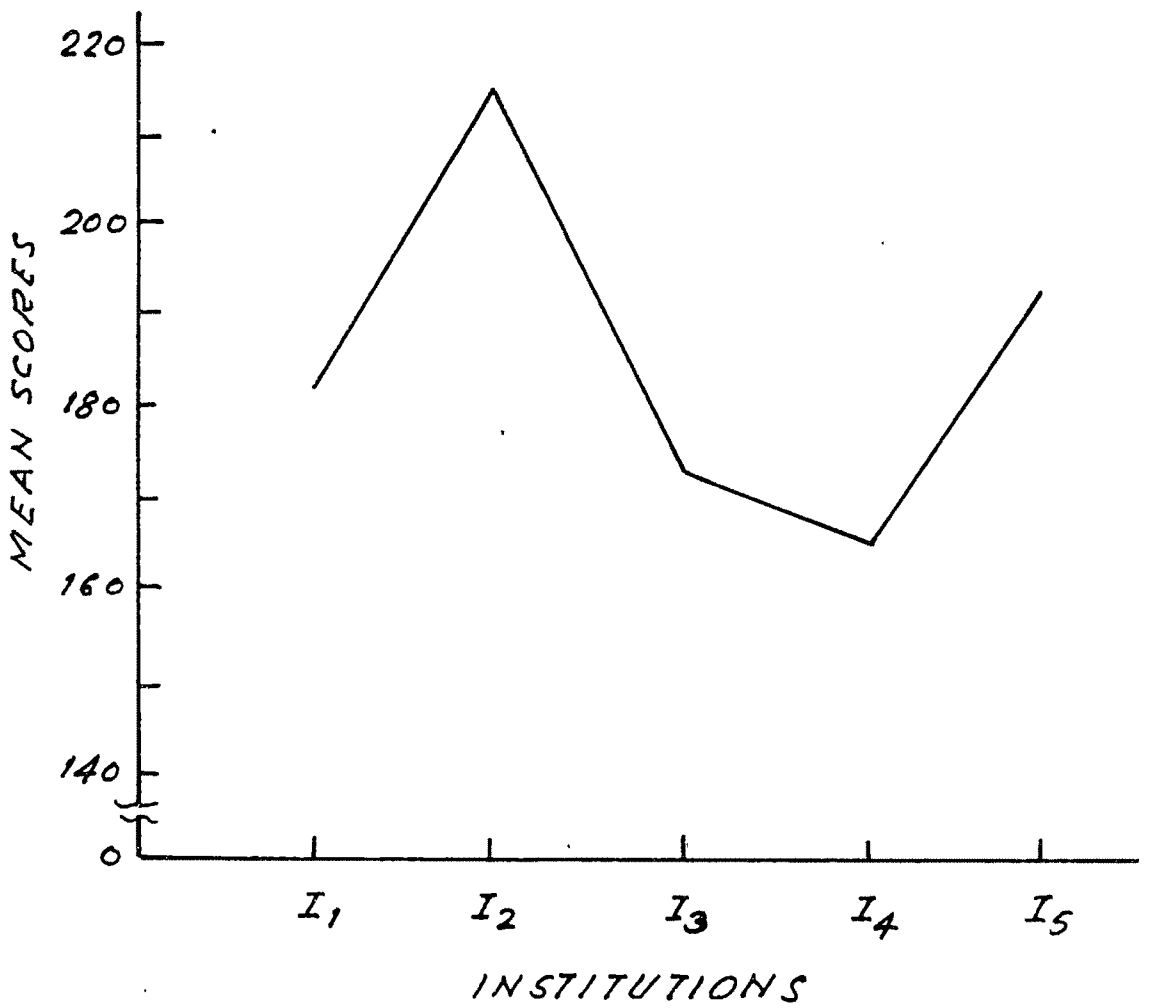
It would be seen from the Table 4.33, the mean scores of the Faculties on the Dogmatism scale ranged from 157.13 to 202.86, the highest being in the Faculty F_9 and the lowest being in the Faculty F_2.

CHART-11



FACULTYWISE MEAN SCORES OF THE DGM

CHART-12

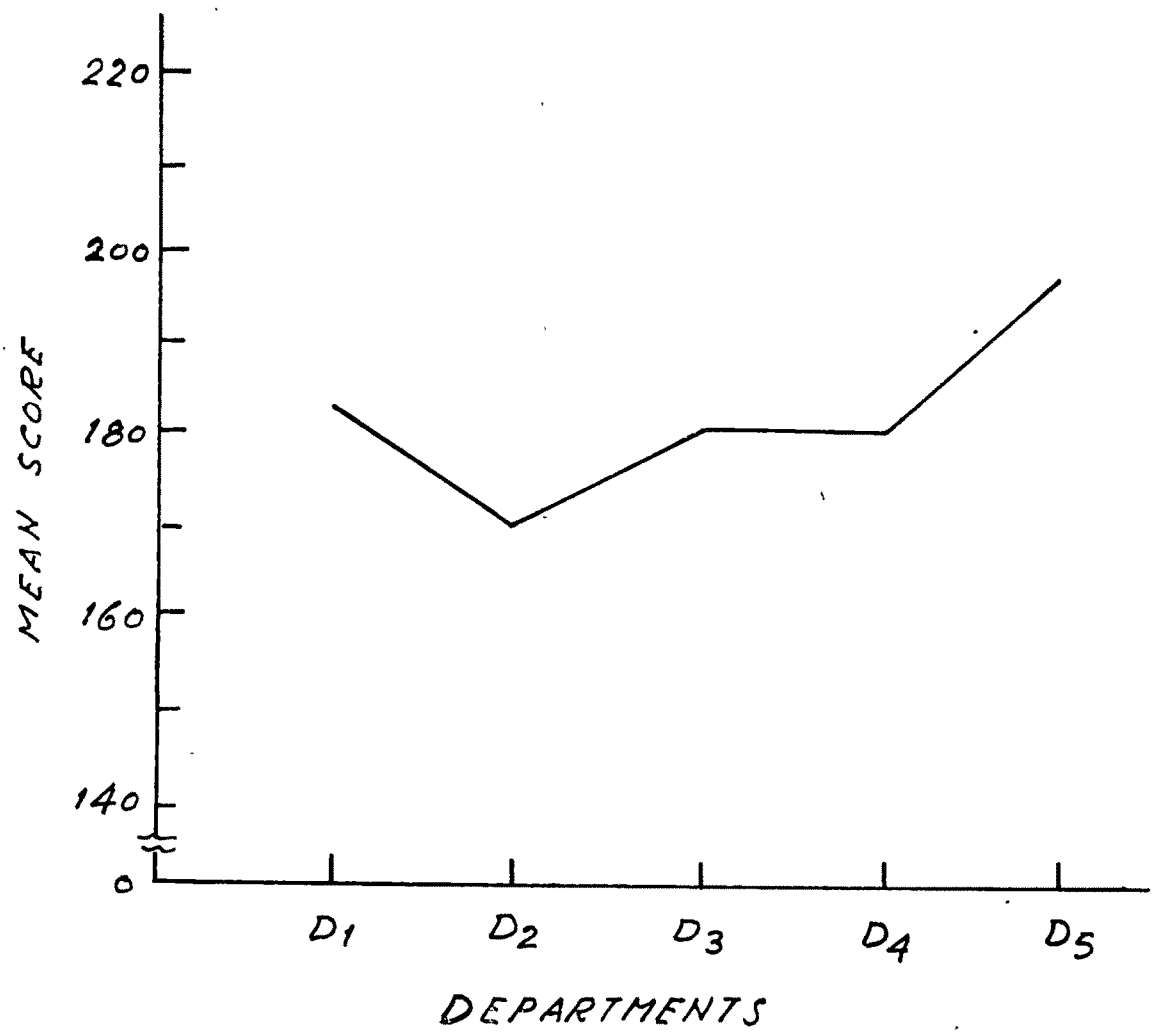


INSTITUTIONWISE MEAN SCORES OF THE DGM

Table 4.33 : Faculty-wise Dogmatism.

Faculty	Mean	$\leq df^2$	SD	n
Science	190.20	35126.76	24.7680	54
Home Science	157.13	14421.79	30.0227	16
Education & Psychology	167.83	11640.52	25.4302	18
Arts	176.75	42758.20	30.8250	45
Law	183.75	2036.71	22.5651	04
Commerce	169.54	2747.21	14.5370	13
Social Work	181.33	860.66	16.9377	03
Technology	178.67	29842.82	27.5143	40
Fine Arts	202.86	1372.86	14.0044	07
Medical	176.15	9422.50	21.7054	20
Institutions				
Padra College	182.28	8177.44	34.1790	07
Sanskrit Mahavidyalaya	215.60	35.20	2.6533	05
Polytechnic	177.67	7549.35	22.4341	15
Oriental Institute	164.50	264.50	11.5	02
Music College	192.55	1676.20	13.6471	09

CHART-13



DEPARTMENTWISE MEAN SCORES OF THE DGM

Similarly the range of corresponding mean scores in the case of the institutions ranged from 164.50 to 215.60. It should be noted that the highest mean score was registered by No.2 and the lowest by the institution No.5.

After discussing the faculty-wise as well as institution-wise Dogmatism score, the investigator would like to analyse her results further by finding out whether major departments had any influence on the university teachers' belief system. The data are presented below in Table 4.34.

Table 4.34 : Testing significance of differences in mean perception scores of University Teachers according to the five major Departments to which they belong.

Pair of Major Departments	Mean Score	SD	Mean	SD	t-value	Level of significant
1-2	182.72	30.43	169.73	27.38	2.21	.05
1-3	182.72	30.43	180.22	29.85	.42	NS
1-4	182.72	30.43	179.85	25.65	.57	NS
1-5	182.72	30.43	197.06	15.20	1.8	NS
2-3	169.73	27.38	180.22	29.84	1.91	NS
2-4	169.73	27.38	179.85	25.65	2.18	.05
2-5	169.73	27.38	197.06	15.20	3.80	.01
3-4	180.72	29.85	179.85	25.65	.08	NS
3-5	180.22	29.85	197.06	15.20	2.18	.05
4-5	179.85	25.65	197.06	15.20	2.59	.05

Note: 1 = Humanities; 2= Social Sciences; 3=Pure Sciences; 4 = Applied Sciences; 5= Fine Arts.
NS = Not significant.

As regards the differences in the Dogmatism scores between the five major departments, the Table 4.34 revealed that the t-values were significant in the departments of Humanities and Social Sciences at .05 level, between Social Sciences and Applied Sciences at .05 level, between Social Sciences and Fine Arts, between Pure Sciences and Fine Arts and Applied Sciences and Fine Arts. In the case of the rest of the pairs the t-values were found to be insignificant.

Table 4.35 : Comparison of Dogmatism Scores of University Teachers of Open, Intermediate and Closed Types of Faculties.

Types of Climate	Dogmatism Score					Level of Significant
	Mean	SD	Mean	SD	t-value	
Open-Intermediate	173.98	23.49	176.11	27.38	1.81	NS
Intermediate-Closed	176.11	27.38	179.38	27.84	0.80	NS
Open-Closed	173.98	23.49	179.38	27.84	1.04	NS

NS = Not significant.

The above table indicates that the mean scores on Dogmatism scale for university teachers in Open Climate Faculty/Institution was lowerr than the mean score on

Dogmatism scale for teachers in closed climate. As the results of the t-test did not provide evidence to support the Hypothesis, viz., The more open the climate of the Faculties/Institutions, the more open minded are the teachers.

The Hypothesis, therefore, does not stand, it is not substantiated.

Gandhi (1977) found that mean score of Dogmatism scale for teachers in Open Climate schools was significantly lower than the mean score on Dogmatism Scale for teachers in Closed climate schools.

Table 4.36 : Analysis of Variance data for the influence of Categories of Climate on Dogmatism Level.

	df	SS	MS(v)	f
Between means	2	4232.36	2116.18	4.72*
Within conditions	220	98120.16	446.73	

* Significant at .05 level

Categories of climate	Mean Dogmatism Score	K-value	Pair Combination	p
Open	190.12	1.37	Open-Intermediate	
Intermediate	193.05	1.54	Intermediate-Closed	
Closed	205.27	4.22	Open-Closed	$p < .01$

The further testing of the Hypothesis was carried out by the coefficient correlation by Pearson Product Moment to determine the extent of relationship between the sub-tests of the OCDQ and the dogmatism level of their teachers. The following table 4.37 shows coefficient correlation of the 12 dimensions of the OCDQ with dogmatism scores.

Table 4.37 : Correlation Between Dogmatism Scores and OCDQ sub-test Scores.

OCDQ Dimensions	Coefficient of Correlation
Disengagement	-.02
Hindrance	.03
Intimacy	-.01
Esprit	.18**
Aloofness	.01
Production-Emphasis	-.11**
Consideration	-.02
Thrust	-.06*
Communication	-.12**
Organizational Structure	.17**
Freedom and Democratization	-.01
Human Relations	-.04

* Significant at .05 level
** Significant at .01 level

From the above table, it is seen that the correlation coefficients are ranged from -.01 to .18. The four of the eight dimensions in which high scores are indicative of Open climate exhibit significant relationship with the dogmatism scores of the teachers, i.e. Esprit, $r=.18 < .01$; Thrust, $r=-.6 < .5$, Communication, $r = -.12 < .01$; Organizational Structure, $.17 < .01$, Again the correlation between dogmatism score on one hand and Hindrance and Aloofness on the other hand are not significant. Though the correlation of Disengagement with Dogmatism score is low, the Communication is negatively related. While the Intimacy is low, but negative in the case of Consideration. Therefore, the relationship of school climate and belief system of teachers bears significant relationship.

The Hypothesis is thus partly substantiated.

4.13 COMPARISON OF OPEN MINDED AND CLOSED MINDED UNIVERSITY TEACHERS AND THEIR CUSTODIAL STUDENT CONTROL IDEOLOGY

This Hypothesis deals with the relationship of dogmatic university teachers with their student control ideology. Earlier this question was examined by Willower, Eidell and Hoy (1967). Their data were based on responses of 973 educators, 376 elementary school teachers, 429 secondary school teachers, 79 elementary and 89 secondary school principals. Their findings confirmed the following six predictions :

1. Closed minded teachers are more custodial in pupil control ideology than open-minded teachers.
2. Closed minded principals are more custodial in pupil control ideology than open minded principals.
3. Closed minded elementary teachers are more custodial in pupil control ideology than open minded elementary principals.
4. Closed minded secondary teachers will be more custodial in pupil control ideology than open minded secondary teachers.

5. Closed minded elementary principals will be more custodial in pupil control ideology than open minded elementary principals.
6. Closed minded secondary principals are more custodial in pupil control ideology than open minded secondary school principals.

Mehta (1977) studied student control ideology of affiliated colleges of the Gujarat University. She found that college teachers in open climate were more humanistic and those in closed climate colleges more custodial. But she did not examine the relationship between teachers' dogmatism and their student control ideology.

The present investigator has studied earlier dogmatism of university teachers. She, therefore, felt interested in examining further to what extent university teachers' dogmatism or open or closed mindedness is related to their student control ideology. The following Hypothesis is formulated to that end.

> "The more dogmatic the university teacher, the greater is his propensity towards custodial orientation in student control ideology".
>
> (The Hypothesis XII)

The Hypothesis is tested by computing mean scores of open-minded teachers and closed minded teachers and testing the difference between them by applying the t-test.

The Table 4.38 summarises the data analysed in this connection.

Table 4.38 : Teachers' Dogmatism Characteristic.

Open Minded teachers			Closed minded teachers		t-value
Mean	SD		Mean	SD	
110.87	11.40		118.20	12.05	4.36 **

** Significant at .01 level.

It will be seen from the above table that the mean score of closed minded university teachers is higher (118.20) than the corresponding mean score (110.87) of open-minded university teachers. The t-value of 4.36 is found to be significant at .01 level. The Hypothesis, therefore, stands

The Hypothesis is further tested by using the correlation coefficient technique and the value of coefficient of correlation is .33. Therefore, it may be observed that the dogmatism of the teachers and their student control ideology

as measured by the SCI (Baroda Form II) are positively significant at .01 level.

The Hypothesis stands further substantiated.

4.14 DIFFERENCE BETWEEN PERCEPTIONS ON (A) INSTITUTIONAL CLIMATE AND OF (B) PUPILS CONTROL IDEOLOGY, (C) DOGMATISM AND (D) STUDENTS' ACTS OF INDISCIPLINE OF UNIVERSITY TEACHERS

After having identified the Institutional Climate, an attempt needs to be made to find out whether student Control Ideology entertained by university teachers of departments as well as Faculties, contributes to its Institutional Climate and to find out a possible relationship existing (a) between institutional climate of a Faculty and Acts of Indiscipline by its students.(b) Students Control Ideology and Acts of Student Indiscipline and (c) the custodial or humanistic belief system of university teachers and students' acts of indiscipline.

Actually, in Open climate, Pupil Control Ideology reveals the democratic thinking of teachers about dealing

with students. It reflects both their value systems and attitudes, the openness of their minds, and faith in giving freedom to pupils to determine their ways of feeling and doing.

The Hypothesis is formulated as under :

"There exists a significant difference in attitude towards the Students' Pupil Control Ideology, Dogmatism and Students' Acts of Indiscipline by Different Climate".

(The Hypothesis XIII)

The data in respect of Pupil Control Ideology, Dogmatism and Students' Pupil Acts of Indiscipline were considered in relation to the three different types of climate viz., Open, Intermediate and Closed. Table 4.39 presents these related data.

Table 4.39 shows that on the tool SCI the Mean scores obtained under Intermediate and Closed Climates are higher as compared to Open and Intermediate climate respectively. The t-values [illegible] show significant difference between Open, Intermediate and Closed. Climates when interrelated, with pupil control ideology.

Table 4.39 : Climate-wise Comparison of SCI, DGM and SAI.

Comparison Between pairs	SCI	DGM	SAI
Open-Intermediate	-2.98 **	+1.81 NS	-2.56 *
Open-Closed	-2.57 *	-1.04 NS	-2.64 **
Intermediate-Closed	-2.53 *	-0.801 NS	-0.03 NS

Note: '+' = higher mean of the first type than that of the second and the

'-' = higher mean of the second type than that of the first.

* Significant at .05 level
** Significant at .01 level
NS=Not significant.

The results of Inquisition, comparison of climate categories in regard to Dogmatism, it is seen that in Open Climate mean score is ~~higher~~ lower as compared to the Intermediate and Closed climates respectively. Again, the mean score of the Closed climate is higher than the Intermediate climate. The t-values indicate no significant relationship between the variation of institutional climate and Dogmatism.

The results of Pupils' Acts of Indiscipline point out that the mean scores under the Closed climate is higher than under Intermediate Climate and the mean score under

Intermediate Climate is higher than it is under the Open Climate. The t-values indicate significant relationship at .05 level for the Open and Intermediate climates and significant relationships at .01 level for Open and Closed climates and no significant relationship for Intermediate and Closed Climates.

Table 4.40 : Intercorrelation amongst student Control Ideology, Dogmatism and Students' Acts of Indiscipline.

Variables	SCI	Dogmatism	Students' Acts of Indiscipline
SCI		.33**	.46**
Dogmatism			.28**
SAI			

The Hypothesis XIII was further tested by the intercorrelation matrix. The results indicates that it was significant at .01 level. It means that SCI is significantly related to Dogmatism, Dogmatism is significantly related to SAI and SCI is significantly related to SAI. It proves that all the three variables are interrelated. Therefore, the Hypothesis is accepted.

It can, therefore, be concluded that only the factor students' acts of indiscipline and Students' Control Ideology have significant relationship in the Open and Closed climates. The other factor viz., Dogmatism has no influence in determining the variation in the climate of the Institutional Structure.

Department-wise Comparison for the Factors Pupil Control Ideology, Dogmatism and Student Acts of Indiscipline

Interrelationship of the various Departments of the Faculties with the factors SCI, DGM and SAI also support the hypothesis that there exists significant variation in the relationship, if the factors are studied interdepartment-wise. The following Table 4.41 sets out the results to this effect.

The Table 4.41 is a study of the factors SCI, DGM and SAI, studied in relationship of five major departments of the various Faculties.

The results of students control ideology indicate higher mean scores in respect of departments connected with Humanities whereas for other departments like Social Sciences, Pure Sciences, Applied Sciences and Fine Arts, their mean scores are lower than the department of Humanities. There exists

Table 4.41 : Comparison of the PCI, DGM and SAI According to the Type of the Department.

Comparison Between Pairs	PCI	DGM t-values	SAI
Humanities-Social Sciences	+0.77 NS	+2.21 *	-2.78 **
Humanities-Pure Sciences	-6.19 NS	+0.42 NS	-2.13 *
Humanities-Applied Sciences	-2.0 NS	+0.57 NS	-2.96 NS
Humanities-Fine Arts	-2.32 NS	-1.80 NS	+2.08 *
Social Sciences-Pure Science	-1.07 NS	-1.91 NS	+2.76 **
Social Sciences-Applied Sciences	-2.98 NS	-2.18 *	+2.17 *
Social Sciences-Fine Arts	-2.86 NS	-3.80 **	+3.41 **
Pure Sciences-Applied Sciences	-2.07 NS	+0.08 NS	+3.34 **
Pure Sciences-Fine Arts	-2.54 NS	-2.18 *	+2.97 **
Applied Sciences-Fine Arts	-2.23 NS	-2.59 *	+2.96 **

Note: '+' ='higher mean' of the first type than that of the second.
'-' ='higher mean' of the second type than that of the first.

* Significant at .05 level.
** Significant at .01 level.
NS Not significant.

significant relationship at .05 level for the following pairs of departments like Humanities-Applied Sciences, Humanities-Fine Arts, Pure Sciences-Applied Sciences, Pure Sciences-Fine Arts. Again significant relationship at .01 level exists between Social Sciences-Applied Sciences, Social Sciences-Fine Arts departments. It is also found that there is no significant relationship between Humanities-Social Sciences, Humanities-Pure Sciences, Social Sciences-Pure Sciences, and Applied Sciences-Fine Arts.

A study of results under the DGM scale points out higher mean score for the Humanities Departments for the following pairs of comparison, with Social Sciences, Pure Sciences and Applied Sciences. Pure Sciences Departments also have higher mean score as compared to Applied Sciences. The Fine Arts Departments have higher mean scores as compared to Humanities, Social Sciences, Pure Sciences and Applied Sciences. Again Applied Sciences Departments have higher mean scores when compared to Departments of Social Sciences.

The t-values were found significant at .05 level between the pairs of Departments belonging to Humanities-Social-

Sciences, Social Sciences-Applied Sciences, Pure Sciences-Fine Arts, Applied Sciences-Fine Arts. Again significant relationship at .01 level was found to exist between Departments of Social Sciences-Fine Arts. No significant relationship was found in the remaining pairs of Departments.

The results of Students' Acts of Indiscipline indicate lower mean scores for Humanities Departments in relation to those of Social Sciences, Pure Sciences and Applied Sciences. However, higher mean scores are found in relation to Departments of Fine Arts. The Social Sciences Departments having higher mean scores in comparison to those of the Departments of Pure and Applied Sciences and of Fine Arts. The Departments of Pure Sciences have higher mean scores in comparison with the corresponding scores of the Departments of Applied Sciences and Fine Arts. The Applied Sciences have higher mean scores in comparisom with those of the Departments of Fine Arts.

The t-values indicated significant relationship at .05 level for Humanities and Fine Arts departments. Again, significant relationship at .01 level for Departments of Social Sciences-Fine Arts, Pure Sciences-Fine Arts, and

Applied Sciences-Fine Arts were found. No significant relationship was found with the remaining inter-departments.

The interrelationship between various departments for the three factors viz., Student Control Ideology, Dogmatism and Students' Acts of Indiscipline, is predominant in the case of the SCI, Dogmatism Scale and SAI respectively. Between Pure Sciences-Fine Arts, Social Sciences-Fine Arts inter-relationship for all the three above factors was found significant. Similarly between Humanities-Pure Sciences and Social Sciences-Pure Sciences, no significant relationship was found in respect of the three factors. In other cases, the inter-relationship was either in one factor or more than one factor. On the whole, it can be said that the three factors have sufficient influence in determining the variation in the climate.

4.15 RELATIONSHIP BETWEEN STUDENT CONTROL IDEOLOGY OF HEADS OF DEPARTMENTS AND STUDENTS' ACTS OF INDISCIPLINE

Usually, in different Departments of the University, students are selected for admission by the Heads of their Departments. Heads are more directly responsible for taking decisions regarding the nature and frequency of the periodical tests. They also possess the decision-making powers as regards the nature of sessional work that students are required to do. If some students miss some periodical tests, the authority to set for them other periodical tests is also yielded by them (i.e. heads). The Heads possess a number of controlling powers over students such as granting them terms, accepting and sending to the University their examination forms, deciding award of half freeship to economically weaker students etc. When many and varied powers of decision-making are possessed by Department Heads, one may assume they would be more custodial in their control ideology and, therefore, they may be, directly or indirectly, the cause of students' acts of indiscipline occurring in their departments. Much of the unrest on the campus of the M.S. University in 1975 was related to issues connected with examinations. The

University in cases of disputes on any aspect of examination worked naturally on the recommendations of the Faculty Dean/ Institution head where the views and directions of heads of Departments prevailed to an appreciable extent. It is, therefore, rational to assume that there exists a significant relationship between student control ideology held and manifested by heads of Departments and students' acts of indiscipline.

The Hypothesis in this connection is worded in the form of a null hypothesis as under :

> "There is no significant relationship between student Control Ideology of Heads of University Departments and students' acts of indiscipline as measured by the SAC."
>
> (The Hypothesis XIV)

The scores yielded by the SAC were converted into stanine scores which yielded three categories high (Stanines 9 to 7), average (Stanines 6 to 4) and low (stanines 3 to 1). The scores yielded by responses of the Heads of Departments on the tool SAC were interpreted humanistic if the mean scores thereon were lower and custodial if the mean scores were higher.

The humanistic and custodial control ideology of heads of University Departments are shown across the "high", "average" and "low" SAC scores of these heads. Table 4.42

Table 4.42 : Relationship of Students' Acts of Indiscipline and the Control Ideology of Heads of Sampled University Departments.

Control Ideology No.of Heads manifesting	Students' Acts of Indiscipline SAC Stanine Score System			
	High (Stanines 9 to 7)	Average (Stanines 6 to 5)	Low (Stanines 4 to 3)	Total
Humanistic-Ideology	9	8	12	29
Custodial Ideology	14	9	5	28
Total	23	17	17	57
Chi-Square = 1.26		df = 1	Not Significant.	

In order to test the Hypothesis the Chi-square was applied. The Chi-square value was found to be 1.26 which was found to be insignificant. As the Chi-square value was found to be insignificant, it would mean that there is no real relationship between student control ideology of students and students' acts of indiscipline. Whatever relationship is manifested it is merely a chance affair. Therefore, the

Hypothesis is not sustained.

4.16 ESTIMATES OF SIGNIFICANCE OF RELATIONSHIP BETWEEN STUDENT CONTROL IDEOLOGY (SCI) OF HEADS OF UNIVERSITY DEPARTMENTS AND DEPARTMENT TEACHERS

In the previous section discussion was directed to the typology of the control ideology of Heads of University Departments on the basis of their functions and responsibilities. In this section, keeping in perspective the role that a University Department Head has to perform in the Faculty, a comparison will be attempted between the control ideology of the Heads and Teachers at the level of University Departments.

The following observations by Willower Eidell and Hoy (1967:7) throw significant side-lights on differences between custodial ideology of teachers and principals of elementary and secondary schools :

> "We believed that elementary and secondary schools would differ with regard to pupil control ideology of their professional personnel. Elementary school pupils, when compared with secondary pupils, pose a lesser threat to

> teacher status because of their age, size and relative immaturity. An essential part of our conceptualization was the proposition that, in organizations, with unselected clients to controller status and the tendency of controllers to adapt a custodial ideology. Given this proposition and rationale above on differences between elementary and secondary pupils, we predicted that secondary teachers would be more custodial in their pupil control ideology than would elementary teachers, and that secondary principals would be more custodial in their pupil control ideology than elementary principals."

The focus in the present Hypothesis is to investigate significance of differences between the student control ideology of heads of Departments and teachers.

As heads of Departments have several types of responsibility in regard to planning of curriculum, tests, timetables, co-curricular and curricular programmes, one may assume that they develop custodial student control ideology.

Similarly, teachers have also a number of control functions to perform.Teachers get students in the selection of whom they have no hand. However, they have to deal

directly with students in teaching and learning situations. They, therefore, have opportunity to control them. They evaluate their tests, they determine their achievement progress and they have opportunity to affect their value systems and mould their character. They shape the dimensions and directions of their interests. In the University, it is often observed that teachers exercise greater influence and control over students than either the Faculty Deans/Heads of Institutions and Heads of Departments. Teachers are closer to students than either Deans or Department Heads. It would, therefore, be interesting to examine the level of difference in control ideology by Department heads and teachers.

In this perspective, the following Hypothesis is formulated :

> "There is no significant difference between the pupil control ideology of the heads and teachers of University Departments".
>
> (The Hypothesis XV)

The data to test the Hypothesis are collected through the SCI scores. The technique applied is the t-test.

Table 4.43 : A Comparison of the Students' Social Control Ideology of of the Departmental Heads and Teachers.

Position	N	Mean SCI Score	SD	t-value
Teachers	201	118.23	7.64	4.61**
Departmental Heads	57	112.84	5.21	

** Significant at .01 level.

It can be observed from the above table that teachers have a mean score of 118.23 which is lower than the mean SCI score of Department heads which is 112.84. This would mean that teachers have more custodial ideology than the heads of Departments who have comparatively a lower or more humanistic ideology. The t-value of the mean SCI score of teachers and that of Department heads is 14.61. This t-value of 4.61 is significant at .01 level. This is indicative of the fact that the Hypothesis is not accepted.

The discussion on the Hypothesis indicates that those who are directly responsible for controlling students in teaching - testing classroom situations develop custodial ideology to a greater extent than those who have an indirect responsibility for controlling students. This would also

suggest that organizational position is an important variable instructing the SCI of incumbents.

4.17 BIOGRAPHICAL VARIABLES AND INSTITUTIONAL CLIMATE OF FACULTIES/INSTITUTIONS OF THE UNIVERSITY

Researchers have been showing interest in examining to what extent biographical characteristics of respondents like sex, age, the SES status, the professional rank and other variables affect their perceptions of dependent variables, like institutional climate, morale, etc. In this section, the present investigator has chosen to examine the following biographical variables in relation to institutional climate of the Faculties/Institutions of the M.S.University of Baroda.

(1) Sex

(2) Professional rank or Status (Professorship, readership and lecturership)

(3) Urban-rural upbringing

(4) Previous experience as student-leaders during student-hood.

(5) Exposure to experiences in foreign countries.

In this connection, the following Hypothesis is formulated.

> "Biographical characteristics of University Teachers of (a) sex, (b) professional status or rank, (c) urban-rural up-bringing, (d) exposures to foreign experiences and (e) previous experience of working as student-leaders during their studenthood are independent of their perception of the institutional climate of the Faculty/ Institution to which they belong."
>
> (The Hypothesis XVI)

The data necessary to test this Hypothesis were collected through the personal data sheet attached to the booklet of the tools used in the study.

(a) Sex : The sub-hypothesis will be that sex of respondents bears no significant relationship with the climate typology which they perceive for their Faculty/Institution.

The sub-hypothesis will be tested by applying the Chi-square. The relevant data are presented in Table 4.44.

Table 4.44 : Chi-square Value of Institutional Climate According to Sex of the University Teachers who perceived it.

Sex	Climate			Total
	Open	Intermediate	Closed	
Male	18	10	22	50
Female	30	6	14	50
Total	48	16	36	100
df=2	$x^2 = 5.26$		Not Significant.	

It will be seen from the table that the Chi-square value of 5.26 is not statistically significant. That means that the sub-hypothesis on lack of relationship between sex of the respondents and their perceptions of climate is supported.

The Hypothesis will be tested variable-wise.

(1) Sex-wise Comparison: The relationship between sex and climate has been investigated by many researchers. Noleod (1969) and Seidmann(1973) revealed that there was significant relationship in institutional climate between schools administered by female principals and by male principals whereas Hoagland (1968), Winter (1969), Farber (1969) and Evans (1973) found that there was no significant relationship existed between teacher's sex and climate in schools.

Hill (1973) reported that the teacher biographical variable of sex was the best predictor for each of the eight dimensions of OCDQ scores. Dicarprio (1974) found that there was significant relationship between the perceptions of climate and the biographical characteristic i.e. sex. Women tended to have higher climate scores.

The results of researches on relationship between sex of teachers and their perceptions of climate are conflicting and inconclusive. Those who did not find any significant relationship between sex and perception of organizational climate include Reitz (1973), Kobayashi (1974) and others, While those who did find significant relationship between the two variables include Hill (1973), Sharma (1973), Evans (1973), Dicarpio (1974), Samrong Pengnu (1976), Sangchen Sonsena (1977) and Taotipaya Prachak, Kirit Gandhi (1977)

(b) The second sub-hypothesis on the issue reads as under :

"Professional rank or status of respondents like professorship, readership and lecturership is independent of their perception of the climate of their Faculty/Institution"

This sub-hypothesis, too, is tested through Chi-square. The relevant data are presented in the Table 4.45.

Table 4.45 : Chi-square value of Institutional Climate According to Professional Status of the Teachers.

Professional Status	Climate			Total
	Open	Intermediate	Closed	
Professors/ Readers	28	12	10	50
Lecturers	18	8	24	50
Total	46	20	34	100

df = 2 x^2 = 8.76 Significant at .05 level.

The Chi-square value is 8.76. It is significant at .05 level. This shows that there does exist relationship between perceptions of professors and readers on the one hand and lecturers on the other hand in respect of their perception of the institutional climate of the Faculty/Institution to which they belong.

(c) City-Rural Upbringing :

The third sub-hypothesis takes the following shape :

"The city-rural up-bringing of the respondent University teachers bears no significant relationship with the climate they perceive of their Faculty/Institution."

This sub-hypothesis will also be tested through chi-square. The analysed and classified data are presented in Table 4.46.

Table 4.46 : Chi-square value of Institutional Climate According to Upbringing of the Teachers

	Climate			Total
	Open	Intermediate	Closed	
City	30	14	6	50
Town-Village	11	13	26	50
Total	41	27	32	100

df = 2 x^2 = 21.88 Significant at .01 level.

The chi-square value of 21.88 seen in the above table is significant at .01 level. This is indicative of the fact that the sub-hypothesis (c) is substantiated. The urban-rural upbringing of the responding university teachers appears to be an influencing factor in their estimate of their Faculty/Institutional climate.

Franklin (1975), too, found a significant relationship between the climate categories and the upbringing of college teachers who perceived climate. Shelat, too, studied this relation, but she could not find a clear and conclusive relationship between the two variables.

(d) Exposure to Foreign Countries

Visits to foreign countries and particularly to foreign universities, as student observers or visiting university teachers do result in liberalising minds of university teachers and making them more progressive and innovative in their thinking and attitude. Table 4.47 presents the related data in this regard.

Table 4.47 : Chi-square Value of Institutional Climate According to the Stay of University Teachers Abroad.

Teachers	Climate			Total
	Open	Intermediate	Closed	
Studied in Foreign Universities	10	6	4	20
Visit to a Foreign Universities	4	7	9	20
Total	14	13	13	40

df = 2 $x^2 = 4.26$ Significant at .05 level.

It could be seen from the above table that the Chi-square value of 4.26 yielded by the analysis of the data is significant at .05 level. This would mean that there does exist significant relationship between exposure of university teachers to experiences in foreign countries and their perception of their Faculty/Institution's organizational or institutional climate.

Franklin (1975) had also studied the relationship between teachers' exposure to foreign visits and their perceptions of the climate of their colleges. She reported that there did not exist any significant relationship between the two.

(e) Leadership Experiences :

Some of the university teachers when they themselves were students had more or less experiences in participating in leadership acts in curricular, co-curricular or extra-curricular experiences. The sub-hypothesis (e) seeks to establish relationship between leadership experiences of university teachers during their studenthood and their perception of their institutions' climate. The fifth sub-hypothesis seeks to test this assumption.

Table 4.48 : Chi-square value of Institutional Climate According to their Leadership Experiences.

	Climate			Total
	Open	Intermediate	Closed	
Leader	18	21	11	50
Non-leader	11	24	15	50
Total	29	45	26	100

df = 2 $x^2 = 4.28$ Not significant.

This sub-hypothesis is not supported, inasmuch as the Chi-square value of 4.28 yielded by the analysed data is found to be insignificant.

Franklin (1975)'s study revealed that those teachers who had previous leadership experiences in one way or the other were found to be in a greater number in Open Climate colleges than in Closed climate colleges.

4.18 MULTIPLE CORRELATION AND REGRESSION EQUATION

In this section, Multiple Correlation and Regression Equation are presented. The strength of the Multiple Correlation indicates the strength of the relationship between one dependent variable and two or more independent variables taken together. From Regression Equation, one can predict the value of criterion variables for every individual.The Multiple R and Regression Equation for climate score of the Faculties/Institutions of the M.S. University of Baroda are given in Table 4.49.

Table 4.49 : Multiple R and Regression Equation for Climate Score.

R	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20.
$\bar{Y}$ =	$30.99 - .01x_1 + .18x_2 + .26x_3 + .19x_4 + .30x_5 + .05x_6 + .16x_7 - .02x_8 + .03x_9 + .01\ x_{10} - .06x_{11} - .15x_{12} - .08x_{13} - .13x_{14} + .10x_{15} + .10x_{16} - .10x_{17} - .13x_{18} + .06x_{19} + .08x_{20}$

where

$\bar{Y}$ = Climate Score

1 = Disengagement

2 = Hindrance

3 = Esprit

4 = Intimacy

5 = Aloofness

6 = Production Emphasis

7 = Thrust

8 = Consideration

9 = Communication

10 = Organizational Structure

11 = Freedom and Democratization

12 = Human Relations

13 = Humanistic Control Ideology

14 = Custodial Control Ideology

15 = Openmindedness

16 = Closedmindedness

17 = Acts of Indiscipline against Administrators

18 = Acts of Indiscipline against Teachers

19 = Acts of Indiscipline against fellow-students

20 = General Acts of Indiscipline

It can be seen from the Table 4.49 that the R between criterion variable climate score and the predictor variables, namely, Factors Disengagement, Hindrance, Esprit, Intimacy, Aloofness, Production Emphasis, Thrust, Consideration, Communication, Organizational Structure, Freedom and Democratization, Human Relations, Student Control Ideology of the University Teachers, Dogmatism level of teachers and Student Acts of Indiscipline came out to be 0.30 which is highly significant beyond .01 level of probability (F=4.54).

In all, there are 20 predictor variables, out of which 12 factors viz., (Hindrance, Intimacy, Esprit, Aloofness,

Production Emphasis, Thrust, Communication, Organizational Structure , Openmindedness, Closedmindedness, Acts of Indiscipline against Fellow-students and General Acts of Indiscipline) have positive relations and 8 other factors, viz., (Disengagement, Consideration, Freedom and Democratization, Human Relations, Custodial Student Control Ideology, Acts of Indiscipline against Administrators and Acts of Indiscipline against Teachers) have negative relations with the dependent variable climate score.

The variable "Esprit" has the highest positive relation (+.26) and the variable "Human Relations" has the highest negative relation (-.15) with the climate score.

These are the results of the Multiple Correlation and Regression Equation.

It may be recalled that Anjani Mehta had studied institutional climate of the affiliated colleges of the Gujarat University. She, too, had computed regression equation based upon climate scores as criterion variable and along with different factors of college teacher morale scores on Student Control Ideology. She found that in regard to the

predictor variables of climate factors and student control ideology factors, the emergent factors that relate to climate were : "Esprit", "Intimacy", "Thrust", "Consideration", and "Organizational Structure". The Table 4.50 presents a comparative picture of the results of Mehta's and the present studies in regard to the positive and negative coefficients among the predictors.

Table 4.50 : A Comparative Picture of the Coefficients among the Predictors in Mehta's Study and the Present Study.

Positive Coefficients among the Predictors The ICDQ		Negative Coefficients among the Predictors The ICDQ	
Mehta's Study	The Present study	Mehta's study	The Present study
1.Esprit	Esprit	1.Disengagement	Disengagement
2.Intimacy	Intimacy	2.Hindrance	Consideration
3.Thrust	Thrust	3.Aloofness	Freedom and Democratization
4.Organizational Structure	Organizational Structure	4.Production Emphasis	Human Relations
5.Communication	Communication		
6.Consideration	Hindrance		
7.Human Relations	Aloofness		
8.Freedom and Democratization	Production Emphasis		

From the above table, it can be seen that out of 12 dimensions of ICDQ, 8 dimensions were found positive coefficient and 4 dimensions were negative coefficient in Mehta's as well as the present studies. It further indicates that 5 positive dimensions of ICDQ were common in both the studies viz., Esprit, Intimacy, Thrust, Organizational Structure and Communication. Whereas regarding the negative dimensions only one dimension i.e. Disengagement is common in both the studies.

From this it may be concluded that the institutional climate is either positively or negatively correlated with the 12 dimensions which make up the ICDQ.

4.19 CONCLUSION

In this chapter, the investigator has endeavoured to test the sixteen hypotheses formulated by her with a view to weaving the taxture of the fabric of her study keeping in focus the specific objectives set up for the study. Her efforts were mainly directed towards identifying the institutional climate of the 10 Faculties and 5 institutions and 57 academic departments located in the Faculties and the Institutions. The emergent picture of the institutional climate helps one to get an insight into the inner life on the campus of the University and the nature and the intensity of the interaction patterns of teachers with teachers and with the Dean/Head of their institution as well as the Department. The study throws further light on how the typology of the control ideology of the University teachers and the relationship it bears with their perceptions of the organizational climate of their institution. The study helps one to know further the extent of dogmatic thinking and the nature of beliefs and disbelief systems the teachers possess. A modest attempt has also been made to establish relationship between personality traits of heads of Departments and their climate categories.

The central thread running through the study is to perceive whether any kind of connection exists among institutional climate, student control ideology, dogmatism of teachers, personality factors of heads of Department and the students' acts of indiscipline that break out on the University/Faculty campus.

As the study largely uses the perceptions of the teachers, some of their biographical characteristics are also sought to be related with institutional climate

The study stands out distinctly among the other Indian climate studies on three counts. Firstly, it has developed a new research instrument and determines the procedures to identify and classify institutional climate for a unitary, teaching and partially residential type of an university; secondly, climate has been examined perhaps for the first time in such a broad perspective having overtones of control ideology, dogmatism, personality factors and some new biographical traits of the respondent university teachers and lastly, the vexing problem of student unrest.

The next chapter will be the concluding chapter. It will summarise main findings of the study, examine to what extent the specific objectives set for the study are realized, discuss the implications of the findings and suggestions will also be considered that could be examined by the University/Faculty/Institution and Department administrators to improve their institutional climate towards openness which would provide a better way of combating the evils of student unrest.